

THE POLITICAL FACTORS BEHIND LABOR REFORMS

**An empirical economic analysis of the political determinants of labor market
reforms implementation: evidence from 38 OECD countries**

ABSTRACT

The paper analyzes the political determinants of the implementation of labor market reforms. Reforming labor market settings, such as employment protection legislation or pension-related policies, is a necessary economic policy but politically complex in its nature. The political characteristics of countries can affect the ability of their governments to implement labor market reforms. In an empirical investigation, we identify the influence of several political features on labor market reforms across 38 OECD countries over 21 years. We find that the degrees of power concentration in the form of presidentialism, political instability and political corruption feature a negative significant effect on labor market reforms being implemented. Additionally, a strong rule of law and the strength and participation of civil society are related to more labor market reforms. Considering the impact of these political variables, further research has the opportunity to adapt the analysis towards product market reforms or expand the variables considered and explore their interactions.

Key words: OECD countries, labor market reforms, labor market settings, and political factors.

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1. INTRODUCTION

In the ever-shifting world we are living in, structural reforms have become a central element and goal of public action. In all areas, governments need to pursue reforms due to a multiplicity of reasons. Maintaining a good economic performance and keeping abreast of other countries or guaranteeing good living standards to their citizens are important objectives. Over the past decades, there has been a consensus on the need to implement structural reforms to improve overall economic performance. Several institutions and organizations advise countries on how to enact economic reforms. A relevant institution in this field is the Organization for Economic Cooperation and Development (OECD).

All the above puts forward the salience of structural economic reforms. There are two main areas of structural reforms that stand out: product market reforms and labor market reforms. Labor market reforms, as discussed by Eichhorst et al. (2017), involve changes in employment protection legislation, unemployment benefits, and active labor market policies to create more flexible and secure labor markets. In recent decades, the negative effects of the global crises have posed an important challenge to all nations. In developed economies, the tool of labor market reforms has been identified as useful to maintain employment levels in times of rising unemployment rates and limited public resources (OECD, 2012). Labor market reforms are a highly relevant matter, not only in an economic sense but also from a social welfare perspective.

Given their current economic importance and their controversial nature regarding welfare, labor market reforms need to be studied in depth. In this way, the present paper aims to gain further insight into labor market reforms. One way to understand reforms is by identifying their determinants, that is, the factors that potentiate reforms and the factors that hamper them. This type of analysis sheds light on why some governments are more successful than others in implementing such reforms. Research in the field mainly focuses on the macroeconomic conditions that lead to this type of reforms (OECD, 1988; Drazen, 2000; Drazen and Easterly, 2001; Bean, 1998; Pitlik and Wirth, 2003; Adascalitei & Pignatti, 2016).

Nonetheless, a smaller number of publications have focused on the effect of political institutions on the implementation of labor market reforms, such as Høj et al. (2006), which serves as the starting point for this research. Their results, not very conclusive in terms of political characteristics, point, for example, to the importance of government ideology. Although it is understandable that measuring political variables is somewhat complicated, it would be a misstep to overlook such an important field of influence when it comes to policymaking.

The gap this work aims to fill is the lack of a comprehensive study of political factors affecting labor market reforms implementation alone. Moreover, although Høj et al. (2006) and many other contributions were indeed essential in the field of structural reforms research, much has changed since those publications, starting with the 2008 crisis, the pandemic, climate challenges, or the major social changes and polarization.

Consequently, the research question this paper seeks to answer is: *What political factors influence the implementation of labor market reforms and in what sense?* That is, to study the political characteristics of a country that make it more prone to implement labor market reforms directed towards growth and the improvement of living standards. When talking about labor market reforms implementation we refer to their *de facto* implementation, when changes can be observed in the policy settings.

In concordance with this research question, the general objectives of this work are three-fold:

- a) Performing a literature review on political factors that influence the implementation of labor market reforms and choosing the most feasible and relevant ones for our own empirical analysis.
- b) Creating and exploiting a new database in the form of panel data, suitable for analyzing the impact of the chosen political factors on the implementation of labor market reforms.
- c) Conducting an empirical analysis to test the significance of the influence of several political factors in the implementation of labor market reforms.

The methodology used to achieve these objectives is quantitative, consisting of an empirical analysis in the form of regressions, using first a pooled OLS model and then working with panel data with a fixed effects specification. For this purpose, the chosen object of study are the 38 OECD member countries observed between 2001 and 2021. The elaboration of our own database brings added value to this bachelor's thesis due to its unique nature in sources and variety of areas of the variables. The database as a whole includes other dimensions of reform determinants besides political factors, as well as data for product market reforms, beyond the data we will use for labor market reforms. I built this database under the umbrella of the OECD in the context of a three-month internship at the Economics Department. Therefore, an additional goal of this research is to perform an empirical exercise that shows the relevance of such a database and proves that it can be a useful tool in the analysis of structural reforms.

All the above is aimed at expanding the literature that delves into the complexities of labor market reforms. To this end, the present paper consists of four sections. In Section 2, we conduct a literature review of the research done in the field of labor market reforms and the political factors that influence them, to identify the research gap to be filled. From this, a set of sub-hypotheses are formulated regarding the influence of political variables on the implementation of labor market reforms. The political variables considered are divided into *institutional features*, the *ideology of the government* and the *role of civil society*. Next, in Section 3 we set the methodological basis for an empirical analysis to test the impact of various political factors in the implementation of labor market reforms. Section 4 then elaborates on the empirical analysis and examines its results. Finally, Section 5 presents the conclusions drawn from this entire research exercise.

2. THEORETICAL FRAMEWORK

As mentioned in the Introduction, the purpose of this work is to determine which political factors affect the *de facto* implementation of labor market reforms and how they do so. Understanding how reforms work is a matter of great importance to governments and policymakers around the world and, as a result, there are many scholars who have conducted research in the field. The present study is embedded in the context of structural economic reforms research. Therefore, it is essential to first paint the general picture of this area of research, then explore the more specific literature that has focused on labor market reforms and their complexities, and finally relate it to the political determinants of reforms. In the next section we focus on the political determinants of labor market reforms to answer the research question.

2.1. Structural reforms

To begin with a more general approach to structural economic reform, Duval et al. (2018) produced an empirical analysis covering labor and product market reforms of 26 advanced economies over the period that goes from 1970 to 2013. The strength of the dataset they use is that it allows the identification of major reforms. Nevertheless, it does not include any of the factors that influence the success of a reform in winning approval.

In a similar vein, Høj et al. (2006) sought to expand the empirical base for understanding the political economy factors that prompt or hamper consensus around structural economic reforms in OECD countries. The authors consider political economy determinants, such as macroeconomic variables and some political and demographic characteristics. Our investigation builds on it in and intends to be an updated version that focuses on the political determinants of labor market reform. After almost two decades and many important events, there are many areas to explore and revise.

Since our research is done under the umbrella of the OECD, we will consider as positive those reforms that are in line with the organization's core values and objectives. These include raising living standards by increasing labor utilization and productivity, making the economy more resilient to shocks, and improving welfare by addressing social concerns (OECD, 2010). The idea is to propose policy packages that boost productivity and employment, while ensuring that the benefits of reforms accrue quickly and reach the vast majority of workers and households (OECD, 2017).

2.2. Understanding labor market reforms

Labor market reforms are a matter of the utmost importance for policymakers and politicians to attend to. The OECD (2010) sets the economic and political scene for implementing pension and labor market reforms. From now on, when referring to labor market reforms, we will also refer to pension-related policies. It makes sense to combine the two policy domains because they are not independent but endogenous labor-related policies. In essence, retirement reform is one aspect of

labor market policy and needs to be complemented by other labor regulations. Fisher & Keuschnigg (2010) find a link between labor market reforms and the pension systems.

Labor market regimes are persistent settings that affect most part of society in a variety of ways. Reforming them entails large distributional effects, creating winners and losers. This is related to the electoral costs (or benefits) of labor market reforms, which result from the political influence of the winners or losers. However, it is not a balanced distribution, as these reforms typically entail high costs for a small group that is easily identifiable and happens to be politically relevant (such as labor market insiders). On the other hand, they yield small benefits spread across many people who are harder to identify. The situation described may lead to important electoral backlashes. Nevertheless, there are ample sources of motivation to carry out reforms. As the OECD (2010) notes: “This motivation for reform may reflect ideological positions, a desire to secure economic opportunities for the country, external constraints, or an economic crisis that reveals the cost of the status quo” (p. 70).

Although labor market settings, such as unemployment benefits, act as stabilizers for the economy, frequent adjustments are needed to ensure their proper functioning and synergy with the economic environment. For instance, in the case of pension policies, the need for reform is made evident by the aging of the population.

Likewise, the case for other types of labor market reform reflects a range of economic and welfare concerns. There is a broad consensus among economists on the need for structural reforms to make the allocation of labor more efficient and increase participation rates. Also, labor market reforms respond to the need to protect workers against dismissals and give them security. Nevertheless, with worker protection in mind, countries with a strong employment protection legislation (EPL) have developed a “labor market dualism”, which involves a defined separation between senior workers on regular permanent contracts and workers on temporary contracts. This raises several inequality dimensions since the “outsider group” is typically made of young people, females, poorly educated people, or migrants. Large shares of temporary workers are typically associated with high levels of EPL. This is both inefficient and inequitable and calls for reform. However, greater pressure for reform is often matched by greater resistance from labor market “insiders” (typically a politically influential group).

Notwithstanding these objections, windows of opportunity to reform highly regulated labor markets do sometimes open. A good proxy for the demand for security is individuals’ perceptions of the probability of losing their jobs (or their children’s jobs). Workers’ demand for job security may pave the way for reforms aimed at achieving a more balanced labor market, for instance by relaxing EPL in exchange for better income protection against unemployment risk (Boeri, 2011). Accordingly, over the past decades, countries have implemented labor market reforms directed towards modifying the prospects of outsiders. These measures have typically involved reducing

the stringency of EPL, modifying the unemployment benefit system, and making active labor market policies (ALMPs) more targeted.

Oftentimes, labor market regulation can complement or substitute for income-support schemes. The OECD (2006) identifies two groups of countries that have achieved relatively strong employment performance with very different policy mixes: a first group of “market-reliant” economies, including mainly Anglo-Saxon countries, and a second group including mainly Nordic countries. These two groups have combined labor market policies in different ways and achieved reasonably good results, showing that the way policies are combined matters, but that there are different paths to success. Indeed, a large number of scholars have analyzed the political economy factors that shape labor market reform. Even so, most of this work has focused on the study of individual policies, such as unemployment benefits or EPL. A few, such as Høj et al. (2006), have examined all together, taking into account possible complementarities. Reform packages that change different policies at the same time open the possibility of compensation for losers and make labor market reforms more politically feasible. It is in this context, where much remains to be explored, that the present research is situated.

2.3. General factors affecting labor market reforms

As we have shown through existing literature, labor market reforms are a much-needed policy move. However, they are also complex. Many factors and conflicting interests are at stake when considering the implementation of this sort of reforms. Studying reform’s determinants of success or failure is a common approach used in the literature. This is a step towards achieving successful reforms that make a difference in this delicate economic and social area of policymaking.

When it comes to the political economy influences that may have prompted or hindered consensus around reforms, Høj et al. (2006) distinguish between factors beyond the control of the government (exogenous to the political process) and factors over which governments may have some leverage. According to them, the exogenous factors include the following:

- Big economic crises are found to be associated with higher overall reform activity. They make clear that existing policies are not sustainable, neither for individual citizens nor for the economy. On the other hand, political opposition for labor market reforms can be high at times of economic downswings because workers seek more job protection (Bean, 1998).
- The unemployment rate has also been considered as a factor with potential impact.
- Governments in office for some time tend to be more able to reform and left-of-center governments tend to undertake less reform.

The factors influenced by government policies found to be relevant are:

- A sound government budget balance is associated with higher reform activity.

- Spillover from other reforms, even from product market, may also prompt reform in the labor market.
- The reduction in tariff barriers has frequently been associated with a less liberal stance in labor markets.

Aside from this distinction, Høj et al. (2006) study five big fields of factors that can influence reform, although they deal with both product and labor market reform. They are as follows: macroeconomic conditions, international influences, macroeconomic policies, political institutions, and demography. From their empirical analysis, they mostly get significant results from macroeconomic conditions, international influences, and macroeconomic policies.

Given the political sensitivity of labor market reforms and the research gap that exists in their study, we find it relevant to conduct a study focused on the impact of political characteristics in the implementation of labor market reforms. Therefore, after defining our initial interest in the separate study of labor market policies, we determine our more specific object of study, which consists of the research of the political factors that affect the implementation of labor market reforms. This focus is to answer the research question of our study.

2.4. Impact of political variables in the implementation of labor market reforms

The review above has established the basis and justification for studying of the impact of a country's political features in the implementation of its labor market reforms. Now, this section surveys the literature on the political determinants of structural economic reforms applied to the case of labor market reforms. The empirical analysis of the 38 OECD economies given in Sections 3 and 4 has been carried out on the basis of the theoretical foundation laid in this section and is meant to empirically test the hypotheses stated here.

2.4.1. Veto players and labor market reforms

In the early 2000s, political scientist George Tsebelis introduced the concept of “veto players”, which serves as a suitable starting point for this review. In his work “Veto Players: How Political Institutions Work” (2002), the author emphasizes the importance of analyzing the actors and institutions that have the power to block or facilitate policy change, shedding light on the complexities of democratic governance and the challenges of enacting reform. Veto players are defined as a certain number of individual or collective actors that must agree for a concrete change in the *status quo* to occur in the form of new policies. The general conclusion is that reforms become more difficult as the number of veto players increases, and that therefore policy stability is greater when veto players are numerous. An interesting subsequent paper based on the concept of Tsebelis (2002) is that of Gehlbach & Malesky (2010). In their article “The Contribution of Veto Players to Economic Reform”, the authors study the impact of different numbers of veto players in the implementation of economic reforms. Contrary to conventional belief, they formally show

that a large number of veto players may encourage policy change by weakening the power of certain interests that favor inefficient reform outcomes.

Given the fact that our object of analysis is not one but 38 countries, what we intend to draw from the veto player literature is not to reproduce a veto player configuration analysis specific to each country. Our interest is to extrapolate the core idea of Tsebelis (2002) to a macro political analysis of labor market reforms across a large number of countries and years (see Section 3). Despite their differences, the above-mentioned scholars demonstrate the importance of studying the characteristics of a political system in order to comprehend its outcomes. By studying the determinants of the policy outcome we will not only gain an understanding of the economic dimension, but also shed light on the political system in itself.

2.4.2. Impact of political features in labor market reforms implementation

Having established the complicated and political nature of labor market reforms, it is now necessary to review the literature that focuses on the political determinants of reforms and to select those variables applicable to labor market reforms. Attention is also drawn to those variables that, being relevant to labor market reform, are amenable to being tested in our data set by means of the empirical analysis (see Section 3).

The political economy literature outlines multiple trajectories for making reforms happen, specifying several political factors that might enable or challenge the implementation of labor market reforms. Some explanations focus on institutional features (degree of concentration of power in the form of presidentialism, political instability, rule of law, and corruption), while others examine the ideology of the government, and a third group studies the role of civil society. We define each concept and review several publications that deal with each characteristic, and from there we construct a set of six sub-hypotheses to be tested that derive from the research question: *What political factors influence the implementation of labor market reforms and in what sense?*

2.4.2.1. *Institutional features*

Degree of power concentration in the form of presidentialism

Presidentialism refers to a system of government in which a president serves as the head of state and head of government, wielding significant executive power separate from the legislative branch. The president typically holds authority over areas such as law enforcement, vetoing legislation, directing the military, and conducting foreign affairs (Linz & Valenzuela, 1994).

Presidential political systems often seem to empower large and homogeneous constituencies compared to outcomes in parliamentary systems (Persson, 2003). This translates into presidential systems being more effective in implementing reforms than the parliamentary ones because the executive branch can have significant power separate from the legislative branch.

However, the separation of power can lead to gridlocks if the two branches are controlled by different political parties (Høj et al., 2006). In a similar line, in his distinction between majoritarian and consensus models of democracy, Lijphart (1999) defines the majoritarian model as emphasizing the concentration of executive power and being efficient in decision-making. Even so, the author states such a model can marginalize the interests of minority groups, whilst a consensus model is better at representing the interests of all citizens and therefore can lead to higher levels of stability.

Moreover, abuse of the executive power may be an indication that the democratic foundations of a country are not sound. Thus, an abuse of the presidential power could entail that we are dealing with an autocratic regime. As a result, legitimacy issues that may arise can affect the ability to implement reform. Tompson & Dang (2010) remark the importance of having an electoral mandate for reforms given that reforms “by stealth” have severe limitations.

In light of the presented bibliography, the hypothesis we will test is that **a higher degree of power concentration in the form of presidentialism has a positive impact on the implementation of labor market reforms** (Hypothesis 1). Nonetheless, a substantive body of literature suggests the contrary; hence, the negative impact of presidentialism on labor market reforms should not be disregarded.

Political instability

Alesina et al. (1996) define “political instability” as the propensity of a government to collapse. They find that countries and time periods with a high propensity of government collapse witness a significantly lower economic growth than more stable episodes. Barro (1991) measures political instability by the number of revolutions and coups per year and concludes that growth rates are positively related to measures of political stability.

Consequently, countries with more unstable political institutions not only have a harder time when it comes to boosting growth, but may also find it harder to implement reforms, since they require stability and continuity to be fully implemented. Consistent with this, Høj et al. (2006) find that mature governments are more prone to implement reforms because they have the time needed to overcome political and administrative obstacles. Moreover, Alesina & Tabellini (1990), Cukierman et al. (1992), and Ozler and Tabellini (1992) study various harmful economic policies that a country can adopt or good policies that it fails to adopt when it is politically unstable.

Hence, our hypothesis to be tested is that **political instability hampers labor market reforms implementation** (Hypothesis 2).

Rule of law

Rule of law is defined by the United Nations (2024) as: “A principle of governance in which all persons, institutions and entities, public and private, including the State itself, are accountable to laws that are publicly promulgated, equally enforced and independently adjudicated, and which are consistent with international human rights norms and standards”. According to the UN, a strong rule of law is fundamental for economic and social progress and development.

The logic is that the security of property rights and the integrity of contracts allow for investment and trade to happen, which in turn fuel economic growth and development (Haggard et al., 2008). Thus, without a strong rule of law, it is unlikely that pro-development policies, such as labor market reforms, will be implemented.

For this reason, the hypothesis we formulate is that **a strong rule of law is a facilitator of labor market reforms to be implemented** (Hypothesis 3).

Corruption

The World Bank’s definition of corruption is “the abuse of public office for private gain” (2020). In addition, Transparency International (2024) indicates corruption can take many forms and includes behaviors like: public servants demanding or taking money or favors in exchange for services; politicians misusing public money or granting public jobs or contracts to their sponsors’ friends and families; and corporations bribing officials to get lucrative deals.

Many studies have supported the negative impact of corruption on growth, such as Wei (1999), Ugur (2014), and Bardhan (2017), among others. Furthermore, Rose-Ackerman & Palifka (2016) state that “the level of corruption makes reform difficult and undermines public trust in government institutions” (p. 10). Therefore, it may also affect the implementation of labor market reform.

Hence, in light of these scholars’ contributions, our hypothesis is that **high levels of corruption hamper labor market reforms implementation** (Hypothesis 4).

2.4.2.2. Ideology of the government

We understand government ideology as the position on the left-right axis of the main political party in government.

The results of Høj et al. (2006) suggest that the political orientation of the government has a dampening effect on the overall reform intensity in the case of left-of-center governments. Additionally, the IMF World Economic Outlook of 2004 made a similar point regarding left-leaning governments (IMF, 2004).

On the contrary, Tompson & Dang (2010) add that left-wing governments may be more successful since they tend to have closer relations with organized labor and therefore, they may find it easier to reach an agreement with unions on reform proposals.

Considering the presented literature our hypothesis is that **left and center governments undertake less labor market reforms** (Hypothesis 5). Despite this, contrary evidence should also be considered when analyzing the results.

2.4.2.3. Role of the civil society

Civil society refers to the set of non-governmental organizations and institutions that represent the interests and the will of citizens. They are distinct from the state or the market and can also be referred to as “third sector”, operating in diverse areas such as social services, advocacy, culture, and politics. Civil society plays a crucial role in promoting democracy, human rights, social cohesion, and addressing societal issues (Cohen & Arato, 2016).

Putnam’s theory of social capital exposes that dense and rich associational networks facilitate the underlying conditions of interpersonal trust, tolerance and cooperation, providing the social foundations for a vibrant democracy. His argument is that it is horizontal networks of civil engagement that are important in solving the dilemmas of collective action (Putnam, 1994). Given the fact that the IMF (1997) considers policy reforms as collective action, Putnam’s theory of civil society facilitating collective action can also be applied to labor market reform. Moreover, Norris (2000) finds that it is true, as Putnam suggests, that “social capital is strongly and significantly related to multiple indicators of socioeconomic development” (Norris, 2000, p. 1). All this suggests that a strong civil society should in principle help promote labor market reforms aimed at boosting growth and development.

On the other hand, if we look at the extent to which civil society is consulted in reform decisions, and if we go back to the literature on veto players, we might conclude that the involvement of civil society in decisions can hinder reform. If civil society has power in such decisions, although it will not have a veto, it may still make it less likely to reach consensus (Tsebelis, 2002). However, this conclusion should only be considered in part, since, on the one hand civil society is typically not considered as having veto power and, even if it had it, alternative literature points to the fact that a high number of veto players can promote policy change. Moreover, Tompson & Dang (2010) stress the importance of a government’s electoral mandate for reform. The authors state that reforms “by stealth” have severe limits and that major reforms should be accompanied by efforts to persuade voters and stakeholders of the need for reform. Civil society can channel societal demands, such as demand for reforms. Consequently, relevant literature does indeed point to the positive aspects of consulting the civil society.

Therefore, our hypothesis is that **both the strength of civil society and its regular consultation can help implement labor market reforms** (Hypothesis 6).

2.4.3. Hypotheses

All the above has allowed us to select some of the most relevant policy variables in terms of their impact on the implementation of labor market reforms. Based on the literature review, we have formulated a set of six sub-hypotheses that attempt to answer the research question. A labor market reform is understood, as previously defined, as one that has a positive impact on development, in line with the core values of the OECD. Table 1 lists the hypotheses formulated.

Table 1. Summary of hypotheses and mechanisms of political features. Source: author's own elaboration.

HYPOTHESIS 1	A higher degree of power concentration in the form of presidentialism has a positive impact on the implementation of labor market reforms.	Positive impact
HYPOTHESIS 2	Political instability hampers labor market reforms implementation.	Negative impact
HYPOTHESIS 3	A strong rule of law is a facilitator of labor market reforms to be implemented.	Positive impact
HYPOTHESIS 4	High levels of corruption hamper labor market reforms implementation.	Negative impact
HYPOTHESIS 5	Left and center governments undertake less labor market reforms (left-of-center ideology of the government).	Negative impact
HYPOTHESIS 6	Both the strength of civil society and its regular consultation can help implement labor market reforms.	Positive impact

3. METHODOLOGY OF THE EMPIRICAL ANALYSIS

Considering the findings extracted from the previous section which have allowed us to formulate six sub-hypotheses (see Section 2.4.3) that aim to answer the research question, we now test them empirically. The following section describes the data and the methodology, which consists broadly of running regressions with a pooled ordinary least squares (OLS) method and panel data regressions with a fixed effects specification on data for the 38 OECD member countries from the year 2001 to 2021. This quantitative methodology allows us to test the impact that several political variables may have on the implementation of labor market reform.

3.1. Data collection: creation of a database

As a first step of this work, and with the aim of gaining understanding on the overall topic of economic structural reform, a database conformed by reform activity indicators (both product and labor market) and potential facilitators/detractors of reforms has been built in the form of panel data. This project was done as part of a three-month internship at the OECD, in the Economics Department, in the Structural Policy Analysis Division (SPAD).

Regarding the construction of the database, a similar methodology had been used in Duval et al. (2018) in the sense that they also built a comprehensive database of major labor and product market reforms. However, this database did not include any of the factors that influence the success a reform in winning approval. The database presented by Høj et al. (2006) had included some of them, but there are a lot of other fields to be explored and updated. The database we have built consists of a conglomerate of several sources and data for the 38 OECD member countries from the year 2000 to the year 2022. Firstly, and since the elaboration of this database has been done under the umbrella of the OECD, multiple data come from the OECD itself (OECD, 2023). Another relevant data source in economics is the Varieties of Democracy (V-Dem) Dataset (Coppedge et al., 2021), a political science project that has hardly been used in economic research. Finally, for the political variables, data from the Comparative Political Dataset (CPDS) was also included (Armingeon, 2018). The creation of our own database brings value to this bachelor's thesis due to its unique nature in sources and variety of areas of the variables.

This paper aims to further understand one of the main areas of reform: labor market reforms. The use of the database described above will allow us to test the hypotheses formulated in Section 2. Part of the value of this work is also that it allows us to make specific use of the comprehensive database built up under the auspices of the OECD, thereby extending the general literature that examines the nature of structural economic reforms.

3.2. Justification of case selection

As mentioned above, the 38 OECD member countries are the subject of this empirical analysis. The reason for such a selection is that these countries are among the world's most prominent

economies. In addition, the OECD's pioneering work in advising policymakers means that a great deal of data on labor market reforms is available. Moreover, these countries were also the ones with the most availability of external data sources (V-Dem Dataset and CPDS). We are aware that there is a selection bias in our sample, as we are analyzing only developed economies, with a minimum core of democratic values. However, this does not mean that the results are not valid, but that they should be considered especially for countries with similar characteristics to those studied.

The 38 countries included in the analysis are: Austria, Australia, Belgium, Canada, Chile, Colombia, Costa Rica, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

The analysis includes data from year 2001 to year 2021 for each country.

3.3. Variables included in the analysis

Before exposing the econometric methodology, it is first necessary to define and present the construction of the dependent variable, the independent variables, and the control variables.

3.3.1. Dependent variable

Regarding the dependent variable, which is **implementation of reforms in the labor market**, it has been built in two steps. First, we aggregate different labor market policy areas to create an aggregate indicator of the policy setting of the labor market. A second step is needed to transform the policy setting into reform activity. It consists of measuring the increment of these setting across years. In this way, we have a dependent variable that measures the change in the settings of the labor market and thus indicates the implementation of the reform.

This variable construction is aligned with our conception of “implementation” which, as mentioned in the introduction, refers to the *de facto* implementation of labor market reforms, when changes can be observed in the policy settings. The dependent variable captures such change. The following section describes in detail the construction of the dependent variable.

As a first step, thirteen initial variables about the policy setting of the labor market have been used in the creation of the dependent variable. All variables come from the OECD and are as follows.

Strictness of employment protection – collective dismissals (regular contracts): Indicates strictness of employment protection legislation on collective dismissals, considering regular contracts. It has been compiled considering statutory laws, collective bargaining agreements, and case law, as well as contributions from officials from OECD member countries and advice from country experts.

Strictness of employment protection – individual dismissals (regular contracts): Indicates strictness of employment protection legislation on individual dismissals, considering regular contracts. It has been compiled considering statutory laws, collective bargaining agreements, and case law, as well as contributions from officials from OECD member countries and advice from country experts.

Strictness of employment protection – individual dismissals (temporary contracts): Indicates strictness of employment protection legislation on individual dismissals, considering temporary contracts. It has been compiled considering statutory laws, collective bargaining agreements, and case law, as well as contributions from officials from OECD member countries and advice from country experts.

Marginal Tax Wedge – Single, 100% average earnings, no child: Marginal tax wedge (difference between the cost to an employer of employing a worker and the net take-home pay of the worker) for a single person at 100% of average earnings, without children. It indicates the percentage of labor costs for the principal earner of the household.

Marginal Tax Wedge – Single, 167% average earnings, no child: Marginal tax wedge (difference between the cost to an employer of employing a worker and the net take-home pay of the worker) for a single person at 167% of average earnings, without children. It indicates the percentage of labor costs for the principal earner of the household.

Marginal Tax Wedge – Single, 67% average earnings, no child: Marginal tax wedge (difference between the cost to an employer of employing a worker and the net take-home pay of the worker) for a single person at 67% of average earnings, without children. It indicates the percentage of labor costs for the principal earner of the household.

Average Tax Wedge – Single, 67% average earnings, no child: Average tax wedge (proportion of an employee's total labor cost taken by the government in the form of taxes) for a one single person without children at 67% of average earnings. In percentage of labor costs.

Average Tax Wedge – Two earner married couple, one 100% average earnings and the other 67% average earnings, two children: Average tax wedge (proportion of an employee's total labor cost taken by the government in the form of taxes) for a two-earner married couple with two children, one at 100% of average earnings and the other at 67%. In percentage of labor costs.

Average Tax Wedge – One earner married couple, 100% average earnings, two children: Average tax wedge (proportion of an employee's total labor cost taken by the government in the form of taxes) for a one-earner married couple with two children at 100% of average earnings. In percentage of labor costs.

Average Tax Wedge – Single, 100% average earnings, no child: Average tax wedge (proportion of an employee's total labor cost taken by the government in the form of taxes) for a one single person without children at 100% of average earnings. In percentage of labor costs.

Effective labor market exit age, men and women: The average effective labor market exit is defined as the average age of exit from the labor force for workers aged 40 and over. This variable is computed as an average between effective labor market exit age of men and effective labor market exit age of women.

Net pension replacement rate, men at 50% of average wage: It is defined as the individual net pension entitlement divided by net pre-retirement earnings, taking account of personal income taxes and social security contributions paid by workers and pensioners. At 50% of average wage, for men.

Net pension replacement rate, women at 50% of average wage: It is defined as the individual net pension entitlement divided by net pre-retirement earnings, taking account of personal income taxes and social security contributions paid by workers and pensioners. At 50% of average wage, for women.

These variables have been added together to create an indicator of labor market settings for each of the countries in each of the years. This aggregation is not problematic since the variables have been normalized beforehand. That means they have been converted to a value from 0 to a 100 ranking from a “bad” state of the labor market to a “good” one in terms of positive labor market indicators. By positive, we mean those that are conducive to development and increasing prosperity, according to the OECD standards described in Section 2.1. Depending on the variable, one of these two formulas was used for normalization:

$$P_i^N = 100 * \frac{P_i - \text{Min}\{P_i\}}{\text{Max}\{P_i\} - \text{Min}\{P_i\}} , \quad (1)$$

$$P_i^N = 100 * \frac{P_i - \text{Max}\{P_i\}}{\text{Min}\{P_i\} - \text{Max}\{P_i\}} . \quad (2)$$

That is, variables whose high values indicate good labor market conditions have been normalized using Expression (1) (the highest value has been set to 100, and the lowest value has been set to 0). On the other hand, variables whose high values indicate a bad scenario have been normalized with Expression (2) (the highest value has been set to 0, and the lowest value has been set to 100). Annex 1 lists the formula each of the variables used for the construction of the dependent variable has been normalized with.

This processing of the data produced a variable that accounts for the general state of labor market policy setting for the 38 countries and for each of the years between 2001 and 2021. In order to create the dependent variable we need, that is, implementation of labor market reform, we had to perform a second step. It consisted in calculating the increment (by subtracting one year’s value from a future year’s value) between years of the general labor market state variable to account for its change. The first consideration was to measure the annual increment of the variable, but due to its brevity annual changes were not significant in the regressions. Consequently, two options have been finally carried out: measuring the **increase within three years** ($\Delta R_{t, t+3}$) and the **increase**

within five years ($\Delta R_{t,t+5}$) of the state of the labor market variable. These two options allow us to observe more change in policy settings and hence reform, of sufficiently large size. Therefore, we have constructed two separate dependent variables that account for reforms in the labor market and we have analyzed them in separate regressions.

3.3.2. Independent variables

Section 2.4.2 has allowed us to identify relevant political variables that impact labor market reforms implementation and explore their potential mechanisms of influence. According to the literature review, a set of six sub-hypotheses have been formulated. The independent variables have been chosen in order to test each one of the hypotheses. We list each of the chosen independent variables for analysis beneath the hypothesis it intends to test. It is important to note that for each hypothesis several independent variables have been considered but we kept those that are more coherent with the literature and presented higher statistical significance in the analysis. All independent variables come from either the Varieties of Democracy (V-Dem) Dataset or the Comparative Political Dataset (CPDS).

Hypothesis 1: A higher degree of power concentration in the form of presidentialism has a positive impact on the implementation of labor market reforms

Index of presidentialism (V-Dem): It measures to what extent the regime is characterized by presidentialism. Presidentialism is understood here as the systemic concentration of political power in the hands of one individual who resists delegating all but the most trivial decision-making tasks. Lower scores indicate a normatively better situation (more democratic) and higher scores a normatively worse situation (less democratic). Index in an interval, from low to high (0 to 1).

Hypothesis 2: Political instability hampers labor market reforms implementation

Democratic breakdowns (V-Dem): Dummy variable (takes value 0 or 1) that indicates how many previous democratic breakdowns have occurred. Once a democratic breakdown has occurred, it is counted as an increase of a unit in the next years. This way, breakdowns over the years are accumulated.

Hypothesis 3: A strong rule of law is a facilitator of labor market reforms to be implemented

Index of rule of law (V-Dem): It measures to what extent laws are transparently, independently, predictably, impartially, and equally enforced, and to what extent do the actions of government officials comply with the law. Index in an interval, from low to high (0 to 1).

Hypothesis 4: High levels of corruption hamper labor market reforms implementation

Index of political corruption (V-Dem): It measures how pervasive political corruption is. It includes measures of six distinct types of corruption that cover both different areas and levels of

the polity realm, distinguishing between executive, legislative and judicial corruption. Index in an interval (0 to 1) that runs from less corrupt to more corrupt.

Hypothesis 5: Left and center governments undertake less labor market reforms (left-of-center ideology of the government)

Social democratic and other left parties in government seat share in parliament (CPDS): Parliamentary seat share of social democratic and other left parties in government. Weighted by the number of days in office in a given year. Data missing for Chile, Colombia, Costa Rica, Israel, Korea, Mexico, and Turkey.

Center parties in government seat share in parliament (CPDS): Parliamentary seat share of center parties in government. Weighted by the number of days in office in a given year. Data missing for Chile, Colombia, Costa Rica, Israel, Korea, Mexico, and Turkey.

Hypothesis 6: Both the strength of civil society and its regular consultation can help implement labor market reforms

Core Civil Society index (V-Dem): It measures how robust civil society is. Civil society organizations include, but are not limited to, interest groups, labor unions, spiritual organizations if they are engaged in civic or political activities, social movements, professional associations, charities, and other non-governmental organizations. The core civil society index is designed to provide a measure of a robust civil society, understood as one that enjoys autonomy from the state and in which citizens freely and actively pursue their political and civic goals, however conceived.

Civil Society Organizations consultation (V-Dem): It indicates whether major civil society organizations (CSOs) are routinely consulted by policymakers on policies relevant to their members. Possible responses:

0: No. There is a high degree of insulation of the government from CSO input. The government may sometimes enlist or mobilize CSOs after policies are adopted to sell them to the public at large. But it does not often consult with them in formulating policies.

1: To some degree. CSOs are but one set of voices that policymakers sometimes take into account.

2: Yes. Important CSOs are recognized as stakeholders in important policy areas and given voice on such issues. This can be accomplished through formal corporatist arrangements or through less formal arrangements.

3.3.3. Control variables

As we have seen, there are many other factors influencing labor market reforms aside from the political variables. Section 2.3 reviewed general factors affecting labor market reform, amongst which there were economic crises (or times of economic downswing) and unemployment rate.

That is why three control variables have been added to each regression to account for the economic cycle and conditions. They are as follows.

Gross Domestic Product per capita, USD constant prices: Gross Domestic Product per Capita in USD constant prices. Lagged one year.

Unemployment rate (OECD): Unemployment rate is derived from unemployment (UN) and labor force (LF) data as measured in the Labour Force Survey. Lagged one year.

Economic crisis of 2008: Dummy variable set to 0 for the years without crisis and set to 1 for the years with crises (considered with a one-year lag). The years set to 1 are 2009, 2010, 2011, and 2012.

3.4. Detailed econometric strategy

The empirical strategy consisted of running a series of regressions with the statistical software Stata 18.0. Two separate analyses were performed, depending on the dependent variable considered in each case. A first set of regressions combined the dependent variable measuring the change within three years of the labor market indicator with the independent variables at the beginning of each three-year period. A second set of regressions combined the dependent variable measuring the change within five years of the labor market indicator with the independent variables at the beginning of each period. Each of the independent variables was tested in a univariate scenario always including the three control variables. That is, regressions were run to test the significance of each independent variable separately, including the control variables to account for other effects. Expression (3) is the formula used in the regressions, where ΔR stands for the reform indicator, $P_{t,i}$ stands for political factor (independent variable), $GDP_{t-1,i}$ is the lagged gross domestic product, $UNR_{t-1,i}$ is the lagged level of unemployment, $CRISIS_{t-1,i}$ is the lagged indicator of economic crises and $\Sigma_{i,t}$ is the error term. i is for countries and t for time. Expressions (4) and (5) indicate the two versions of the dependent variable (ΔR) tested in separate regressions, depending on whether the change in policy settings is observed within three or five years, respectively:

$$\Delta R = \beta_1 P_{t,i} + \vartheta_1 GDP_{t-1,i} + \vartheta_2 UNR_{t-1,i} + \vartheta_3 CRISIS_{t-1,i} + \Sigma_{i,t}, \quad (3)$$

$$\Delta R_{t,t+3} = R_{t+3} - R_t, \quad (4)$$

$$\Delta R_{t,t+5} = R_{t+5} - R_t. \quad (5)$$

After considering several econometric methods used in the literature, we decided to use two of them: **pooled ordinary least squares** regression model and a **Fixed effects** regression model. Høj et al. (2006) used a similar econometric strategy regarding the estimation methods. The pooled OLS method exploits the variation in policy indicators across countries over time. It provided a

first approximation of the forces at work. However, it failed to capture unobservable country-specific effects, such as cultural or institutional factors. Hence, time-invariant country-specific effects may be omitted. Consequently, a second set of regressions for each independent variable were run adding the fixed effects specification to account for the possible unobserved time-invariant characteristics of each country. In all cases, a robust standard errors specification was included when the assumption of homoskedasticity of the residuals did not hold, to control for possible heteroskedasticity.

Therefore, four sets of regressions were run, always including the control variables. With the dependent variable measuring change over three years, a pooled OLS regression and a fixed effects regression were run to test the significance of each independent variable separately. Similarly, with the dependent variable measuring change over five years, a pooled OLS regression and a fixed effects regression were run to test each independent variable separately. Thus, **32 regressions** were run to test the presented hypotheses.

It is important to highlight that this empirical analysis does not intend to create a model to explain the influence of political characteristics in labor market implementation, but to identify relevant political factors in this area of reform and to try to understand their mechanisms of influence.

4. DISCUSSION OF EMPIRICAL RESULTS

Using the methodology described in Section 3, the research question (*What political factors influence the implementation of labor market reforms and in what sense?*) has been addressed. Several political factors have been found to be significant across regressions. Each of them is discussed below with each of the six hypotheses they are linked to.

On a general note, the fixed effects regressions, aside from being more suitable (see Section 4.2), have produced more significant results. Nonetheless, the pooled OLS results are also relevant for preliminary results and to observe the similarities with the fixed effects regression to see which factors are consistently significant across regressions. This would be an indicator of the robustness of the results.

4.1. Dependent variable patterns

As a first step in discussing the results, it is important to know the nature of the dependent variable we are studying, which is the change in labor market settings that accounts for the implementation of labor market reforms. Looking at Figure 1, we can see that most countries have implemented reforms in a positive sense, that is, reforms aimed at growth and increased welfare. Only six countries have reformed "negatively", but when interpreting the graph, we must keep in mind that it represents the reform that has occurred in twenty years, all in a single difference (value of 2021 of the aggregated labor market regulation indicator minus value of 2001). In addition, the indicator of the state of labor market reform includes many variables that can offset each other's development, which makes it difficult to identify individual tendencies in a simple graph.

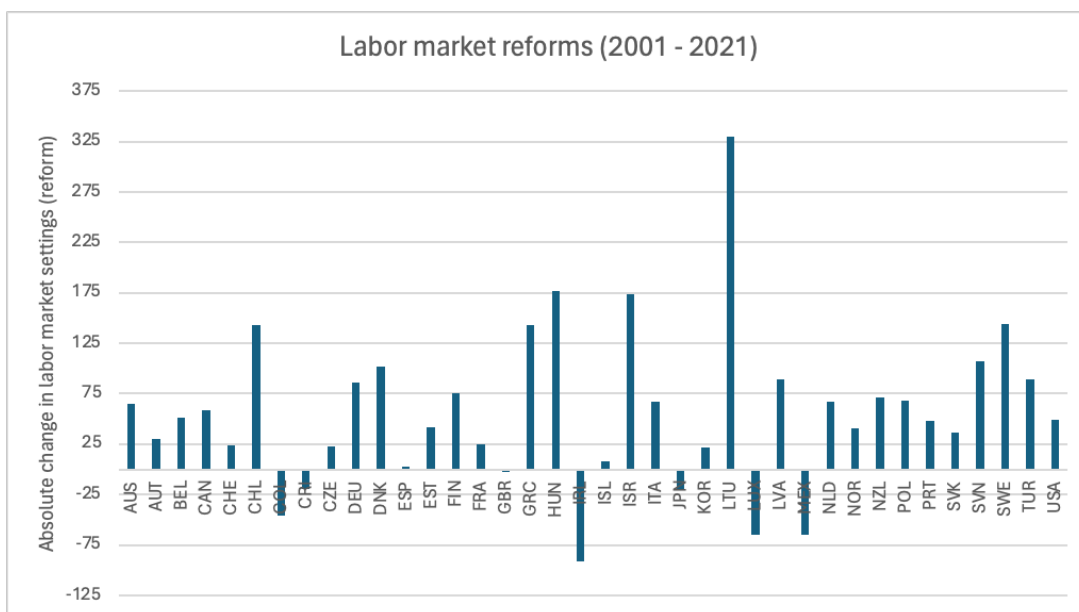


Figure 1. Increment of the labor market settings indicator between 2001 and 2021. Source: author's own elaboration.

4.2. Econometric conclusions

A second step of this discussion is to analyze the results from an econometric strategy perspective. In Section 3.4 we specified the econometric strategy, consisting of running two different sets of regressions depending on the dependent variable used, and using two methods in each of the two sets. Each independent variable was tested separately using the model described by Expression (3).

For the dependent variable we measured the annual increment of the state of the labor market variable within three years ($\Delta R_{t,t+3}$) and the increment within five years ($\Delta R_{t,t+5}$). These time spans were chosen instead of looking at one-year increments because annual changes were not significant in the regressions. Expanding the time frame allowed us to observe more change in the policy settings. Our initial reasoning coincides with the econometric results obtained, since the regressions that use the dependent variable that measures change in five years show more statistical significance than the ones that use the change in three years. Further research could increase the time studied even though measuring increment over many years may make results less relevant, since in a longer time span reforms can start to blur each other.

Concerning the two regression techniques used, results also fit with our initial reasoning. Pooled OLS processes data without accounting for country-specific effects, which can introduce bias in the results. Considering the nature of our dataset, which is panel data, we deemed the fixed effects technique as more suitable, since it considers the time-invariant characteristics of each country and treats our dataset as panel data. Accordingly, the regressions run with the fixed effects specification showed more significant independent variables, and higher levels of confidence.

Therefore, the econometric results are in line with the decisions taken in the process of designing the methodology of the empirical analysis. The following results organized by hypotheses show more statistically significant results in the case of the five-year dependent variable with the fixed effects technique. Other methods and variable configurations were considered and discarded in the process. Further research could attempt at combining certain independent variables and testing their joint significance.

4.3. Hypotheses testing

We will now enter the discussion of the results of the sets of regressions presented in Section 3.4. We have a first set of regression that explores the impact of the independent variables over the dependent variable measuring change of the labor market regulation over three years, and then a second one that does the same with the dependent variable measuring change of the labor market regulation over five years. Each of the regressions have been performed first with a pooled OLS method and then with a fixed effects method. To discuss the results, we are going to explore each of the six hypotheses and see if our sample supports them, refutes them, or is non-conclusive. For each variable we consider all the described regressions' results and consistency of the results.

Annex 2 summarizes the four sets of regressions' results and provides the coefficient, the p-value, and the significance for each of the independent variables.

Regarding concentration of power in the form of presidentialism, in Section 2 we presented several arguments on the mechanism of influence of presidential systems over the ability to implement reform. Considering the contradicting arguments, we decided on higher concentration of power having a positive effect on the implementation of reform. Nonetheless, as the most consistent result in our empirical analysis is a negative and significant (at 5% or 10% level, depending on the regression) coefficient of the "Presidentialism index" throughout regressions and estimation methods, we find that **our results refute the hypothesis that a higher degree of power concentration in the form of presidentialism has a positive impact on the implementation of labor market reforms** (Hypothesis 1). A negative coefficient indicates that the more power concentrated in the executive of a regime, the more unlikely it is to implement labor market reforms (as understood by OECD standards). This conclusion drawn from our sample is a contrarian finding to some of the literature reviewed.

These results can be understood considering the alternative literature we described about excessive presidentialism being an indicator of democracy in danger. Moreover, this conjecture fits with the construction of the independent variable used to test Hypothesis 1. V-Dem describes the "Presidentialism index" as going from a more democratic situation (less presidentialism) towards a less democratic one (more presidentialism). It would be interesting to study these results further with new variables, to confirm this potential mechanism. We must also keep in mind that when studying 38 countries we are considering a wide range of regimes and distributions of power. Therefore, it is possible that the effect of the power concentration in some countries overpowers that of other countries. Even though the OECD member countries share many characteristics, recent incorporations have increased the heterogeneity among them.

Switching to political instability, we identified it as an impediment to labor market reforms implementation. Some literature (Barro, 1991) defines political instability as non-democratic actions, and after trying other variables, we used the number of democratic breakdowns as a proxy for extreme political instability. While no significant effect of democratic breakdowns on the dependent variable was found in the pooled OLS regressions, the coefficients on this independent variable were negative and significant at the 5% level in both fixed effects regressions. Considering that fixed effects is a more suitable method for analyzing our sample, **these results support the hypothesis that political instability hampers labor market reforms implementation** (Hypothesis 2).

Consequently, our conclusion is in line with that of most scholars. Countries with more unstable political institutions may face more obstacles in implementing labor market reforms due to difficulties in boosting growth and maintaining the political continuity needed for reform.

In relation to rule of law, by definition (United Nations, 2024), it is essential for economic and social development. The results obtained are consistent with this statement. V-Dem's "Index of rule of law" chosen to test the hypothesis has shown significance in all regressions with both dependent variables. Significance varies from 10% to 5% level and is 5% in both fixed effects regressions, the results of which we value as more suitable. The coefficients for rule of law are positive in all cases, indicating that a strong rule of law is related to more labor market reforms implementation. Therefore, **our analysis supports the hypothesis that a strong rule of law is a facilitator of labor market reforms to be implemented** (Hypothesis 3).

Hence, rule of law, as indicated by the literature, seems to potentiate labor market reforms directed towards development. A robust and secure democratic foundation allows for new policies to arise.

As to corruption, plenty of studies confirm its negative effects on political institutions and economic development. Although less robust than in other factors, our results are aligned with this thesis. The coefficients for the variable "Political corruption" are negative throughout regressions and estimation methods. Hence, political corruption is related with lack of implementation of reforms in the labor market. Regarding the level of significance, political corruption only appeared significant (at 10% level) in its effect on the five-year change dependent variable. Even so, since it shows significance with the fixed effects specification, ruling out possible country-specific effects, we consider **these results support the hypothesis that high levels of corruption hamper labor market reforms implementation** (Hypothesis 4).

As we have seen, the abuse of public office for private gain is in a normative sense pernicious. Moreover, our study adds to the literature that also points to the detrimental effects of corruption in practice. In an atmosphere of undermined public trust and deficient institutions, reforms or any other initiative directed towards development will probably be doomed from start.

Concerning government's ideology, literature on its impact on labor market reforms implementation presents multiple mechanisms that move in opposite directions. If we look at the coefficients alone, we see that the variable for left-wing governments has a small but positive coefficient in all regressions, indicating a positive relation between left parties and more labor market reform. On the other hand, the coefficient for center parties is also small but in this case negative, indicating a negative link between center parties and labor market reform. If these conclusions were to be statistically significant, they would provide a new outlook on the mechanism of influence of the government's ideology on reform, perhaps supporting the thesis that left-wing parties can be more successful at implementing reforms as they may find it easier to agree with organized labor. Nonetheless, aside from the small absolute value of both coefficients, they only appear to be significant in one of the regressions and one of the estimation methods: pooled OLS. Considering the nature of this estimation method, these results could be capturing country-fixed effects and distorting the conclusions. Therefore, **we cannot say our analysis**

supports the hypothesis that left and center governments undertake less labor market reforms due to lack of significance (Hypothesis 5).

Nevertheless, given the number of publications that examine the impact of government ideology on policymaking, it would be very informative to conduct further research to examine its impact on the implementation of labor market reforms. Moreover, as discussed in the case of presidentialism, we have to keep in mind that when working with so many diverse countries the effect of government ideology in a country can neutralize the effect in another country, leading to a non-significant result. We should also consider that maybe not enough variability was available in order to extract relevant results.

In the case of the role of civil society, besides the objections that could be made through the veto players literature, many other scholars point to the benefits of having a strong civil society that is included in the processes of making political decisions in a country. In accordance with this, coefficients for the variables “Core civil society index” and “Civil society consultations” are positive throughout the regressions and estimation methods. Regarding significance, the variables related with the civil society are significant (at 5% or 10% level depending on the regression) with the fixed effects specification. Considering that this method is more suitable for our analysis, we assess these results to be valid and affirm that **our results support the hypothesis that both the strength of the civil society and its regular consultation can help implement labor market reforms** (Hypothesis 6).

In this way, we add to the literature that highlights the important role of the civil society. Civil society has been considered to play a primordial role when it comes to promoting democracy, human rights and socioeconomic development. In addition to that, our results indicate a possible link between strength and consultation of the civil society with the implementation of labor market reforms that is sure to be a very interesting line of research.

Table 2 summarizes the results of our empirical analysis. It is important to note that the conclusions drawn from this empirical exercise should be considered in light of the sample selection bias already mentioned. Moreover, the results presented are not intended to be a model of the determinants of labor market reform, but rather an exploration of potential mechanisms of influence of political variables in order to provide an answer to our research question.

Table 2. Summary of results by variable. Source: author's own elaboration.

INDEPENDENT VARIABLE	Expected mechanism of influence over labor market reforms implementation	Supported / Refuted / Mostly non-significant results
H1. Index of presidentialism	+	Refuted
H2. Democratic breakdowns	-	Supported
H3. Index of rule of law	+	Supported
H4. Index of political corruption	-	Supported
H5. Left parties in government	-	Mostly non-significant
H5. Centre parties in government	-	Mostly non-significant
H6. Core civil society index	+	Supported
H6. Civil society consultation	+	Supported

CONCLUSIONS

As a first concluding remark, it is clear that our research has come to gain further understanding of an area that is as much interesting and important as it is complex and controversial: labor market reforms. Combining political science and empirical economics we have attempted to shed light on this area of policymaking. The process and results of the analysis are not only valuable for their present impact but for the new perspectives on reform that can be traced from them.

The results obtained in the empirical analysis, which have as a base the previous literature review, have helped us answer the research question: *What political factors influence the implementation of labor market reforms and in what sense?* The degree of power concentration in the form of presidentialism has been found to be an important factor when determining labor market implementation, featuring a negative significant effect in the case of our analysis. This could be attributed to its non-democratic extreme being noxious for reform. Political instability has also been linked to lack of labor market reforms implementation. A potential mechanism could be that in a climate of instability it is harder to build the consensus and continuity necessary for pro-development initiatives. In concordance, a strong rule of law has appeared to be significantly related to more labor market reform. In turn, corruption and labor market reforms appear to be negatively related to some level of relevant significance. No significant results for ideology of the government have been found, although the literature points to its importance; hence, this issue should be examined further. Finally, robustness and consultation of civil society appears to potentiate labor market reform. Its mechanism can be understood in multiple ways, such as Putnam's theory of social capital's relevance for the good functioning of institutions.

It is important to highlight that the 38 countries this study has been carried out on are all developed countries with a minimum standard of democratic values. Results should be examined from this point of view, even though it might be insightful to explore them in countries with very different situations, as some mechanisms might still hold. Moreover, while it is clear that this exercise has not produced a one-size-fits-all "toolkit" for reformers, it does point to a number of relevant factors and its potential mechanisms.

Beyond the main findings, we thought it relevant to highlight the innovative addition that civil society indicators represent in this type of research. In this case, civil society has been included in the analysis through the idea that the literature on veto players brings to the table, which is that the configuration of actors in a political decision-making process matters, even though we cannot consider civil society as having a veto. The inclusion of the third sector is necessary, given its political and social importance.

Regarding the general contributions of this work, the creation and exploitation of a new and unique database under the umbrella of the OECD has brought an added value. On the one hand, its value is due to the number of years and countries studied, which expands the existing literature on the subject. The diversity of variables included in the database, going beyond the variables used in this

analysis, provides opportunity for new and varied works. Also, the data sources of V-Dem and CPDS have proven to be as much complete and rigorous as interesting and refreshing. In addition, the database built has potential to be exploited combining many other areas of study.

As to future research, much work remains to be done, given that our analysis is preliminary and exploratory. One possible research avenue is the creation of a model to determine the interactive influences of political factors on the implementation of labor market reforms. In addition, similar investigation could be conducted in the area of product market reforms and regulations. Regarding the independent variables, there are many other salient factors to be studied, such as economic inequality or gender equality, both of which are included in our database.

In a nutshell, the present research has succeeded in expanding the literature on structural economic reforms while giving presence to an important area in economics as is political science. Since this is an exploratory analysis, many opportunities emerge from it to expand the present results or explore new horizons of reform. In order to tackle the pressing issues our societies face nowadays it is essential to continue to investigate to create better, more efficient, and equitable policies.

5. BIBLIOGRAPHY

- Adascalitei, D., & Pignatti Morano, C. (2016). Drivers and effects of labour market reforms: Evidence from a novel policy compendium. *IZA Journal of Labor Policy*, 5, 1-32.
- Alesina, A., Özler, S., Roubini, N., & Swagel, P. (1996). Political instability and economic growth. *Journal of Economic growth*, 1, 189-211.
- Alesina, A., & Tabellini, G. (1990). A positive theory of fiscal deficits and government debt. *The review of economic studies*, 57(3), 403-414.
- Armingeon, K., Wenger, V., Wiedemeier, F., Isler, C., Knöpfel, L., Weisstanner, D., & Engler, S. (2018). Codebook: comparative political dataset 1960–2016. *Bern: Institute of Political Science, University of Berne*.
- Barro, R. J. (1991). Economic growth in a cross section of countries. *The quarterly journal of economics*, 106(2), 407-443.
- Bean, C. R. (1998), “The Interaction of Aggregate-Demand Policies and Labour Market Reform”, *Swedish Economic Policy Review* 5.
- Bardhan, P. (2017). Corruption and development: a review of issues. *Political corruption*, 321-338.
- Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. I., Teorell, J., Alizada, N., ... & Ziblatt, D. (2021). V-Dem dataset v11. 1.
- Cohen, J. L., & Arato, A. (2016). Civil society and political theory. In *Democracy: A Reader* (pp. 370-374). Columbia University Press.
- Cukierman, A., Edwards, S., & Tabellini, G. (1989). Seigniorage and political instability.
- Drazen, A. (2000), *Political Economy in Macroeconomics*, Princeton University Press.
- Drazen, A., W. Easterly (2001) “Do Crises Induce Reform?: Simple Empirical Tests of Conventional Wisdom” *Economics and Politics*, Vol. 13 (July).
- Duval, M. R. A., Furceri, D., Hu, B., Jalles, J. T., & Nguyen, H. (2018). *A narrative database of major labor and product market reforms in advanced economies*. International Monetary Fund.
- Eichhorst, W., Marx, P., & Wehner, C. (2017). Labor market reforms in Europe: towards more flexicure labor markets?. *Journal for labour market research*, 51, 1-17.

- Fisher, W. H., & Keuschnigg, C. (2010). Pension reform and labor market incentives. *Journal of Population Economics*, 23, 769-803.
- Gehlbach, S., & Malesky, E. J. (2010). The contribution of veto players to economic reform. *The Journal of Politics*, 72(4), 957-975.
- Haggard, S., MacIntyre, A., & Tiede, L. (2008). The rule of law and economic development. *Annu. Rev. Polit. Sci.*, 11, 205-234.
- Høj, J., Galasso, V., Nicoletti, G., & Dang, T. T. (2006). The political economy of structural reform: empirical evidence from OECD countries.
- IMF. (1997). *Policy Reform as Collective action*. IMF Working paper.
- IMF. (2004). Fostering Structural Reforms in Industrial countries, chapter III of *World Economic Outlook: Advancing Structural Reforms*.
- Linz, J. J., & Valenzuela, A. (Eds.). (1994). *The failure of presidential democracy* (Vol. 1). jhu Press.
- Lijphart, A. (1999). *Patterns of democracy: Government forms and performance in thirty-six countries*. Yale university press.
- Norris, P. (2000). Making democracies work. *Social capital and civic engagement in*, 47, 15-20.
- OECD. (2006). *OECD employment outlook 2006: Boosting jobs and incomes*.
- OECD. (2010). *Making reform happen: Lessons from OECD countries*.
- OECD. (2017). *Going for Growth 2017*.
- OECD. (2012). Structural reforms in times of crises in OECD (ed) *Economic Policy Reforms 2012: Going for Growth*. Paris, pp 17-50.
- OECD (2023). *OECD Statistics*. <https://stats.oecd.org>
- Ozler, S., & Tabellini, G. (1991). External debt and political instability.
- Persson, T. (2003), "Consequences of Constitutions", *NBER Working Paper*, No. 10170.
- Pitlik and Wirth (2003), "Do Crises Promote the Extent of Economic Liberalization?: An Empirical test" in *European Journal of Political Economy*, Vol. 19, pp. 565-581.
- Putnam, R. D. (1994). Making democracy work: Civic traditions in modern Italy.

- Rose-Ackerman, S., & Palifka, B. J. (2016). *Corruption and government: Causes, consequences, and reform*. Cambridge university press.
- Tompson, W., & Dang, T. T. (2010). Advancing structural reforms in OECD countries: Lessons from twenty case studies.
- Transparency International. (2024). *What is corruption?*. <https://www.transparency.org/en/what-is-corruption>
- Tsebelis, G. (2002). *Veto players: How political institutions work*. Princeton University Press.
- United Nations. (2024). *United Nations and the Rule of Law*. <https://www.un.org/ruleoflaw/what-is-the-rule-of-law/>
- Ugur, M. (2014). Corruption's direct effects on per-capita income growth: a meta-analysis. *Journal of Economic Surveys*, 28(3), 472-490.
- World Bank (2020). *Anticorruption Fact Sheet*. <https://www.worldbank.org/en/news/factsheet/2020/02/19/anticorruption-fact-sheet>

ANNEX 1: NORMALIZATION FOR CONSTRUCTION OF THE DEPENDENT VARIABLE

The variables used in the process of building the dependent variable have been normalized in two different directions depending on whether their high values were considered as good or bad for the state of the labor market regulation (see Section 3.3.1). Below we list the thirteen variables and specify whether they have been normalized with Expression (1) or Expression (2).

$$P_i^N = 100 * \frac{P_i - \text{Min}\{P_i\}}{\text{Max}\{P_i\} - \text{Min}\{P_i\}} \quad , \quad (1)$$

$$P_i^N = 100 * \frac{P_i - \text{Max}\{P_i\}}{\text{Min}\{P_i\} - \text{Max}\{P_i\}} \quad . \quad (2)$$

- *Strictness of employment protection – collective dismissals (regular contracts):* Normalized with Expression (2)
- *Strictness of employment protection – individual dismissals (regular contracts):* Normalized with Expression (2)
- *Strictness of employment protection – individual dismissals (temporary contracts):* Normalized with Expression (2)
- *Marginal Tax Wedge – Single, 100% average earnings, no child:* Normalized with Expression (2)
- *Marginal Tax Wedge – Single, 167% average earnings, no child:* Normalized with Expression (2)
- *Marginal Tax Wedge – Single, 67% average earnings, no child:* Normalized with Expression (2)
- *Average Tax Wedge – Single, 67% average earnings, no child:* Normalized with Expression (2)
- *Average Tax Wedge – Two earner married couple, one 100% average earnings and the other 67% average earnings, two children:* Normalized with Expression (2)
- *Average Tax Wedge – One earner married couple, 100% average earnings, two children:* Normalized with Expression (2)
- *Average Tax Wedge – Single, 100% average earnings, no child:* Normalized with Expression (2)
- *Effective labor market exit age, men and women:* Normalized with Expression (1)
- *Net pension replacement rate, men at 50% of AW:* Normalized with Expression (2)

- *Net pension replacement rate, women at 50% of AW*: Normalized with Expression (2)

ANNEX 2: RESULTS OF THE EMPIRICAL ANALYSIS

Results of the empirical analysis are presented by sections and with a summary table for each set of regressions.

2.1. Dependent variable: change between 3 years of the labor market regulation indicator

2.1.1. Pooled OLS regression results

Summary table:

Independent variable	Coefficient	P-value	Significance
Index of presidentialism	-54,5532	0,052	Significant at 10% level
Democratic breakdowns	2,710072	0,368	Non-significant
Index of rule of law	40,38706	0,127	Non-significant
Index of political corruption	-21,35233	0,256	Non-significant
Left parties in government	0,1134541	0,373	Non-significant
Centre parties in government	-0,1809814	0,130	Non-significant
Core civil society index	0,9798657	0,967	Non-significant
Civil society consultation	0,9082385	0,733	Non-significant

Index of presidentialism (*presin*):

laborm_3	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
presin	-54.5533	27.913	-1.95	0.052	-109.5603	.4536919
gdp_t1	-.0001901	.0001012	-1.88	0.062	-.0003895	9.37e-06
crises_t1	-.8868909	4.217414	-0.21	0.834	-9.197976	7.424194
unr_t1	.6223515	.6173639	1.01	0.315	-.5942623	1.838965
_cons	14.33799	7.267606	1.97	0.050	.016012	28.65996

Democratic breakdowns (*dembreak*):

laborm_3	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
dembreak	2.710072	3.0013	0.90	0.368	-3.204468	8.624611
gdp_t1	-.0001036	.0001086	-0.95	0.341	-.0003176	.0001104
crises_t1	-.5333359	4.179126	-0.13	0.899	-8.768969	7.702297
unr_t1	.5597646	.6553962	0.85	0.394	-.7317978	1.851327
_cons	6.643412	7.572204	0.88	0.381	-8.278819	21.56564

Index of rule of law (*rulelaw*):

laborm_3	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
rulelaw	40.38706	26.38451	1.53	0.127	-11.60781	92.38193
gdp_t1	-.0002343	.0001085	-2.16	0.032	-.0004481	-.0000205
crises_t1	-.733127	4.207944	-0.17	0.862	-9.02555	7.559296
unr_t1	.6135605	.6092247	1.01	0.315	-.5870136	1.814134
_cons	-25.23697	24.86519	-1.01	0.311	-74.23777	23.76383

Index of political corruption (*polcorr*):

laborm_3	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
polcorr	-21.35233	18.75251	-1.14	0.256	-58.30714	15.60248
gdp_t1	-.0002255	.0001154	-1.95	0.052	-.0004529	1.96e-06
crises_t1	-.4451501	4.213006	-0.11	0.916	-8.747548	7.857248
unr_t1	.6482536	.6172728	1.05	0.295	-.5681805	1.864688
_cons	14.43494	7.787137	1.85	0.065	-.9108545	29.78073

Left parties in government (*govleft*):

laborm_3	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
govleft	.1134541	.1269946	0.89	0.373	-.1371262	.3640344
gdp_t1	-.0002321	.0001133	-2.05	0.042	-.0004556	-8.59e-06
crises_t1	-2.479959	4.652102	-0.53	0.595	-11.65929	6.699368
unr_t1	.4608004	.6422691	0.72	0.474	-.8064974	1.728098
_cons	13.36604	7.579608	1.76	0.080	-1.589713	28.3218

Center parties in government (*govcentd*):

laborm_3	Robust				
	Coefficient	std. err.	t	P> t	[95% conf. interval]
govcentd	-.1809814	.1189598	-1.52	0.130	-.4157078 .0537449
gdp_t1	-.0001863	.0001143	-1.63	0.105	-.0004118 .0000392
crises_t1	-2.391604	4.644711	-0.51	0.607	-11.55635 6.77314
unr_t1	.6382447	.6428032	0.99	0.322	-.6301071 1.906596
_cons	14.24105	7.644999	1.86	0.064	-.8437344 29.32583

Core civil society index (*cscore*):

laborm_3	Robust				
	Coefficient	std. err.	t	P> t	[95% conf. interval]
cscore	.9798657	23.75683	0.04	0.967	-45.83674 47.79647
gdp_t1	-.0001261	.000114	-1.11	0.270	-.0003508 .0000985
crises_t1	-.5124198	4.182583	-0.12	0.903	-8.754864 7.730024
unr_t1	.7239938	.6377136	1.14	0.257	-.5327222 1.98071
_cons	6.691375	20.41797	0.33	0.743	-33.54547 46.92822

Civil society consultation (*csconsult*):

laborm_3	Robust				
	Coefficient	std. err.	t	P> t	[95% conf. interval]
csconsult	.9082385	2.661838	0.34	0.733	-4.337337 6.153814
gdp_t1	-.0001515	.0001221	-1.24	0.216	-.0003921 .0000891
crises_t1	-.5518092	4.193946	-0.13	0.895	-8.816647 7.713029
unr_t1	.721818	.6274796	1.15	0.251	-.5147304 1.958366
_cons	6.584407	8.564808	0.77	0.443	-10.29391 23.46272

2.1.2. Fixed effects regression results

Summary table:

Independent variable	Coefficient	P-value	Significance
Index of presidentialism	-69,76885	0,003	Significant at 5% level
Democratic breakdowns	-58,54149	0,000	Significant at 5% level
Index of rule of law	83,74047	0,005	Significant at 5% level
Index of political corruption	-30,8381	0,615	Non-significant
Left parties in government	0,0159651	0,909	Non-significant
Centre parties in government	-0,1044091	0,584	Non-significant
Core civil society index	50,65887	0,046	Significant at 5% level
Civil society consultation	5,775707	0,229	Non-significant

Index of presidentialism (*presin*):

laborm_3	Robust				
	Coefficient	std. err.	t	P> t	[95% conf. interval]
presin	-69.76885	22.35172	-3.12	0.003	-115.0577 -24.47997
gdp_t1	.0000747	.0005268	0.14	0.888	-.0009927 .0011422
crises_t1	-1.039217	4.525249	-0.23	0.820	-10.20824 8.129808
unr_t1	1.233576	.6734974	1.83	0.075	-.1310588 2.598212
_cons	1.819271	17.6689	0.10	0.919	-33.98131 37.61986
sigma_u	12.835752				
sigma_e	30.489151				
rho	.1505267	(fraction of variance due to u_i)			

Democratic breakdowns (*dembreak*):

laborm_3	Robust					
	Coefficient	std. err.	t	P> t	[95% conf. interval]	
dembreak	-58.54149	3.056267	-19.15	0.000	-64.73407 -52.3489	
gdp_t1	.0000435	.0005141	0.08	0.933	-.0009981 .0010852	
crises_t1	-.8769397	4.48969	-0.20	0.846	-9.973916 8.220037	
unr_t1	1.30917	.6820978	1.92	0.063	-.0728915 2.691231	
_cons	28.55068	16.45825	1.73	0.091	-4.796904 61.89827	
sigma_u	46.450323					
sigma_e	30.415942					
rho	.69990239	(fraction of variance due to u_i)				

Index of rule of law (*rulelaw*):

laborm_3	Robust					
	Coefficient	std. err.	t	P> t	[95% conf. interval]	
rulelaw	83.74047	28.1935	2.97	0.005	26.61502 140.8659	
gdp_t1	.0000977	.0005289	0.18	0.854	-.0009739 .0011693	
crises_t1	-1.104213	4.483498	-0.25	0.807	-10.18864 7.980217	
unr_t1	1.242064	.6722363	1.85	0.073	-.1200164 2.604144	
_cons	-81.218	35.72889	-2.27	0.029	-153.6116 -8.8244	
sigma_u	15.285633					
sigma_e	30.448202					
rho	.20129388	(fraction of variance due to u_i)				

Index of political corruption (*polcorr*):

laborm_3	Robust					
	Coefficient	std. err.	t	P> t	[95% conf. interval]	
polcorr	-30.8381	60.8334	-0.51	0.615	-154.0983 92.42208	
gdp_t1	-.0000817	.0005174	-0.16	0.875	-.0011299 .0009666	
crises_t1	-.4149624	4.432479	-0.09	0.926	-9.396017 8.566093	
unr_t1	1.210874	.6851951	1.77	0.085	-.1774631 2.599211	
_cons	6.581091	18.64573	0.35	0.726	-31.19874 44.36093	
sigma_u	12.071783					
sigma_e	30.647736					
rho	.13431003	(fraction of variance due to u_i)				

Left parties in government (*govleft*):

laborm_3	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
govleft	.0159651	.138303	0.12	0.909	-.2664873	.2984176
gdp_t1	.0000114	.000585	0.02	0.985	-.0011834	.0012061
crises_t1	-2.440949	5.224078	-0.47	0.644	-13.10994	8.228041
unr_t1	1.41285	.7361039	1.92	0.064	-.0904751	2.916174
_cons	-1.581317	22.76572	-0.07	0.945	-48.07513	44.91249
sigma_u	11.852433					
sigma_e	30.124256					
rho	.13405223	(fraction of variance due to u_i)				

Center parties in government (*govcentd*):

laborm_3	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
govcentd	-.1044091	.1883959	-0.55	0.584	-.4891649	.2803467
gdp_t1	.0000136	.0005736	0.02	0.981	-.0011579	.001185
crises_t1	-2.406582	5.210635	-0.46	0.648	-13.04812	8.234953
unr_t1	1.489446	.730701	2.04	0.050	-.0028443	2.981737
_cons	-.7882846	21.93615	-0.04	0.972	-45.58787	44.0113
sigma_u	11.562732					
sigma_e	30.095177					
rho	.12862675	(fraction of variance due to u_i)				

Core civil society index (*cscore*):

laborm_3	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
cscore	50.65887	24.59228	2.06	0.046	.8301883	100.4876
gdp_t1	-6.90e-06	.0005182	-0.01	0.989	-.0010568	.001043
crises_t1	-.8807881	4.518594	-0.19	0.847	-10.03633	8.274753
unr_t1	1.235839	.6689585	1.85	0.073	-.1196001	2.591277
_cons	-45.50017	30.55902	-1.49	0.145	-107.4186	16.41828
sigma_u	13.509129					
sigma_e	30.58188					
rho	.16327166	(fraction of variance due to u_i)				

Civil society consultation (*csconsult*):

laborm_3	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
<i>csconsult</i>	5.775707	4.721296	1.22	0.229	-3.790548	15.34196
<i>gdp_t1</i>	-.0000758	.0005153	-0.15	0.884	-.0011198	.0009682
<i>crises_t1</i>	-.8263332	4.488682	-0.18	0.855	-9.921267	8.268601
<i>unr_t1</i>	1.25323	.6744143	1.86	0.071	-.113263	2.619723
<i>_cons</i>	-9.952163	18.98685	-0.52	0.603	-48.42318	28.51886
<i>sigma_u</i>	13.149876					
<i>sigma_e</i>	30.582605					
<i>rho</i>	.15603403	(fraction of variance due to <i>u_i</i>)				

2.2. Dependent variable: change between 5 years of the labor market regulation indicator

2.2.1. Pooled OLS regression results

Summary table:

Independent variable	Coefficient	P-value	Significance
Index of presidentialism	-90,84995	0,098	Significant at 10% level
Democratic breakdowns	4,816265	0,342	Non-significant
Index of rule of law	73,39398	0,085	Significant at 10% level
Index of political corruption	-43.64323	0,156	Non-significant
Left parties in government	0,3574961	0,087	Significant at 10% level
Centre parties in government	-0,3622778	0,036	Significant at 5% level
Core civil society index	1,153847	0,970	Non-significant
Civil society consultation	2,706673	0,515	Non-significant

Index of presidentialism (*presin*):

laborm_5	Robust				
	Coefficient	std. err.	t	P> t	[95% conf. interval]
presin	-90.84995	54.47913	-1.67	0.098	-198.5134 16.81353
gdp_t1	-.0003034	.0001635	-1.86	0.065	-.0006264 .0000197
crises_t1	3.720138	7.520164	0.49	0.622	-11.14146 18.58174
unr_t1	.220938	.9502177	0.23	0.816	-1.656914 2.09879
_cons	27.29086	12.65987	2.16	0.033	2.272008 52.30971

Democratic breakdowns (*dembreak*):

laborm_5	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
dembreak	4.816265	5.05054	0.95	0.342	-5.164781	14.79731
gdp_t1	-.0001592	.0001737	-0.92	0.361	-.0005025	.0001841
crises_t1	3.94089	7.490504	0.53	0.600	-10.86209	18.74387
unr_t1	.1702525	1.066822	0.16	0.873	-1.938037	2.278542
_cons	14.38191	12.19265	1.18	0.240	-9.713603	38.47743

Index of rule of law (*rulelaw*):

laborm_5	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
rulelaw	73.39398	42.38473	1.73	0.085	-10.36813	157.1561
gdp_t1	-.0003994	.0001708	-2.34	0.021	-.000737	-.0000618
crises_t1	3.894462	7.598014	0.51	0.609	-11.12099	18.90991
unr_t1	.1787245	.9392584	0.19	0.849	-1.677469	2.034918
_cons	-43.30511	38.89667	-1.11	0.267	-120.174	33.56378

Index of political corruption (*polcorr*):

laborm_5	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
polcorr	-43.64323	30.63559	-1.42	0.156	-104.1863	16.89985
gdp_t1	-.000412	.0001827	-2.26	0.026	-.000773	-.000051
crises_t1	4.03958	7.620259	0.53	0.597	-11.01983	19.09899
unr_t1	.2196475	.9526761	0.23	0.818	-1.663063	2.102358
_cons	30.85138	13.40753	2.30	0.023	4.354971	57.34779

Left parties in government (*govleft*):

laborm_5	Robust		t	P> t	[95% conf. interval]	
	Coefficient	std. err.				
govleft	.3574961	.2068825	1.73	0.087	-.0521519	.7671441
gdp_t1	-.0004522	.0001873	-2.41	0.017	-.0008231	-.0000813
crises_t1	6.044217	8.477455	0.71	0.477	-10.74199	22.83042
unr_t1	-.5465909	1.004018	-0.54	0.587	-2.534646	1.441465
_cons	28.12165	12.07271	2.33	0.022	4.216475	52.02682

Center parties in government (*govcentd*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
govcentd	-.3622778	.1705987	-2.12	0.036	-.7000803	-.0244754
gdp_t1	-.0003533	.000183	-1.93	0.056	-.0007157	9.04e-06
crises_t1	4.547527	8.521705	0.53	0.595	-12.3263	21.42135
unr_t1	-.2922795	.9685769	-0.30	0.763	-2.210159	1.6256
_cons	33.17624	13.41325	2.47	0.015	6.616673	59.7358

Core civil society index (*cscore*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
cscore	1.153847	30.35262	0.04	0.970	-58.83002	61.13771
gdp_t1	-.0001983	.000164	-1.21	0.229	-.0005225	.0001258
crises_t1	3.524312	7.430445	0.47	0.636	-11.15998	18.20861
unr_t1	.4367958	.9783093	0.45	0.656	-1.496572	2.370163
_cons	15.11928	28.71131	0.53	0.599	-41.62096	71.85952

Civil society consultation (*csconsult*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
csconsult	2.706673	4.142524	0.65	0.515	-5.479921	10.89327
gdp_t1	-.000278	.0001793	-1.55	0.123	-.0006324	.0000763
crises_t1	3.561047	7.442014	0.48	0.633	-11.14611	18.2682
unr_t1	.4160497	.9531011	0.44	0.663	-1.4675	2.2996
_cons	13.31571	14.10118	0.94	0.347	-14.55151	41.18293

2.2.2. Fixed effects regression results

Summary table:

Independent variable	Coefficient	P-value	Significance
Index of presidentialism	-110,3815	0,016	Significant at 5% level
Democratic breakdowns	-27,61131	0,000	Significant at 5% level
Index of rule of law	154,2238	0,024	Significant at 5% level
Index of political corruption	-177,2789	0,057	Significant at 10% level
Left parties in government	0,30769	0,200	Non-significant
Centre parties in government	-0,3516691	0,165	Non-significant
Core civil society index	82,53569	0,065	Significant at 10% level
Civil society consultation	19,88148	0,080	Significant at 10% level

Index of presidentialism (*presin*):

laborm_5	Robust				
	Coefficient	std. err.	t	P> t	[95% conf. interval]
presin	-110.3815	43.72439	-2.52	0.016	-198.9755 -21.78747
gdp_t1	.0008087	.0009983	0.81	0.423	-.001214 .0028315
crises_t1	3.425983	9.277533	0.37	0.714	-15.37209 22.22405
unr_t1	-.3713976	1.220964	-0.30	0.763	-2.845306 2.102511
_cons	-2.690957	29.48171	-0.09	0.928	-62.42657 57.04466
sigma_u	31.585535				
sigma_e	42.460524				
rho	.35623318	(fraction of variance due to u_i)			

Democratic breakdowns (*dembreak*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
dembreak	-27.61131	5.687568	-4.85	0.000	-39.13542	-16.0872
gdp_t1	.0006562	.0009491	0.69	0.494	-.0012669	.0025793
crises_t1	3.712805	9.271446	0.40	0.691	-15.07293	22.49854
unr_t1	-.4167701	1.252096	-0.33	0.741	-2.953758	2.120218
_cons	9.981958	26.47263	0.38	0.708	-43.65668	63.62059
sigma_u	40.297675					
sigma_e	42.619218					
rho	.4720235	(fraction of variance due to u_i)				

Index of rule of law (*rulelaw*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
rulelaw	154.2238	65.75105	2.35	0.024	20.99948	287.448
gdp_t1	.000878	.0009905	0.89	0.381	-.0011289	.0028848
crises_t1	3.041865	9.130929	0.33	0.741	-15.45915	21.54288
unr_t1	-.2956501	1.230189	-0.24	0.811	-2.788249	2.196949
_cons	-155.685	71.82369	-2.17	0.037	-301.2137	-10.15643
sigma_u	38.463636					
sigma_e	42.202219					
rho	.4537528	(fraction of variance due to u_i)				

Index of political corruption (*polcorr*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
polcorr	-177.2789	90.05574	-1.97	0.057	-359.7492	5.191352
gdp_t1	.0005152	.0009366	0.55	0.586	-.0013827	.002413
crises_t1	3.904662	9.25098	0.42	0.675	-14.8396	22.64893
unr_t1	-.4049317	1.286254	-0.31	0.755	-3.011131	2.201267
_cons	24.51475	30.5845	0.80	0.428	-37.45533	86.48483
sigma_u	43.067371					
sigma_e	42.140229					
rho	.51087969	(fraction of variance due to u_i)				

Left parties in government (*govleft*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
govleft	.30769	.2349554	1.31	0.200	-.172153	.787533
gdp_t1	.0007976	.00111	0.72	0.478	-.0014693	.0030645
crises_t1	4.557191	10.16631	0.45	0.657	-16.20518	25.31956
unr_t1	-.5730516	1.283614	-0.45	0.658	-3.194541	2.048438
_cons	-16.25863	40.47426	-0.40	0.691	-98.91811	66.40084
sigma_u	31.478683					
sigma_e	42.938539					
rho	.34957262	(fraction of variance due to u_i)				

Center parties in government (*govcentd*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
govcentd	-.3516691	.2473578	-1.42	0.165	-.8568412	.153503
gdp_t1	.0008589	.0010669	0.81	0.427	-.00132	.0030379
crises_t1	3.664624	10.26059	0.36	0.723	-17.29029	24.61954
unr_t1	-.5296845	1.381773	-0.38	0.704	-3.351642	2.292273
_cons	-9.241782	36.68892	-0.25	0.803	-84.17056	65.68699
sigma_u	31.386874					
sigma_e	43.069885					
rho	.3468604	(fraction of variance due to u_i)				

Core civil society index (*cscore*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
cscore	82.53569	43.47055	1.90	0.065	-5.544005	170.6154
gdp_t1	.000756	.000964	0.78	0.438	-.0011973	.0027092
crises_t1	3.215355	9.217867	0.35	0.729	-15.46182	21.89253
unr_t1	-.3901996	1.213811	-0.32	0.750	-2.849613	2.069214
_cons	-81.70006	53.50066	-1.53	0.135	-190.1027	26.70258
sigma_u	33.047298					
sigma_e	42.507016					
rho	.37672821	(fraction of variance due to u_i)				

Civil society consultation (*csconsult*):

laborm_5	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
csconsult	19.88148	11.05915	1.80	0.080	-2.526487	42.28946
gdp_t1	.0008214	.0010096	0.81	0.421	-.0012242	.002867
crises_t1	3.158262	9.256632	0.34	0.735	-15.59746	21.91398
unr_t1	-.4158984	1.167736	-0.36	0.724	-2.781956	1.950159
_cons	-51.01357	38.4544	-1.33	0.193	-128.9296	26.90245
sigma_u	43.427321					
sigma_e	41.92898					
rho	.51754855	(fraction of variance due to u_i)				