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Political Representation and Economic Growth[1]

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Abstract

This paper aims to contribute to the debate on the economic implications of political institutions by conducting an empirical investigation of the relationship between political representation and economic growth in a panel data analysis. Showcasing two novel indicators of political representation that can significantly account for long-run cross-country differences in various measures of economic development, I employ two-step system GMM estimations to empirically test the growth effect of inclusiveness of political representation processes across 38 European countries in the 1950-2010 period. The results show that economic growth rates across Europe in the given time period have not depended on inclusiveness of said countries' political institutions of representation, providing further evidence for the vein of institutional economics research that finds no relationship between features of democracy and growth.

Keywords: Political representation, economic growth, political institutions, institutional economics.

JEL Codes: D72, O43, O47

1. Introduction

This paper aims to fill a gap in the institutional economics literature by being the first study, as far as detected, to empirically investigate the economic growth effects of a certain type of political institution that has not received much empirical interest from economists: Political representation. While representation as a political institution forms the foundation of most governmental decision-making processes in modern democracies, a literature on its economic implications – unlike various other types of political institutions – is barely in existence at all. The lack of research on the topic is attributable to the absence of cross-country data on political representation. The main contribution of this paper, therefore, lies in the novel approach it introduces to generate cross-country data that can pave the way for empirical analyses of representation as a political institution, which could then result in an increase in the amount of scholarly interest shown in the institution by the field of economics.

[1] This article was produced from my doctoral dissertation submitted to the social sciences institute of Dokuz Eylül University.

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Political institutions have in recent decades received an increasing amount of interest from economists who have shown them to be interrelated with various economic phenomena, a primary one among which is economic growth. Economists study a variety of political institutions, such as the rule of law (Cross, 2001; Haggard & Tiede, 2011; Xu, 2011), form of government (Nelson & Svara, 2012; Knutsen, 2011), separation of powers (Persson, Roland & Tabellini, 1997; Laffont, & Meleu, 2001; Meyer & Sitaraman, 2019), checks and balances (Acemoglu, Robinson & Torvik, 2013), electoral systems and rules (Han, 2015; Iversen & Soskice, 2010) and corruption (De Vaal & Ebben, 2011; d'Agostino, Dunne & Pieroni, 2016; Huang, 2016). While the findings in the field regarding the connection between some of those institutions and economic growth have never ceased to be mixed, the field of institutional economics has undeniably transformed itself into a powerhouse in the economics literature, owing to the influence of these studies (Hodgson, 2007:8). Political representation, despite having been neglected in such theoretical and empirical investigations by economists, also matters for economic development, in the same vein as those other types of political institutions. Most modern states are representative democracies and all actions by governments of such states fall under the premise of representations of interests of individuals and/or groups forming the society. Rodrik (2004:10) defines political representation as an important institution capable of explaining the difference between developed and developing economies. Popular datasets and indices in social sciences, such as those by the United Nations Development Program and the Freedom House, have come to regard representation as a component of economic development around the globe and include in their publications, where feasible, measurements of political representation, despite the limited nature of those measurements.

The lack of interest shown in political representation by institutional economists can be regarded as a consequence of absence of data fit for robust empirical analysis. The institution is intrinsically an element of political science, rather than that of economics, and has been defined even by its pioneers in the field of political science to be a highly complex political concept (Pitkin, 1972: 4). Theoretical discussions on the nature of political representation exclusive to the field of political science fall outside of the scope of this study and I define political representation as modestly as possible from the perspective of institutional economics: Political representation is a political institution through which the rights and interests of individuals and groups in a society are represented in varying degrees in policy-making processes by a government. While defining the institution as such appears to be an effortless way to save oneself from overcomplicating the matter at hand, real world practices of political representation, on the contrary, exhibit no less complexity than the theoretical discussions demonstrated by the field of political science. Due to vast cross-country differences in both formal and informal political, social, cultural and economic institutions that influence political processes around the world, the nature of processes of political representation varies vastly from country to country, making both theoretical and empirical inquiries a challenge.

The complexities surrounding political representation both in the theoretical and empirical realms make it no less important an effort to study this political

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institution within the domain of institutional economics. Given the crucial role of political representation in governmental processes in modern democracies, investigating the economic implications of forms, degrees and qualities of this institution is a challenge worthy of taking on to, on par with studies of other political institutions. Thus, the study at hand aims to take on this challenge by proposing a novel procedure to empirically test the quality of political representation across democracies and demonstrating a use case for this procedure in the form of a cross-country panel regression analysis.

The rest of the paper is organized as follows: Section 2 summarizes the literature review and Section 3 introduces the data used in the study, followed by explanations toward the study's empirical methodology. Section 4 presents empirical findings. Section 5 provides the concluding remarks.

2. Literature Review

Research on the relationship between political representation and economic growth has remained shallow, at best. While the institution has been studied to some extent, papers released have limited scope, in that they either narrow down their focus on political representation of certain disadvantaged minorities in societies (Welch and Hibbing, 1984; Tremblay, 2007; Latimer, 2020) or are based on samples of limited numbers of countries and years for which cross-country survey data are available. For there are not many empirical studies in literature that fall into the scope of the paper at hand, documenting a precise literature review on the relationship between political representation and economic growth is a difficult task to realize. Despite a literature on the subject of this paper not being readily available, it should be noted that political representation is theoretically closely tied to some of the other types of political institutions frequently studied by economists. This fact facilitates a use case for the remainder of the institutional economics literature in order to shed light onto possible implications of political representation for economic growth. In this section, I intend to utilize the institutional literature to draw a theoretical connection between political representation and economic growth.

A central theme in the institutional economics literature has been the popular debate over whether democracy matters for economic growth. The bulk of research done in the field comes with mixed results. While some household names argue that democracy significantly contributes to economic growth (Acemoğlu et. al., 2019), other notable economists claim that there is no relationship at all, while some claim democracy may even have a negative effect on economic growth. For a recent and comprehensive review of the literature surveys each of these three positions in detail, refer to Sirowy & Inkeles (2017).

One of the arguments that directly concerns the institution of political representation in this debate is one that was put forth by Acemoğlu and Robinson (2012) in their famous work, 'Why Nations Fail'. The authors classify economic and political institutions into two types: Inclusive and extractive. Inclusive institutions are institutions that create incentives for a wide group of members of a society to take part in political and economic processes, boosting plurality while

leaving out as few individuals and groups as possible. Extractive institutions put the interests of elite groups above other individuals and groups forming the society, creating incentives for no one but those elites to take part in political and economic processes. The authors famously use examples from history to make a case for their argument that inclusive institutions are good for economic growth because they secure property rights and encourage innovation, while extractive institutions are bad for economic growth, as they do the exact opposite.

Considering the institution of political representation within the context of Acemoğlu and Robinson's (2012) discussion of inclusive and extractive institutions allows for linking the institution to economic growth in a simple fashion. As most modern democracies are classified as representative democracies, the notion of the width of interests being represented in the policy-making process in a country makes a case for inclusiveness, or thereby, lack of it. Questions such as what percentage of voters are endowed with the opportunity of having their elected representatives represent their rights and interests in the parliament, how effectively those rights and interests are being represented by the elected representatives, whether interests of certain, privileged groups in a society are being represented more predominantly or to what degree minorities enjoy political representation turn the matter into an inquiry about the inclusiveness of the institution of political representation. Since all economic and political decisions by a government are made to represent rights and interests, according to the argument of Acemoğlu and Robinson (2012), more inclusive processes of political representation in which a wider range of interests in a society are being represented in the political sphere must be good for economic growth, while less exclusive processes of political representation must be not as good for economic growth.

Obviously, in order to measure the inclusiveness of political representation, one would need qualified data that exhibits an identical unit of measurement for as many countries and as many points in time as possible, which so far constitutes the missing element in this discussion. In the next section of the study, I propose a procedure to accomplish this task in a way that allows robust empirical analysis of political representation.

3. Data and Methodology

In this part, I introduce the data and describe the methodology employed in the empirical analysis of the study.

3.1. Data

The novel indicators of political representation utilized in this study were produced as part of my doctoral dissertation (Yıldırım, 2020). The approach to producing a set of working political representation indicators was based on the idea that incumbent governments in democracies have various instruments in their disposal to restrict political representation of opposing parties (Przeworski, 2018). These instruments can be in the form of elementary details such as choosing specific colors of ballots to emotionally affect or confuse voters (Valdez & Mehrabian, 1994; Reynolds & Steenbergen (2006), determining voting locations (Haspel and Knotts, 2005) that are closer to areas populated by voters of ruling parties and farther away from areas populated by voters of opposition parties, choosing certain

days or months of the year as election time to benefit from behavioral patterns of certain groups of voters, or more formal electoral arrangements such as setting up electoral thresholds to leave minorities out of parliament, engaging in gerrymandering to geographically divide electoral districts to maximize number of own members of parliament (MPs) elected (Chen & Cottrell, 2016) or specifying district magnitudes in accordance with district voter population to minimize number of opposition MPs elected (Chang & Golden, 2007).

While the instruments listed above can constitute de jure restrictions to access to political representation by opposition parties, the de facto restrictions caused by all of these arrangements can be different in their effect in comparison to what can be suggested by the mere numbers expressed by formal rules, varying from country to country and election to election. While it is not a workable approach to quantify such instruments in their de jure form for each country for empirical purposes, election results can actually provide us with an interesting and feasible approach to account for the de facto consequences of a government's use of all of these instruments combined in an election. This approach lies in the notion of 'wasted votes. Wasted votes are a concept that has been studied frequently in political science (Anckar, 1997; Tavits and Annus, 2006). A wasted vote is a vote that has not resulted in any political representative being elected. When a voter's vote is wasted, the party they vote for has failed to earn any seats in the parliament, as a result of which the said voter's policy choices have been officially left out of the policy-making process in the parliament for the duration of the given electoral term.

Wasted votes can arise from any number of the election-manipulating instruments listed above and are often no accidents: They happen directly because of those instruments. One of the extreme examples for the occurrence of wasted votes can be found in Turkey's general elections in 2002. With the leading Justice and Development Party having won 34.3% of the votes and the main opposition, Republican People's Party, having won 19.4% of the votes, the odd outcome of this election was that no candidates from any other party – except nine independent candidates – won a single seat in the election, due to an electoral threshold of 10 percent. As a result, almost half of the whole voting population was left without a single representative in Turkey's parliament between 2002 and 2007, the year of the next general election. Consequently, it can be stated that the institution of political representation cannot be deemed very inclusive, at least from a quantitative perspective, for the duration of the given electoral term.

What's interesting about the inquiry into the notion of wasted votes is that the number of wasted votes can be extracted from the results of almost every single election that has taken place in the recent history of modern democracies, as election data are often well kept. Thus, calculation of the ratio of wasted votes to total votes in general elections can provide us with a useful indicator that shows what percentage of a population has the right to be politically represented in a democratic society. If the instruments in the disposal of incumbent governments in a country do not allow for a high percentage of voters being left out, then the institution of political representation can be regarded to be not particularly inclusive, and vice

versa. Following this approach, I have examined results of a total of 527 parliamentary elections that took place in 38 European democracies between the years 1946 and 2017, and precisely calculated the following two indicators, relying on the number of votes received by parties that won seats and parties that did not win any seats, that represent the ratio of wasted and or invalid/blank votes to all votes for each of these elections:

1. PR_i: the ratio of valid votes that won no seats in a parliament to total valid votes in a given election.
2. PR_{ii}: the ratio of valid votes that won no seats in a parliament plus the invalid/blank votes, to the total votes in a given election.

The PR_i and PR_{ii} take values between 0 and 100, where higher values indicate a higher proportion of the voting population deprived from the right to be politically represented, and values closer to zero indicate a higher level of inclusiveness of political representation.

The reasoning behind forming two separate indicators of political representation in PR_i and PR_{ii} is as follows. While it can be stated that a voter who has cast a valid vote but could not earn the right to be politically represented in a parliament had deliberately demanded such a right, it is unclear whether voters who cast invalid/blank votes had actually demanded such right. These voters may have cast invalid/blank votes on purpose, or such outcome may have been a consequence of electoral design mechanisms that made it difficult for certain members of a society to vote in an election. The ratio of invalid/blank notes is systematically higher in some countries than others. Thus, I have decided to form PR_i and PR_{ii} as two separate indicators of political representation to capture such effects, if any.

Following calculations of PR_i and PR_{ii}, I annualized the data using weighted averages based on the number of days in every year for which a given election was in effect and ended up with a total of 1.784 observations, between 1950 and 2017. The resulting panel-data is unbalanced due to some of the countries in the dataset, such as post-Soviet states, being founded in years later than 1950 and also certain periods of time going by without elections in some countries, or absence of data. The sources for the election results are the institutes in countries that are responsible for publishing national election data and other relevant data sources published by other respectable work in the field. For a more comprehensive documentation of the process of generating the indicators that took 3 years of work, refer to Yıldırım (2020).

The complete list of the elections used in generating the indicators are as follows:

Albania: 1991, 1992, 1996, 1997, 2001, 2005, 2009, 2013, 2017
Austria: 1949, 1953, 1956, 1959, 1962, 1966, 1970, 1971, 1975, 1979, 1983, 1986, 1990, 1994, 1995, 1999, 2002, 2006, 2008, 2013, 2017
Belgium:

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1949, 1950, 1954, 1958, 1961, 1965, 1968, 1971, 1974, 1977, 1978, 1981, 1985, 1987, 1991, 1995, 1999, 2003, 2007, 2010, 2014
Bulgaria: 1991, 1994, 1997, 2001, 2005, 2009, 2013, 2014, 2017
Croatia: 2000, 2003, 2007, 2011, 2015, 2016
Cyprus: 1976, 1981, 1985, 1991, 1996, 2001, 2006, 2011, 2016
Czech Republic: 1990, 1992, 1996, 1998, 2002, 2006, 2010, 2013, 2017
Denmark: 1947, 1950, 1953, 1953, 1957, 1960, 1964, 1966, 1968, 1971, 1973, 1975, 1977, 1979, 1981, 1984, 1987, 1988, 1990, 1994, 1998, 2001, 2005, 2007, 2011, 2015
Estonia: 1992, 1995, 1999, 2003, 2007, 2011, 2015
Finland: 1948, 1951, 1954, 1958, 1962, 1966, 1970, 1972, 1975, 1979, 1983, 1987, 1991, 1995, 1999, 2003, 2007, 2011, 2015
France: 1946, 1951, 1956, 1958, 1962, 1967, 1968, 1973, 1978, 1981, 1986, 1988, 1993, 1997, 2002, 2007, 2012, 2017
Germany: 1949, 1953, 1957, 1961, 1965, 1969, 1972, 1976, 1980, 1983, 1987, 1990, 1994, 1998, 2002, 2005, 2009, 2013, 2017
Greece: 1974, 1977, 1981, 1985, 1989, 1989, 1990, 1993, 1996, 2000, 2004, 2007, 2009, 2012, 2012, 2015, 2015
Hungary: 1990, 1994, 1998, 2002, 2006, 2010, 2014
Iceland: 1949, 1953, 1956, 1959, 1959, 1963, 1967, 1971, 1974, 1978, 1979, 1983, 1987, 1991, 1995, 1999, 2003, 2007, 2009, 2013, 2016, 2017
Ireland: 1948, 1951, 1954, 1957, 1961, 1965, 1969, 1973, 1977, 1981, 1982, 1982, 1987, 1989, 1992, 1997, 2002, 2007, 2011, 2016
Israel: 1949, 1951, 1955, 1959, 1961, 1965, 1969, 1973, 1977, 1981, 1984, 1988, 1992, 1996, 1999, 2003, 2006, 2009, 2013, 2015
Italy:

1948, 1953, 1958, 1963, 1968, 1972, 1976, 1979, 1983, 1987, 1992, 1994, 1996, 2001, 2006, 2008, 2013
Latvia: 1990, 1993, 1995, 1998, 2002, 2006, 2010, 2011, 2014
Lithuania: 1990, 1992, 1996, 2000, 2004, 2008, 2012, 2016
Luxembourg: 1948, 1951, 1954, 1959, 1964, 1968, 1974, 1979, 1984, 1989, 1994, 1999, 2004, 2009, 2013
Malta: 1947, 1950, 1951, 1953, 1955, 1962, 1966, 1971, 1976, 1981, 1987, 1992, 1996, 1998, 2003, 2008, 2013, 2017
Moldova: 1994, 1998, 2001, 2005, 2009, 2010, 2014
Netherlands: 1948, 1952, 1956, 1959, 1963, 1967, 1971, 1972, 1977, 1981, 1982, 1986, 1989, 1994, 1998, 2002, 2003, 2006, 2010, 2012, 2017
Norway: 1949, 1953, 1957, 1961, 1965, 1969, 1973, 1977, 1981, 1985, 1989, 1993, 1997, 2001, 2005, 2009, 2013, 2017
Poland: 1989, 1991, 1993, 1997, 2001, 2005, 2007, 2011, 2015
Portugal: 1975, 1976, 1979, 1980, 1983, 1985, 1987, 1991, 1995, 1999, 2002, 2005, 2009, 2011, 2015
Romania: 1990, 1992, 1996, 2000, 2004, 2008, 2012, 2016
Russia: 1993, 1995, 1999, 2003, 2007, 2011, 2016
Serbia: 1990, 1992, 1993, 1997, 2000, 2003, 2007, 2008, 2012, 2014, 2016
Slovakia: 1990, 1992, 1994, 1998, 2002, 2006, 2010, 2012, 2016
Slovenia: 1990, 1992, 1996, 2000, 2004, 2008, 2011, 2014
Spain: 1977, 1979, 1982, 1986, 1989, 1993, 1996, 2000, 2004, 2008, 2011, 2015, 2016
Sweden: 1948, 1952, 1956, 1958, 1960, 1964, 1968, 1970, 1973, 1976, 1979, 1982, 1985, 1988, 1991, 1994, 1998, 2002, 2006, 2010, 2014
Switzerland:

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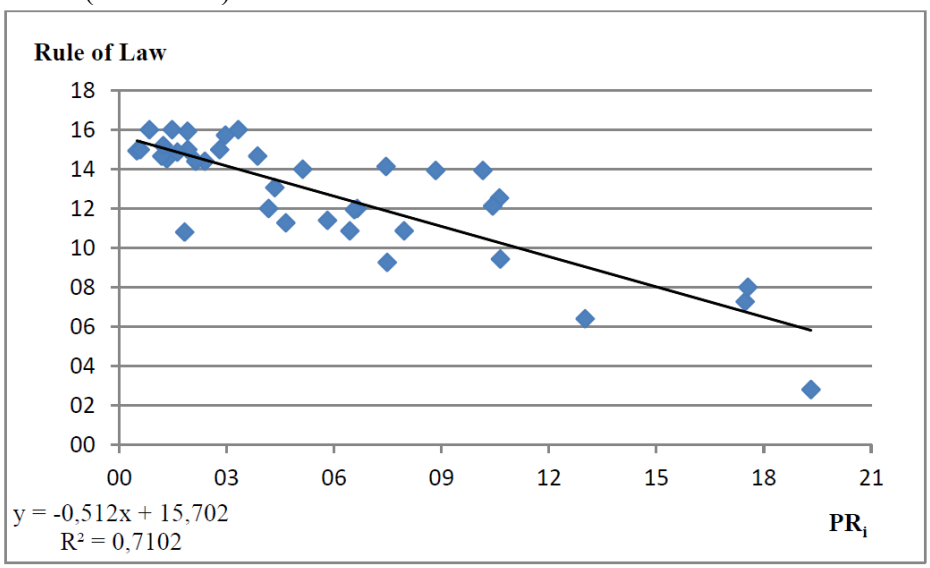
1947, 1951, 1955, 1959, 1963, 1967, 1971, 1975, 1979, 1983, 1987, 1991, 1995, 1999, 2003, 2007, 2011, 2015
Turkey: 1983, 1987, 1991, 1995, 1999, 2002, 2007, 2011, 2015, 2015
Ukraine: 1994, 1998, 2002, 2006, 2007, 2012, 2014
United Kingdom: 1950, 1951, 1955, 1959, 1964, 1966, 1970, 1974, 1974, 1979, 1983, 1987, 1992, 1997, 2001, 2005, 2010, 2015, 2017

A possible issue to consider regarding the indicators of PR_i and PR_{ii} is that one may have produced, despite all the demanding work, nothing but statistical noise in the end. In order to test the statistical validity of PR_i and PR_{ii}, a necessary step is to test them against a significant number of other popular indices and indicators frequently used in social sciences. While Yıldırım (2020) presents results for a broader number of indices and indicators against which PR_i and PR_{ii} were tested, for the scope of this paper, I present the results of two correlation analyses: First one is between country mean scores of PR_i and the Freedom House's Function of Government indicator, and the second one is between country mean scores of PR_{ii} and the United Nations Development Program's (UNDP) Human Development Index, for the respective time periods for which the Freedom House and UNDP data are available. The findings are presented below.

Figure 1: Countries' Freedom House Rule of Law Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)

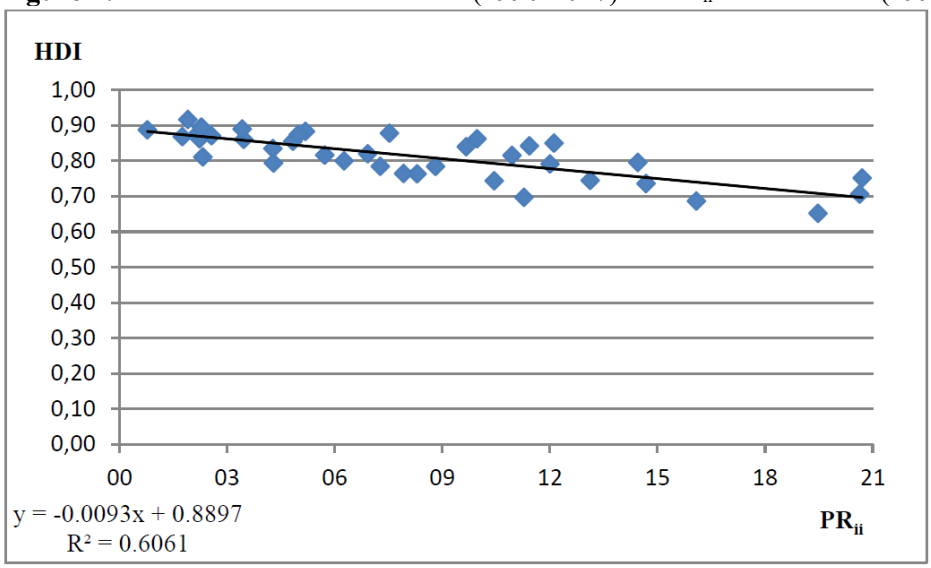


Source: https://freedomhouse.org/report/freedom-world and own calculations.

Both Figure 1 and Figure 2 show that the country mean scores for the indicators are strongly correlated with the country mean scores for the indices they were tested against. Figure 1 makes it apparent that European countries in which a

larger segment of the public has access to the institution of political representation happen to have a more functional rule of law, while Figure 2 shows that better access to political representation translates into higher human development. Both the PRi and PRii look promising in terms of their potential usefulness in quantifying the institution of political representation. The two indicators can be shown to produce very similar results when tested against almost every single economic development indicator in the social sciences literature.

Figure 2: Countries' HDI Mean Scores (1990-2017) vs. PR_{ii} Mean Scores (1990-2017)



Source: http://hdr.undp.org/en/data and own calculations.

The other sources of data utilized in the study are as follows. Data on per capita real GDP, saving rates, population growth rate, rate of change of technology and depreciation are from Penn World Table 9.1. Data on average total schooling years are from Barro and Lee (2013).

3.2. Methodology

The empirical analysis of the paper uses a two-step system generalized method of moments (GMM) estimation of the Solow version of the neoclassical economic growth model to test the relationship between political representation and economic growth, based on the convergence equation in Mankiw et al. (1992). While the GMM estimator by Caselli (1996) is regarded as a more robust estimator (Windmeijer and Santos Silva, 1998) than ordinary least squares and within-group estimators in the presence of endogeneity, it is known to perform poorly in a relatively short panel setting in comparison to the system GMM estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998). Bond et al. (2001) makes a strong case for the use of System GMM in empirical growth models and the estimator has proven itself as a go-to procedure in growth empirics.

As usual practice, the Arellano-Bond test was utilized to control for serial correlations in the first and second orders of the first differenced residuals and the

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Hansen test of overidentifying restrictions was used to control for the instrument variables' validity. The difference-in-Hansen test should also not have its null hypothesis rejected too so that the lack of multiple instruments can be confirmed. Using the two-step GMM estimation requires that the number of cross-section units in the sample is larger than the time points and (ii) the number of instrument variables should not exceed the number of cross-section units. The model satisfies both criteria.

Below is the regression equation for the human capital augmented version of the Solow model used in line Mankiw et al. (1992) that includes the novel indicators of political representation introduced in this study.

$$\ln(y_{it} - y_{it-1}) = \beta_0 + \beta_1 \ln y_{it-1} + \beta_2 \ln s_{it} + \beta_3 \ln[n_{it} + g_{it} + \delta_{it}] + \beta_4 \ln h_{it} + \beta_5 \ln rp_{it} + \mu_i + \phi_t + \varepsilon_{it} \quad (1)$$

Economic growth rate of per capita real GDP as the dependent variable is theoretically a function of the initial level of per capita real GDP at the beginning of a period (y_{it-1}), saving (investment) rate (s_{it}), human capital (h_{it}) and the sum of the three variables of population growth, technological change and depreciation $[n_{it} + g_{it} + \delta_{it}]$. β_1 and β_3 have expected signs of negative, while β_2 and β_4 have expected signs of positive. The PR_i and PR_{ii} (rp_{it}) represent the political representation indicators. μ_i and ϕ_t represent unobserved country-fixed effects and time effects and ε_{it} is the error term.

The expected sign of β_5 forms the main interest of this paper, as it can shed light on the relationship between economic growth and political representation. A statistically significant coefficient of β_5 would reject the null hypothesis to be tested below. A significant coefficient with a negative sign would imply that more inclusive processes of political representation have a positive effect on economic growth, and vice versa.

H_0: There is no statistically significant relationship between political representation and economic growth.

H_1: There is a statistically significant relationship between political representation and economic growth.

The time period in the regression analysis is 61 years, covering the years between 1950 and 2010. Since the Barro and Lee educational attainment dataset (2013) is only available until 2010, the years from 2011 to 2017 were dropped from the analysis due to the human capital variable being an indispensable component of the augmented Solow model. The period was divided into 5-year sub-periods and period averages were calculated in line with the widespread approach in panel-data economic growth empirics. $[g_{i,t} + \delta_{i,t}]$ was assumed to be equal to 0.05 in line with Mankiw et al. (1992), Islam (1995) and Caselli et al. (1996). I use the natural

logarithm of all variables in line with the literature. The next section reports on the results of the empirical analysis of the paper.

4. Empirical Results

Table 1 presents the results of the two-step system GMM estimation. As presented in Table 1, none of the Arellano-Bond (A-R z-values), Hansen's J-test (Hansen p-values) and the difference-in-Hansen (Diff-in-Hansen p-value) tests result in a rejection of the respective null hypotheses. The models are robust, and the instruments are valid. Following Ding and John (2011), the models contain year-specific fixed-effect dummies which serve to diminish the effect of cross-sectional error dependence on shorter dynamic panels. The number of instruments was reduced by use of three lags for the instruments and collapsing the instrument sets in the GMM model specification, in accordance with Roodman (2009).

The System GMM (1) column in Table 1 presents the results of the core augmented Solow model. All variables have the expected signs and are statistically significant, except $\ln(n_{it}+g_{it}+\delta_{it})$. It is well known that some of the main variables in the augmented Solow model can result in insignificant coefficients when the number of countries in the model is not very high, due to not enough variation in the data. Therefore, the result on the coefficient of $\ln(n_{it}+g_{it}+\delta_{it})$ is not a threat against the validity of the estimations.

Table 1: Regression Results

	System GMM (1)	**System GMM (2)**	**System GMM (3)**
Constant	1.44 (1.32)	1.61 (1.19)	1.58 (1.26)
$\ln(y_{it-1})$	-0.86*** (-6.02)	-0.88*** (-5.44)	-0.87*** (-6.29)
$\ln(s_{it})$	0.83*** (5.79)	0.83*** (5.64)	0.82*** (5.51)
$\ln(h_{it})$	0.96** (2.23)	0.96** (2.30)	0.94** (2.07)
$\ln(n_{it}+g_{it}+\delta_{it})$	-0.05 (-0.23)	-0.05 (-0.24)	-0.05 (-0.24)
$\ln(rpi_{it})$		-0.02 (-0.31)	
$\ln(rpii_{it})$			(-0.02) (-0.27)
Number of obs.	269	269	269
Number of groups	38	38	38
Number of instruments	35	36	36
A-B z-values (2)	0.79	0.81	0.80
Hansen p-value	0.11	0.11	0.12
Diff-in-Hansen p-value	0.40	0.43	0.58

Values in parentheses are t-values.

*** Significant at 1%, ** Significant at 5%, * Significant at 10%

The sign and the significance of the initial level of per capita real GDP is in line with the convergence hypothesis. Savings and human capital also positively affect growth rates, as expected. The indicators of PR_i and PR_{ii} enter the equation in the System GMM (2) and System GMM (3) columns, respectively. While both variables have a negative sign, the coefficients are numerically small and statistically insignificant. Hence, the results of the estimations imply, regarding the 38 European countries in our sample, that the degree of inclusiveness of political representation has not been interrelated with economic growth in the post-1950 period.

This result is in line with a large portion of the institutional economics literature which claims that components of democracy have no effect on economic growth. The level of democracy in a country is no doubt an important indicator of economic development, yet the institutionalist literature comes with many findings in which it has shown not to be a determinant of economic growth. While the indicators of PR_i and PR_{ii} have been shown to be statistically related to various other indicators in social sciences that reflect on countries' levels of economic development, a direct influence on economic growth is a completely different thing, and it is apparently not the case here. Political representation, as noted before, is a highly complex institution and due to the political sphere resembling an arena in which representations of a wide range of rights and interests varying in their economic worth constantly clash, there may not always be a direct relationship between economic growth and inclusive or extractive representations of those rights and interests. Nevertheless, it is apparent that the subject at hand calls for further research in the future.

5. Conclusion

The study constitutes a first step in examining the relationship between the institution of political representation and economic growth in a cross-country panel setting. The study makes use of its own indicators, namely PR_i and PR_{ii}, to account for the inclusiveness of the institution of political representation across 38 European democracies between the years 1950 and 2010. PR_i and PR_{ii} perform considerably well when tested against other popular indicators and indices of economic development. The panel regression results, on the other hand, showcase no significant relationship between political representation and economic growth. This result is not surprising, given the bulk of research in the institutional economics literature that makes a case against any significant impact of democracy on economic growth.

There are a number of reasons why processes of political representation may not result in growth-inducing policymaking in democracies. The questions of whose rights and interests are being represented more predominantly and the productive nature of those rights and interests are crucial. While Acemoğlu and Robinson (2012) argue that more inclusive political institutions promote economic growth, political representation is an overly complex phenomenon and lobbying activities or corrupt practices in representation may distort its functioning as a political institution. Countries can vary significantly in the growth implications of their

representative institutions and this variation is reflected in the data: No uniform effect can be detected from political representation to economic growth at an international scale, at least regarding the sample set of countries chosen in this study.

Regardless of the results of the regression analysis in the study, it is reasonable to suggest that the topic at hand is worthy of further theoretical and empirical analysis within the institutional economics framework. The indicators of PR_i and PR_{ii} show that political representation is closely related to various indicators of economic development in the sample countries, thus, they can be utilized in future research to investigate the relationship of the institution of political representation with various economic, political and social phenomena.

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