

DOKUZ EYLÜL UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
ECONOMICS PROGRAM
DOCTORAL THESIS
DOCTOR OF PHILOSOPHY (PHD)

**POLITICAL REPRESENTATION AND ECONOMIC
GROWTH**

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İZMİR - 2020

DOCTORAL THESIS
APPROVAL PAGE

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ABSTRACT
Doctoral Thesis
Doctor of Philosophy (PhD)
Political Representation and Economic Growth
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Political representation is an institution that sits at the heart of all policy-making processes in contemporary democracies. Despite the institution's essential role in influencing economic policy decisions in democratic societies, academic interest it has received from the field of economics has remained low, in part due to the unavailability of systematic cross-country data that allow for robust empirical analysis.

Exploiting the prevalence of wasted votes in a total of 527 general elections that took place in 38 European countries between 1946 and 2017, we construct a novel dataset of political representation that allows for cross-country empirical analysis of the institution. The Political Representation Dataset, as we call it, consists of two annual indicators, the PR_i and PR_{ii} , which measure the inclusiveness of processes of political representation across Europe in the post-1950 period. The PR_i gives the proportion of wasted votes to all valid votes in an election, while the PR_{ii} gives the proportion of the sum of wasted, invalid and blank votes to all votes in an election, thereby constituting two separate expressions of the percentage of voters who have not gained the right to be politically represented in a democracy. We demonstrate that the PR_i and PR_{ii} can significantly explain around 40 to 70 percent of the continent-wide variation in other popular indicators of economic development, such as the United Nation's Human Development Index, Freedom House's Political Rights

and Civil Liberties indices and the Economist Intelligence Unit's Democracy Index.

Regarding our empirical findings on the impact of political representation on economic growth, we propose that more inclusive processes of political representation do not have a systematic influence on economic growth rates in European democracies. On the other hand, we find preliminary evidence that the link between political representation and economic growth may be more nuanced in flawed democracies than in advanced democracies. Economic growth rates of less democratic nations are seemingly more prone to significant influences from variations in the inclusiveness of their representative institutions, whereas the link is found to be weak to non-existent in full democracies.

Keywords: Political Representation, Economic Growth, Political Institutions.

ÖZET
Doktora Tezi
Siyasi Temsil ve Ekonomik Büyüme
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Siyasi temsil, çağdaş demokrasilerdeki tüm politika yapım süreçlerinin merkezinde olan bir kurumdur. Kurumun ekonomi politikası kararlarını etkilemedeki belirgin rolüne karşın ekonomi yazınından gördüğü akademik ilgi, ülkeler arası sistematik veri eksikliğinin de sebebiyle, düşük olmuştur.

Bu çalışma, 38 Avrupa ülkesinde 1946 ile 2017 yılları arasında gerçekleşmiş olan toplam 527 genel seçimdeki boşa gitmiş oyların yaygınlığına dair istatistiklerden faydalanarak, siyasi temsil kurumuna dair ülkeler arası ampirik analizleri mümkün kılan özgün bir veri seti oluşturmuştur. “Siyasi Temsil Veri Seti” olarak adlandırdığımız bu veri seti, Avrupa ülkelerinde 1950 sonrası dönemdeki siyasi temsil süreçlerinin kapsayıcılığını yıllık gözlemler biçiminde ölçen PR_i ve PR_{ii} isimli iki göstergeden oluşmaktadır. PR_i göstergesi bir seçimde boşa gitmiş oyların tüm geçerli oylara oranını verirken, PR_{ii} göstergesi ise bir seçimde boşa gitmiş, geçersiz ve boş oyların toplamının tüm oylara oranını vermekte, bu sayede iki gösterge, bir ülkede siyasi temsil hakkı kazanamamış seçmenlerin tüm seçmenlere oranının iki farklı ölçümünü oluşturmaktadır. İstatistiksel analizlerimize göre PR_i ve PR_{ii} göstergeleri, Birleşmiş Milletler’in İnsani Gelişim Endeksi, Freedom House adlı kuruluşun Siyasi Haklar ve Sivil Özgürlükler endeksleri ve Economist Intelligence Unit adlı kuruluşun Demokrasi İndeksi gibi diğer önemli iktisadi gelişme göstergelerinin kıta coğrafyası üzerinde gösterdiği değişkenliğin yaklaşık olarak yüzde 40 ile 70 arasındaki kısmını açıklayabilmektedir.

Siyasi temsil kurumunun ekonomik büyüme üzerindeki etkisini araştıran ampirik analizimiz ise, Avrupa demokrasilerinde sergilenen daha kapsayıcı siyasi temsil süreçlerinin ekonomik büyüme oranları üzerinde anlamlı bir etkisinin olmadığını göstermektedir. Diğer taraftan, siyasi temsil ile ekonomik büyüme arasındaki ilişkinin gelişmiş demokrasilere kıyasla eksik demokrasilerde daha belirgin olabileceğine dair ipucuna rastlanmıştır. Daha az demokratik olan toplumların ekonomik büyüme oranları temsil kurumlarının kapsayıcılığindeki değişkenlikten daha kolay etkilenebilirken, gelişmiş demokrasilerde ise bu ilişki yok derecesinde zayıf görünmektedir.

Anahtar Kelimeler: Siyasi Temsil, Ekonomik Büyüme, Siyasi Kurumlar.

POLITICAL REPRESENTATION AND ECONOMIC GROWTH

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LIST OF ABBREVIATIONS

CAP	Central Arizona Project
EIU	Economist Intelligence Unit
FH	Freedom House
GDP	Gross Domestic Product
GII	Gender Inequality Index
GLS	Generalized Least Squares
GMM	Generalized Method of Moments
GNP	Gross National Product
HDI	Human Development Index
OLS	Ordinary Least Squares
PR_i	Political Representation Indicator I
PR_{ii}	Political Representation Indicator II
UNDP	United Nations Development Programme

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Appendix 1: Data Sources for Election Results

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INTRODUCTION

The title of this study is fundamentally simple, from a syntactic perspective: “Political Representation and Economic Growth”. To the best of our knowledge, there are no current academic studies in existence that employ this title, at least in the English-speaking literature: A Google Scholar search of the phrase “Political Representation and Economic Growth” (in quotation marks) returns only seven results in total, none of which actually contain the phrase in their title. Only one of the studies in the search results contains in its full text an instance of the exact phrase and it is to state that the relationship between political representation and economic growth is more complex than concerns the intention of the author in his investigation of the relationship between political representation and social progress (Fontana, 2010: 8). Just to do a double check, a reversal of the syntax into “Economic Growth and Political Representation” also produces a total of 10 search results only, once again with no studies titled as such, and definitely no studies that solely focus on the relationship between political representation and economic growth.

Reduced-form Google Scholar searches certainly do not serve to claim that the topic comprised by the title of this dissertation has never any received mention in the literature before. It definitely has, albeit not exactly in the form we aim to approach it in this study, but either in the form of mere verbal narrations of the possible nature of a relationship between political representation and economic growth – as is the case with the work of Fontana (2010) cited above – or in the form of studies that focus solely on political representation of certain disadvantageous groups in societies, such as women (Chen, 2010) or minorities (Pande, 2003; Chin and Prakash, 2011). Even then, studies that relate those aspects of political representation to economic growth are very few, in fact, one would have to leave no stone unturned in the economics literature to find a handful of them.

In a relevant study, Besley and Coate (1997) develop a theoretical model of representative democracy that explains political decision-making by elected officials who represent voter preferences. In their model, citizens decide whether to run for office as political candidates, after which, elections take place and citizens vote for candidates. The winner of the election is decided by plurality rule, and implements

their favorite policy from a set of alternative policy choices. As the model solely aims to define political equilibrium through utilization of optimization behavior by agents, it has no implications for macroeconomic performance of an economy. While the work of Besley and Coate (1997) has paved the way for extensive research into economic modeling of political decision-making processes and representation, a majority of those works have remained exclusively within the domain of political science¹. As far as our investigations have gone, no studies in this rich vein of work have focused on the role played by variations in the quality of political representation across countries on economic growth rates.

This academic abstinence cannot have arisen from a voluntary lack of interest in the subject, as political representation is just another member of a crowded family of political institutions that have received their fair shares of scholarly interest from economists, such as form of government, legal system, rule of law, tax system, corruption, checks and balances, separation of powers, electoral rules or suffrage. Political representation cannot be the ugly duckling here: Conceptually it does not have any unpleasant features to it that must render it unattractive to economists in comparison to other political institutions. Rather, it is an intriguing institution that has gone through important transformations throughout the history of societies until our day, at which point it now forms the foundation on which governing bodies of all modern states are built. On the other hand, there is indeed an ugly face to this institution, from an empirical perspective that is, in that scholars working on some of those other political institutions have enjoyed a certain privilege that scholars of political representation have not: Availability of high quality data that allow for robust cross-country empirical analysis.

Emergence of quality data on institutions has facilitated research on political institutions in the recent decades, in the endeavor to provide an answer to the fundamental question that the dismal science has been continuously asking in the last two and a half centuries since Adam Smith: Why are some nations wealthier than others? While the institutional approach has been emerging as a serious contender, unarguably the most predominant answer to this question in the last century has been

¹ Refer to Dewan and Shepsle (2011) for an extensive review of the literature on political economy of voting and electoral models.

put forth by the neoclassical school of thought, namely the conviction that higher levels of physical capital, human capital, saving rates, technology and lower population growth rates are what enable economies to grow faster. The neoclassical determinants of economic growth have been rigorously tested and repeatedly triumphed in their explanatory powers, as shown by the brilliant theoretical and empirical works of neoclassical economists who perhaps do not need an introduction here. When variables such as saving rates and population growth rates are contently acknowledged as the *definitive* factors behind economic growth, there is little reason to study any other possible sources of growth, such as political institutions. After all, a variable such as the saving rate does not enter into the neoclassical growth model out of thin air: It is a robust product of rigorous theorizing on the utility maximization process of the hypothetical economic agent, serving as a remarkable mathematical replication of the thought process of the perfect homo economicus. The resulting models also fit the data very well, so what else is there to not acknowledge the superiority of neoclassical theory in explaining patterns of growth?

On the other hand, the revival in the institutional approach in the recent decades has produced strong evidence that there is much more to the functioning of the economy than just mathematical interpretations of the perfectly rational homo economicus. Real-world economic agents do not behave consistently across time and space, and various sorts of economic, political and social structures that influence human behavior also play their parts in determining the prevailing levels of the variables in the neoclassical model. Highlighting this perspective, Acemoğlu and Robinson (2010: 2) boldly describe the neoclassical determinants of growth listed above as being only the *proximate* causes of economic performance. In their perspective, it is rather those economic, political and social structures that matter for growth; in other words, institutions. They are not alone in this endeavor, as the broad range of academic work that has defined institutions as an engine of economic growth has produced such intriguing answers to these issues in the last twenty years that the field has been described as capable of penetrating, or almost being on the verge of itself *becoming*, what is currently called the changing mainstream economics (Hodgson, 2007: 8).

According to the illustrious definition by North (1991: 1), institutions are “humanly devised constraints that shape human interaction” and they consist of both informal constraints such as sanctions, taboos, customs, traditions, and codes of conduct and also formal rules such as constitutions, rule of law or property rights. Drawing on this definition, aforementioned political institutions are the rules of political human interaction and set the rules and regulations in the political sphere.

The dissertation at hand focuses on the particular case of representation as a form of political institution, scholarly research into which has been rather neglectful, as we previously stated. As the growing body of comprehensive research into various other political institutions and their economic effects has not been paralleled by investigations into political representation, we see an interesting point in proposing that almost all studies in the field of economics that relate some sort of political institution to economic growth must have implicit implications for the institution of political representation as well, even when they do not even mention a word about it. Studies of the rule of law, for instance, take into account that laws are made and repealed by those politicians who were elected to represent demands of various interest groups that make up a society (Sunstein, 1985: 32; Golden, 1998: 246; Furlong and Kerwin, 2005: 355). Concerning the case of property rights, an eminent view is that the institution was historically extended only as middle classes gained access to political representation of their rights through extension of suffrage (Przeworski and Limongi, 1993: 53). Investigations into form of government often rank countries on a scale of totalitarian regimes to advanced democracies, the former of which enforce political representation of interests of only a select few while the latter ensure political representation of a majority of the population in the political process (Acemoglu and Robinson, 2005: 23). Representation as a political institution thus sits so unavoidably at the heart of all policy-making processes in modern democracies that, the case is almost as if everyone is studying it, while no one is explicitly doing so.

Consequently, we are of the conviction that an aspect of political representation is always involved whenever an economist seeks to reserve a role for political institutions in answering the fundamental question of economics repeated above. Of course, it is then an entirely different matter whether the involvement of

processes of political representation actually makes a significant difference in explaining why some nations are wealthier, but the contradiction between the abundance of implicit references to the institution and the scarcity of explicit investigations of it, in our opinion, constitutes a sort of call for papers in this potential area of institutional economics.

Therefore, we aim to fill a gap in the literature by making an attempt at both theoretical and empirical explanations for the relationship between political representation and economic growth. The cause of our initiative can be debated, on the grounds that, since we deem most other political institutions already as incorporating processes of political representation, then why the need to exclusively study the institution of political representation itself as a separate entity? Variations in the qualities of those other political institutions can be assumed to be good proxies for variations in the quality of political representation in a nation, eliminating the need to study the institution of political representation itself, especially when data problems are crippling potential research efforts before they even begin. In response to this legitimate question, we believe that the processes and mechanisms of the institution of political representation are distinct enough to make it a worthy subject of inquiry, capable of contributing a unique understanding on the subject of economic implications of democratic institutions. Surely, one could assert that a more developed rule of law in a country will ensure better political representation for all segments of a society which can already achieve that end result, but rule of law takes place in a courtroom, while political representation takes place in a parliament: They are not the same thing, thus they should not be measured by the same variables.

In order to support our narrative that representation is distinct enough as a political institution to deserve to be studied in its own domain, we would like to demonstrate examples of our thought process on how the institutional approach can naturally draw a connection between representation and economic activities of a nation. Regarding the example of the saving rates variable mentioned above, one obvious question for the neoclassical framework would be related to the issue of why some forms of the 'homo economicus' are inclined to save at a higher rate than others, even when they have objectively less income at their disposal? For instance, what is the distinctive mechanism that underlies the saving traditions of China,

whose mean per capita GDP in the 1990s was \$1.782 and who still managed to save an astonishing 39.7% of that relatively low income, in comparison to that of Spain, for whom the respective figures were a much higher per capita GDP at \$16.321 and a much lower savings rate at 21.7%? Why do the Chinese save more? Are they just born frugal? While a number of studies have investigated the factors behind the high saving rates in the Chinese economy, we would like to provide an alternative account, at least only in the form of a thought experiment only.

China has been ruled by authoritarian regimes throughout much of modern and recent history. The common Chinese citizen today is foreign to the concept of voting in a general election in order to elect a political representative, as the country does not hold general elections in the fashion that Western societies are accustomed to do in our day. As a result, the governing bodies of China are not particularly inclusive in that political rights and interests of large segments of the society are imperatively left out of the policy-making process. Reflecting of the low levels of inclusiveness of the country's government mechanisms, a noteworthy detail would be the fact that the Chinese state has the power to expropriate private property, if it 'sees necessary' for the benefit of the nation. In other words, property rights are not as secure as they are in the West, leaving the Chinese people defenseless against the power of the state at times, in the protection of their own rights.

While this aspect of the political process in China can be explained by the institutions of property rights or checks and balances, we believe that these institutions are *end results* of what is actually going on with the form of governance, that is, authoritarianism. The Chinese political elite make policy decisions, and since the proportion of the society whose political interests they must directly satisfy during the decision-making process is inordinately little in comparison to the size of the whole population, which was above 1.4 billion people as of 2019, they cannot be subjected to protect the property rights of the masses and they cannot be subjected to checks and balances. Thus, we believe that a quantitative measure of the proportion of the population whose interests are being represented in the political process – a kind of data that scholars of political representation are just lacking – could constitute a good indicator of what is actually wrong with the political system: The institution of political representation.

A second element to be considered in such an environment is, China's long-lasting issues with poverty. The problem now begs the question of whether the Chinese people, stripped of the very political rights that the West have long taken for granted and also suffering from poverty, have had to learn to live frugally and save large portions of their income, as a means to survival? They obviously have more reasons to try to protect what little they have than the example of Spanish people above, in that, they do not enjoy the privileges of living in a developed economy with advanced representative institutions. The Spanish political rights and interests are under the protection of the Spanish constitution, and the citizens enjoy a high level of per capita income. Adding to that the Fiesta culture which is probably a result of these favorable conditions, should it really come as a surprise that the Spanish do not save as much the Chinese do, when they can instead consume a larger share of their income, in a worry-free state of mind, as they enjoy the good life in the Mediterranean?

The political institutions of Spain are obviously so distinct than those of China that it is not logical to assume that the economic institutions generated by these two distinct sets of political institutions should resemble one another in their degree of pluralism, and neither in the resulting national economic performances. In a representative democracy such as Spain, citizens vote for their favorite parties and the elected representatives are often vastly far from possessing absolute power. In this kind of a political environment, citizens who take office as winners of an election are often held accountable to the electorate and can be removed from office unless their actions are in line with the will of the other citizens who chose them as representatives. On the other hand, leaderships in dictatorships and other non-democratic states are often as sentimental as wedding scenes in romantic movies: "Till death do us part". The king of Saudi Arabia, being the sole property owner and rule maker in his land, can walk over anyone's political or economic interest if he wishes to, often without repercussions. He can make policy decisions binding for everyone while only representing interests of his own self and family or share (often marginal) portions of his political power with whoever he sees fit, all in all generating a process that converges toward a monopolization of political and

economic power, rather than representing the political and economic interests of masses.

As such, it is definitely not sensible to conclude, by just looking at the cases of a few countries, that better representations of interests and rights are better for growth. There may as well be other forces at play that may be misleading us to believe that it is inclusive representation of interests that matters. The issue at hand is complicated both theoretically and empirically, and even institutional economists have still not managed to arrive at a unifying theory on whether an advanced democracy or a dictatorship is better for economic growth. From an empirical perspective, a relevant inquiry that seeks to explain the role of political representation in such a setting would require comprehensive quantitative data on the inclusiveness of the institution in a sufficient number of countries, across sufficient points across time. Only then the study of political representation could be established as a field of its own merit, one that is capable of contributing significantly to the literature of institutional economics.

We believe that the scarcity of such reliable cross-country data on the institution has been a consequence of at least two factors: First, political representation is a highly complex theoretical phenomenon, toward the definition of which there is not even a dominant consensus in the field of political science itself (Pitkin, 1972: 4). Philosophical discussions of the varying interpretations of representation is not within the scope of the study at hand, and we treat the concept in the most relevant interpretation possible from an institutional economist's perspective: Representation of citizens' interests and rights in the political process. Still, the theoretical complexity of the concept does reflect on the real-world political sphere which paves the way for the second factor: Countries differ too much in the processes and structures of their representative institutions to render empirical cross-country comparisons feasible. The immediate negative consequence of this challenge is that a literature that focuses directly on the relationship between political representation and economic growth is virtually non-existent, to say the least.

In this study, we aim to contribute to just that: By introducing a novel source of data, namely the Political Representation Dataset as we call it, we aim to build an outlet for scholars in the studies of political representation and its relationship with

any other relevant and empirically measurable social phenomena. A brief description of the novel dataset we introduce is as follows: We exploit the results of a total of 527 parliamentary elections that took place in 38 European countries between the years 1946 and 2017 to produce two novel indicators of political representation that measure the proportion of an electorate who won the right to be politically represented in the policy-making process in a country. We produce the first indicator of political representation, PR_i , by dividing the total quantity of votes by the quantity of votes that are given to parties that failed to gain representation in a parliament due to certain rules of electoral system design such as electoral threshold, gerrymandering and district magnitude, in other words, wasted votes. We produce the second indicator of political representation, PR_{ii} , by dividing the total quantity of votes by the quantity of wasted votes plus invalid and blank votes. The indicators are in panel-data form, have the same unit of measurement in all countries making up the sample, thereby allowing for cross-country analyses of the institution of political representation. After introducing the Political Representation Dataset, we provide tests of it against other relevant sources of institutional data popular in the political sciences in order to demonstrate the statistical and conceptual validity of our indicators, which gives promising results. As a first example of the possible uses of our dataset, as in also constituting the title of our study, we make an empirical attempt at investigating the relationship between political representation and economic growth.

The layout of our study is as follows. We start with a brief discussion, in the first chapter, of the concept of political representation with an emphasis on the history of the relationship between elections and representation, through which we aim to describe the channels through which representation may influence economic growth in a country. In this endeavor, we do not start with any preconceived opinions regarding whether representation is an actual determinant of economic growth or not, therefore we provide an investigation not only of the reasons why the institution may matter for economic growth, but also of the reasons why it may not. After completing our narration of the reasons why political representation may or may not be connected to economic growth, we move on to the theoretical framework of our study in the second section. This section lays out two distinct frameworks for

analysis, which are in disagreement with one another regarding the theory of how the two concepts can interact. We choose to include two alternative theoretical frameworks for the following reasons: First, the existing literature on the subject is underdeveloped which led us to borrow theories from studies of other political institutions in the literature to form it. Second, since we do not have any reservations regarding the true nature of the relationship between representation and growth, we have seen it fit to include and empirically test alternating theories of it. The first theoretical framework borrows from the work of Acemoğlu and Robinson (2012: 14), while the second borrows from Przeworski (2007: 37).

After laying out the theoretical framework(s) of our study, we explain our data and methodology in the third section. In this section, we present a detailed description of the Political Representation Dataset we produce as part of our work and the results of the extensive tests we conduct in order to empirically compare it against other relevant and popular datasets in political sciences. Also, in this section, we describe the other data sources that we utilize and explain the methodology we employ in the empirical analysis.

In the fourth section, we report on the empirical results we find regarding the relationship between political representation and economic growth, in the form of descriptive statistics and panel data analysis. Finally, in the last section we conclude our work by summarizing our main points, and laying out ideas for future research in the field of political representation.

CHAPTER ONE

ELECTIONS, POLITICAL REPRESENTATION & ECONOMIC GROWTH

This section starts with a brief history of elections and political representation, providing core descriptions. It continues with arguments on the mechanisms that relate political representation to economic growth, surveying the channels through which representation may act as a pro-growth political institution and through which it may not. The section concludes with an overview of its main points.

1.1. A BRIEF HISTORY OF ELECTIONS AND POLITICAL REPRESENTATION

The notion of elections is a modern phenomenon and in its current form, has only been around since the late 18th century. In modern democracies, political representation manifests itself through periodic elections in which some citizens of a nation are employed with government duty and held responsible with representing the interests of the people who voted for them - a responsibility which is, from then on, at their own discretion to fulfil or not, for a given period of time. The rules and procedures surrounding electoral processes worldwide today are not distinctive of the times in which we live. Rather, they were products of the French and American revolutions, the ideologues behind which advocated that political power belonged to the people and should be submitted to them accordingly. Elections, then, were designated as the core mechanisms that sat at the heart of the transfer of political power from the ruling elite classes of the times to the common people, by virtue of political representation (Crook, 1996: 8). It was overseen by founders of representative governments that elections were the indispensable criterion for establishment of a form of government in which the people could practice their right to self-rule and protect their wealth from being extracted by elites. This criterion was the only means seen fit to “ensure that the interests and values of rulers would coincide with those of the ruled” (Przeworski, 2019:15).

Before modern elections, political power was eventually held by whoever *could* hold it, almost always by brute force. The type of force prerequisite to holding

power went through gradual transformations throughout history as societies evolved. Whereas up until the medieval ages it was the sheer force of armies the building of which was exclusive to elites, political power then was gradually diffused as middle classes started to receive their share of the pie, thanks to possession of means of industrial production. The Revolutions attributed above constitute a significant point in history in the so-called transfer of power from the elites to the common people: Starting with the 18th century, the right to vote started to steadily diffuse to lower classes of modern societies.

Revealing of the role played by elections in this transfer, Edelstein (2014:1) reports on the transformation of the word “election” in French dictionaries before and after the French Revolution. In Jean-Joseph Expilly’s Dictionary of 1764 and in Bruzen de la Martinière’s dictionary of 1768, the meaning of the word was in the context of “the courts dealing with taxes in the jurisdiction”. In the Dictionary of the French Academy in 1762 and 1798, decisions made by the Holy Roman Emperor were given as an example of the act of “electing”. Both of these definitions indicate that an election was, much like any other political concept before the French Revolution, a component of a top-down political system. This is evidently so because, regarding the former of the two definitions above, the courts dealing with taxes were accountable to monarchs and oligarchs back then, while regarding the latter, the Holy Roman Emperor was after all, well, the Holy Roman Emperor.

In the several decades that followed, significant changes were witnessed in those same dictionaries. The sixth edition of the Dictionary of the French Academy in 1832–35 defined “election” as “the action of electing, choice made in an assembly by way of votes”, “used absolutely and in the plural form, it is to be understood ordinarily as the Nomination of deputies”. In similar fashion, Emile Littré’s Dictionary of the French Language in 1872-1877 defined the term as “a choice that is made of someone in an assembly and by way of votes”, in the context of legislative and municipal elections. These two latter definitions, in the broad sense, would translate equally well into today’s dictionaries. The meaning in which we use the term “election” and celebrate it as a cornerstone of democracy today has stayed mostly unchanged since its foundation.

The noteworthiness of the one-to-one applicability of a two-century-old political definition to today's dictionaries does not arise from a mere lexicographical curiosity. When one considers the modern inefficiencies entailed by the institution of political representation in our day, it comes off as a striking feature about elections that not only the meaning, but also the way in which we hold and get through with them has stayed unmodified since the Revolutions. Perhaps, one would wonder, all the radical changes societies have gone through in most areas of life in the last two hundred years would have facilitated significant changes in the mechanisms of elections and political representation, but for some reason, they have not.

One explanation for this stagnancy has been that no one wants to share political power for nothing. Despite being arguably the most efficient mechanism devised by mankind for implementation of a modern democratic governance through political representation in a country, elections are far from perfect today in that they do not, and possibly should not be expected to ensure effective representation of every member of a society. Time and time again, we hear news of elections in various parts of the world resulting in nothing but conflict and injustice, yet we keep turning to them in their basic form as the only viable means to keep representative democracy alive, readily acknowledging that in every election there must be losers and winners. A noteworthy point to make among this hodgepodge is that, let alone the risk of political and economic alienation faced by losing sides of an election in some countries, even winners may face uncertainties regarding how responsive their elected representatives will be to their interests. The degree to which governments are responsive and accountable to their voters and apathetic and perhaps even aggressive toward their opposition therefore make up, among other things, a significant deal of what brings about the success of representative democracy, or otherwise, its failure.

The concerns about these issues are not new. In fact, they are as old as representative democracy itself, have been debated thoroughly (Pitkin, 1972: 8-12; Przeworski et al., 1999: 2; Runciman, 2007: 93-98) and are among the reasons why the relationship between political representation and economic growth should be expectedly a complex one. The contradiction between the social norm that elections are valuable so long as they generate representation and the vast academic literature

which documents that they often may not do so, above all, signals to a fragile relationship between political representation and a nation's economic performance, if any. Attempts at investigating the relationship between these two concepts must then involve a comprehensive inquiry into the causes and consequences of such fragility. Delving into this challenge, the next two subsections in this chapter will survey the reasons for which political representation may act as a pro-growth institution, and for which it may not, respectively.

1.2. POLITICAL REPRESENTATION AND ECONOMIC GROWTH

When the real-world applicability of a political concept is fragile, it may prove useful to start with a basic specification of precisely what is meant by that concept. What *is* political representation? Przeworski et al. (1999: 2) define it, as quoted from Pitkin (1967: 33), as a political task of governance where representatives are 'acting in the best interest of the public. This description of political representation is thus substantially fundamental. In an ideal world in which universal suffrage exists as a well-established rule of the political game, perfect political representation would mean that every individual interest gets represented equally well in the policy making process. We can hypothesize that the closer a society gets to the qualifications entailed by such an ideal world, the more content with the notion of democracy its citizens will be. Everyone's shared contention that their best interest is being protected by the government would thus turn the institution of political representation into a 'vital component of democratic institutions in modern states'² by producing the best interest of the public. On the contrary, as one can immediately infer by cross-checking between the aforementioned ideal world and the realities of the world in which we actually live, the definition above remains perhaps too fundamental, to the extent that it may almost sound like a dream.

As fundamental or dreamy as such a definition may be, no serious political scientist would actually claim that the argument that political representation could ensure the best interest of the public is entirely made of dreams. The notion of 'best

² Stanford Encyclopedia of Philosophy, <https://stanford.library.sydney.edu.au/entries/political-representation>, (12.07.2018).

interest' is a term grounded in the two century old establishments in political theory and practice traceable back to the Revolutions attributed above, and its attractiveness was the driving force behind the pace at which elections spread through most parts of the world in the 19th century (Przeworski, 2019: 28-29). Surely, modern implementations of the political institution of representation is far from flawless, but then again, its place in the long history of mankind filled with peoples living under totally authoritarian regimes is unarguably very new. Acemoğlu et al. (2010: 9-10) discuss that just before the French Revolution, under the *ancien régime*, certain groups in the society (members of the monarchy, aristocracy and the church) had very distinctive social, political and economic privileges, while those who were not members of these groups had almost none. Equality before the law was a concept to which large segments of the public were alien. The aristocracy did not pay taxes at all, for instance, and the church was a natural landowner, taxing the agricultural product of peasants at will. Peasants, the urban poor and other minorities were all at the bottom of the hierarchical society. The authors add that the representation of those groups was also subjected to the same structure of hierarchy. Compared to our day in which political representation is a right into which citizens of many countries are naturally born into, the institution is indeed too young to be expected to have developed perfectly.

Within the context of the late 18th century, then, one can only imagine how attractive it must have sounded to the common people to be able to elect one's rulers: The idea of having been born with a natural right to choose one's own rulers and disposing of them in the case of inefficacy was essentially captivating for societies. It was the spark that ignited many political revolutions around the world, owing to how easy it was for the masses to agree with the founders of representative governments in the belief that elections would guarantee their own ability to rule over themselves and not that of some privileged classes who held unaccredited political power. Truly applicable or not, the belief that elections would ensure the best interest of the public through political representation was not baseless: It is what gave rise to the political product of representative democracy. It is the base on which democracy rightfully stands today. Amidst its flaws, there are reasons why political representation may be

expected to actually produce a kind of best interest for societies, and these must be highlighted.

In Pitkin's (1972: 209) words, despite potential reasons for conflict between a political representative and the represented, in order for representation to materialize, the representative must act in such a way that such conflict should not take place. There obviously exist very solid reasons why it *may* take place - and these will be documented in the following sections - but there is a reason why we hold periodic elections in the first place. Elections are seen as a mechanism through which potential conflicts would automatically be resolved by courtesy of the power of the vote that citizens of democratic countries hold the rights to, that which would allow them to knock sense into politicians via two means: (1) By effectively selecting the best political candidates who pursue the interests, in any domain, of the voters rather than their own interests and (2) by punishing wrongdoers in office by not voting for them in the next elections. There is a vast amount of scholarly work that seeks to explain how the vote, by these two means, can be effective in inducing politicians to do a good job of representing their constituents' interests. Next, we make a case for political representation as a pro-growth institution by utilizing this line of work.

1.2.1. Representation as a Pro-Growth Political Institution

Is political representation actually an institution that may be capable of fostering economic growth? In order to come up with an answer, we review the theory of the economic vote with the intention of linking political representation to economic growth. We propose that by economic voting, voters aim to incentivize political representatives to implement economic policies that promote growth. We list the relevant features of economic voting patterns in order to explain why political representation may actually yield positive consequences for economic growth.

As a starting point, there is little reason to imagine that voters would not want their elected political representatives to work in favor of a high growth rate for the national economy. Opinion surveys show that the public thinks economic problems should have the highest priority for politicians (Taylor, 1996). Supportive of this principle, a large body of literature in normative political theory has acknowledged

the role attributed to elections at filtering out 'bad' interests and enabling only the economically productive, good interests to win seats in a parliament, securing employment of good governments who devote their efforts to the betterment of the society. In his widely acclaimed work, Dahl (1971: 1) starts his analysis by asserting his assumption that the continuing responsiveness of the government to its citizen preferences is a key characteristic of democracies. He goes on to state that democracy is the term he uses to name a political system which is almost completely responsive to all its citizens. Be it either in majoritarian and proportional electoral systems, an electorate votes, as noted above, to either select good politicians whose actions they believe will satisfy their demands or to sanction unsuccessful ones who dissatisfied them, or to some extent, to perform a combination of both, with the intention of utilizing this responsiveness. These two motives for voting are also called retrospective/sanction (Lanoue, 1994: 196; Berry and Howell, 2006: 2-4; Woon, 2012: 914; Healy and Malhotra, 2013: 286-289; Hellwig and Samuels, 2008: 66-68) and prospective/selection (Norpoth, 1996: 778; Lewis-Beck and Paldam, 2000: 118; Duch and Stevenson, 2008: 46; Mansbridge, 2009: 369-371) voting models.

Under majoritarian rule, a majority who receives more than half of the votes forms the government. The presence of an elected majority implies that the government is under tight control of the majority of the electorate either through a mandate and/or an accountability perspective of selection (Aarts and Thomassen, 2008: 6). The mandate perspective states that popular preferences become public policy goals because elections dictate that the parties whose policies are preferred by a majority are selected to form the government (McDonald et al., 2004: 2-3). The accountability perspective purports that governments tend to not stray away from the path of representation due to the threat of being thrown out of office in the next elections, in which respect they remain accountable to the electorate.

On the other hand, under a proportional system, the parliament is expected to consist of representatives the composition of whose preferences should comprise an equivalent distribution of the preferences of the electorate itself. In this way, a society can enjoy an effective distribution of proportional political representation among its members (Brighouse and Fleurbaey, 2010: 150-152). Under both systems,

elections are expected to act as an effective means through which rulers in representative democracies are kept accountable by the voters, with the objective of working in favor of the interest of the public (Besley and Case, 1995: 793; Austen-Smith and Banks, 1989: 124-125; Lowry et al., 1998: 764; Ashworth, 2012: 184-185). If one is to accept this view that political representation inherently resolves itself into political actions that pursue the best interest of the public, such a definition would render it an immediately pro-growth institution that naturally paves the way towards economic welfare, since, from an economic growth perspective, materializing the best interest of the public should theoretically indicate implementation of a set of economic policies that produce the highest possible rate of growth for an economy. It is not wise to claim that this translation from efficient political representation to high economic growth would occur automatically, but the literature on a concept called economic voting, a term that is the product of a field that resides at the junction of economics, political science and econometrics, argues that it is often what voters seek to achieve.

Economic voting is an area of study that investigates the relationship between voting behavior and voter perceptions of the economy. It is also known as the VP-function literature: The vote and popularity function. The vote function in this regard builds upon studies based on election data and aims to explain changes in government vote in elections as a function of voter perceptions of economic and political phenomena. The popularity function on the other hand assesses the impact of said phenomena on public opinion/popularity polls. The two functions are expected to produce parallel results and they are generally referred to as the VP-functions (Nannestad and Paldam, 1994: 214). A significant deal of work done in this field state that voters' views on the status of the economy have a significant effect on elections. Electorates tend to vote for politicians whom they think have had or will have a positive impact on economic welfare.

The relevance of economic voting in the context of the topic of this dissertation is our convention that the extent to which voting behavior is shaped by well-informed voter perceptions of the economy must also determine the extent to which politicians must represent the economic interests of those voters in order to win votes and seats in a parliament. In other words, if the economic vote is actually a

strong and statistically significant phenomenon, then this phenomenon will be recognized by politicians and pave the way for elections to become a mechanism that automatically keeps them in check, at least to an extent. Since politicians desire to get elected in order to be actively involved in policymaking, if the key to taking responsibility in government duties requires ensuring that voters are made better off economically, then politicians will be incentivized to represent their voters' interests to make them better off economically. Economic voting may in this way form a link between political representation and economic performance of a country by inducing political representatives to act in ways complementary to achieving economic prosperity. We thus find the theory of economic voting to be an important component in underlying the theoretical foundation for our work.

Academic work in the field of economic vote has been alive for around 50 years. The field has benefitted from extensive surveys of the literature throughout the years, found in the works of Nannestad and Paldam (1994: 237-238), Paldam (2004: 50-57), Lewis-Beck and Stegmaier (2008: 304-316) and Lewis-Beck and Stegmaier (2013: 368-381). We benefit from these surveys while building our own account of the field with an emphasis on the relationship between political representation and economic growth. The authors of these reviews are not mere surveyors of the literature, they are among the very founders of the field who helped establish and maintain it as a popular area of academic research to this day, therefore, almost any study on the economic vote extensively benefits from their work in surveying the literature and so will we.

On the other hand, in our case, doing a mere re-evaluation of the points made by these reviews is not an adequate approach to achieve our goal. We aim to link the economic vote to the subject of this dissertation, and in order to realize this we see fit to highlight, where due, the relevance of each finding in the field within the context of the relationship between political representation and economic growth. To begin with, we first present a list of the main topics of interest in the field that are relevant for our work. We then present a survey of the literature while simultaneously explaining how the findings regarding these topics are functional in helping us link political representation to economic growth through the economic vote.

Constituting the first extensive literature survey in the field, Nannestad and Paldam (1994: 214-235) review about a hundred of the most influential studies in the field back then. They list the findings of the field in a systematic fashion, categorizing results with respect to what aspect of the economic vote they concern. Around 20 years after their work, Lewis-Beck and Stegmaier (2013: 368-381) provide an update on the evidence on economic vote while staying loyal to the same classification employed by Nannestad and Paldam (1994: 214-235). They investigate whether the new results produced by the scholarly work in the field have remained consistent with the findings reported by Nannestad and Paldam (1994: 214-235) and present updated evidence where due. Below we summarize the main topics of interest in the field as reported by these studies, and that which we find to have relevance for our work. These topics are:

- Voters' knowledge about the economy
- Statistical significance and magnitude of the economic vote
- Sociotropic vs. egotropic economic voting
- Macroeconomic variables shaping the economic vote
- Asymmetry of the economic vote
- Retrospective vs. prospective economic voting

1.2.1.1. Voters' Knowledge About the Economy

In order for the state of the economy to have a significant impact on electoral outcomes, it must be a prerequisite that those who vote in the elections should know a good deal about the economy in the first place. If the voters are uninformed about the economy, the economic vote can hardly be meaningful at all. The level of knowledge voters possess regarding economic phenomena has been a topic that has received a significant amount of attention in the economic vote literature. While Nannestad and Paldam (1994: 214-235) report that the VP-function literature must implicitly favor the perfect information assumption in order to maintain simplicity of their models, they also mention reasons for which the assumption may not hold true in the real world. Among them are that voter opinions on the economy might be shaped by biased news coverage by the media, or that voters may be inclined to think

that the economy is doing well when their favorite party is in charge and the contrary when their favorite party is in the opposition. The authors, in parallel with other notable scholars in the same vein, test whether the perfect information assumption really works in the actual world, in a later study they conduct.

Constituting that later work, Paldam and Nannestad (2000: 364) start their discussion of the subject with a brief comparison of the two prevalent views on citizens' economic knowledge. The first view deservedly belongs to the school of neoclassical economics, under the title of rational expectations. People may not always be right about real world economic phenomena, but on the average, they are usually right. They may not possess all the information in the world, but by utilizing whatever knowledge available to them they form rational expectations that often converge to real-world market equilibria. If the scholars of economic voting were to fully embrace the assumption of rational expectations without further ado, perhaps they would have little reason to doubt the role of the economic vote in elections. Rather, in the words of the authors, a significant deal of academic work in this field have chosen to actually test the perfect information assumptions, and the findings in the field not only differ from the neoclassical assumptions but also differ within themselves as well.

To begin with, Paldam and Nannestad (2000: 389) find that only one third of the Danish people knew whether the economy experienced a budget deficit or a budget surplus in the years 1990-1993. On the other hand, the selected time period saw an unemployment rate 10% and an inflation rate of 2.6% in Denmark. Under these circumstances, the people were found to know a good deal about unemployment but not so much about inflation. The authors state that if the economy was suffering from a rather high level of inflation, the people would have known more about it as well. In this case, an empirical finding that people's knowledge about inflation did not shape their voting decisions would be irrelevant: Inflation does not really exist.

Another finding of the study was that the voters' knowledge about the economy right after an election were higher than it was in general. This also implies that something about elections made voters demand and acquire more knowledge about the state of the economy. While the study of Paldam and Nannestad (2000:

388-390) does not fully confirm the perfect information assumption, it also does not rule out the possibility that voters are knowledgeable to an extent that may allow them to reflect their economic perceptions in their voting behavior.

Sanders (2000: 275-276) is another influential study that asks the question of whether voters know enough about the economy for economic conditions to influence election results. He utilizes time-series data for the United Kingdom between years 1974-1979 and the findings are particularly interesting. The study does not propose that voters are very accurate in their knowledge about the state of the economy. Nevertheless, even though they may not know the exact values of macroeconomic variables, they have a good sense of capturing the trends in the various indicators shaping the economic performance of the country such that they can accurately distinguish between improvements and declines. The author argues that it is this accuracy that matters for elections and not perfect information on factors such as unemployment, inflation or economic growth. With the amount of knowledge they possess, voters are well-equipped to reflect their perceptions of the economy on the vote shares of political parties. Sanders (2003: 255-256) reassures in a follow-up study that voters' perceptions regarding real-world economic phenomena are statistically significant and have the expected sign on their coefficients.

Bélanger and Lewis-Beck (2004: 232-235) investigate the objectivity of the economic knowledge of French voters. They use data for the years 1978-2002 and arrive at the interesting conclusion that subjective perceptions of French voters are a better determinant in explaining electoral results than the objective state of the economy. In the authors' words, this result is a product of the fact that people individually evaluate the relative impacts on their lives of various indicators explaining the state of the economy such as economic growth, inflation, unemployment, trade balance by giving them different weights, and the resulting perceptions of the economy are more solid reflections of the economic situation than what the announced numbers captured. As a result, they confirm that voters benefit from a significant level of knowledge about the economy.

Duch and Stevenson (2010: 117) also report that voters are well-informed about the economy to the extent that they are competent economic voters. People are able to efficiently interpret the volatilities within their national economy and are

aware of the national consequences of international economic shocks as well. In another important work, Nadeau et al. (2012: 565) also conclude that economic perceptions are significantly shaped by the real state of the economy. Among the variables of unemployment, interest rate, unemployment and economic growth, they find voter perceptions of economic growth to be most reflective of its real-world indicator.

As numerous academic papers show, the economic vote literature proposes that voters are qualified, at a seemingly sufficient level, to assess the state of the economy based on the information they have on the real-world states of key macroeconomic variables. It is safe to assume that voters are qualified to take into account economic variables when deciding for whom to vote, and a next step would be to assess whether they actually use the information they possess in shaping their voting behavior. The next section provides an extensive survey of the literature regarding whether the economic vote is a real, statistically significant phenomenon.

1.2.1.2. Statistical Significance and Magnitude of the Economic Vote

The questions of whether the economic vote actually has a statistically significant effect on voting behavior and its magnitude are of primary interest for our work. If economic voting is real, then there is reason for political representatives to bear in mind that in order for them to remain in the office in the next elections, they better manage the economy to the best of their ability. From an economic growth perspective, this intuition can be imagined to include designation and effective implementation of economic policies that are growth-enhancing. If the incumbents fail to achieve macroeconomic prosperity for their electorate by maintaining a high rate of economic growth, it is likely that their vote shares will fall due to the deteriorating state of the economy.

According to the findings in the literature, the economic vote in fact seems real, as only a few studies among the around-hundred papers reviewed by Nannestad and Paldam (1994: 214) claimed otherwise. All the other papers were shown to establish a highly significant role for VP-functions in explaining election results. To begin with, Kramer's (1971: 133-140) pioneering work examines voting behavior for

the United States House of Representatives. Kramer (1971:133-134) reminds the readers that the voting model found within classical democracy theory, which viewed the voter as a rational agent who processes information he gathers from examining parties and their policy platforms and compares them to one another and votes in accordance with his findings, had not been doing well in empirical tests. He states that however rational a real-world voter may be, such an exhaustive way of acquiring information is not the way in which he would choose to behave in real life, as it is not economical. A perfectly rational voter knows that the mere fact that a certain party announces a certain policy platform is no proof that the party will actually go through with those policies once it is elected. Even if the parties are sincere in their promises, a rational voter will have no feasible way of judging whether those policy ends are actually achievable, as parties only announce policy goals in election campaigns and do not often explain how they will achieve those goals. For the rational voter, a comparison of all the information on every political party and all their promises regarding every issue at hand will also be a very costly effort. Because of the inefficiency of the classical democracy theory in explaining voting behavior as a consequence of such shortcomings, Kramer suggests to eye a more realistic pattern in voting behavior in which voters rather examine the information which is readily and less expensively available to them. In order to decide whether to vote for the incumbents or not, voters simply rate the past performance of governments. If they are satisfied with the rule of the incumbents with respect to certain criteria that are important to them, then voters will vote for the incumbents. Otherwise, they will vote for opposition parties.

In order to test this proposal, Kramer (1971: 134) examines voting behavior in the House of Representatives elections between the years 1896 and 1964 and finds that votes are actually responsive to changes in economic welfare under rule of the incumbent parties. The coefficients of the income variables are positive and highly significant in every equation, meaning that decreases in income result in a decrease in the vote share of the incumbents. To be precise a 10% decrease in per capita real income has a negative impact of 4-5% on the votes of ruling parties according to the study, signaling to the significance and the magnitude of the economic vote. The coefficients for price variables are negative as expected, statistically significant but

less so than income variables. This implies that inflation is also costly for the incumbents in terms of votes, but what matters more is the changes in income, in other words, the rate of growth. The unemployment variable on the other hand is found to be insignificant.

Kramer (1971: 140-141) concludes by arguing that votes are not simply products of partisanship, nor of habits and fanaticism. Changes in the state of the economy determine a good deal of who votes for whom as increases in per capita real income positively effects votes in favor of incumbent parties and economic downturns impact votes in favor of oppositions. Fluctuations in the economy can be held responsible for half of the variance of the votes, uncovering the significance of the economic vote.

Mueller (1970: 18-20) is also another important work in the same vein. The author investigates the impact of political and economic conditions on President popularity in the United States, using Gallup Poll's Presidential Popularity Survey data for the 1945-1969 period. Mueller uses the unemployment rate as a proxy for economic downturns. In summary, below are the four main findings of the study:

1. The “cost of ruling”: It is almost always standard that incumbents will suffer from a subtle decline of popularity at the end of their term, as apparent in the next election. Once the elected form a government after having won the elections with a vote share of $x\%$, they are very likely to receive a vote share that is lower than $x\%$ in the next election. This effect is also called “cost of ruling”.
2. The above decline will sometimes be interrupted with temporary increases/decreases in vote shares due to exogenous events such as international crises.
3. Rises in unemployment rates will cause Presidents to lose popularity whereas decreases in unemployment will not have a significant effect on popularity. In detail, a one percent rise in the unemployment level during a President’s popularity causes a three percent decrease in the President popularity.
4. Wars cause presidents to lose popularity.

The third item among these findings demonstrates the significance of the economic vote. The asymmetry in terms of the impact of downturns and upturns of the economy on votes and popularity is also a topic that has received much attention in the field and will be reported on in the following sections.

Some of the other notable papers demonstrating the existence of a statistically significant economic vote in advanced democracies are Fiorina (1981: 248), Kiewiet (1984: 370-373), Anderson (2000: 152-160) and Hellwig (2010: 186-195). Fiorina (1981: 248) looks at micro-level election data for American national elections for the years 1956 to 1974 to determine whether the macro-level relationship between voting behavior and economic perceptions also holds true at the micro-level and asks whether votes by the electorate for the ruling party are affected by individual voters' economic condition. The author concludes that the votes are closely related to the current economic conditions of voters. Kiewiet (1984: 370-373) also investigates the impact of individuals' economic concerns on their voting behavior in American national elections. He finds that people are more likely to vote for incumbent parties under favorable economic conditions and less likely to do so when the economy is declining.

Anderson (2000: 152-160) examines cross-national, individual-level survey data on Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and the United Kingdom, by using the Eurobarometer 42.0 dataset from the year 1994. The author finds a very strong effect of personal evaluations of the economy on the tendency to vote for the incumbent party. Hellwig (2010: 190-197) analyzes the impact of the economy on incumbent vote in 77 democracies between the years 1950–2004 and he finds that a 4% increase in per capita income growth increases the vote share of the ruling party by 1.2%.

Despite the fact that a large share of academic papers on economic voting is on advanced democracies, cases studies on developing countries also exist. Weyland (2000: 485-496) estimates the impact of voters' approval of the economic policies of Peru's President Alberto Fujimori on his popularity, by analyzing monthly time-series popularity polls data for the period of 1992-1997. The survey respondents were asked whether they approved of the President's performance and the answers given to this question form the dependent variable of the empirics of the study.

Among the independent variables are questions on various political events in Peru and also a question on whether the respondent approved of the economic policies during the President's term. The results confirm a significant impact of the economic vote, as a one percentage point increase in economic policy approval resulted in a rise in President Alberto's approval by voters by over 0.33 percentage points.

A paper that attempted to answer the question of what factors were influential in Boris Yeltsin's popularity in the 1990s Russia is Hesli and Bashkirova (2001: 384-392). The 1990s constitute a memorable decade in Russia's economic history. The era marks a transition to free market economy and is remembered with economic crises. Following the abolition of price controls at the start of the decade, prices had risen by around 2500 percent in 1992 and gross domestic product had shrunk by around 40 percent between 1991 and 1996 (Klugman and Braithwaite, 1998: 39). In order to measure the impact on voting behavior, Hesli and Bashkirova (2001: 385-388) used data from popularity surveys from 1991 to 1997. The findings of the study assert, perhaps expectedly, that support for Boris Yeltsin was lowered by perceptions of individual economic conditions of voters. The worse-off economically a voter thought that he and his family had been in the last 12 months, the less support he had for Yeltsin, and the worse-off economically a voter thought that he and his family were going to be in the coming 12 months, once again, the less support he had for Yeltsin.

Another influential study that investigates the case of Russia in the same time period is Colton (1996: 291-293). Colton's study is based on surveys conducted with around 2800 voters regarding their voting behavior during the 1995 parliamentary elections, with a high number of questions on economic perceptions. The author reports that the survey results revealed the people were *very* angry with the economy of the country. Approximately two-thirds of the sample named an economic issue when they had been asked what the most serious problem the country had been facing was. The most frequently cited issue was unemployment and the top-ten list of issues reported contained six economic ones. The econometric findings are once again no different. As the elections ended in a defeat for the incumbents, Colton notes that the people who thought negatively about the state of the economy moved away from the ruling party while the minority of the people who did not see

problems with the economy did not. The end result was a big loss for the government. The study concludes by reminding the readers that the impact of the economy on voting behavior ultimately did help shape Russian politics in the 1990s.

Canton and Jorrat (2002: 414-419) examined the significance of economic voting in the Argentinean presidential elections of 1995. The authors employed a logistic regression model in which the dependent variable was based on whether a respondent voted for the ruling president Carlos Menem or not. The independent variables consisted of demographical variables, political tendencies and a variable for assessments of the national economy. The model results showed that the largest impact on the voting behavior was that of the voter perceptions on the economy. Respondents were more likely to vote for Carlos Menem if they were thinking that the economy had been going well in the last year. In a similar study, Brophy-Baermann (1994: 126-129) aimed to assess the impact of a varying set of economic indicators on opposition left parties between 1946 and 1988 in Mexico. The variables of interest were trade balance, inflation and per capita income. The author found that 83% of the variation on the vote shares of opposition left parties were explained by these economic variables.

Dominguez and McCann (1992: 208-210) also used national survey data from 1988 in which respondents had been asked whether they would vote for the incumbent party - the Institutional Revolutionary Party (IRP) - or not. The results were similar: Those who thought that the economy was not doing well were significantly more likely to vote for leftist opposition parties, in comparison to those who saw no problems with the state of the economy. Despite this finding, Dominguez and McCann (1994: 220) also argued that inclusion of political control variables into the model altered the results in that they thought that what really transferred votes from the incumbent IRP to the opposition parties was perceptions of political issues, rather than economic ones.

Benton (2005: 417-422) examines presidential election results from Argentina, Bolivia, Brazil, Columbia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Peru, Uruguay and Venezuela between the years 1980-2003. The total number of elections analyzed was 39. According to the results of the regression, a 1 percent drop in per capita GDP meant a 1.7 percent drop in the

incumbent party votes. Pacek (1994: 724-728) on the other hand investigates the cases of non-western democracies, namely Bulgaria, the former Czech and Slovak Federated Republic and Poland. He aggregates the election data for presidential elections of 1990 in Poland, legislative elections of 1991 in Poland, legislative elections of 1991 in Bulgaria and the legislative elections of 1992 in the Czech and Slovak Federated Republic, with the aim of detecting the impact of the macroeconomy on voter turnout and vote choice. His three hypotheses are that there are direct relationships between the severity of economic conditions before the election and (1) voter turnout, (2) support for incumbents and (3) support for oppositions. The findings are highly significant. It is stated that worsening of economic conditions such as unemployment and decreases in incomes cause voters to lose interest in participating in elections, resulting in drops in voter turnout. In addition, as the severity of economic conditions increases, voters also tend to punish incumbents by choosing to vote for opposition parties.

As apparent by the numerous studies covering a wide range of countries and establishing the link between economic perceptions and the vote, there is no grounds to reject that the economic vote is a statistically significant phenomenon, influencing voting behavior at a significant magnitude. Electorates all around the world are influenced by economic concerns when deciding for whom to vote. This outcome gives us a solid reason to hypothesize that the economic vote can create incentives for both self-interested and benevolent political representatives to represent the economic interests of their voters. The message is simple: Better-off voters with less economic concerns bring in more seats for the incumbents in a parliament. A rational political representative would thus receive this message and act in accordance with the economic demands of their electorate.

An implication of this result is that politicians of countries with more developed representative institutions may have more significant incentives to strive to achieve higher rates of growth for the economy. More inclusive processes of political representation would yield stronger pressures on the representatives, because the higher the proportion of a population whose interests are represented in the policy-making process, the higher the demands on the representatives who represent those interests. The politicians are aware that they can increase their vote

shares by realizing those interests, via better managing the economy. Thus, the statistical significance of the economic vote allows for a theoretical link between political representation of interests and economic growth.

The nature of those interests, on the other hand, has also been another subject of inquiry in the economic vote literature due to its implications for both the represented and the representatives. Do the voters want a higher level of growth for the whole economy? Or are they rather interested ‘pocketbook’ effects, that is, improvements in their own individual economic conditions? The answer to this question has implications for the theoretical framework of this dissertation, soon to be discussed, therefore we now turn to the subject of what voters really want, in other words, sociotropic voting versus egotropic voting.

1.2.1.3. Sociotropic vs. Egotropic Economic Voting

Now that we know that economic voting has a significant effect on elections, we want to know whether the economic vote is sociotropic or egotropic. The economic vote is egotropic if voters evaluate the past or future economic impact of government policies on their own pockets when casting votes. It is sociotropic, on the other hand, if voters think in macroeconomic terms. An inquiry into how egotropic and sociotropic effects work to shape voting behavior reveals that both of these motives are reasonable. Regarding egotropic voting behavior, it makes sense to assume that personal experiences of economic downturns that worsen one’s individual economic well-being should shape voting behavior. It is plausible to argue, for instance, that a person who has remained unemployed for the last six months may not feel the same way towards the rulers of their country in comparison to some other person who has been thriving economically, having enjoyed a larger share of the economic pie in the same time period.

Alternatively, as much as economic theory proposes that rational individuals act to maximize their own self-interest, elections are not solely about one’s own self. In general elections people vote to elect representatives who will take on the responsibility of governing the *whole* country, as a result of which, voting behavior can be expected to have sociotropic elements to it. People may equally have an

interest in evaluating politicians on the basis of how economically beneficial their policies are to the nation as a whole, how well they manage the inflation, what consequences their policies will have for the future generations of the country, etc. These kinds of concerns signal towards a sociotropic motive for economic voting.

While individuals' decisions can be influenced by any reasonable combination of these two motives, whether egotropic or sociotropic effects dominate the economic vote is an important distinction for our work due to the implications it has for the relationship between political representation and economic growth. Every society demonstrates a certain level of income inequality. In a hypothetical case in which egotropic economic voting dominates while the economy is experiencing a 5% decline in per capita real GDP income, it may not be a fruitful effort to search for a systematic impact of the decrease in the per capita real GDP on voting behavior. If people look not at the macroeconomic indicators during voting but at the impact of policies on their own pocket, then a significant portion of the population would certainly have no reason to turn away from the incumbents even during economic crises. This is due to the fact that not every member of the society suffers equally badly from negative consequences of economic slumps, or in other words, the 5% decline in per capita real GDP income is only an average decline and would definitely not constitute a bother for some members of the society who did not experience it. Alternatively, the impact of an economic crisis on a government's vote share is also determined by *who* is being negatively affected by the economic downturn the most. If voting motives are egotropic to a significant degree, then this will fortify partisan impacts. Incumbent parties will want to consolidate their votes by placing the political and economic interests of their own support base above anyone else, in which case the political process will result in redistribution of resources to certain groups in the society. This kind of political process will result in a government for whom the creation of its own prosperous class in the society may be a higher priority, in order to survive, than a high rate of growth for the whole economy. As a result, the economic vote would lose some of its significance in incentivizing politicians to work towards a common goal for the whole economy, that is, the incumbents could still be maintaining their vote share with low growth

rates, provided that they supplied an effective representation of the interests of their own voters.

If individuals or groups have such egotropic motives while deciding for whom to vote in elections, they can be expected to hold elected political representatives responsible for realizing their individual/group interests. This perspective is closely related to lobbying activities which are well-documented to be prevalent in political processes in democracies. As long as the egotropic motive is significant for economic voting, it can be hypothesized that voters can engage in lobbying activities in order to do more than just voting to keep politicians in check after having elected them, since, what influenced their vote choice was their own individual/group economic conditions in the first place. Lobbying activities have been reported to be capable of having a negative (Olson, 1982: 69) or positive (Becker, 1983: 244-245) impact on economic welfare due to their nature, and constitute a subject with which we will deal in a following section.

On the other hand, if voting motives in a society are significantly sociotropic, we will expect an equally significant effect of the economic vote on political representatives, in the form of directing them to pro-growth policy-making in order to win votes. In order to clarify the nature of the interests of the voters in this domain, we now summarize the relevant findings in the literature.

To begin with, Kinder and Kiewiet (1979: 496-498) constitute the first solid effort in investigating whether the economic vote is sociotropic or egotropic. The authors go through a discussion of egotropic vs. sociotropic voting and proceed to ask the question of whether 'personal economic grievances' or 'collective economic judgements' define the economic vote. They utilize the University of Michigan Survey Research Center's survey data on 11 national elections between the years 1959 to 1976. They first investigate, in their first empirical analysis, how consistent personal economic grievances are in explaining congressional voting across these elections. Their findings are robust. The economic vote between within the time frame examined in the study was 'hardly at all' shaped by individual economic conditions. Surely many people were affected by the negative outcomes in the economy, but those individual concerns barely shaped vote decisions at all as the thorough investigations of the 1974 and 1976 elections detected absolutely no impact

of personal economic troubles on votes. Kinder and Kiewiet (1979: 522) at this point state that there is no evidence to argue that individual economic downturns affected people's political views. In a second analysis, the authors assess the impact of collective economic judgements in explaining congressional voting behavior. They find a very strong link from collective concerns regarding the economy to vote decisions. According to the findings of the paper, ruling political representatives see drops in their vote shares not because people hold them responsible for their individual economic losses but because they are perceived to be inefficient in running the national economy, implying the statistical significance of not egotropic, but sociotropic economic voting.

The question of whether sociotropic vs. egotropic motives dominate economic voting has received much attention after Kinder and Kiewiet's above work. The answers have had a more mixed nature to them in the coming studies. Some of the other notable works on the topic are as follows. Kiewiet (1983: 97-99) shows that voting behavior both in congressional and presidential elections in the U.S.A. displays strongly sociotropic effects. The author fails to provide significant evidence for egotropic voting behavior. Lewis-Beck (1988: 37-39) examines popularity survey data on Germany, Spain, Italy, France and the United Kingdom and detects that voter behavior is sociotropic. Markus (1992: 833) finds that American voters are as egotropic as they are sociotropic in their electoral calculus. Nannestad and Paldam (1997: 97) also find that egotropic economic voting is stronger than sociotropic economic voting in Denmark. Borre (1997: 364) and Lewis-Beck et al. (2013: 318) demonstrate for Denmark, on the contrary, that sociotropic effects are more significant in voting behavior than egocentric ones which are also significant but less so. Freire and Santana-Pereira (2012: 508-509) also find significance evidence for both motives in Portugal, with the sociotropic effect being stronger. Anderson (2000: 168) analyzes 13 European countries and finds significant sociotropic effects, yet no evidence on egotropic effects. Duch and Stevenson (2008: 146-155) examine 165 surveys from 19 countries, and uncover strong sociotropic and retrospective effects. Lewis-Beck and Ratto (2013) study 12 Latin American countries and also detect strong sociotropic voting patterns. Kotnarowski and Markowski (2014) analyze the case of Poland's 2011 parliamentary

elections and Stubager et al. (2014) study the Danish case. Both studies derive parallel results confirming the evidence on sociotropic economic voting. Elkind et al. (2019) investigate economic voting for the Lisbon Treaty Plebiscites in Ireland, examining data on the 2008 and 2009 EU Referendums. In both referendums, both sociotropic and egotropic effects were found to exist, but the sociotropic voting motive was slightly stronger than the egocentric motive.

The evidence in the literature leads us to think that both sociotropic and egotropic economic concerns can be statistically significant determinants of the economic vote, with the sociotropic effects being stronger. It can be stated that a large deal of what matters for the vote share of governments is how well they have run – or are expected to run – the whole economy. While the consequences of economic policies in a country may vary from citizen to citizen in a society, there is good reason to imagine that at times, political stances of those citizens may be influenced by their views on the whole economy, independent of their personal gains or losses, as mentioned above. Since the statistics published by the authorities on macroeconomic variables such as economic growth, unemployment and inflation are equal for everyone, sociotropic voting allows formation of a link from political representation to economic growth, because in the case that voters evaluate the state of the macro economy rather than the state of their individual economy to decide for whom to vote, political representatives will be induced to strive for implementation of growth-enhancing policies that improve the levels of variables that equal for everyone. In this way, the institution of political representation may be influential on macroeconomic growth.

While the dominance of sociotropic voting motives enable a conceptual link between representation and growth via the economic vote, egotropic motives, on the other hand, may have either a negative or a positive impact on economic growth, depending on the nature of those interests represented by the policymakers as well. Since there is some evidence for egotropic economic voting behavior as well, we argue that the egotropic economic vote may serve as a reason for lobbying activities in democracies. Voters demand to have their individual/group interests represented in the decision-making process, and politicians thus work in favor of those interests, in order to realize them. As a result, the consequences for economic growth of

representations of those interests depend on what those interests have in store for economic growth. If the represented pursue growth-enhancing business activities, for instance, investments in an innovative industry with high value-added, then the political representation of those activities may end up being pro-growth. On the contrary, if the economic interests of the represented are growth-impeding, then their representations in the political sphere may end up hurting economic growth. These topics will be further highlighted in the theoretical framework section of our study. For now, we turn to another aspect of the economic vote that is relevant for our work, namely the issue of which macroeconomic variables are most important in the eye of economic voters.

1.2.1.4. Macroeconomic Indicators Shaping the Economic Vote

A next step is to discuss what aspects of the macro economy are most influential in affecting election results. The three main indicators influencing the economic vote have been found to be GDP growth, unemployment and inflation. Below is a summary of the findings of the literature in this regard.

In his aforementioned work, Kramer (1971: 137-141) finds that annual relative changes in real income, as well as inflation, form the most significant economic indicators in shaping the economic vote. The author reports on a positive relationship between both nominal and real per capita incomes and incumbent votes. Even though Kramer does not explicitly use the wording of economic growth, we find it convenient to state that his finding is relevant, by definition, for economic growth because he uses per capita income as his independent variable. As a higher economic growth rate implies a higher annual change in per capita income, it is safe to expect a positive relationship between economic growth rates and incumbent votes according to his findings. A study that follows Kramer (1971) and examines the vote impact of the growth rate of real per capita gross national product (GNP), among other variables, is Fair (1978). The author examines economic events' influence on presidential votes. He studies a rather long period of time as his data covers annual data on real per capita GNP, unemployment and the GNP deflator for the years 1889-1976. According to his results, the indicator that had the largest impact on votes was

changes in real per capita GNP, underlining the importance of economic growth for the economic vote.

Paldam (1991) is a highly influential paper on the subject, with rather discouraging results. The author looks into the relevance of real GDP growth, increases in consumer prices and unemployment for explaining the results of 197 elections in 17 industrialized countries and finds weak to non-existent effects. Paldam (1991: 27-29) suggests that VP-functions need to include variables for controlling the political context in order to better capture the effects of economic indicators on the vote. Powell and Whitten (1993) contribute to the work of Paldam (1991) in this respect. They collect data for real economic growth rate, unemployment and inflation for the years 1967-1988 for 19 industrialized countries and first reproduce the results achieved by Paldam (1991) in that the coefficients for growth and unemployment are with the correct signs (positive) but statistically insignificant. The inflation coefficient is also not significant. Extending Paldam's work, the authors then apply four refinements to their model. They first use (i) comparative international economic indicators, rather than the simple economic variables; (ii) then add as a control variable governments' baseline of swing votes in the preceding elections; (iii) add control variables for governments' left-right positions and finally (4) divide the countries into two groups according to a concept called the clarity of government responsibility. In terms of the first refinement, they extend the model by proxying for voter expectations regarding these indicators. Their assumption is that while voters do look the state of economic indicators like GDP growth, unemployment and inflation, what also matters is the state of these variables in other countries, that is, a 3.5% increase in annual per capita real GDP is perceived differently when the world average is 1% and when it is 6%. Once they incorporate comparative international data to their models in order to control for expectations, the statistical significance of the variables of interest increase slightly but still, they are insignificant. The fourth refinement is the significant refinement for the discussion here. The authors suggest that in some countries the citizens are not sure about exactly whom to hold responsible for the macroeconomic performance. In order to control for the clarity of responsibility, the authors separate the countries into two groups; a group of 11 countries for which they judge that government

responsibility is clear in the eye of the public opinion, and a group of 7 countries for which it is rather blurred. The results of the fourth refinement are especially promising. They dictate that for the countries with a high clarity of responsibility, the GDP growth and unemployment variables are both significant. The inflation variable is also significant with the correct sign, but only for right governments.

Palmer and Whitten's (1999) results are also worth mentioning. They study the electoral effects of unexpected and expected GDP growth and inflation on incumbent vote, in 19 industrialized nations between the years 1970-1974. Their results show that while a 1 percentage point rise in unexpected economic growth increases government vote by 0.6 percentage points, a parallel rise in unexpected inflation results in a 1.1 percentage decrease in votes. They also find unemployment to have statistical significance with the expected sign.

Wilkin et al. (1997) is also an acclaimed study which comes up with robust results on economic growth's impact on election outcomes. The authors present results for a cross-national analysis of 38 countries. They include all the countries that had held a minimum of two elections in a row, had stable governments and on whom there were available electoral data. Each country was included in the analysis with the most recent election they had held and the set of elections analyzed thus fell between the years 1988-1994. The dependent variable of the study was incumbent vote share while the independent variables of interest were inflation rate and annual rate of change in real GDP. The study finds that no matter the differences in political context between countries, the vote share of major parties in office is significantly affected by the economic growth rate in the year of the election.

Benton (2005) studies the case of 13 countries in the Latin America, a region riddled with economic instability. According to the results of the paper, a 1% decline in GDP per capita results in a 1.7% decrease in incumbent votes on average. This is a strong effect, as the author discusses that a recent case in Argentina saw a 17% decline in GDP per capita within a single presidential term. In such an extreme scenario of economic downturn, incumbents can be expected to suffer from a decline of 29% of the total votes. A 3% drop in per capita GDP would result in a 5.1% loss in vote share, which could make or break electoral victories.

Dassonneville and Lewis-Beck (2017) investigate the role of variance in political-institutional characteristics across countries in influencing the economic vote. Specifically focusing on economic growth, they collect a large dataset that involves as the dependent variable the electoral performance of governments in 34 OECD countries since 1950. They find that a 1% increase in economic growth in the year before an election will increase the vote share of the incumbents, on average, by 0.5% a point. They further explain that their results are stable when tested against various measures of institutional variety across countries. The impact of economic growth on incumbent vote shares in OECD countries – the majority of which are developed countries – is not only strong but also stable across the political-institutional variety within this group of countries. While the forms of governments prevalent in some OECD countries allow for a higher clarity of responsibility in the eye of voters than others, the authors suggest that the impact of economic growth on the economic vote is independent of this variety.

Pacek and Radcliff (1995) present their findings on the impact of per capita real GDP on voting behavior, in a total of 52 elections from eight countries: Costa Rica, Jamaica, Venezuela, Botswana, Uruguay, India, Trinidad and Tobago and Sri Lanka. They find, on average, that the vote share of incumbents falls by 1.1% as a result of a 1% drop in per capita real GDP. Akarca and Tansel (2007) study the 1995 general elections in Turkey. The authors aim to assess the impact of the growth rate of per capita real GDP on the provincial vote shares of political parties. The results confirm, in line with the majority of the literature, that the vote share of the incumbents is significantly affected by the same year's GDP per capita growth. Akarca and Tansel find that a 1% rise in the economic growth rate resulted in a 0.27% rise in the vote share of the major ruling party.

Fidrmuc (2000) uses region-level election data from 1993 to 1997 to estimate a vote function for Poland. In order to assess the significance of the economic vote, Fidrmuc uses variables that measure the region-level unemployment rate and regions' wage-level deviation from the average wage in Poland. The author finds that unemployment has no impact on the vote share of governments. On the other hand, unemployment affects the level of support received by parties depending on whether they support reforms or not, since the country was in a phase of economic

transformation during those years. The years examined by the study were of economic hardship for Poland due to the troubles faced in during transition into a market economy. The parties whose agendas favored this transition were held responsible for the economic troubles in the eye of the public opinion. Supporting this position were the results of the regressions which suggested that if a regions' unemployment rate had been 1% over the country's average unemployment rate, support for the parties who promoted reform was to drop by 0.33% and support for the leftist parties was to rise by 0.5%.

Wade and Kang (1990) investigate the macroeconomic indicators responsible for explaining vote shares in South Korea, by utilizing district-level data on the 1988 assembly elections. They ask the question of whether unemployment and incomes are influential in explaining the vote shares of the four largest political parties. The results show that higher unemployment meant lower votes for the ruling party and higher votes for the opposition. Districts which suffered from high unemployment moved towards opposition parties and away from incumbents. The authors conclude that the economic performance of rulers was what mattered in the eye of voters. Three other studies that focus on voters' perceptions of unemployment and voting behavior are Lepper (1974), Conover et al. (1986) and Lewis-Beck and Nadeau (2009). Lepper (1974) narrates that preferences of the United States voters regarding public policies on unemployment and inflation are significantly reflected in voting behavior, as embedded in vote statistics. Conover et al. (1986) utilize individual-level survey panel-data on the residents of the city of Lexington, Kentucky (USA), covering 18 months. They control for gender, race, age, education and income as determinants of economic evaluations of voters. They find that the people are very accurate in their evaluations of the actual trends in unemployment, even when they have little or no knowledge of the unemployment rate. In the case of inflation, the people were also accurate, but less so. Lewis-Beck and Nadeau (2009) propose that a vast portion of the voters in the United States were able to accurately perceive unemployment and that this accuracy significantly contributed to Barack Obama's triumph in the 2008 Presidency elections in the USA.

Chappell and Veiga (2000) find that rises in inflation had a significant negative impact on incumbent vote shares in a sample of 136 elections spanning

Finland, Austria, France, the United Kingdom, Belgium, Ireland, Italy, Spain, Germany, Sweden, Denmark, Netherlands and Portugal between 1960 and 1997. The authors also examined the impact of GDP growth on vote. The effect GDP growth was significant in some regressions while insignificant in others.

As apparent from the vast amount of work on the subject, the literature on economic vote suggests that economic growth, unemployment and inflation are the three major macroeconomic indicators that have been found to shape voting behavior. While all three indicators are significant, we would like to stress the importance of economic growth in shaping the economic vote, as the title of this dissertation would suggest. As long as political representatives are aware of the impact these indicators have on their vote shares – which is expected given the fact that awareness on such a principle constitutes a natural qualification to have in their profession – they will be inclined to act accordingly and choose growth-accelerating policies over non-growth-accelerating ones. Thus, once again, more inclusive processes of political representation can lead to more incentives for politicians to work for a growing economy, as opposed to leaders of non-democracies who do not have such pressures on their shoulders. Next then, we focus another aspect of economic voting which we find to be important in the context of our work, namely the asymmetry of the economic vote.

1.2.1.5. Asymmetry of the Economic Vote

A significant deal of research in the economic voting literature has concerned the subject of asymmetry of the vote. The asymmetry within the context of economic voting is related to the relative importance voters associate with good times and bad times, economically. Voting behavior is symmetrical if, for instance, a drop in incumbent vote share due to a 3% drop in per capita real income is proportionally equal to a rise in incumbent share due to of a 3% rise in per capita real income. In the case that there is a difference between the above drops and rises in vote shares, the economic vote is asymmetric. This phenomenon has also been called the *grievance asymmetry* in the literature in line with the findings that voters give a greater weight to negative news than positive ones (Lau, 1985: 123). Findings in the literature,

which will be presented below, are divided such that while some studies have claimed that voters attached relatively higher weight to the bad times, some scholars have found no evidence of such asymmetry. This distinction is significant for the subject of our work. An asymmetry of the economic vote creates room for politicians to 'settle for less' when they can do more. If voters punish the incumbents as a result of bad economic performance yet do not reward them for the good times, then political representatives would have little incentive for struggling to maximize economic well-being of the voters, apart from purely benevolent incentives. They could as well only aim to prevent economic downturns and not try to shoot for the stars when it comes to costly, and often unpopular, growth-enhancing policies, since even successful implementations of those policies would run the risk of not producing any extra votes for their cause. On the other hand, if the economic vote is not asymmetrical in favor of the bad times, even self-interested politicians could be incentivized to strive for policies that could achieve the maximum attainable economic growth rate possible, with the hope of winning the next elections. As a consequence of this effect, the asymmetry of the economic vote could serve to hinder the link between political representation and economic growth by removing the incentives for the representatives to do their best to achieve high levels of economic growth.

Some of the early studies in the literature indeed found that voters were asymmetric in their evaluations. They were likely to punish ruling governments for the bad times and not likely to reward them for the good times. In his acclaimed work, Kernell (1977) reports on the studies that employed experimental methods and came up with evidence that people's overall judgments towards a phenomenon were shaped more heavily by its negative aspects than positive ones, from a psychological perspective. The author then applies the same logic to voting behavior. He states that achievements by a ruling party is less influential in shaping the judgements of the public in comparison to its failures. As a result of this asymmetry, even if the portion of voters who were dissatisfied by a government's performance was equal to the portion of voters who were satisfied with it, the net impact of the evaluations on the vote would probably be negative. Kernell (1977: 55-62) tests this idea using data on

the U.S. Presidential popularity and finds that the disapproval of the Presidents had a larger impact on votes rather than approval of them.

While Kiewiet (1983) studies the U.S.A. Congressional elections and finds no evidence of asymmetric voting behavior in a study of the U.S.A. national elections, Nannestad and Paldam (1997) study economic voting data in Denmark for the years 1985-1992. Their model involves a variable which controls the changes in individual economic conditions, major macroeconomic indicators and a control variable for individuals' underlying support for the government. The main finding of the study is that votes respond to economic downturns at a magnitude three times larger than to economic improvements, signaling to the existence of the grievance asymmetry.

Lewis-Beck (1988), on the other hand, looks at the cases of European democracies by studying individual survey data. The results do not favor the asymmetry hypothesis. He finds no evidence that voters tend to attach higher importance to economic downturns than to improvements. In a more recent study, Park (2018) studies the impact of the grievance asymmetry on votes in 122 elections across 42 democracies between the years 1996-2016. The author declares little support for the phenomenon, stating that the evidence is very weak and inconsistent.

For the time being, the evidence on economic voting asymmetry is mixed. Surveying the literature, Lewis-Beck and Stegmaier (2013) also state that the evidence is not conclusive, as such, they do not declare that the grievance asymmetry is convincingly real. For now, we state that there is no strong evidence that would tell those who run the economy that they could not benefit politically – in the form of increasing their vote shares – from efforts to achieve higher rates of economic growth.

1.2.2. Representation as an Anti-Growth Institution

In spite of the academic evidence presented to argue that political representation may induce economic growth, no known representative democracy particularly produces high rates of economic growth every year. In many scenarios, political representation of the public does not translate into acting in the best interest of the public and there are various reasons why some of those interests can be lost in

translation. Underlying factors may vary: For some countries it may be difficult to define a best interest of the public that constitutes a common will for the whole society, due to conflicts within the society itself. In other countries, some elected representatives may simply choose not to pursue the interests of those who elected them, instead pursuing their own agendas, due to being corrupt. Even in cases where politicians do want to be loyal to their electorate, there may be cases of governments not skilled enough to devise or powerful enough to implement and see through with desired policies. The case may be that voters are not able to make the best decisions in elections so they elect the wrong people to represent them, or that voters may be influenced by partisan motives, ignoring policy outcomes. Above all, one could argue that the institution of political representation, subject to its current mechanics, is not sophisticated enough to produce any significant impact on the economic performance of a country. In this respect, perhaps the idea of having a natural right to choose one's own government is so captivating for the human mind that it becomes easy, at some point, to overlook the flaws embedded in the institutional arrangements surrounding political representation, through which the institution of democracy itself is at times pervaded, and deviated from its purpose. A thorough investigation of the impact of political representation on economic growth should therefore take into account all of these possible scenarios in which the institution may have no significant impact on economic growth as well.

In the next section, we make a case for political representation as an institution with neutral, and in some scenarios, negative consequences for economic growth. We begin with a discussion on why the economic vote might not matter at all, due to a lack of clarity of responsibility in the eye of the public opinion regarding whom to hold accountable for fluctuations in the economy. We then mention the consequences of the asymmetrical information between the elected and the electorate, followed by a discussion of distortionary effects of corruption and lobbying activities on processes of political representation.

1.2.2.1. VP-function Stability Issues

While we listed numerous studies establishing that voting behavior is indeed altered by economic perceptions, the economic vote literature is in fact not one with clear-cut answers. It has been reported to have deeply rooted problems regarding VP-functions. It has been often stated that the VP-functions that economic vote scholars derive are usually not stable across time and space (Paldam, 1991) meaning that their results are fragile in the sense that what is found to be working for one country fails to explain voting behavior in another country, or in some even more dubious cases, what works for one country is found to be not working for the same country some years later. Results are fragile and lack universal applicability. Such issues bring into disrepute the credibility of the findings in the literature on the grounds that if well-structured, stable VP-functions do not exist, then the very concept called the economic vote is problematic. If people vote with economic concerns on their minds at some point in time and not so at other times, then it can be argued that the theory of economic voting is not really useful at all. On the other hand, it has often been asked whether the stability issues regarding the functions were inherent or apparent (Lewis-Beck and Paldam, 2000: 114). If they are inherent, then there is not much anyone can do to solve the problem and perhaps it should just be admitted that VP-functions cannot be generalized. If the instability is only apparent, then there could be some certain trick, or some better methodological approach that would solve the problem.

The stability issues arise from the so-called responsibility hypothesis on which the entire field of the economic vote is based. The responsibility hypothesis states that an electorate will normally hold the government responsible for economic events. This link between the vote and the economy allows scholars to hypothesize the economic vote to function as a means of a reward/punishment mechanism (Paldam; 2004:535) through which voters choose to punish politicians by not voting for them when the economy is not doing well and to reward them by voting for them when the economy is doing well. While this mechanism leaves little reason to claim that elections would not invoke certain representative instincts in politicians, an electorate may not always be able to decide whom to hold responsible. Some

governments may come in the form of coalitions with an even distribution of political power among the members of the government and voters may have a difficult time deciding on whom to lay the blame. Other countries may have political institutions under which presidents and prime ministers from different parties may be working in cohabitation. Political shocks and civil conflicts may complicate matters beyond comprehension. External shocks like global economic crises or wars may also blur the concept of responsibility. Under such cases the responsibility hypothesis breaks down. If voters are not knowledgeable on whom to hold responsible for the state of the economy, the theory of economic voting would collapse (Lewis-Beck and Stegmaier; 2013: 372). In other words, a *clarity of responsibility* is required in order for academic work to be able to produce sensible explanations to the extent to which the economic vote is influential in elections. The fact that the responsibility hypothesis can be a problematic concept has resulted in many scholars doing just that: Indicators enter into VP-functions in the form of control variables that aim to account for various political and institutional factors that determine how easy or difficult it is for voters to decide whom to hold responsible for the economy.

The work of Powell and Whitten (1993) constitute an important example in understanding clarity of responsibility. The authors argue that economy's impact on the vote would diminish in cases in which governments have the opportunity to diffuse political responsibility. The political context in which governments function has several determinants which shape the ability of incumbents to lay blame on others and in countries in which these opportunities are abundant, the economic vote can be expected to lose its purpose. The study suggests that there are two main factors that determine clarity of responsibility. The first one is related to voting cohesion within the governing party. It is stated that political representatives within government parties vote together during policy-making processes 95% of the time in most democracies. Voting cohesion helps maintain the political influence of the ruling party intact and prevents opposition parties from affecting policy choices. In the case that no significant voting cohesion exists within a ruling party, opposition parties can also have a major say in policy-making by means of not only their own votes but also influencing the vote choices of political representatives of the ruling party. The authors identify four democracies in which voting cohesion does not

significantly exist: Italy, Japan, the United States and Switzerland. They expect incumbents in these countries to be less vulnerable to vote loss due to economic downturns, in order to test which, they create a dummy variable which codes these four countries as 1 and all others as 0. The second factor that authors deem a significant influencer of the clarity of responsibility is related to how inclusive legislature committees are. If committee chairs are distributed proportionally among all political parties, then it is easier for incumbents to diffuse responsibility by blaming the opposition as policy-making becomes a collective process. The authors thus create a second indicator variable that controls for countries in which legislatures have committee systems which are both effective in policy-making and also distribute chairs proportionally to all the parties in the parliament, independent of whether they are in the government or not. These countries are said to be Austria, Belgium, Denmark, West Germany, Netherlands, Norway, Sweden, and Switzerland. Three other features of the political context which, according to the authors, significantly affect clarity of responsibility are bicameral position, minority governments and coalition governments. The bicameral position concerns the countries in which there also exists a second parliament, such as the United States, the United Kingdom, Germany and Australia. If the second parliament is not controlled by the government, clarity of responsibility can be blurred. Minority and coalition governments can also blur the concept due to the shared status of the political power maintained by the government.

The results of the empirical analysis by Powell and Whitten (1993) strongly support their hypothesis on the importance of clarity of responsibility. In a cross-sectional analysis of over 100 elections in 19 democracies between the years 1969-1988, they find that lack of voting cohesion, inclusive committee systems and governments' lack of control in the second parliament result in governments losing less votes due to economic downturns. Minority and coalition governments are also less likely to be negatively affected by the economic vote, due to responsibility in policy-making being shared. The authors also run separate regressions by dividing the sample countries into two groups, depending on the level of clarity of responsibility. They expect the economic vote to be statistically more influential in

the group of countries in which the clarity of responsibility is higher and their expectations are realized by their findings.

Lewis-Beck and Nadeau (2000), Nadeau and Lewis-Beck (2001), Samuels (2004), Bengtsson (2004), Anderson (2006), Hobolt and Tilley (2013), Parker-Stephen (2013) and Williams and Whitten (2015) are among the many other studies that take into account the concept of clarity of responsibility in explaining the economic vote. The consensus within the economic literature is that stability issues are more likely to take place as studies involve more countries in their samples. Single-nation studies therefore do not suffer much from the issue, but since countries differ vastly in their political institutions, the responsibility of governments in the eye of the public opinion also differs vastly, causing cross-country studies to produce inconsistent results. We find this issue to be a problem for our efforts in employing the concept of economic voting in linking political representation to economic growth. The economic vote literature is one that commands respect, given the rigorous efforts in establishing itself as a valid field. As such, the scholars in the field are able to successfully modify their models by adding control variables that account for clarity of responsibility, and produce statistically significant coefficients that make a strong case for the reality of the economic vote. Nevertheless, this kind of methodological correction takes place only in *academic papers*, not in real life. In real life, voters have no way of incorporating control variables into their thought processes that allow them to achieve, out of thin air, a clear vision of responsibility in countries whose political institutions function to blur that clarity. The control variables that account for clarity of responsibility do not really indicate that voters can tell the guilty from innocent, as it's only the econometric models that can do that. The clarity of responsibility is thus not an issue that haunts the literature of economic voting only, it can also haunt the institution of political representation.

How do voters actually know if their interests are being represented to the best of the representatives' ability, if their perception of responsibility is blurred? If the economic vote is capable of losing its significance due to a lack of clarity of responsibility in some countries, so can the voter perceptions of whether their interests are being efficiently represented or not. Accordingly, in those countries, when governments can make their voters believe that they are doing their best to

realize their interests when they are not actually doing so, or can get away with diffusing responsibility, that is, laying the blame on others for failures in the management of the macroeconomy, then why should they even try hard?

Consequentially, political representation can significantly malfunction in its role as a democratic institution under a lack of clarity of responsibility, and this problem may cripple cross-country empirical studies on the institution. In order to link the concept of clarity of responsibility to political representation, we propose that a parallel can be drawn from clarity of responsibility to another concept that has held its authentic place in the field of economics; the concept of asymmetrical information, albeit in this case, one that arises between the representative and the represented. In the following section, we focus on the potential role played by the information asymmetry in breaking the connection between political representation and economic growth.

1.2.2.2. Asymmetrical Information, Corruption and Lobbying Activities

For the days of direct democracy in Ancient Greece are long over and modern societies hold periodic elections in order to leave the work of governance to the elected under the notion of representative democracy, the act of voting is an implicit declaration of trust by the electorate to the elected. The elected are acknowledged to be capable of acting in the best interest of the electorate, without needing to be given further instructions. Schumpeter (1942:295) highlights this fact as he stresses the importance of a division of labor regarding the job of governance between the electorate and the representatives whom they elect, in that the people should not attempt to give direct instructions to politicians regarding what they should do because governance is the job of the representatives and not the represented. Still, the information asymmetry between politicians and voters are almost a default characteristic of modern-day representative democracies, and will remain to be so until societies manage to develop a much higher level of transparency in the process of representation.

Do voters around the world actually know what their representatives are doing at all times? It is known that voters' interest in political affairs can vary.

Delwit (2013:49) reports on a substantial decline in voter turnout in most of Europe since the 1940s to the 2000s. While the study covers the case of developed economies with relatively high per capita incomes, voters in poorer nations can also lose interest in elections due to being 'disenchanted' with politicians and policy outcomes as a result of persistent economic hardships, corruption and inequality (Hughes and Guerrero, 2009:363). Let alone the cases of willful decline in political interest, the asymmetrical information can still occur even when voters do demand to know what is going on. Since the amount of knowledge possessed by the common citizen about state affairs would vastly increase if he took over office duty, a government may and often does know things that citizens possibly could not, resulting in a case of lack of clarity of responsibility which has consequences for not only economic voting but potentially all forms of political participation. For instance, a forthcoming epidemic risk, safety hazards of certain products and production technologies, external security threats, confidential international agreements compose a few examples for scenarios in which a government may know much more than voters do, and thus conjure different best interests for the society than voters do. In such cases, what does the concept of political representation actually come down to?

Under the information asymmetry, there may be cases where, due to circumstances observable to a new government only after an election, implementing the policies promised by the party and favored by the voters during the electoral campaign could mean to not maximize the welfare of the voters. The information available to a government but not to the public may well convince the incumbents that a particular set of policies, one that is not desirable to the public, is actually good for the public and another set of policies that was demanded by the public is bad for them. Is a government 'representative' solely because it implements policies that were requested by the people no matter the consequences, or because it acts seemingly contrary to the will of the people, based on its conviction that the people themselves would have chosen the same course of action had they possessed the same knowledge about the circumstances surrounding the issue at hand? Would the voters' demands from their government remain the same if they had possessed the information that became available to the government once they were elected?

How often can we actually know for sure that a government is representing the will of the electorate, under any given circumstances known only to them? Since modern political systems require governments to declare to the public neither the motives behind nor the details of their actions, in any country, at a given time, there is no easy way of assuring that elected representatives are representing the interests of their electorate (Manin, 1997: 167). Neither is there a guarantee that even a perfectly loyal representation of the public interests will translate into maximization of the public welfare. It is almost as if the information asymmetry bounds not only voter perceptions, but also academic research into representation. The best that citizens can hope is to punish politicians whom they consider unresponsive to their demands, by not voting for them in the next elections, and the best that we can hope is that any quantitative measure of political representation that we can produce is actually a good indicator of what is going on behind closed doors. Yet, in a world filled with countries exhibiting a vast heterogeneity in terms of the quality of their political institutions, the global political spectrum is filled with interesting cases in all possible scenarios: Leaders can even accomplish all that is against the will of the public, and still keep on winning elections.³

In order to give a hypothetical example to how complex the concept of political representation can become under asymmetric information, we can conceive an imaginary scenario in which a benevolent, environmentalist party wins the general elections in a small country. There recently was a discovery of vast reserves of gold in this country, the mining of which would require deforestation of a significant

³ An example is the 1948 Presidential Election in which the incumbent Democratic President Harry S. Truman, who was largely behind the easy front-runner Republican candidate Thomas E. Dewey according to three major election polls, surprisingly defeated his opponent despite his growing unpopularity due to factors such as rises in unemployment and inflation, shortages in commodities, labor strikes and ultimately his decision to use the atomic bomb on two Japanese cities. After winning the 1948 Presidential Election, Truman continued to lose the remainder of his popularity throughout his second term. As of today, he is still regarded as one of the most unpopular presidents in the United States History. Sources:

<https://web.archive.org/web/20130402213551/http://www.sampler.isr.umich.edu/2012/featured/isr-and-the-truman-dewey-upset/>, (07.02.2020).

<https://www.history.com/news/dewey-defeats-truman-election-headline-gaffe>, (07.02.2020).

portion of its world-renown forests. The fact that the environmentalist party had campaigned against the mine before the elections helped them win the elections, but upon taking office the party is informed that the foreign debt of this small country was actually several times higher than what was announced to the public. The party did not know this before, because of the asymmetrical information. Political relations with the debtors dictate that the consequences for the future of the nation of not paying the debts will outweigh the consequences of cutting down the trees, and the party is left with a tough decision to make. If they decide to allow the mine, they will seem to have betrayed their voters, and may face severe protests and be thrown out of office in the next elections. If they decide to keep the forests, they will have actually worked against the best interest of the public and thrown the future of the nation into a bigger risk. What does political representation actually come down to in such a scenario? Should the party cut down the trees and construct the mine, at the cost of losing their popularity? Should they keep the forest, running the risk of national bankruptcy? Which one of these decisions would be a true representation of national interests?

Since the environmentalist party is benevolent, in this example, let's go on with the scenario they decide to cut down the trees and construct the mine; a decision they do not wish to but are forced to make. While the construction is still going on, nation-wide protests arise and the government has to call for an early election. The party loses the election and gets replaced by a new, self-interested government who also promised to cancel the construction of the mine in its electoral campaigns, in order to win the election. When the new government takes over, they too are notified of the level of the national debt. Judging by how the decision to build the mine ended for the last government, they decide to proceed with their campaign promises to cancel the construction and keep the country's world-renown forests, in order not to lose their position in the government. The end result of this decision for the country is bankruptcy after a decade of governance by the self-interested government.

Concerning this scenario, questions arise about how the institution of political representation could ever be measured to induce economic prosperity under these terms. Attempts at solving such dilemma only confirm that the relationship between responsiveness of a government to the will of their voters and its position with

respect to what is in the best interest of the voters is fragile at best. Whatever little is left of the dubious notion of the best interest of the public is prone to becoming a vague concept, difficult to conceptualize and foreign to the public itself, either revealed to or concealed from them, at the will of the representatives.

The above case constitutes examples of both a case of asymmetrical information under benevolent governance, and one under corrupt governance. While the institution of political representation can malfunction due to even well-intentioned cases of asymmetrical information, it is not difficult to imagine how worse things can get when intentional wrongdoing is involved. After all, even though the asymmetrical information can serve to blur the vision of the voters and make it difficult for them to know whether their interests are being effectively represented, there are almost at all times *some* interests that are fiercely represented. The motives behind these can be anything. Regardless of how effective in representing the interests of masses a parliament may be, one certain fact about it is that there never is a shortage of demand for its seats. Everyone wants a piece of the pie when it comes to participating in the political process and this should only be expected, since what is called the process of policy-making is a continuum where policy alternatives proposed by some representatives in accordance with either their voters' demands or their self-interests are voted by all representatives who are also held accountable to their voters or might be busy pursuing their own agendas. The whole ordeal becomes a constant struggle for power where the wider the range of interests being represented, the tougher the competition for not only protection of rights but also maximization of rents through redistribution of wealth and incomes. In the end, some of those interests win the battle in representation and the respective policies are implemented. What determines whether those policies are economically productive to the point of being good for economic growth? What are the criteria that decide which political and economic interests triumph in a parliament? When corruption and lobbying activities go hand to hand, we believe that the institution of political representation may not have much in store for economic growth.

According to Przeworski and Stokes (2012:35), political parties must raise funds from 'special interests' in order to exist and be visible to voters. In other words, their existence is built on the foundation of political rent, as these funds must

then be compensated through ‘favors’. The authors state that such favors are distortionary due to their implications for allocations of resources and the resulting social costs are greater than the costs of ‘outright theft’ in political processes, since the only effect of the latter is through a distortion of taxing. Political parties, while not legally obliged to represent the interests of their voters, are by definition obliged to serve to represent the interests of those who helped finance them into existence in the first place. Since there are usually only so many economic or political interests that can be realized in policy-making, some interests will always be left out for these reasons. The question of whether the effectively-represented interests are actually beneficial for the best interest of the public is rather complicated, and is a function of prevalence of corruption, lobbying powers and the productive opportunities available to interest groups who have influence over parties through corruption and lobbying.

In an influential paper, Laffont and Tirole (1991) show that corrupt incumbents who hold political power are able to extract more resources for themselves in industries in which a higher degree of information asymmetry works in their favor, against firms. Corruption results in state officials selecting those projects and firms from which they can extract more resources for themselves, instead of promoting the projects and choosing the competitors that are the most beneficial to the public. Corruption has also been found to have a negative impact on the growth rates of economies, as it distorts schemes of incentives and causes misallocation of resources (Gyimah-Brempong, 2002:200). Constituting a seminal study, for instance, Mo (2001:76) associates a 1% increase in the level of corruption in a country, as measured by the Transparency International Corruption Perception Index, with a 0.72% decrease in economic growth rate. While not all lobbying activities are wasteful (Besley and Coate, 2001:68), most either produce costly trade-offs between policy choices, resulting in social inefficiencies (Hasen, 2012:198), or translate into rent-seeking behavior in line with Przeworski and Stokes’s (2012:35) above view of political parties. The information asymmetries not only allow such harmful corrupt practices to be persistent (Lamsdorff, 2007:80) but may also help politicians get away with blaming mystical, foreign circumstances and actors unobservable to the public for having failed to achieve the desired outcomes.

Given the below-par political, economic and cultural institutional arrangements in this discussion, the whole notion of the “best interest of the public” runs into an almost Machiavellian risk of slipping into obscurity. But who is to prevent it? The aforementioned quote by Schumpeter about governance reminds us that citizens in democratic societies willingly leave the business of governance to the elected, and that also includes letting the elected what is in the best interest of them. Therefore, the citizens cannot determine what identifies as the best interest of the society, nor can the political scientists or philosophers - unless they are appointed by the politicians to do so. Once elected, it is the politicians who ought to decide what to do about virtually every issue that requires action be taken in various spheres of life, with the glorified objective of maximizing the welfare of the nation. In addition to having been elected by them, politicians also have the option to consult the public opinion (via referendums, opinion polls, surveys) regarding issues at hand, but still, the decisions they make are theirs and theirs only. They are not legally obliged to ask anyone else about what to do. Except for, as we discussed, certain interest groups active in the political process.

Nevertheless, politicians are often keen to glorify the task of representation assigned to them, whenever they must. Especially right before and right after elections, the public will hear them addressing the public with speeches garnished with euphonic phrases such as ‘the general will’, ‘will of the people’, ‘power to the people’, ‘one people’. The public does like to hear these phrases, especially if they had voted for those who are expressing them. The portion of the population happening to be on the losing side of an election, on the other hand, at best hope that the winners of the election are sincere in their orations. A crucial question, that which often goes unasked throughout this whole political thriller, is whether there can actually be a general will that unites the people as a whole, under these circumstances. Is it a high rate of economic growth? Is it income equality? Price stability? Protection of the environment? Who defines the best interest of the public? Can it ever be possibly defined? Or should we take it to be whatever the elected politicians say it is, since we gave them the authority to do so?

The presence of differences in opinion in a society, especially a democratic one, is second nature to being human. The severity of these differences is what

constitutes impediments to the formation of a general will in a society. According to Hand (1929:46) “the truth appears to be that what we mean by a common-will is no more than that there shall be an available peaceful means by which law may be changed when it becomes irksome to enough powerful people who can make their will effect”. The attribution here to the process of law making can be substituted by any process of policy making, so as to say, a policy gets implemented when the previous state of the world becomes irksome to enough powerful people. Because democratic regimes, especially in less developed regions, have been described as vulnerable to lobbying activities by interest groups (Sirowy and Inkeles, 1990:129), it is easy to infer that representability of a wide array of interests under the title of a ‘general will’ in a society is often a problematic issue. It would thus be naive to expect that the mere presence of a representative democracy in a country should be enough to ensure efficient representation of vast portions of the population. There may be cases where only certain groups within a country have majority in the parliament and are therefore endeavoring to redistribute resources toward themselves, or that political representatives of some groups may simply be pursuing their own agendas instead of representing the interests of their electorate, with the sole intention of maximizing own rents. The truth about these political arrangements is that the political sphere is an arena in which interests of various sections of a society clash and the interest groups with the highest lobbying power overcome weaker groups and implement policies that maximize their own rents, more often than not ignoring how costly those policies might be to some other sections of the society. The general will, in practice, then becomes a mere compilation of custom wills, random in its degree of plurality. The idealistic notion of the best interest of the public pursued by elected representatives transforms into the best interest of those sections of the society whose interests constitute the strongest force to be reckoned with in the political arena. What if those who are the strongest in a country’s parliament have interests in non-productive activities that are neither innovative nor providing a high value-added to the economy, but are rather just focused on protecting or increasing their own share of the political/economic pie? The possibilities raise doubts over why the institution of political representation should be expected to intrinsically have a positive impact on the economic growth of a country

at all, if it is true that parliaments serve as the arenas in which interests battle each other only to come on top, with insignificant considerations given on the issue of what sets of policies are the most beneficial for the public.

Under these circumstances, the degree of the inclusiveness of a country's representative institutions might not matter for economic growth at all, since it may not have a significant effect on policy choices. Citizens can cast their vote under universal suffrage, and governments can be formed, yet in the end it might be the relative strength of interest groups that determines which policies get implemented. If the strongest lobbying comes from groups with innovative production opportunities, a growth-inducing economic environment may follow. If it comes from groups whose top priorities are consumption-related, then saving rates could decrease, leading to low rates of economic growth. A high number of scenarios are possible, and weaken the case for political representation as a pro-growth institution.

1.3. OVERVIEW

Our discussion so far of the mechanisms shaping the interaction between the institution of political representation and economic growth paints a mixed picture. One thing that is for certain is that citizens in democratic countries do want a high rate of growth for the economy and this priority of theirs is reflected in their voting patterns, via the economic vote. The economic vote constitutes a valid reason why the degree of the inclusiveness of a country's representative institutions may induce political representatives to strive to achieve a higher rate of growth for the economy: It is a top priority for politicians to satisfy the economic concerns of the electorate in order to increase their vote share and get re-elected. Hence, the larger the proportion of a society present in the political representation process, the more demanding their economic priorities of the politicians, thus a larger proportion of the society the politicians should make better-off through economic growth. On the other, in a society in which a significant portion of the population is excluded from political representation, their vote would not matter, and thus would not induce representative incentives in politicians.

Nevertheless, while the statistical significance and magnitude of the economic vote leads us to think that political representation may facilitate growth this way, a lack of a clarity of responsibility in public eye due to the information asymmetry between politicians and voters, coupled with distortions arising from corruption and lobbying activities, can serve to hinder the relationship between elections, processes of political representation and macroeconomic demands of an electorate. Political representatives can get away with not representing the interests of their voters, while seeming to do so. Political representation may not even be aiming to actually represent the interests of the voters, under heavy influences from corrupt practices and strong lobbying. As such, a harsh but seemingly not so implausible statement to make would be that political representation can transform into a bogus political institution, incapable of accomplishing what it promises to societies in terms of representation of interests and rights.

Concludingly, we are inconclusive on whether political representation can serve as a pro-growth or an anti-growth political institution in modern societies. This inference should not come as a surprise, as the whole literature on the relationship between various aspects of democracy and economic growth is filled with mixed results. In order to provide an answer to the dilemma of political representation, robust empirical analysis with quality data on the institution is required, a challenge which we aim to take on in this study. Before delving in that, in the next section we place our discussion of the mechanisms that relate political representation and economic growth into the literature of institutional economics. We refer to institutional economic theory with the objective of providing our research hypotheses and empirical analysis with a solid theoretical framework.

CHAPTER TWO

POLITICAL REPRESENTATION AND ECONOMIC GROWTH

Following the preceding discussions of why political representation may induce economic growth and why it may not, we now consult institutional theory to place our inquiry into a recognized theoretical framework. So far, what we now is as follows:

An electorate;

- (i) Can use the economic vote in elections to induce politicians to implement policies that induce macroeconomic growth,
- (ii) May form interest groups that try to influence politicians to represent their own interests through lobbying, which can hinder macroeconomic growth.

On the other hand, political representatives;

- (i) Can be benevolent or self-interested,
- (ii) Have incentives to attain a high growth rate for the macroeconomy (in either case) in order to win votes,
- (iii) Have incentives to represent the interests of their own voters (in either case) in order to win votes,
- (iv) Can be corrupt and have own agendas, which can hinder economic growth.

The political turbulence signaled by different combinations of the above scenarios is apparent, and the differences between the resulting economic institutions can make or break economies. In order to answer the question of what makes a representative government good for economic growth, we propose two alternative (and contradicting) theoretical linkages between economic growth and political representation. The first is based on the assumption of the dominance of sociotropic voting motives and proposes that inclusive forms of political representation are better for economic growth than extractive forms of the institution, in line with a popular line of thought found within the contemporary institutional theory (Acemoglu and

Robinson, 2012). According to the approach in the authors' famous book, "Why Nations Fail", there is a positive relationship between the inclusiveness of the institution of political representation and economic growth. The second is based on the assumption of the dominance of egotropic voting motives and proposes a framework to assess the growth effects of the institution of political representation based on the growth-quality of the political interests represented, in line with the perspective of Przeworski (2007), rather than how inclusive or exclusive the institution of representation is. According to this framework, there is an inverse U-shaped relationship between the institution of political representation and economic growth, resembling the idea of a political Kuznets curve between the two phenomena.

2.1. A POSITIVE RELATIONSHIP BETWEEN POLITICAL REPRESENTATION AND ECONOMIC GROWTH

The role of the economic vote in incentivizing political representatives to work for higher levels of per capita income is apparent. As explained, the statistical significance and high magnitude of the economic vote, combined with sociotropic and retrospective economic voting motives, creates incentives for both benevolent and self-interested politicians to implement growth-enhancing policies to enhance the economic conditions of their voters. On the other hand, the egotropic economic voting motive can have either positive or negative impacts on economic growth, primarily depending on the growth-quality of various interests represented in policy-making processes. Such interplay between elections and prospects for economic growth allows us to form a theoretical bridge between representation as a political institution and the contemporary institutional economics literature, as these relationships constitute the mechanism through which political representation may influence economic growth.

While the field of institutional economics has invariably occupied itself with vigorous research into the relationship between various aspects of democracy and economic growth, we have explained that almost no empirical work has been conducted in order to investigate the relationship between political representation and economic growth in the specific way that we approach the subject in this

dissertation. As we previously mentioned, difficulties in to access to cross-country data on political representation may have constituted a serious challenge in this regard. Still, that is not to say that representation as a political institution has not received any consideration in the field.

Since the basics of political science dictates that representation cannot be decoupled from democracy (Plotke, 1997), we suppose that most scholars who have busied themselves with economic effects of political institutions must have contemplated an idea or two about a relevant role for political representation at some point in their research. The concept has received significant mention here and there, apart from the studies that investigate political representations of minorities and women which was already mentioned in the Introduction section of this study. Political representation has occasionally been described as an institution that can have pro-growth properties. For instance, as Rodrik (2004: 10) narrates the now-widespread agreement among economists that institutional quality is important for economic growth, he mentions citizens' access to political representation as a significant institution that separates rich countries from poor ones, among several others, such as property rights, rule of law, presence of private incentives, social insurance and civil liberties.

In accordance, a part of our attempt at connecting political representation and economic growth largely borrows from institutional theory, with an emphasis on the perspective of Acemoğlu and Robinson's (2012) work in which the authors famously separate political institutions into two groups: 'Extractive' political institutions through which small groups (elites) with high political power rule over and extract resources from the masses and 'inclusive' political institutions under which governance is carried out by collective decision making processes attended by a majority of a population during which no – or as few as possible – individuals or groups are alienated. The authors' renowned argument is that inclusive forms of political institutions are good for economic growth while extractive forms of them are bad for it. The theory dictates that inclusive political institutions are better for economic growth than extractive forms because of the equality of opportunity they create for every member of a society who is willing to participate in the political decision-making process. A form of governance in which all sections of a society can

freely participate in politics, propose and vote for different sets of policies they deem best for their own interest will create, according to the authors, different sets of economic institutions than one in which a dictator single-handedly makes policy decisions that are legally binding on other members of the society.

In accordance, we conceive that representation, as a political institution that sits at the heart of all policy-making processes in a democracy, is no exception to this principle, by means of the significance of the economic vote. Political representation has a chance to enhance economic growth to the extent that it is inclusive. The inclusiveness of the institution concerns the issue of how wide an array of interests is being represented in the political sphere in comparison to the whole set of interests in the society, that is to ask, among the total quantity of different sets of interests within a society, what portion of those are actually being represented in the policy making process? A higher portion implies a more inclusive process of representation. In contrast, extractive practices of representation appear eventually when policy choices are voted and decided by representatives of smaller sections of a society.

We argue that the dominance of sociotropic motives in economic voting is relevant in this respect, contributing to the inclusiveness of the institution. Individual members of an electorate vote for those parties/politicians whom they think have made (retrospective) and will make (prospective) improvements to both the macro economy (sociotropic motives) and also to their individual/group economy (egotropic motives). They hold politicians accountable by means of the power of the vote. In the case that sociotropic motives dominate over egotropic motives, the economic vote acts to induce political representatives, through a simple mechanism, to produce growth-inducing policies: A higher proportion of the population who not only vote but also win the right to political representation in an election results in a more inclusive policy-making process, which means a higher level of competition between political representatives to increase their vote share in the next election, thus stronger incentives for those political representatives to work in favor of a growing macro economy in order to appeal to the electorate's sociotropic voting motives. As a result, Acemoğlu and Robinson's (2012) above perspective implies that a higher share of voices in the decision-making process results in a higher level of political competition and such competition is better in terms of both the quality of the policies

implemented and the quality of the economic institutions it gives rise to, and thus may increase economic growth, in comparison to a state of the political world in which only few voices are represented.

As a result, we suggest that the first option for a theoretical link between representation as a political institution and economic growth suggests a positive relationship between the inclusiveness of political representation and economic growth. Our hypotheses in testing this relationship are as follows:

H₀: There is no statistically significant relationship between the degree of inclusiveness of a country's processes of political representation and its economic growth rate.

H₁: There is a statistically significant relationship between the degree of inclusiveness of a country's processes of political representation and its economic growth rate.

In the fifth section of this study, we aim to empirically test this relationship in order to shed light on the question of whether political representation can actually positively influence economic growth.

2.2. AN INVERSE U-SHAPED RELATIONSHIP BETWEEN POLITICAL REPRESENTATION AND ECONOMIC GROWTH

Productive government expenditure, synonymous to good policy making, is often found to have a positive impact on the long-run economic growth path (Barro, 1990). while unproductive government expenditure, resulting from sets of policies that are either substandard or perhaps designated with the priority of maximizing rents of some political groups in parliaments rather than the requirements of the economy itself, are detrimental to economic growth. The question of *which interests* are being represented is key in this setting, and allows for an alternative account of a theoretical relationship between economic growth and political representation, one that contrasts with the perspective of Acemoğlu and Robinson (2012).

As it is true that people can vote with egotropic motives, voters can significantly care more about their own well-being than the society as a whole, especially in countries with social conflict between various groups. Since it is political representatives in a country who get to impose how much of a nation's

resources goes where; solutions to various policy problems such as who have to and who do not have to pay taxes, which firms/industries can receive incentives, how much the minimum wage should be, how well the environment should be protected or who can run for president in the next elections, firmly depend on which groups within a society manage to get more of their political representatives in office. In such a setting, there exists a bidirectional relationship between political decision-making processes and distribution of political power in the society. While distributions of political power shape the sets of policies implemented, the outcomes of those policies in return reshape the existing distributions of political power. In the case that egotropic motives dominate over sociotropic motives in an election, a main result for policy-making may be that governments see a higher priority in representing the interests of their own voters and support/interest groups, rather than the whole society, in order to get re-elected. In fact, even in the case that egotropic motives are not actually stronger than sociotropic motives, the same outcome can occur even if only a government *believes* that egotropic motives are stronger. As long as a government believes that their voters have egotropic motives, it will respond to those motives by aiming to make their own followers better off, even at the cost of the welfare of other groups in the society. Laws and policies will then be biased toward the benefit of certain groups in the society.

When politicians dominantly want to maximize the interests of those who voted for and supported them, the effect of political representation on economic growth will depend not exactly on how inclusive the institution is, but rather the growth-quality of the political interests being represented. For instance, how pro-growth is an environmental project, in comparison to a nuclear power plant project? Is the answer dependent on which project is supported by a larger proportion of the society? Probably no. In such a setting, it would make sense to expect that the institution of political representation would only be pro-growth when those who are the most influential in policy-making would implement growth-inducing policies. On the other hand, the economically less-productive the business interests of those who have a higher share of representatives in the parliament, the less growth-enhancing the sets of policies implemented and the resulting government expenditures would be.

Undoubtedly there is a difference between a government which devotes itself to the welfare of the whole electorate and one which is only in the office to maximize the resources it can extract for the welfare of itself and its supporters. In spite of such divergence between the intentions of these two types of governments, the line that separates them in terms of their impacts on macroeconomic performance can be thin. Acemoğlu (2008, 921-999) provides an explanation for this dilemma by comparing the economic institutions and outcomes created by such distinct political institutions, namely a government ruled by the elite versus a government ruled by the middle class (dictatorship of the elite versus dictatorship of the middle class, in his own words).

Acemoğlu (2008) first models a political institution in which the political elite are completely in charge of the government and solve their utility maximization problem, leading to a Pareto efficient equilibrium at which they extract revenues from the middle class (merchants, entrepreneurs) by imposing distortionary taxation at the rate which maximizes their own utility. The elite want to extract revenues through taxation in order to allow themselves to be richer and make the middle class weaker by lowering their labor demand. In a second model, the two classes exchange positions and now the middle class controls the government. In this case, the middle class taxes the elite with similar intentions, hoping to maximize their own rent and also to lower wages by reducing the elite's labor demand. Acemoğlu exemplifies these political arrangements from European history where it was first the landlords who were the ruling class and who used their political power to control labor and to reduce, perhaps unsuccessfully, the power and the profitability of merchants and early industrialists. As times began to change in the late medieval period and merchants and industrialists began to be more active in the governing bodies, they became the ones to implement policies that maximized their own rents and gradually weakened the previous elites.

The question of which one of these political arrangements is better for economic growth is then asked by the author. With the both equilibria being Pareto optimal on significantly different points along the Pareto frontier, the difference between their implications for economic growth rates depends on which one of these two classes possess better production opportunities. Historically speaking, the

industrial boom in the late medieval Europe meant that the newly rising middle classes held access to more productive technologies and therefore were able to achieve higher growth rates than the elite-ruled governments preceding them, but it is not impossible to imagine different states of the world where the opposite could take place. As long as political power changes hands in a fashion that the new rulers have access to less productive investment opportunities and technologies, the shift in power will be detrimental to economic growth no matter to whom the power is transferred to from whom, and vice versa.

This conclusion has relevant implications for political representation. Perhaps it would be more fruitful to look at not how efficiently the institution itself systematically functions in societies but precisely at what kind of interests win the battle in a parliament and what their representations imply for economic growth. The objective of this study, on the other hand, is to assess, if any, the impact of the institution on economic growth and not an investigation of those cases in which clashes of interests in parliament, completely out of pure luck, happen to mean an implementation of pro-growth policies. In order to provide an answer to this dilemma, we turn to our second theoretical framework that works under the assumption of egotropic voting motives, inspired by an analysis of the 19th century suffrage rights found in the work of Przeworski (2007).

In contrast to Przeworski's almost celebrity-like status in the field of political science, this is a rather overlooked paper by the author. He provides in his work a valuable perspective to interpret the economic impacts of the expansion of political rights to masses by assessing the redistributive effects of the evolution of suffrage rights in 12 European and 7 Latin American countries during the 19th and 20th centuries. The timeline approached by the study is critical in the sense that at the beginning of it, suffrage was almost solely exclusive to elites in the sample countries whereas it was approaching universality toward the end of the 20th century. It is stated that upward redistribution of income from the poor to the rich occurred when the right to vote belonged to nobody but the elites, was reduced in time when other members of the society - mainly the middle classes - began to acquire political rights and then changed pace and transitioned into downward redistribution as the poor classes began to be enfranchised.

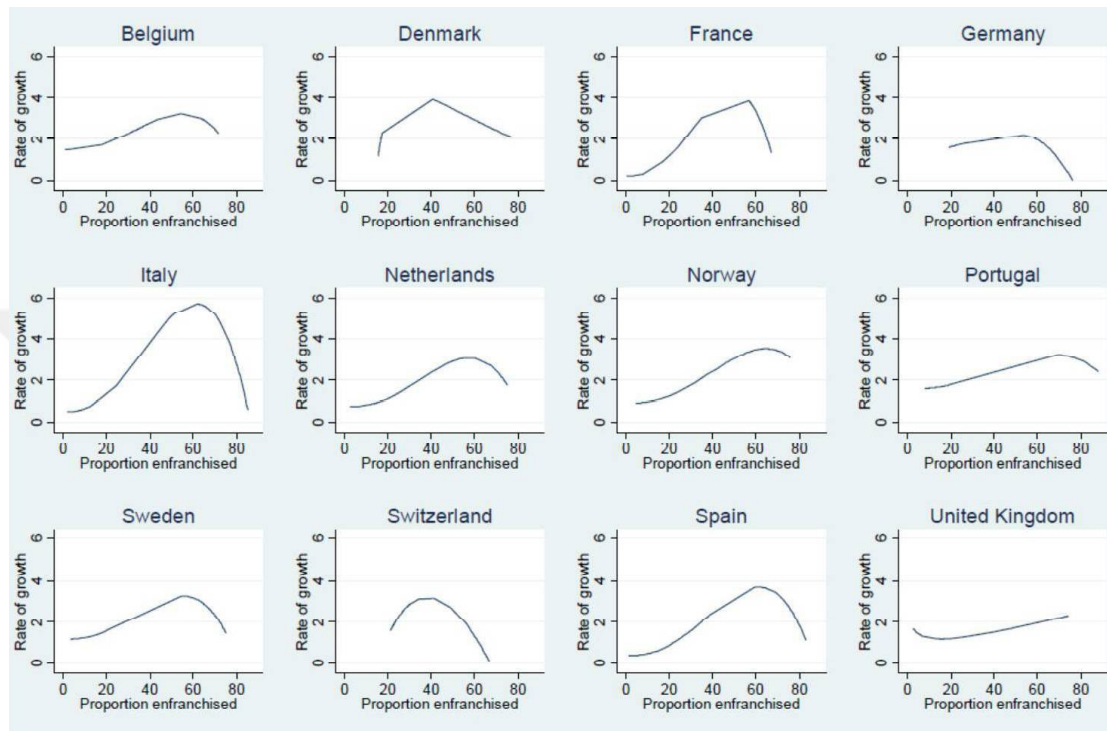
The growth impact of the evolution of political rights and their respective redistribution effects arose, according to the author, from the economic quality of the interests that were being represented by each political group as they gained political rights within the era. When nobody but the elite could vote for policy choices, the policies implemented potentially tended to be anti-growth in nature due to the elite's main interests having lied in the use of distortionary policies to prevent competition in the goods and labor markets and cause impoverishment of their political and economic competitors – the middle class – instead of aiming to boost innovation and nation-wide prosperity. In return, as the middle classes were starting to become powerful enough politically and economically to the point that the elite classes had to compromise and extend suffrage in order to prevent social unrest and risks of revolution (Acemoglu and Robinson, 2000: 1189), their policy interests concentrated on reducing the elites' extraction of their wealth and incomes by mainly reducing the tax burden to which they had been subjected. Such turn of events in the political arena paved the way for higher economic growth for the whole economy since the middle classes were the main undertakers of productive industrial activities.

Finally, in the times after suffrage became universal, political participation of the poor classes resulted in downward redistribution of resources into unproductive activities because the needs of the poor classes were mainly consumption-related. Przeworski provides strong empirical evidence for his theory as he conducts long-run regression analyses of the growth-effects of suffrage rights in the 19th century for his sample of 12 European and 7 Latin American countries, and detects an inverse U-shaped relationship between suffrage rights and the rate of economic growth in almost all the countries in the sample. In Figure 1, we present his graphical demonstration of these findings.

Przeworski's (2007) work sheds lights on the relationship between economic-quality of interests being represented in policy-making and economic growth, by proposing that interests tend to be detrimental to growth when political decision-making processes are dominated by a minority (the elite), then begin to accelerate growth when the emerging middle classes gain some political rights and finally tend to be detrimental to growth again when the poor classes gain political rights. In other words, the study both theorizes (mathematically) and detects empirically that the

elite classes have growth-impeding political interests, the middle classes have growth-inducing political interests and the poor classes have growth-impeding political interests.

Figure 1: Suffrage and Economic Growth in Some Western European Countries



Source: Przeworski (2007:21). Similar figures for 7 Latin American countries can be found on page 22 of the same paper.

It must be noted that this line of thinking clashes with the above institutional approach which argues that a higher degree of the inclusiveness of political institutions is ultimately what matters for economic growth. While Acemoğlu and Robinson (2012) propose that a higher level of inclusiveness is always better for economic growth, Przeworski (2007) is rather interested in the subject matter of *what* is being included, as he ranks political interests in terms of the growth-quality of the policies they result in, irrespective of the level of inclusiveness that gave rise to their occurrence. While a common point between the two approaches is that both Przeworski (2007) and Acemoğlu and Robinson (2012) propose a negative impact of elite-dominated governments on economic growth, according to Przeworski (2007) more inclusive political institutions can be even worse for economic growth than less

inclusive ones, due to the resulting sets of policies implemented by whoever is being included in the policy-making process.

Finally, while Acemoğlu and Robinson's (2012) work is filled with real-world case studies that support their theory, Przeworski's (2007) work remains rather theoretical, with no specific real-world cases. Next, we find it useful to document in the following section two real-world cases that exemplify the theoretical framework of Przeworski (2007) while highlighting its contrast with that of Acemoğlu and Robinson (2012).

2.3. REAL-WORLD EXAMPLES

As it was mentioned above, both Acemoğlu and Robinson (2012) and Przeworski (2007) agree that elite-dominated political institutions are likely to impede economic growth. There is not much disagreement over that much. Acemoğlu and Robinson's work mentions a significant amount of historical examples in order to make a good case for their theory, documenting the stories of several countries who thrived economically under inclusive political and economic institutions including but not limited to the United States, South Korea, the Great Britain and Botswana, as opposed to their counterparts such as the "failed" nations of Mexico, North Korea, the Ottoman Empire and Zimbabwe in which the people suffered the negative economic consequences of extractive economic and political institutions. As these case studies are well-documented by the authors and also by other valuable scholarly work in the literature (Olson, 1993; Gandhi, 2008; Cheibub et al. 2010), we see no use in attempting to document another real-world example for elite-dominated political institutions. Rather, we aim to turn to a different example, one that had received no mention in the book "Why Nations Fail". The example is the case of the Republic of India, which in our belief constitutes a relevant case for the study of political representation and its consequences for economic growth within the framework of Przeworski (2007). Although the decision by Acemoğlu and Robinson (2012) to exclude India from their work might have rather been just an occasional one, it is also possible, as it will soon be apparent, that certain elements within the experience of the country just does not fit the story.

2.3.1. Growth-Inducing Political Representation of the Middle Class

India is a nation which spent a significant portion of her recent history as a colony of the British Empire. The country was officially under British rule (also called the “British Raj”) from 1858 to 1947, during which the whole subcontinent was run by the central government in England. Consequentially the British influence on various aspects of life in India including the political system, the legal system, the culture and the economy have been immense and a significant portion of the institutional arrangements still functioning in modern day India can be traced back to the British Raj (Carey, 2012: 38-39).

Among the wide range of areas in which the legacy of the British rule in India can still be detected, one that has significantly stood out significantly is the political sphere. As was often the case with colonial governance practices, the British exported and gradually established their representative institutions in India during their reign, as a natural outcome of which, India has basically been a democracy since acquiring her independence in 1947. In fact, the founding members of the post-independent India – the political squads around the Prime Minister Jawaharlal Nehru – had already been well-acquainted with democratic governance via their involvement in pre-independence Indian politics and thus, they had envisioned a secular and democratic future for the nation before independence, with universal suffrage, freedom of speech and freedom of press (Metcalf and Metcalf, 2006: 232-233). This vision was quite effective as well: On the day India declared independence, the country constituted the world’s largest democracy with a population of approximately 390 million people and two years later, in 1951, successfully held the biggest elections the world had ever seen until then, with universal suffrage for all adult men and women from all classes of the Indian society (Guha, 2002: 95), even though a vast section of the population was illiterate.

The representative institutions the British formed in India were also influential in the founding of the country. Chiriyankandath (2008: 58) reports that the mass character acquired by the evolution of these institutions was a major factor in influencing the development of the once-weak nationalist movement into “a powerful force capable of a sustained challenge to the (British) Raj” itself, as it was a

main policy objective for the pre-independence Congress to mute class differences between the Indian people and to unite them against the British colonialism (Metcalf and Metcalf, 2006: 243). The fact that the representative institutions implemented in India by the British rulers themselves were a contributing factor to the fall of the British Raj is a strong indicator that those institutions were indeed efficiently implemented in India and democracy was built on strong roots in the nation.

As a country with 22 official languages and a diversity of religions, India has been holding periodic national and provincial elections all throughout the post-independence period. While India's experience with democracy on a continent filled with authoritarian regimes has been a very interesting one, a contrary case was that of the economic legacy of the Raj, which was indeed the equivalent of a disaster. The economic institutions promoted by the British were at least as influential in India as their political counterparts, in the form of market capitalism, but with the exactly opposite consequences for the ideologies of the founders of India: It made them despise capitalism.

Carey (2012: 39-45) summarizes, in a worthy read, the causes and consequences of the long-lasting influence of the British ways of economic governance on the Indian economy. The author mentions, among the major institutions established by the British, a form of a property rights institution that was assigned to landlords, village communities and/or individual land cultivators in India. The features of these rights varied so vastly across different regions of the subcontinent and across time that they ended up creating persistent regional inequalities in income and political rights in the long run, which can still be traced today. The British also made large-scale infrastructure investments in the country in the form of transportation facilities such as railways, canals, ports and others, but those were primarily serving the needs of the British economy rather than the needs of the Indian public, by mobilizing the British army and aiding the transfer of resources from the Indian land to Britain, which, for instance, accounted to an over 4% percent of India's gross domestic product in only 1882, in net transfer payments.

Another significant economic impact of the British Raj on the Indian economy was that the British also utilized their infrastructure investments to promote agricultural production – mostly non-food – in order to transform the comparative

advantage of the Indian economy from the traditional manufacturing industries to non-food agriculture, in conformity with the demands of the comparative advantages of the British economy. Carey (2012: 46) reports that this strategy not only resulted in the de-industrialization of India and leaving her defenseless against the newly industrializing economies, but also in famines in many regions of the subcontinent. After India gained her independence, the economy of the country was in a big recession, far from recovery. All in all, the British had established increasingly extractive economic institutions which caused per capita incomes to remain low in a stagnating economy, in the years preceding the declaration of independence.

Apart from their direct effects on the Indian economy itself, the British economic policies apparently also had an indirect effect on the future of economy as well, as we mentioned, via the impression they left on the new leaders of India, the Nehru government, in the field of economic thought. While the founding Indian politicians definitely had strong socialist backgrounds as well (Viswanathaiah, 1965: 94-96; Rao, 1982: 90-97), their first-hand experience with the negative effects of British capitalism on the Indian people's economic welfare did not particularly help: Bhalla (2007: 238) summarizes the economic thought of the Indian political leaders of the era as a "complete disregard for the market and a complete contempt for economic freedom".

As a result, while India was born on remarkably inclusive political institutions, the same could not be said about the economic institutions designated by the country's founding government. Central to the new India was as a planned economy (Metcalf and Metcalf, 2006:245-247) based on five-year development plans. Focusing on import substitution in agriculture and heavy industry, India was withdrawn from the world economy in order to isolate the nation from the international capitalist system. All the socialist measures taken in this era aimed at fighting poverty and technological backwardness (Metcalf and Metcalf, 2006:271), in other words, representing the political interests of the poor classes. One cannot say that they worked wonders in achieving that, as they were not able to facilitate economic growth.

To summarize their consequences, the socialist system simply did not work in favor of the Indian nation. Joshi and Little (1996:247) mentions that there exists a

general consensus toward the view that the highly protectionist Indian model based on strict central planning failed to create rapid economic growth for India. Famously labeled the “Hindu rate of growth” (Rodrik and Sabramanian, 2005), the growth rate of the Indian economy was dreadfully slow in this era. The economy grew at an average annual rate of 3.5% between 1950 and 1980, while per capita GDP grew at a rate of only 1.3% in the same period (Arvind, 2004:15). Moreover, Sridharan (2004:405) defines the class structure of India developed during these three decades as “one characterized by a sharp contrast between a small elite and a large impoverished mass”. While the large impoverished mass theoretically sat at the heart of all socialist policy-making, they still remained impoverished for three decades: Until the 1980s, India remained a functional democracy that provide a low standard of living for her people.

After three decades of high levels of poverty and inequality in a stagnating economy, the misfortunes of the Indian people finally started to change somewhere between the 1980s and the 1990s. The 1990s were especially an important decade in the history of India in that the year 1991 saw, apart from a big macroeconomic crisis, an official end to the socialist policies in the country. The change of policy was finally unavoidable, after the crisis that involved a sharp fall in the foreign exchange reserves of the country to approximately 1 billion US dollars, a steep fall in India's credit rating, an inflation rate of 12% and high levels of domestic and foreign debts coupled with high levels of public and current account deficits (Joshi and Little, 1996). In addition to the role of the economic crisis in leading up to the reforms, Joshi and Little (1996:2) also argue that the fall of the Russian communist system was additionally influential in the event, as it was a significant factor that caused the governing bodies of India to lose whatever had remained of their faith in central planning. The country eventually embraced a sharp shift toward an open market economy that relied on the private sector (Ahluwalia, 2002:67).

A prominent line of thinking has explained the positive shift in Indian economy's annual growth rates that occurred after the 1980s by attributing it to the reforms of 1991. The annual GDP growth was around 6% since between 1980 and 2005. This perspective seemed to make sense, as it also supports the popular institutionalist view, also found in Acemoğlu and Robinson (2012), that more

inclusive economic institutions are better for economic growth. The storyline is quite straight-forward: Once India embraced free markets, the entrepreneurs of India got moving and domestic production took a rise, as a result of which, higher rates of economic growth were realized.

As relatable as this perspective is, it was challenged by an influential paper by Kohli (2006a). The author detects three problems with this way of looking at Indian growth: (i) The economic growth rates started to go up in early 1980s and not in the 1990s, (ii) Indian industrial production did not accelerate after the reforms of 1991 and (iii) there were significant, and seemingly structural regional disparities in the Indian regions' growth rates throughout this period, contrary to the fact that reforms were binding for all regions of the country (Kohli, 2006a:1251). The author then offers an alternative perspective in order to explain why economic growth took off in India in this period. The distinction between the popular perspective explained above and Kohli's narrative is related to Przeworski's (2007) approach to political institutions.

Kohli (2006a:1252-1256) explains that the Indian government in the early 1980s, led by Indira Gandhi, abandoned left-leaning policies which used to prioritize overcoming the poverty of masses and instead chose the Indian capital class as its main political ally in order to promote economic growth. Indira Gandhi chose to go this way because she saw it as the only means to facilitate economic growth and increase the economic welfare of the nation. As the government chose the Indian middle class as its main ally, the Indian capital also re-organized itself politically and started to make strong demands on the government in this period (Kohli, 2006b:1362). Redistributive concerns of the past were no more driving public policy in this era, and were replaced by policies that were influenced by the lobbying powers of the middle class.

The author discusses that Indira Gandhi did not really make a fuss out of this sharp change in state perspective. She in fact kept a low profile, as she had been as the "mother" of the nation throughout her long political career, always prioritizing the needs of the masses over anything else. She did not *openly* promote the new cooperation with the middle class, since it could damage her popular image and result in her losing votes, but she did it ruthlessly anyway. The new development

approach was in fact a ruthless form of pro-business state intervention, that was neither democratic or pro-market. It was not really inclusive: It involved repression of the workforce in order to provide cheap and disciplined labor for domestic producers who were protected by tax cuts, public investments, credits for preferred firms and sectors through state-controlled banks. Domestic demand was boosted by expansionary monetary and fiscal policies, tariffs and exchange rate policies, so that the growing Indian capital could market their output. Bureaucrats well-respected by the Indian business were appointed as heads of powerful state committees of key importance.

With the Indian state joining forces with the middle class, the economy ultimately grew at a much faster rate than the 1950-1980 period and the class structure of the society began to transition, from an “elite–mass” structure to an “elite–middle–mass” structure which was more pro-capitalism, according to Sridharan (2004:405). This transformation came at the cost of the welfare of the masses, since initially, the income gap between the poor and the middle class grew larger. Metcalf and Metcalf (2006:286) states that the gap between the prospering middle classes and the rest of the society grew in this period and onwards, as also supported by Banerjee and Piketty (2005:7-9) who find that the income shares of the top 0.01, 0.1 and 1 percent follow a U-shaped pattern between 1922 and 2000 as they were first decreasing between 1950 and 1980 and then increasing from 1980 and onwards. The poor classes were repressed more than in the preceding three decades, this time even intentionally, but this repression was what enabled economic growth for India, with a hope to bring economic prosperity in the long run.

The case of India suggests that the inclusiveness of the institution of political representation, much like any other political institution, might differ on its impact on economic institutions not based on its degree but based on who is included. When it is the elite classes whose interests are most effectively represented in the political process, a low rate of macroeconomic growth can be expected. When it is the poor classes with the strongest representation, a low rate of macroeconomic growth can be expected. Yet, a higher rate of economic growth can be expected in the case that middle classes are included in the decision-making process at the cost of the poor classes, than the case in which the poor classes are included at the cost of the middle

classes. This discussion makes a case for the perspective of Przeworski (2007), contrasting with that of Acemoğlu and Robinson (2012).

Next, we turn to a more detailed example regarding the economic consequences of representations of the interests of poor classes in a society. This example is one of the Yavapai people, an Indian tribe living in Arizona/United States.

2.3.2. Growth-Impeding Political Representation of the Poor Class

In order to provide a real-world example to the growth-impeding political representation of the poor classes, we find it befitting to delve into the ‘microeconomic’ story of almost a century-year-old construction history of a massive water diversion system in the state of Arizona of United States, a project that took more than 4 billion dollars of government spending and long years of debates and lobbying among various political groups to complete. Constituting a megaproject due to its massive size and the political controversies it stirred, we believe that this story has much to say about the subject of the perspective of Przeworski (2007).

Due to its arid climate, access to water has always been an issue in Arizona. The Central Arizona Project (CAP), reportedly the most expensive project ever constructed by the Bureau of Reclamation (Zuniga, 2000:2) and the most expensive water diversion project ever built in the United States (Hanemann, 2000:1) had been a “shared dream” of Arizonans in the 20th century due to the conviction that the state’s future depended on a secure, sustainable water supply⁴. Although having been envisioned as early as the first decades of the 20th century, the CAP had to take more than half a century of lobbying by Arizona politicians and citizens, particularly due to the technical difficulties of building such a large-scale project, the costs associated with it and the disputes surrounding its construction. The proponents of the CAP argued that the project would finally allow Arizona to exercise its rights over the Colorado River water, prosper agriculturally and achieve higher economic growth in the future (Hanemann, 2000:1). Construction was approved by the Senate in 1951, but was blocked in 1953 due to opposition from politicians from California who were

⁴ <https://www.cap-az.com/about-us/background>, (06.12.2018).

lobbying to protect their own rights over the Colorado River water. Ten years after Arizona's 1963 victory in court over California, the construction of the CAP had been approved, was begun in 1973 and completed in 1993. As a result, the CAP today stands consisting of a 336-mile long water delivery system, constituting Arizona's largest resource for renewable water as it supplies around 1.5 million acre-feet of water from the Colorado River to Central and Southern Arizona every year where more than 80% of the state's population reside⁵.

Despite its widely inclusive features and crucial importance for the state, one of the biggest controversies surrounding the construction of the CAP never ceased to make headlines due to a very extractive feature it entailed: The fact that one of its key elements, the Orme Dam, if built, would result in the flooding of most of the Fort McDowell Reservation where the Yavapai people, an Indian tribe, had been living on what had been left of their ancestral land.

In order to bring the story of Orme Dam into the context of the relationship between political representation and economic growth, it is useful to give beforehand a brief history of the interactions between the Yavapai people and the federal government of the United States, a relationship which has always been of a very tense nature. Despite having had their first contact with the Europeans in the late fourteenth and early fifteenth centuries during which the Spanish would pass through their territory, the Yavapai people managed to avoid serious contact with these new people for around two centuries and sought peace with them in what little contact they had with them (Rasmussen, 2000:561). Their population in 1860, just before a large-scale intrusion began by miners and settlers due to the discovery of gold in their territory, stood between 2000 and 2500 (Braatz, 2003:67) and it was soon after this time that the Europeans began to outnumber and relentlessly force the Yavapai out of their lands due to their conviction that the Indians, being the savage people that they were, only stood in their way to riches. The military campaign against the Yavapai in the 1860s gave them no chance but to repeatedly fight in order to protect their lifestyle, culture, lands and lives from the Europeans. Despite having been described as a warrior people with a drive for self-sufficiency that almost amounted to a "mania" (Alflen, 2011:45) and having come victorious in many of the battles in

⁵Source: <https://www.cap-az.com/about-us>, (07.12.2018).

which they had had to fight the Europeans (Alflen, 2011:101), the Yavapai were simply fighting a war they could not win and the era after their first major contact with the Europeans saw them being forced to negotiate for new territories to be reserved for their relocation, as consequence of which generations of Yavapai people had to endure “restricted lives, dispossession and displacement” (Alflen, 2011:9).

In 1865, the remaining Yavapai were moved to the new lands the first of which was the Colorado River Reservation, and afterwards, other reservations such as Rio Verde, San Carlos, Camp Verde, Middle Verde, Prescott and Fort McDowell. These series of relocations were not peaceful events themselves either, with the most renowned of them being the moving of the Yavapais of the Camp Verde, Verde Valley and Fort McDowell reservations, of around 900 in population, to the San Carlos Reservation on a forced march that went on for two weeks on foot over mountainous terrain and covered a distance of 180 miles during the winter of 1875 over (Espeland, 1994: 1152-1154). This particular event is known to the Yavapai as “the Trail of Tears” and it resulted in an untracked number of deaths among the causes of which were brutalization by soldiers, starvation, cold, injuries and newborn deaths and constitutes only one, but not the least of the reasons why they were never able to form a bond of true trust with the US government in the following eras.

The story of the Yavapai people are actually closely related to the work of Acemoglu and Robinson (2012) where the authors argue that the underlying reason for the economic welfare differences between North and South America today can be found in the different qualities of political and economic institutions founded by the colonizers during the European conquest of the Americas. While the colonizers of the South Americas were able to totally coerce the native population into forced labor and extract their resources by all means of plunder and pillage, genocides and, their Southern counterparts mostly ended up having to resort to cooperative ways of dealing with the Native Americans in order to ensure their own survival. The Yavapai people could never be subject to genocides nor were they ever enslaved, yet on the contrary, as soon will be mentioned in the next paragraph, in the century that followed their mistreatment at the hands of the US government and the army they began to learn to protect their interests by playing the game by the rules, that is, employing all means in their power to participate in the political decision making

process in order to stop the implementation of a government project that could have cost them what little they had left of the land they were living on: The Orme Dam.

The story of the triumphant Yavapai campaign against Orme Dam is capable of teaching a lesson or two about what representation of interests can mean for economic performance of a nation in relation to the works of Acemoğlu and Robinson (2012) and Przeworski (2007) discussed above. From a purely capitalism-driven perspective, it is no wonder that the Yavapai way of life in the 20th century, not unlike that of other Indian tribes as well, was of little to no economic value for the industrialized, modern economy of the United States whereas the opportunity cost of preserving that way of life, the Orme Dam, was a form of infrastructure capable of answering very well to the needs of such an economy. In other words, the Orme Dam meant higher rates of economic growth for Arizona whereas the tribal economy of the Yavapai which consisted mostly of activities for gathering food and clothes simply did not; especially not in an age when most of those items were being provided for the Yavapai by the US army during some of their years in the reservations, causing some tribe members to take up living rather dull lives in comparison to their ancestors. In line with Acemoğlu and Robinson's (2012) approach to extractive institutions, the Yavapai seemed to be in a perfect position to serve as an example for vulnerable groups within a society the resources of whom seemed to be simply there for the taking, susceptible for extraction by economically and politically more powerful groups, or in other words, the elite, who did try to extract those resources by trying to take the Yavapai land but were unsuccessful in doing so, primarily due to the inclusive nature of the contemporary political institutions in the United States which did allow the Yavapai to have their interests represented and protected in the political decision making process and come victorious in stopping the Orme Dam within the rule of law.

It is at this point noteworthy to note that, in parallel to their economic left-out status, the Yavapai were also almost non-existent in the political sphere until they found themselves in a position where they had to learn how to defend their rights over the McDowell Reservation and stop the Orme Dam from flooding their territory in order to survive as a people. Considering the fact that the issue of whether it was the Orme Dam or the Yavapai way of life that would better accelerate economic

growth for an industrialized nation such as the USA is out of question, one may assert that not having built the Orme Dam might have been costly for the state of Arizona. This line of thought clearly induces one to think of the matter in the context of Przeworski (2007) who then can be seen to be right: More inclusiveness may mean less economic growth. We do not propose this view in a normative way, as less economic growth is maybe better sometimes, depending on *how* you an economy grows. The lower classes, from a positive perspective, once they acquire the right to represent their interests, may need to vote for sets of policies that are economically unproductive and non-growth-enhancing. The Yavapai's struggle to keep their land was non-growth-enhancing, considering the fact that all they wanted to do on their land was to continue living in the ways of their ancestors. It was certainly their land and their right to live on it and the complex impact of their victory on economic growth arises from the fact that while it is true that the Yavapai's success in securing better political representation in order to preserve their economically unproductive use of the Fort McDowell Reservation came at the cost of the Orme Dam and was anti-growth, what helped them to such a triumph would be called, from Acemoğlu and Robinson's (2012) perspective, an agreeably pro-growth political institution. After all, it is the institution of rule of law doing only what was expected of it as an inclusive political institution to do: Protecting a people's freedom no matter how economically unproductive results such freedom may bring about.

The contradiction between the two views is apparent. Does representation significantly boost growth only when those groups who secure representation of their rights are engaged in productive economic activities? Is efficient political representation of economically inefficient interests bad for economic growth, constituting a cost that has to be paid in the short or medium run? Or is the amount of economic endowments of individuals and groups simply insignificant for economic growth because an ideally pro-growth environment is one in which all members of a society can have their interests efficiently politically represented no matter how alien those interests may be from a growth-oriented perspective? Maybe one of these answers is right, maybe neither is: Mere presence of representative institutions in modern day societies may not matter for economic growth at all, due to being not sophisticated enough to secure representation of *better* interests.

The institutional economics literature is yet to come up with convincing answers to these questions, and the task seems too challenging to be solved in the near future. In this section, we have laid out a detailed description of the theoretical perspective of Przeworski (2007) in which he proposes an inverse U-shaped relationship in line with the arguments above, between political representation of interests and rights. As we previously did regarding theoretical framework backed with the perspective of Acemoğlu and Robinson (2012), now we write our hypothesis regarding the theoretical framework backed by the perspective of Przeworski (2007):

H₀: There is no statistically significant inverse U-shaped relationship between the degree of inclusiveness of a country's processes of political representation and its economic growth rate.

H₁: There is a statistically significant inverse U-shaped relationship between the degree of inclusiveness of political representation in a country and economic growth.

In the next section of the study, then, we describe the data and the methodology we utilize in conducting empirical tests of the research hypotheses at hand.

CHAPTER THREE

DATA AND METHODOLOGY

In this section, we present the data used in the empirical analysis and discuss our methodology. We start with a presentation of the novel dataset we introduce as part of our work, the Political Representation Dataset, followed by the other relevant data sources we utilize. We then describe the panel-data regression method we apply in the empirical analysis.

3.1. DATA

We first describe in detail the Political Representation Dataset, composed of two indicators of political representation. Next, we test these political representation indicators against other popular indicators in the political science literature, with an aim to demonstrate their scientific validity. We conclude by identifying the other data sources we use in this study.

3.1.1. The Political Representation Dataset

Empirical analyses on the theoretical framework we described in the previous section of our study must utilize a sort of dataset for political representation that allows for cross-country comparisons across a given period of time. Such a dataset must satisfy certain criteria: An ideal form for it would be a common indicator whose unit of measurement is identical for every country in the given sample, available for as many points in time as possible. A reason why cross-country empirical studies of political representation are hard to come by is that no instances of currently existing sources of data for political representation satisfy such criteria. To the best of our knowledge, no known datasets allow us to test the relationship between representation and economic growth in the way suggested by our theoretical framework. Many empirical works studying the institution of political representation have attempted to utilize various sources of data such as public opinion polls, party manifestos and expert surveys, neither the time frames nor the contents of which provide a balanced match between countries (Andeweg; 2011: 40).

In this section, we demonstrate a novel approach in exploiting general election results in order to produce two indicators of political representation that not only have the same unit of measurement for every democracy, but also include every annual point in time during which a functioning electoral system was in effect in a democracy. The two indicators are labeled as “Political Representation Indicator I” (PR_i) and “Political Representation Indicator 2” (PR_{ii}). Conceptually, the PR_i and PR_{ii} measure the proportion of the voting-age individuals in a democracy who have been officially left out of the parliamentary policy-making process in a given election term. The “officially left out” segment of this statement refers to a case when an individual has actively voted in an election, but has not earned the right to be represented by a political representative in the parliament. In other words, his/her vote has been “wasted”. Wasted votes are a concept in political science that has been often studied before (Anckar, 1997; Tavits and Annus, 2006). Elections can result in wasted votes, due to rules of electoral system designs such as electoral thresholds, district magnitudes and gerrymandering⁶. To the best of our knowledge, there is no present study that has exploited wasted votes in order to develop an indicator for political representation, in parallel to our work in this dissertation. When an individual’s vote is wasted, their policy preferences are not officially represented in the democratic institution of political representation for as long as the said election is in effect, which is often a duration of four or five years in a democracy. The PR_i and PR_{ii} are calculated as follows:

PR_i : the ratio of valid votes that won no seats in a parliament to total valid votes, in a given election.

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.

Two reasons are behind the intuition to derive PR_{ii} as an additional indicator next to the PR_i : (i) Voters who cast invalid/blank votes also may be stripped of the

⁶ A report on the state of electoral thresholds, district magnitudes, gerrymandering and other electoral mechanisms that restrict access to political representation in European countries can be found in the document titled “Comparative Report on Thresholds and Other Features of Electoral Systems Which Bar Parties from Access to Parliament”, published European Commission for Democracy Through

[https://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-AD\(2008\)037-e](https://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-AD(2008)037-e), (23.01.2020)

right to be political represented as well, if the party they voted for does not make it into the parliament. This may not always be the case, as a voter may cast an invalid vote, unknowingly, and still be represented if the party they voted for wins seats in the parliament. There is no feasible way of knowing to which parties the invalid votes go in an election. (i) Invalid and/or blank notes can be negative consequences of electoral design mechanisms that make it more difficult for certain members of a society (such as the old people, the disabled people or people with low levels of education) to cast their votes in an election, resulting in higher levels of inequality in political representation. The ratio of invalid/blank notes are systematically higher in some countries than others. For these two reasons, we have decided to form the PR_i as a second indicator in order to capture these effects as well, if any at all.

We believe that forming a link between the wasted notes and political representation is meaningful in the sense that it allows us to produce a percentage of the population who are excluded from processes of political representation. While electoral thresholds, district magnitudes, gerrymandering and other electoral mechanisms can constitute *de jure* restrictions to access to political representation, the *de facto* restrictions caused by all of these arrangements can be different in their effect in comparison to what is suggested by the mere numbers expressed by formal rules, varying from election to election. Taagepera (1998), for instance, is one study that investigates ways to measure *effective* electoral thresholds and district magnitudes. In the same vein, the indicators of PR_i and PR_i provide us with a *de facto* measurement of the effective restrictions caused by all of electoral mechanisms that are in effect to restrict representation in an election. In order to further explain the calculations of the indicators through an example, we would like to mention Turkey's 2002 Parliamentary Election which constitutes a curious case for the fragility of the institution of political representation in the face of electoral design mechanisms.

Table 1 presents the results for total votes, vote shares and seats won by the political parties in Turkey's 2002 Parliamentary Election. Perhaps the results of the election appear to be anything but unique at first sight, with the leading party having gained 34.3% of the votes, the main opposition standing at a respectable 19.4% and several other competing parties with noteworthy vote shares just below 10%. The

results in fact look quite ordinary, as they are of the kind that can be encountered in many other elections, that is, until one learns that the electoral threshold in Turkey is 10%. The country is currently the world leader in electoral thresholds and such a high electoral threshold level resulted, in 2002, in only two parties and nine independent candidates winning any seat in the parliament as they were the only ones to be able to position themselves above the threshold. The fact that several parties ended up with vote shares just below the 10 percent threshold meant that millions of voters were left without official political representatives in Turkey's parliament for the election term, which was until the next election in 2007. In fact, the PR_i and PR_{ii} are calculated as 45.3 and 47.4, respectively, for the 2002 election in Turkey, and considering the fact that individuals who vote for a same political party often share similar policy preferences, we can deduce that the policy preferences of almost half of the voting-age population happened to be officially excluded from the policy-making process for almost 5 years.

Table 1: Turkey's 2002 General Election Results

Parties	Total Votes	Vote Share	Seats
AKP	10,808,229	34.28	363
CHP	6,113,352	19.39	178
DYP	3,008,942	9.54	0
MHP	2,635,787	8.36	0
GP	2,285,598	7.25	0
DEHAP	1,960,660	6.22	0
ANAP	1,618,465	5.13	0
SP	785,489	2.49	0
DSP	384,009	1.22	0
YTP	363,869	1.15	0
BBP	322,093	1.02	0
BĞMZ	314,251	1.00	9
YURT-P	294,909	0.94	0
BTP	150,482	0.48	0
İP	159,843	0.51	0
LDP	89,331	0.28	0
ÖDP	106,023	0.34	0
MP	68,271	0.22	0
TKP	59,180	0.19	0
Invalid/Blank	1,239,378	3.78	0
Total	32,768,161	100	550

Source: Turkish Statistical Institute, <https://www.ysk.gov.tr/doc/dosyalar/1923-2011-MVSecimleri-Tuik.pdf>, (21.12.2017)

We believe that this occurrence can be significant in terms of its political consequences and can serve as some common ground on which comparative analysis can be conducted between countries in terms of the inclusiveness of their representative institutions. While the inherent fact is that it is only the *actual* political representatives who actively take part in the policy-making process in a parliament and not the voters themselves, we argue that the very concept of the representative democracy in our day renders our indicators meaningful in that the PR_i and PR_{ii} can constitute a meaningful indicator of how inclusive the institution of political representation in a democracy is: A country has a less inclusive political representation process as the PR_i and PR_{ii} are approaching zero and a more inclusive process as they are approaching 100.

This is the intuition behind our Political Representation Dataset. In order to make cross-country comparison possible, we have examined at a total of 527 parliamentary elections that took place in 38 European countries⁷ between the years 1946 and 2017. We have calculated the PR_i and PR_{ii} scores for each election, ending up with a total of 1.784 observations, in annual form, between 1950 and 2017. The resulting panel-data is unavoidably unbalanced in form due to some of the sample countries being founded in years later than 1950, such as the post-Soviet states a majority of whom were founded in the early 1990s, and also due to no elections taking place in some countries during certain periods of time, and/or lack of data. The data sources for the elections are the statistical institutes in each country responsible for publishing national election data and relevant data published by other scholarly work in the field. The data sources are listed in the Appendix 1. The complete list of the elections used in forming the Political Representation Dataset and their years are as below:

⁷ The list actually consists of 37 European countries and Israel, which is also a representative democracy in the European sense and is often included in studies of democratic institutions. Instead of pointing out the presence of Israel in every time we mention the sample countries, we see it fit to say 38 European countries. The list of the countries is as follows, in alphabetical order: Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom.

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:

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:

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

Another important point to note about the calculations regarding the dataset is that, once again following the previous example of Turkey, despite the PR_i and PR_{ii}

being calculated as 45.3 and 47.4 for Turkey's 2002 election, it cannot be stated that Turkey's actual PR_i and PR_{ii} scores are 45.3 and 47.4 for the year 2002. This is due to the fact that while the election took place in the year 2002, these scores were not in effect in every calendar day during the year 2002. The election took place on 3 November 2002, which means that only 58 days (excluding the 3rd of November) in the whole calendar year of 2002 saw these values for the indicators. On the other hand, the 307 days in year 2002 that preceded the election were subject to the results of the country's 1999 election, for which the values of the PR_i and PR_{ii} scores are calculated as 18.3 and 22. Thus, in order to find the values of the PR_i and PR_{ii} for the calendar year of 2002, we take a weighted average of the PR_i and PR_{ii} scores resulting from the two elections, based on the number of days each were in effect in the year 2002. The resulting values for the PR_i and PR_{ii} in the year 2002 are 22.6 and 26. This additional step of taking weighted averages was taken for each of the 527 election years in the sample. Concerning the years without elections, the PR_i and PR_{ii} scores are rather straight-forward to calculate. A year without an election receives the values of the indicators from the previous election that took place. Accordingly, Turkey's PR_i and PR_{ii} scores take the values of 45.3 and 47.4 for the year 2003 and 18.3 and 22 for the year 2001, for instance.

The Political Representation Dataset is without a doubt far from flawless. Political representation is so complex as an institution that perhaps no singular source of data can be expected to fully measure its failures and successes. A main assumption of our approach to measuring political representation is that the quality of the representative institutions in every country in the sample must be similar, such that it only differs by the percentage of those excluded from representation. This is admittedly a long shot at measuring political representation as countries often don't have the same quality of political representation. Yet, our sample includes only European democracies which are assumed to share common democratic values and practices to a significant extent and we believe that our sample gives us plenty of room to make use of our indicators. In addition, provided that we are to use the indicators for other countries as well, such as Latin American or Asian nations, we argue that our approach can prove useful on the grounds that it still has the same unit of measurement for all countries: The percentage of the individuals who are left out

of the policy-making process in a representative democracy can still have merit as a stand-alone political phenomenon in itself with contextual meaning, in our opinion, even when countries differ in the quality of their representative institutions.

In order to test our claim of validity of in terms of the scientific value of the PR_i and PR_{ij} , the indicators should first be tested against other relevant datasets and indicators in political science so that it can be decided whether there is actual use for them in an empirical analysis. If our indicators perform poorly in explaining variation in other indices and indicators of political institutions, there is perhaps no value in them. In case they prove to have statistical significance against other relevant indicators, a case can be made for their scientific value.

In accordance, in the next section we challenge our indicators by holding them, in the form of simple scatter plots of period averages, against a number of other popular datasets often applied to in the political sciences. Our procedure in conducting the comparisons is as follows. We first provide a brief description of each index and indicator. Secondly, we provide information regarding the data sources of the said indices and indicators. This step is necessary so as to ensure that the variables against which we hold our indicators do not share the same data sources as our indicators. The relationships are only meaningful if the indicators were not built around the same data as our indicators, in which case we would simply be looking at correlations that arise from measurement bias. Thirdly, while we aim to keep the comparisons within averages of similar time periods between indicators, we also keep in mind to maintain an at least medium-run average of the PR_i and PR_{ij} in every comparison, such as 1990-2017 (approximating 30 years), even when the average for the other indicator belongs to a shorter period of time, due to data availability. There are two reasons behind this restriction. First, we have found election results to fluctuate arbitrarily in the short run, causing the short-run averages of the PR_i and PR_{ij} to also fluctuate widely. For instance, a country's PR_i score can vary dramatically on a year to year basis, such as rising from 2% to 12% from an election to the next. If we were to look at these two data points only, we would get the misled impression that the institution of political representation suddenly became much more inclusive in this country. This is definitely not the case with the Political Representation Dataset, as almost every country in the sample displays a stable trend

in their PR_i and PR_{ii} scores in the long-run, despite arbitrary fluctuations in the short run. For instance, a said country such as the one in the example above may sit somewhere about 7-8% in terms of the long-run average of its PR_i scores.

The second reason is our consideration that the institution of political representation, much like other political institutions, can benefit from higher explanatory powers on long run data. This idea is related to the topic of institutional persistence, which has received a fair share of attention in the institutional literature. A general consensus is that certain forms of institutions, especially political institutions, hardly go through drastic changes in societies not only in the short run, but even in the long run. Cammack (1992: 406) discusses the reasons why institutional change is difficult: Institutional structures are specifically designed to maintain their existence in societies, often through by all means possible. Policy choices made by the political elites running the institutions limit the number of choices available in the future and the remaining choices are usually in line with the previous choices that were made, further strengthening the institutional structure. Institutions also modify the environment in which they live, make it more coherent with the incumbent institutional rules and processes, by selecting and conditioning their own personnel and creating strong social networks that persist, on the promise of short-run utility maximization of the agents involved.

In parallel, Acemoğlu and Robinson (2006: 326) also explain, in an influential paper on the causes of persistence of institutions, that even when political elites lose their de jure political power through legal means (such as elections) they may still maintain their dominance on the political processes and shape policies via the economic resources they are endowed with, even if takes illegal means to do so, such as bribery, intimidation or brute force. In this way, political institutions rarely change in societies. We believe that the same case may be valid for political representation. Such that, long-run averages of countries' PR_i and PR_{ii} scores can be capable of providing a more consistent approximation of the quality of their representative institutions. In addition to comparing the development indicators with the medium-run (1990-2017) mean scores of the PR_i and PR_{ii} , we will also be making comparisons with the long run (1950-2017) mean scores of PR_i and PR_{ii} , all the while avoiding using short-run averages of our indicators. We see this not only as

a method of testing the long-run persistence of political representation but also the significance of our indicators in measuring this persistence. Based on the results of the scatter plots, we also expect to also develop an insight into how much confidence we can have in the results produced by our empirical analysis.

3.1.2. The Political Representation Dataset vs. Other Popular Datasets

In this subsection we present the results regarding how the indicators of PR_i and PR_{ii} perform against other popular indices and indicators that are often used in the political sciences. This section of the study is not directly related to our main research hypotheses regarding the relationship between political representation and economic growth. While the high number of the various indices and indicators against which we compare the Political Representation Dataset may therefore seem excessive, we believe that it is necessary way of establishing the relevance of the Political Representation Dataset as a new, robust measure of political institutions in a country, as it is a very new dataset. Only through such comparisons, we can have a high level of confidence in our empirical results regarding our main research question. The indices and indicators we utilize in this section are published by the United Nations Development Programme (UNDP), Freedom House (FH) and Economist Intelligence Unit (EIU). They are listed as follows:

- UNDP Human Development Index
- UNDP Inequality in Life Expectancy Indicator
- UNDP Gender Inequality Index
- FH Political Rights index
- FH Civil Liberties index
- FH Electoral Process index
- FH Political Pluralism and Participation index
- FH Functioning of Government index
- FH Freedom of Expression and Belief index
- FH Associational and Organizational Rights index
- FH Rule of Law index
- FH Personal Autonomy and Individual Rights index

- Economist Intelligence Unit (EIU) Democracy Index
- EIU Electoral Process and Pluralism index
- EIU Functioning of Government index
- EIU Political Participation index
- EIU Political Culture index
- EIU Civil Liberties index

Next, we report on the descriptive statistics regarding the relationship of our indicators of political representation and the indices and indicators above, in the form of scatter plots. Descriptive statistical analysis is common as a first step in empirical work in order to provide a summary of the data at hand before econometric analysis (Leavy, 2017: 111). Since this section does not constitute our main empirical analysis, we keep the comparisons at the level of descriptive statistics. We start with comparisons with the indices of the UNDP, followed by the indices of the Freedom House, and finally conduct the necessary comparisons with the Economist Intelligence Unit indices.

3.1.2.1. Political Representation Dataset versus United Nations Development Programme Indicators

The United Nations Development Programme publishes a series of indices and indicators that aim to measure various aspects of development around the world⁸. In this section, we compare our indicators of political representation, the PR_i and PR_{ii} , against three of the UNDP's indices and indicators. The first one, and notably the most prominent indicator published by the UNDP, is the Human Development Index (HDI). The remaining two are Inequality in Life Expectancy indicator and the Gender Inequality Index (GII).

3.1.2.1.1. PR_i and PR_{ii} versus UNDP Human Development Index

⁸ For a detailed discussion of the complete list of indices and indicators published by the UNDP, see: http://hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf, (21.11.2019).

We first compare the Political Representation Dataset with the Human Development Index, a world-renowned measure of countries' economic development levels. According to the United Nations, "The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions."⁹

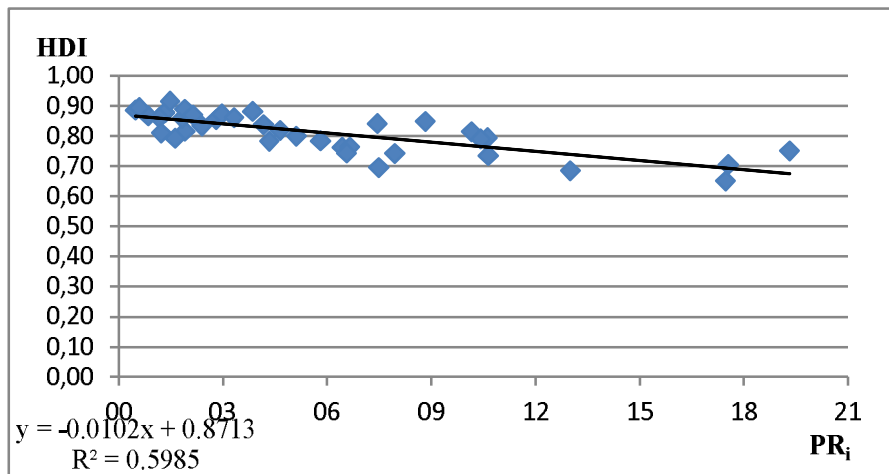
The HDI is indeed a simple index in terms of its calculation, albeit with a lot of explanatory power. First introduced in 1990, the index has attracted a vast amount of interest in the field of economic development. It has been called a "flagship indicator of multidimensional development" (Zambrano, 2014: 853) and is among the most popular composite indices worldwide. Its simple characterization of development in the form of averages in health, education and income has challenged the growth-centric perspective in the literature and contributed to its popularity in the academic circles (Klugman et al., 2011: 250). Among the three components that make up the index, the health component is measured by life expectancy at birth, the education component is measured by average years of schooling for adults who are at least 25 and expected years of schooling for children of school-entering age, and the standard of living dimension is measured by the logarithm of gross national income per capita.

While the HDI would perhaps not need an introduction due to its reputation, a noteworthy point to make here is that the calculation of the HDI does not include any measures of what composes the PR_i and PR_{ij} . We can safely take it granted that any meaningful relationship between the HDI and the PR_i and PR_{ij} must not have arisen from a measurement bias, as the data contents of these two sorts of indicators are completely different. Any significant relationship between the indicators can be taken as an implication of two results: (i) that the level of the inclusiveness of political representation in a country must be contextually related to the level of human development in that country, and (ii) that the indicators of PR_i and PR_{ij} are actually effective in accounting for this relationship.

⁹ Source: <http://hdr.undp.org/en/content/human-development-index-hdi>, (06.08.2018).

In Figure 2, we present a scatter plot of the 38 European countries' average HDI ratings over the period 1990-2017 and their average PR_i ratings over the same period. It must be noted that there is little variation in the HDI scores of the European countries, given the similar levels of economic development in the sample. Nevertheless, the plot displays a very significant negative relationship between the two indicators with an R^2 of 0.599. Although the HDI variation among the countries is little, we find the result that approximately 60 percent of that variation can be explained by the variation in the PR_i to be a noteworthy feature for our dataset. The result indicates that, *ceteris paribus*, the difference in the HDI scores of a country with a PR_i of 0 (meaning a perfectly inclusive institution of political representation) and a country with a PR_i of 10 (meaning that 90 percent of all voters are included in policy-making) would be approximately 0.1 HDI points, which accounts to a solid level of difference in economic development. Thus, we find it safe to argue that our measure of political representation in the 38 European countries is capable of having conceptual significance in terms of countries' both political representation and economic development levels.

Figure 2: HDI Mean Scores (1990-2017) vs. PR_i Mean scores (1990-2017)

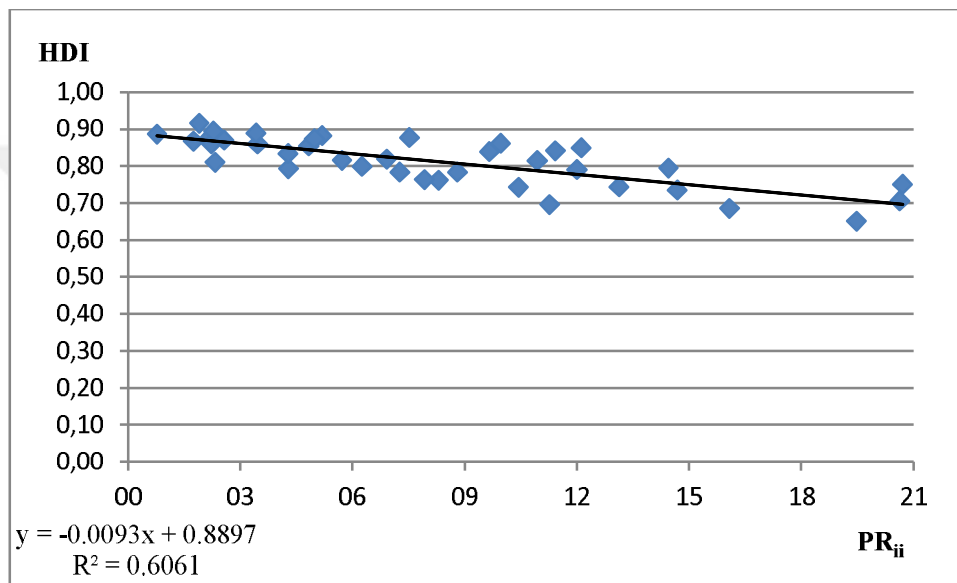


Source: Own calculations and <http://hdr.undp.org/en/data>, (16.05.2019).

In Figure 3, we hold the HDI against the PR_{ii} . Once again, the relationship is significant and conceptually meaningful, with a slight increase of the R^2 to 0.606. As it was previously explained, the PR_{ii} also takes into account the blank and invalid voters as the individuals who cast them also may end up with no political

representatives of their choice in a parliament, or may have suffered from challenging electoral design mechanisms in casting their vote. Overall, the increase in the R^2 is very small, yet we can infer that the inclusion of invalid and blank notes into the calculation of the PR_i may have added to its explanatory power. The PR_{ii} may prove to be an indicator that constitutes an at least as good a measure of political representation as the PR_i .

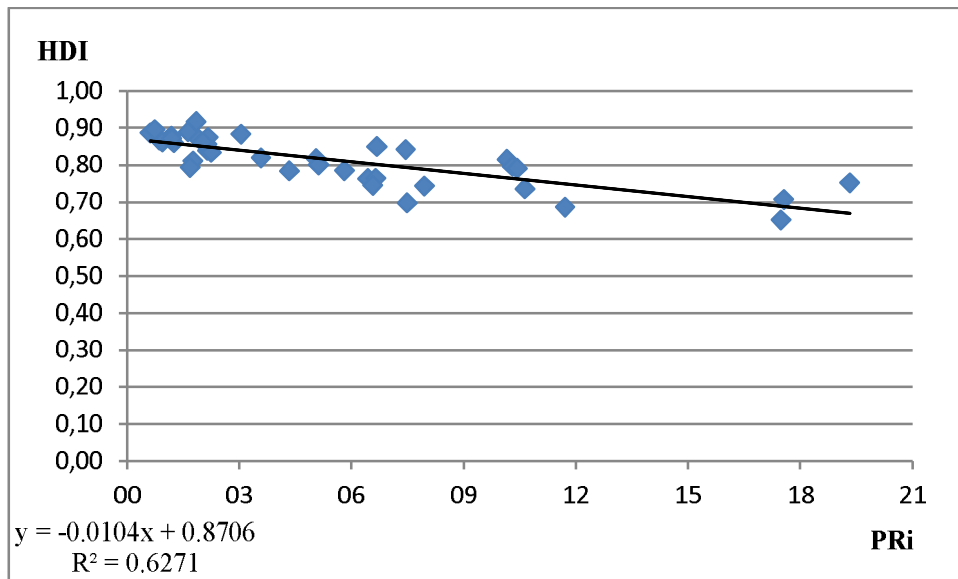
Figure 3: HDI Mean Scores (1990-2017) vs. PR_{ii} Mean Scores (1990-2017)



Source: <http://hdr.undp.org/en/data>, (16.05.2019) and own calculations.

Even though the Political Representation Dataset covers the years 1950 and onwards, the HDI on the other hand starts at 1990. Still, economic development is a long-term process and we conceive that the 1990 and onwards levels of the HDI for a country may have been significantly influenced by policies that date back to way earlier than 1990. Therefore, we propose to compare the 1990-2017 averages of countries' HDI scores with their average scores of PR_i and PR_{ii} for a longer past period. Next, we repeat the scatter plots with the HDI, this time with PR_i and PR_{ii} averages for the period 1950-2017, in Figures 4 and 5. The results are slightly more significant this time.

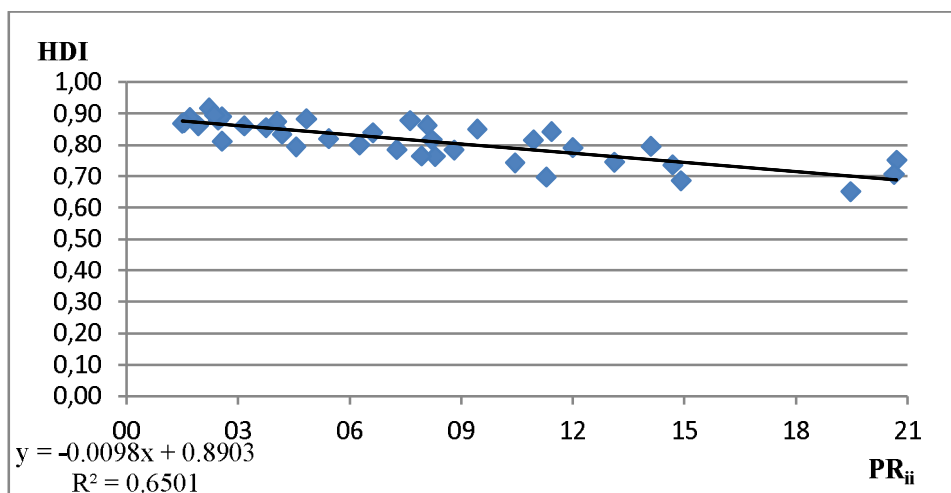
Figure 4: HDI Mean Scores (1990-2017) vs. PR_i Mean Scores (1950-2017)



Source: <http://hdr.undp.org/en/data>, (16.05.2019) and own calculations.

As shown in Figures 4 and 5, plotting the HDI averages of the 38 European countries against their 1950-2017 PR_i mean scores reveals a more significant, negative relationship between the PR_i and HDI with an increased R² of 0.627, and once again a more significant negative relationship between the PR_{ii} and HDI with an increased R² of 0.65.

Figure 5: HDI Mean Scores (1990-2017) vs. PR_{ii} Mean Scores (1950-2017)



Source: <http://hdr.undp.org/en/data>, (16.05.2019) and own calculations.

Testing our indicators against the HDI leads us to believe not only in the significance of our indicators but also in the conviction that political representation as an institution does matter, after all.

3.1.2.1.2. PR_i and PR_{ii} versus UNDP Inequality in Life Expectancy

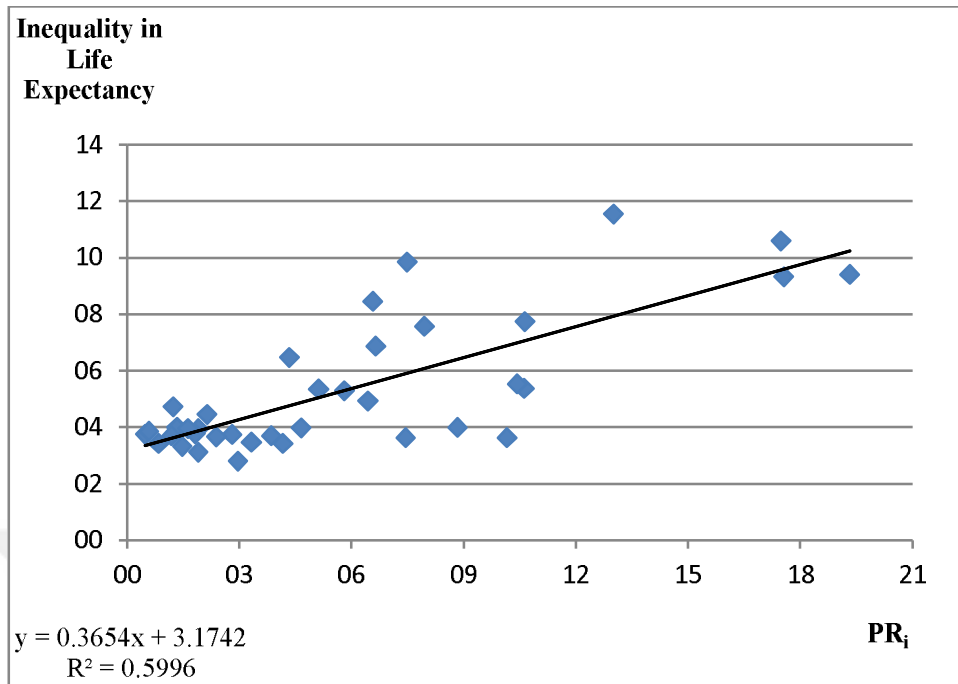
Inequality in life expectancy is an important measure of social inequality in a country and the UNDP's Inequality in Life Expectancy data constitutes a good indicator for measuring it¹⁰. Figure 6 displays the 38 European countries' averages of Inequality in Life Expectancy (available between 2010-2018) scores against their PR_i averages for 1990-2017. Once again, we find a statistically significant relationship between the two indicators. Without reservations for a direction of causation, we can safely infer that increases in the inequality of political representation go hand to hand with increases in the inequality in life expectancy in Europe as a 60 percent of the variation in the Inequality in Life Expectancy indicator can be explained by the variation in the PR_i indicator. In parallel, Figure 7 displays that a slightly less but similar share of the variation in the Inequality in Life Expectancy data can be explained by the PR_{ii} . Figure 7 demonstrates a significant positive relationship between Inequality in Life Expectancy and PR_{ii} with an R^2 of 0.587.

The reasons behind the correlation between these indicators may seem like a theoretical mystery at first, and perhaps it actually is, as an individual's life expectancy in itself does not sound like a factor to be influenced by political representation at all. Still, repeating the same exercise of comparing the 1950-2017 averages of the PR_i and PR_{ii} with the indicator at hand results in the finding that the R^2 values are once again increasing, to 0.614 and 0.628 respectively, signaling towards a persistent relationship.

¹⁰ Source:

https://reliefweb.int/sites/reliefweb.int/files/resources/2018_human_development_statistical_update.pdf, (13.08.2019).

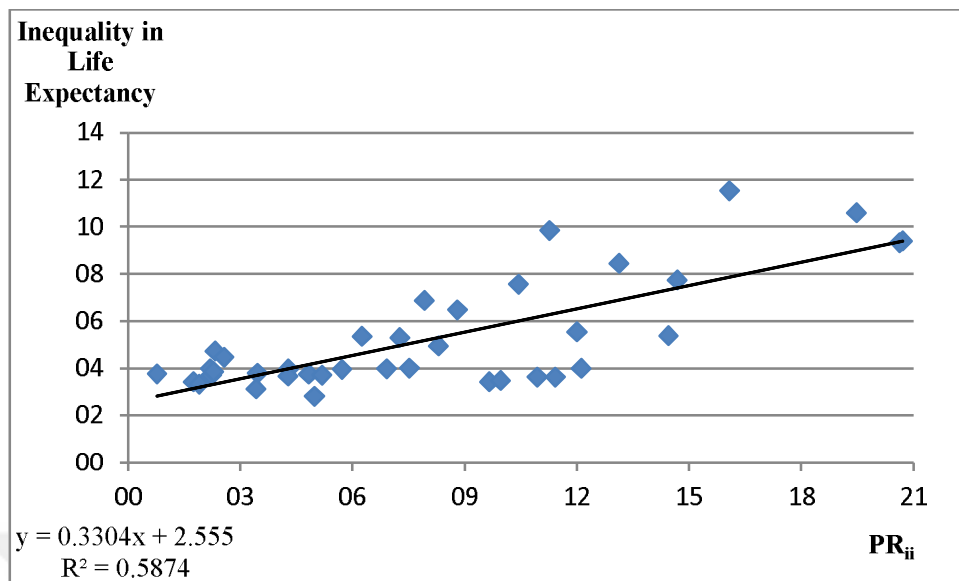
Figure 6: Inequality in Life Exp. Mean Scores (2010-18) vs. PR_i Mean Scores (1990-2017)



Source: <http://hdr.undp.org/en/data>, (16.05.2019) and own calculations.

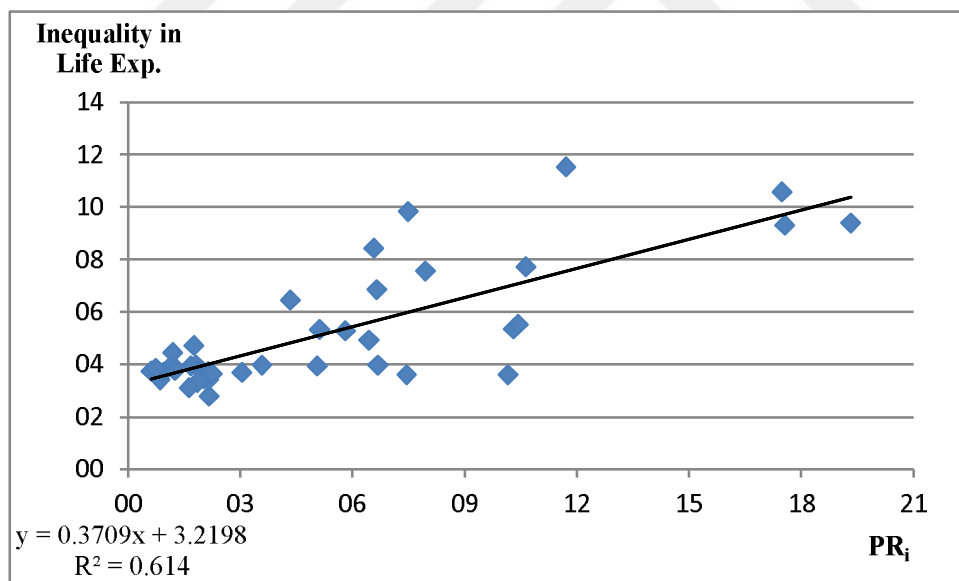
The results in Figures 8 and 9 are perhaps the case for an indication of the far-reaching social consequences of persistent inequalities in the institution of political representation for a society. That is, if certain groups' rights are systematically ignored in the political process for a long enough period of time (68 years, in our investigation), the case might be that the rooted inequalities in representation will lead to inequalities in a wider range of aspects of life, with health being one of them in the long run. This reasoning may be a long shot at justifying the relationship, but we are of the conviction that the statistical significance of the correlation does not arise from an endogeneity bias. There is no apparent theoretical connection between the indicators and the data used in forming them are completely unrelated, so there has to be a connection somewhere. Therefore, we believe that it makes sense to evaluate the underlying mechanisms, if any.

Figure 7: Inequality in Life Exp. Mean Scores (2010-18) vs. PR_{ii} Mean Scores (1990-2017)



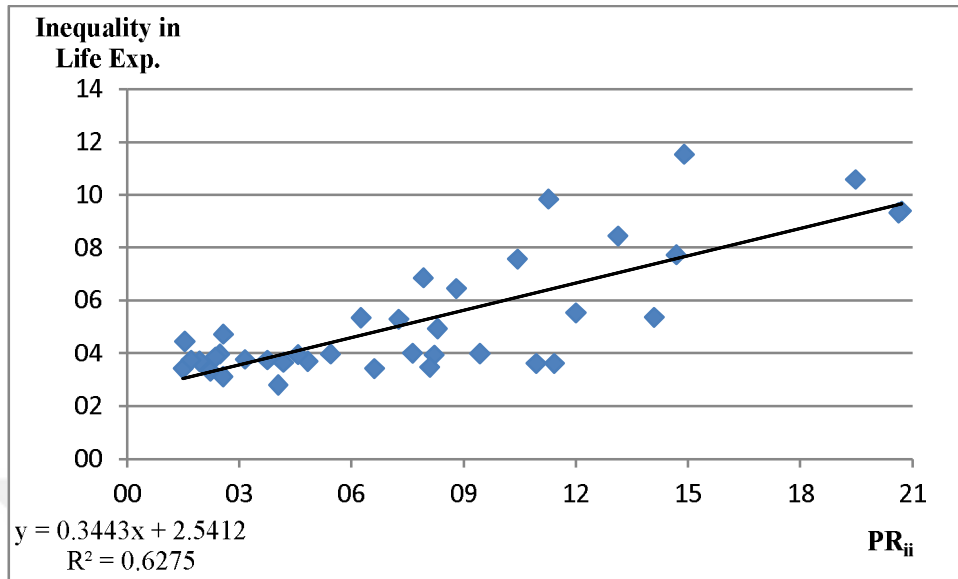
Source: <http://hdr.undp.org/en/data>, (16.05.2019) and own calculations.

Figure 8: Inequality in Life Exp. Mean Scores (2010-2018) vs. PR_i Mean Scores (1950-2017)



Source: <http://hdr.undp.org/en/data>, (16.05.2019) and own calculations.

Figure 9: Inequality in Life Exp. Mean Scores (2010-2018) vs. PR_{ii} Mean Scores (1950-2017)



Source: <http://hdr.undp.org/en/data>, (16.05.2019) and own calculations.

3.1.2.1.3. PR_i and PR_{ii} versus UNDP Gender Inequality Index

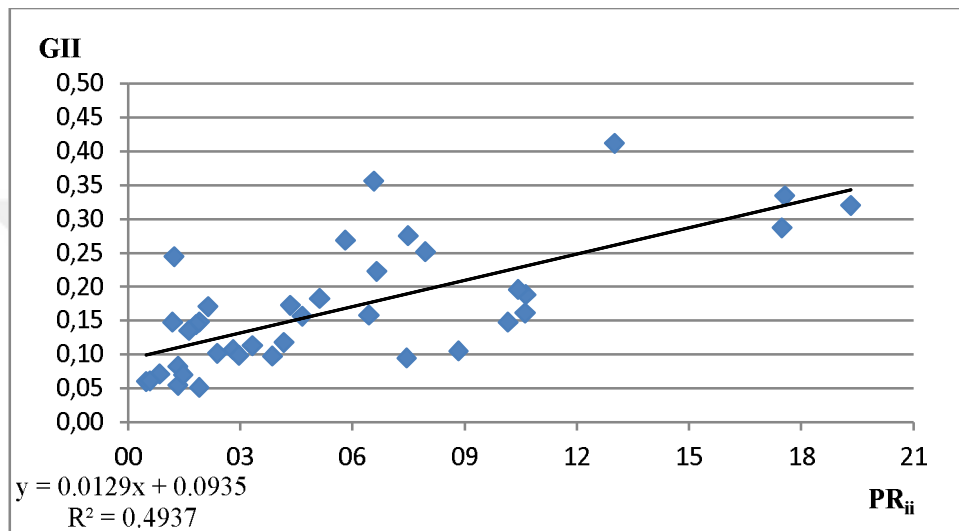
The UNDP Gender Inequality Index (GII) captures women's disadvantage in the dimensions of empowerment, economic activity and reproductive health. Available for the years between 1995 and 2017, it is an index which is widely used in gender studies (Permanyer, 2013; Wells et al., 2012; Gaye et al., 2010). The "empowerment" component of the index is based on women's level of education and also their political participation, measured by female share of parliamentary seats in a country¹¹, so that the index is closely related to the institution of political representation. The data used in calculating it, on the other hand, is unrelated to the data found in the indicators of PR_i and PR_{ii} as in forming these indicators we look at the shares of the votes that did not win seats, while the GII looks at the seat shares of women. The calculation of the PR_i and PR_{ii} also does not have a gender aspect to them. We therefore expect any significant correlation between the indicators to be signaling towards statistical and conceptual significance rather than a data bias,

¹¹ Source: <http://hdr.undp.org/en/content/gender-inequality-index-gii>, (08.06.2019).

implying that both indicators are good but distinct measurements of the inclusiveness of political representation in a country.

This expectation of ours is realized through the scatter plots of the GII scores of the countries in the sample against their 1990-2017 mean scores for the PR_i and PR_{ii} , as displayed in Figures 10 and 11.

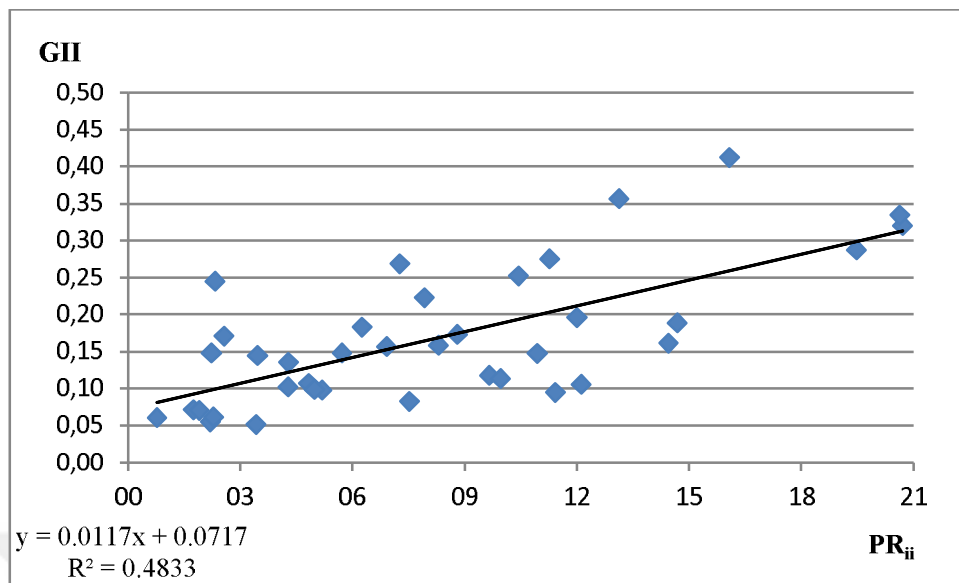
Figure 10: GII Mean Scores (1995-2017) vs. PR_i Mean Scores (1990-2017)



Source: <http://hdr.undp.org/en/content/gender-inequality-index-gii>, (16.05.2019) and own calculations.

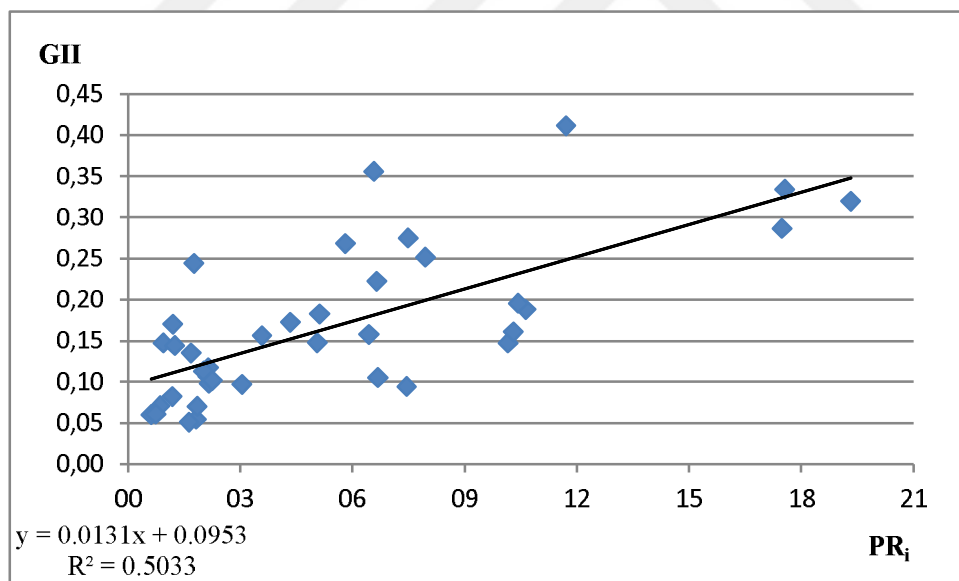
Figure 10 shows that there is a positive relationship between the GII and the PR_i , with an R^2 of 0.494. In other words, a country with a less inclusive institution of political representation is likely a country with a higher level of gender inequality. Almost half of the variation in the GII can be explained by the PR_i . Figure 11 also shows an almost equally significant relationship between the GII and PR_{ii} , this time with a similar R^2 value of 0.483.

Figure 11: GII Mean Scores (1995-2017) vs. PR_{ii} Mean Scores (1990-2017)



Source: <http://hdr.undp.org/en/content/gender-inequality-index-gii>, (17.05.2019) and own calculations.

Figure 12: GII Mean Scores (1995-2018) vs. PR_i Mean Scores (1950-2017)

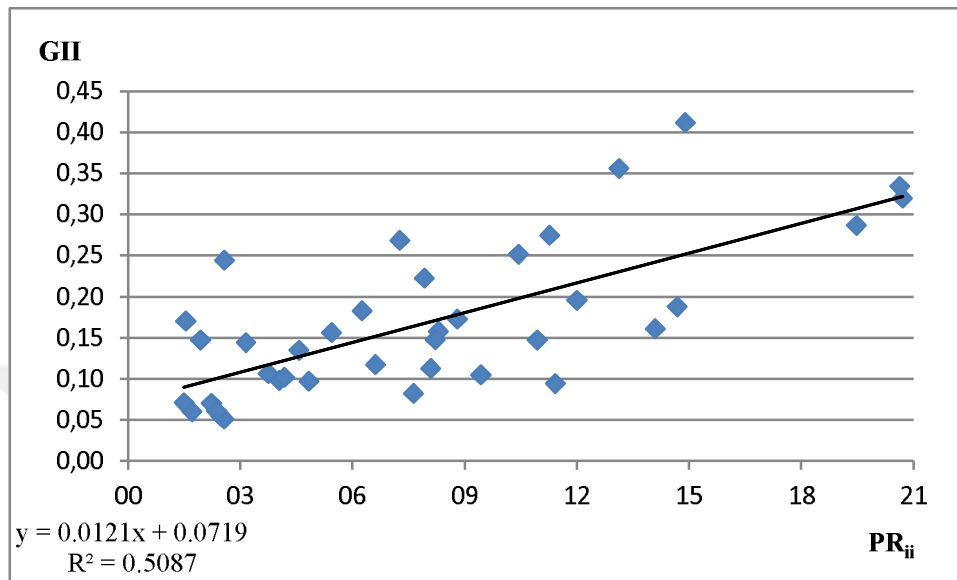


Source: <http://hdr.undp.org/en/content/gender-inequality-index-gii>, (17.05.2019) and own calculations.

When we hold the GII mean scores of the countries against their 1950-2017 mean scores for the PR_i and PR_{ii} indicators, the R² values rise to 0.503 and 0.509, respectively, confirming our inclination to propose that our measures of political

representation are more significant in the long run. These results are displayed in Figures 12 and 13.

Figure 13: GII Mean Scores (1995-2018) vs. PR_{ii} Mean Scores (1950-2017)



Source: <http://hdr.undp.org/en/content/gender-inequality-index-gii>, (17.05.2019) and own calculations.

3.1.2.2. Political Representation Dataset versus Freedom House Indicators

In the Freedom House's own words, the institution is “founded on the core conviction that freedom flourishes in democratic nations where governments are accountable to their people¹².” The Freedom House publishes periodic reports on the states of various components of democracy and freedom from around the world, which constitute a popular source of data for political sciences (House, 2014). The reports include various indicators measuring aspects of civil and political rights, calculated through a rigorous methodology that comprises a rich content of questions regarding countries' performances in these fields¹³. The two main indices published

¹² Source: <https://freedomhouse.org/>, (23.11.2019).

¹³ A detailed list of the data and indicators published by the Freedom House, as the complete methodology can be found at <https://freedomhouse.org/reports/freedom-world/freedom-world-research-methodology>, (23.11.2019).

by the Freedom House are the Political Rights and Civil Liberties indices. The seven sub-indices below the two main indices, also used to form them, are the Electoral Process, Political Pluralism and Participation, Functioning of Government, Freedom of Expression and Belief, Associational and Organizational Rights and Rule of Law. In this section, we will demonstrate the performance of the PR_i and PR_{ii} against each of these indicators.

3.1.2.2.1. PR_i and PR_{ii} versus FH Political Rights

The calculation of the Political Rights indicator of Freedom House places an exclusive emphasis on the quality of electoral processes. The emphasis on elections draws a conceptual similarity between the Political Rights indicator and the PR_i and PR_{ii} . An investigation of the Freedom House's methodology, on the other hand, reveals that the data used in producing the indicator is vastly different from the data we used in producing our indicators. We would first like to demonstrate this fact, in order to ensure that our measurements are free from data bias.

Freedom House answers a wide range of questions regarding the issues found in a country's electoral system in order to produce a Political Rights score for that country. These questions are including but are not limited to the issues of:

- Whether there is a fair and transparent framework for running elections,
- Whether it is possible for all voters and candidates to register for an election in a timely and transparent manner, with no one being discriminated against,
- Whether it is possible for all candidates to make their voice heard to the public, through speeches, meetings and a fair share of media exposure,
- Whether changes are being made to electoral laws and procedures just before an election so that it becomes impossible for some voters, candidates or political parties to take place in the election,
- Independence of election commissions,
- Equality in suffrage rights,

- Gender equality in elections, for both voters and candidates,
- Whether students and/or teachers are pressured or even remotely canalized by school administrations and/or other officials in positions of equivalent status into voting for certain politicians or parties,
- Equality in voter access to ballots,
- Whether employers can control the vote preferences of their employees,
- Whether donations to political parties can lead to control over politicians,
- Manipulations of the system for choosing representatives, such as proportional versus majoritarian systems or election districts, so that certain political parties can win a higher number of seats with less votes,
- Transparency of the voting process (secret ballots),
- Whether voters are free to vote for whoever they want, without being intimidated into voting for particular parties/politicians,
- Transparency of the vote counting process, with believable and honest media coverage,
- Availability for election monitoring from independent national and international groups and representatives from all competing parties,
- Whether the government has the power to limit the activities and opportunities of certain political groups through laws or other obstacles,
- Whether voters and/or candidates are intimidated, attacked or threatened by third-party entities such as the military, armed militants, criminal organizations, large corporations, the media or any other entities,
- Whether the government or other major political parties are able to use illegal and/or legal but unfair extra-political powers to influence preferences of voters or other candidates,
- Bribing to influence election results at any level of the electoral process,

- The presence of a significant vote share for the opposition,
- Whether opposition parties or any of their members are selectively restricted from conducting legal political activities so that they are prevented from increasing their vote share,
- Whether opposition parties decided to boycott previous elections due to unfair electoral processes.

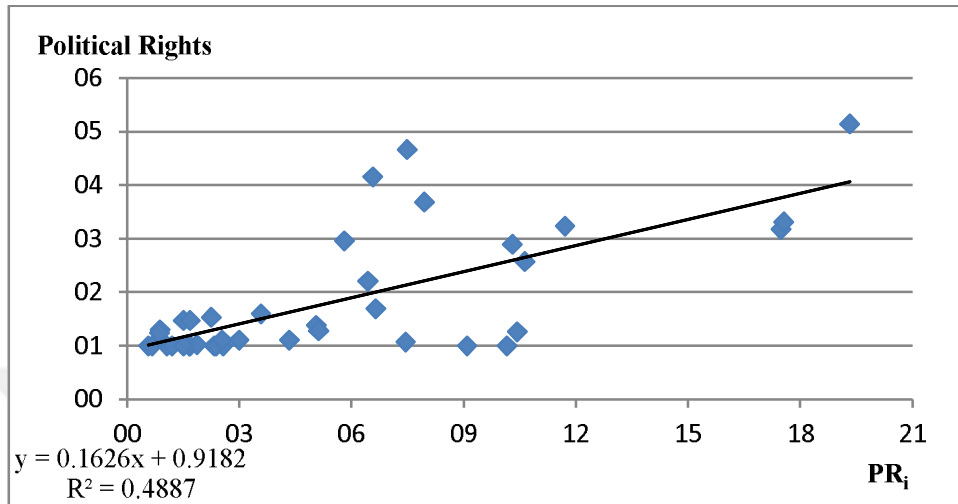
As apparent from the long list of issues above, the Freedom House's assessment of the efficiency of an electoral system evaluates a wide range of aspects related to it. Freedom House answers a wide range of questions it has prepared regarding these issues for every country in their dataset, and form the scores for their indicators accordingly. Thus, the indicators they publish constitute primary data, which is also an additional indicator that our following comparisons do not suffer from data bias.

The resulting scores for the Political Rights indicator comprise an an overall measure of how democratic a country's elections are. At this point one cannot help but think, in the context of our work, that while all of the issues above are important factors that underlie what makes an electoral system democratic, the PR_i and PR_{ii} seem to constitute a good measure of the *end result* of all of those factors. Voters and/or political candidates can be systematically excluded from the political process as a result of inequalities arising from the *de jure* issues listed above, and a country's PR_i and PR_{ii} scores constitute an overall approximation of the *de facto* consequences of those issues, because it measures the actual inequalities that arose from them. This approach can prove useful, by eliminating the need to delve into answering all the questions related to the issues above, for every single country.

Hoping to get an idea of whether our indicators can actually be relevant in accomplishing such a demanding task, we run scatter plots of the PR_i and PR_{ii} against the Freedom House Political Rights scores of the countries in our sample and present the results in Figures 14 and 15 respectively. The Freedom House Political Rights scores are averages for the 1972-2019 period, while the PR_i and PR_{ii} scores are the averages for the 1972-2017 period. The results are promising, as Figure 14

demonstrates a statistically significant relationship between FH Political Rights scores and the PR_i scores of the 38 European countries, with an R^2 of 0.489.

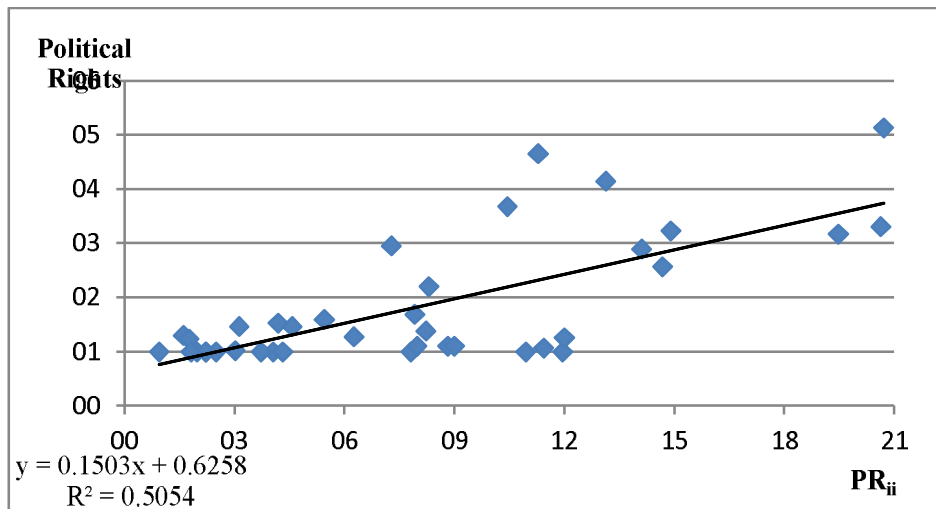
Figure 14: FH Political Rights Mean Scores (1972-2019) vs. PR_i Mean Scores (1972-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

When we take into account the invalid and blank votes as well, Figure 15 establishes the same relationship with PR_{ii} , with a slightly increased R^2 of 0.505. All in all, it becomes apparent that countries with less developed political rights according to the Freedom House data are also the countries with a less inclusive institution of political representation according to our data.

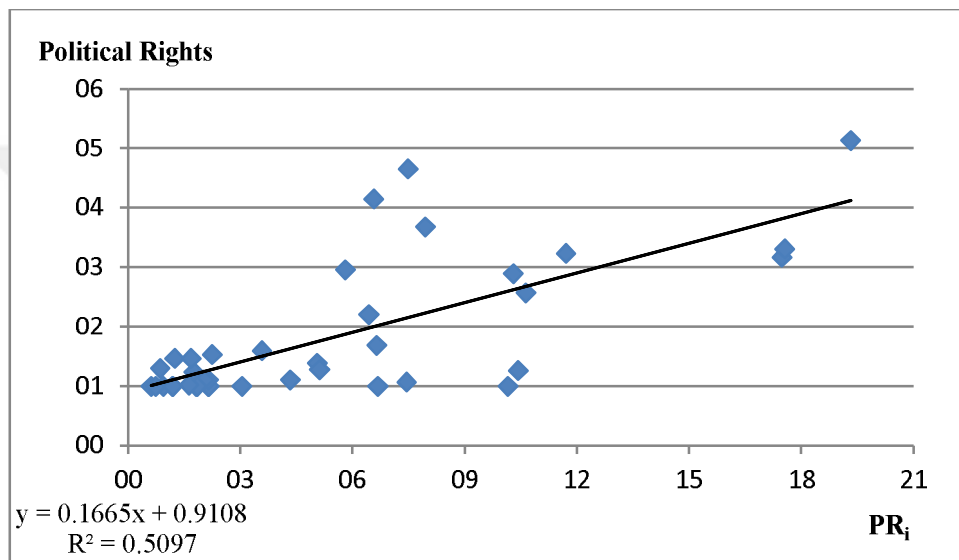
Figure 15: FH Political Rights Mean Scores (1972-2019) vs. PR_{ii} Mean Scores (1972-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

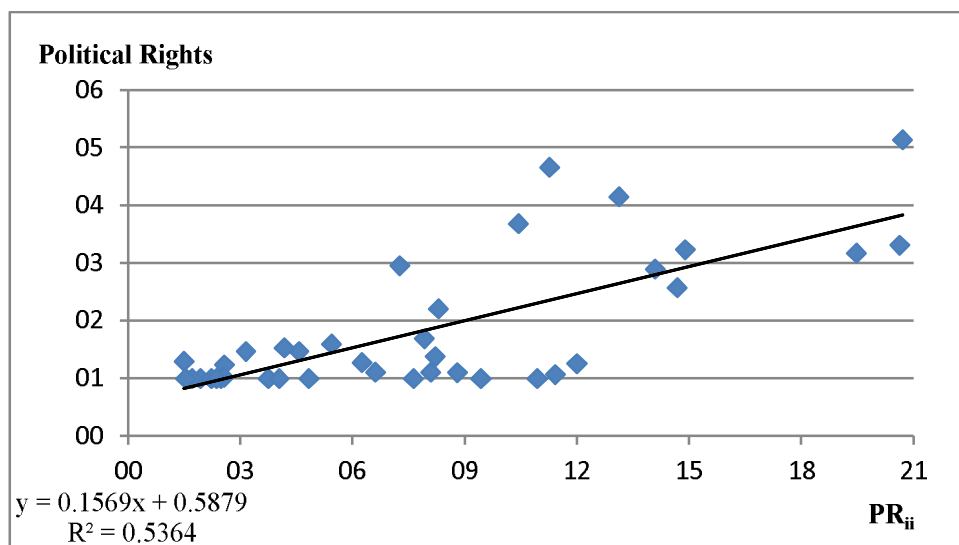
Drawing on our previous conclusion that comparing the Political Rights mean scores from a longer period can yield more productive results, we run the same scatter plots, this time with the PR_i and PR_{ii} mean scores for the period 1950-2017. We see even higher R^2 values this time, as the respective of values go to 0.510 and 0.536, presented in Figures 16 and 17.

Figure 16: FH Political Rights Mean Scores (1972-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 17: FH Political Rights Mean Scores (1972-2019) vs. PR_{ii} Mean Scores (1950-2017)



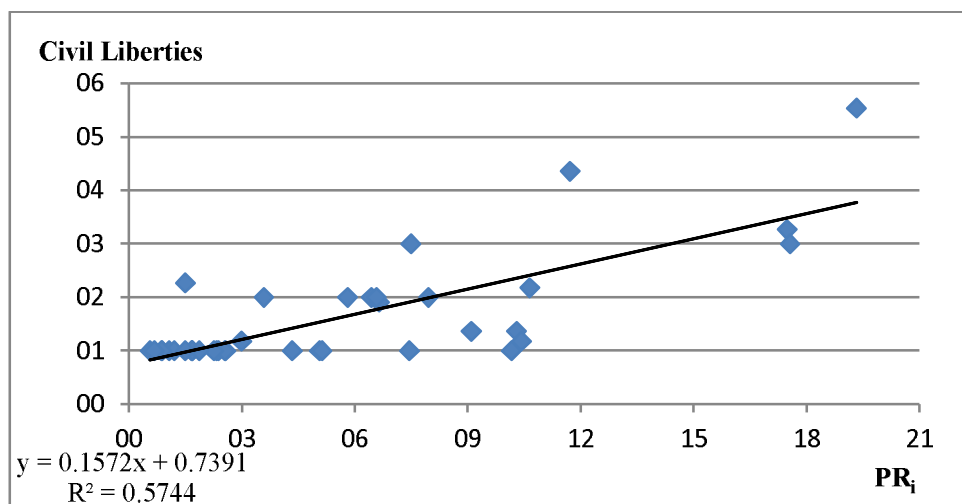
Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

We find it safe to state that the PR_i and PR_{ii} seem to prove useful indicators in their own domains, in order to be utilized in studies of the institution of political representation. Next, we next turn to second main indicator of the Freedom House, the Civil Liberties indicator.

3.1.2.2.2. PR_i and PR_{ii} versus FH Civil Liberties

The Freedom House Civil Liberties indicator is the second main indicator in the Freedom House reports and measures the quality of liberties enjoyed by citizens of a country. A majority of the questions asked by the institution in order to produce a relevant Civil Liberties score for a country are outside the realm of elections¹⁴, yet the very notion that a parliament is the foundation over which all rights and freedoms are protected in democratic states leads us to infer that the inclusiveness of a country's political representation processes can be an important component of and also a good proxy for what makes up a society's perception of civil liberties. In order to present a test of this link, we present the scatter plots between the Freedom House Civil Liberties indicator (1972-2019 mean scores) and the PR_i and PR_{ii} (1972-2017 mean scores) in Figures 18 and 19.

Figure 18: FH Civil Liberties Mean Scores (1972-2017) vs. PR_i Mean Scores (1972-2017)

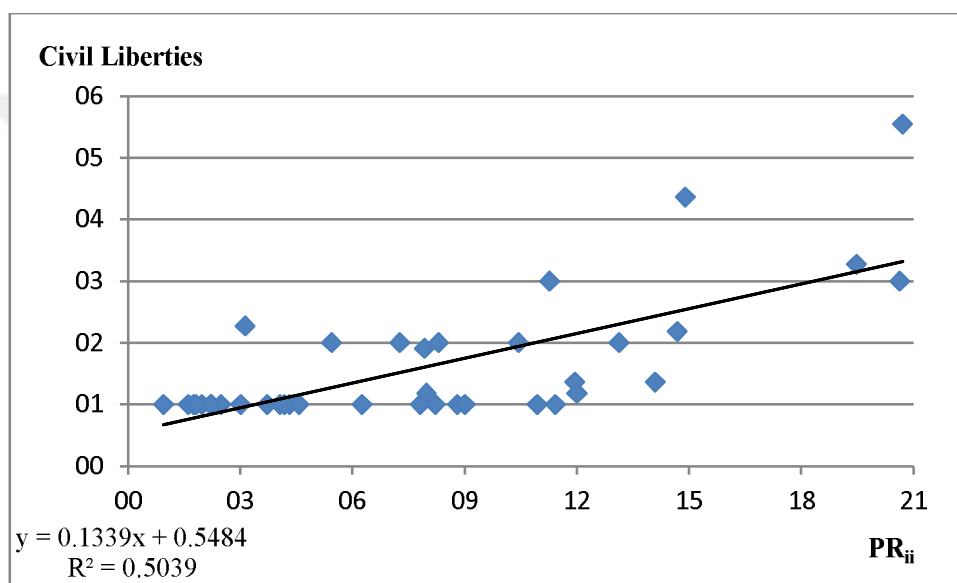


Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

¹⁴ The methodology can once again be found at <https://freedomhouse.org/reports/freedom-world/freedom-world-research-methodology>, (23.11.2019).

The results provide an even stronger relationship between the PR_i and FH Civil Liberties indicator, in comparison to the relationship with the FH Political Rights indicator. The R^2 value of 0.574 reveals that almost 60 percent of the variation in the Civil Liberties indicator can be explained by the variations in the PR_i . The relationship between the PR_{ii} and FH Civil Liberties indicator is also significant with the expected sign: Half of the variation in civil liberties can be explained by the variation in the inclusiveness of political representation.

Figure 19: FH Civil Liberties Mean Scores (1972-2017) vs. PR_{ii} Mean Scores (1972-2017)

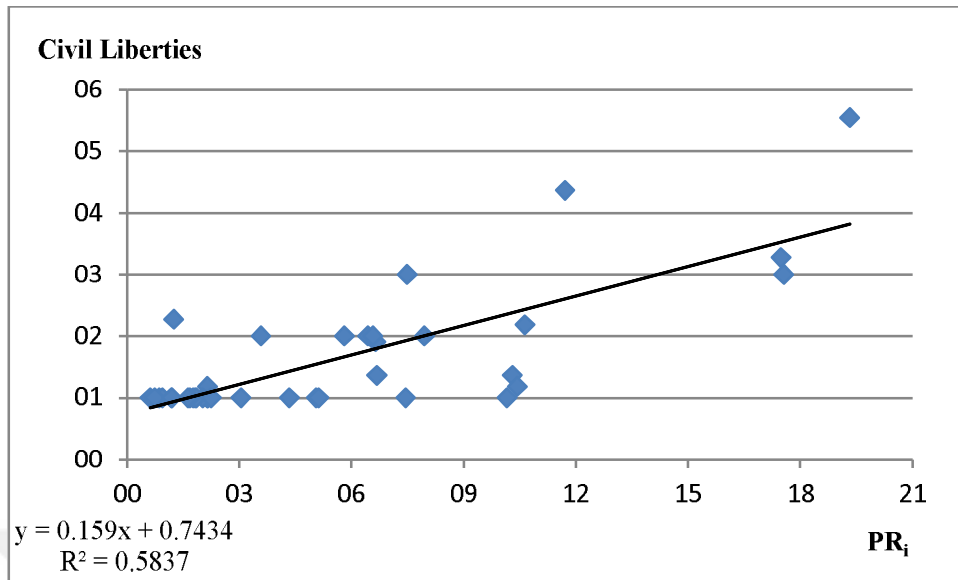


Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Once again, long-run comparisons between the FH Civil Liberties and the PR_i and PR_{ii} (1950-2017 mean scores) indicators displayed in Figures 20 and 21 yield slightly higher R^2 values, standing at 0.584 and 0.525 respectively. Both our confidence in our indicators of political representation and their increased explanatory powers in the long are being further confirmed by these findings.

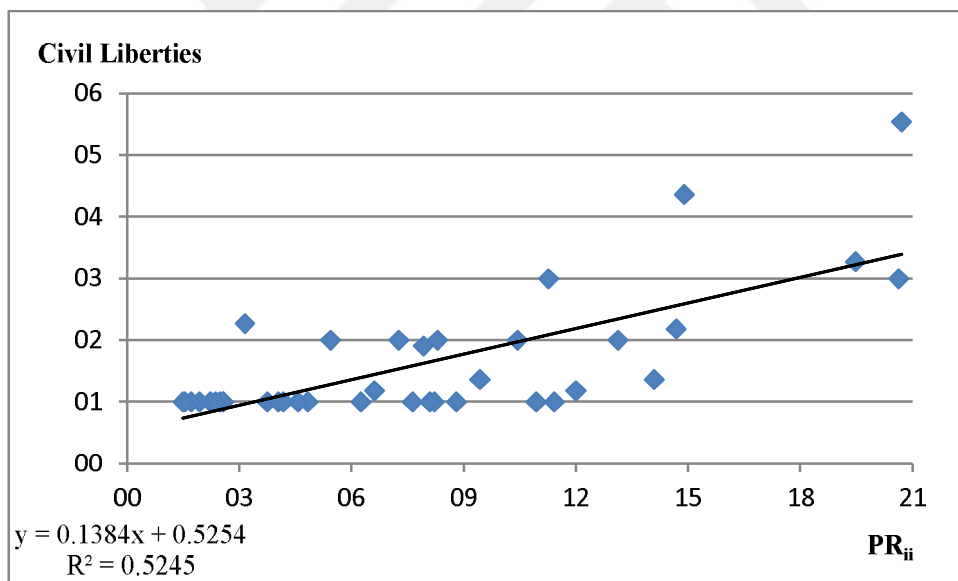
After ensuring the presence of a significant link between the two main indicators of the Freedom House and our political representation indicators, we now turn to the sub indicators of the Freedom House. The data for these indicators are available for the years 2006-2019, therefore we compare the mean scores for these indicators with the 1990-2017 mean scores of the PR_i and PR_{ii} , followed by the long-run comparisons.

Figure 20: FH Civil Liberties Mean Scores (1972-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 21: FH Civil Liberties Mean Scores (1972-2019) vs. PR_{ii} Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

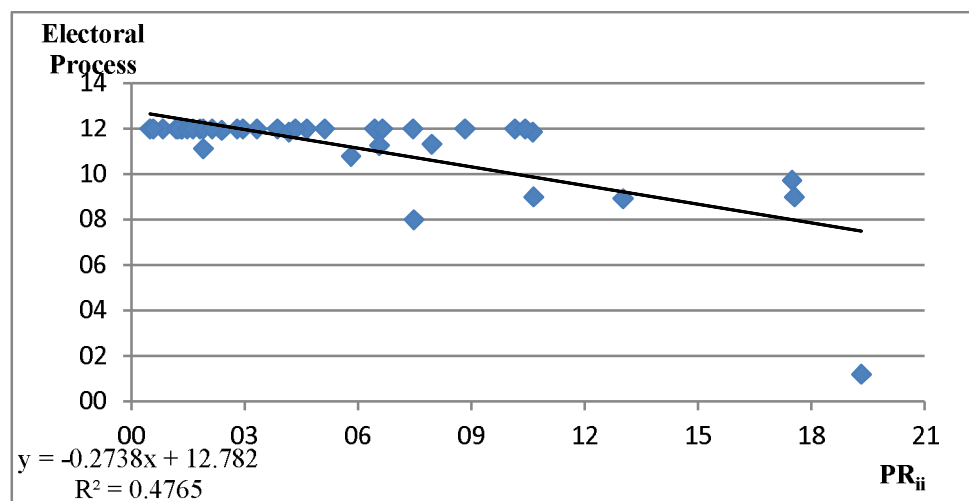
3.1.2.2.3. PR_i and PR_{ii} versus FH Electoral Process

The Electoral Process indicator of Freedom House exclusively focuses on issues related to electoral processes in democracies – as the name would imply – which are listed above. While the quality of a country's institution of political

representation has much farther-reaching consequences for virtually all spheres of life in a country than just the area of elections, elections are certainly what shapes a significant deal of the quality of political representation. Therefore, we naturally expect a significant relationship between the FH Electoral Process and the PR_i and PR_{ii} . The direction of causality, on the other hand, can be thought to have two-way dimension to it: While a country with less developed electoral processes can also be expected to exclude a higher proportion of its population outside the political process (implying a direction of causality from electoral processes to political representation), it is also true that a less inclusive institution of political representation will continue to design backward electoral processes in order to maintain its persistence.

Figure 22 reveals that almost half of the variation in the Freedom House's Electoral Process indicator can be accounted to by the variation in the PR_i indicator, and vice versa. We can infer that this result provides evidence for both sides of the story mentioned above, in explaining the interaction between the quality of electoral processes and political representation.

Figure 22: FH Electoral Process Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)

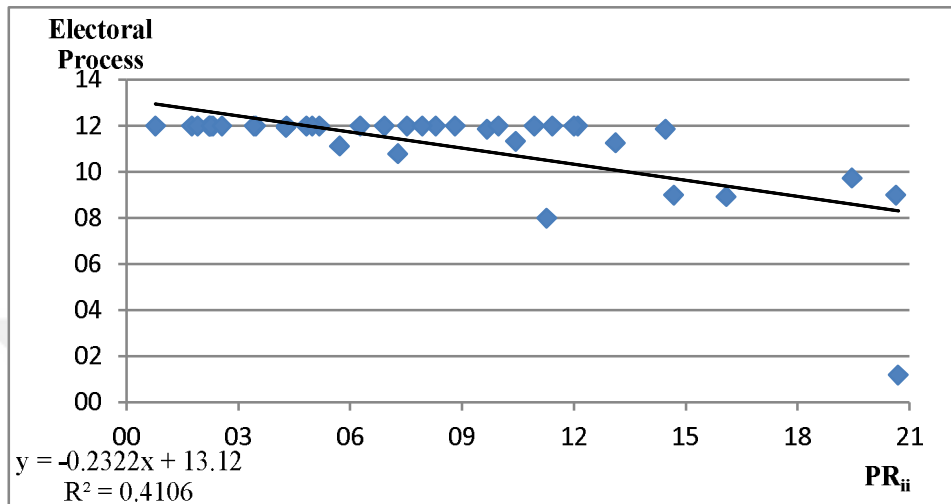


Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

In the context of the PR_{ii} , we find a less significant, yet still meaningful relationship with an R^2 of 0.41, as seen in Figure 23. The variation in the quality of

electoral processes can explain approximately 41 percent of the variation in the PR_{ii} score of a country, and vice versa.

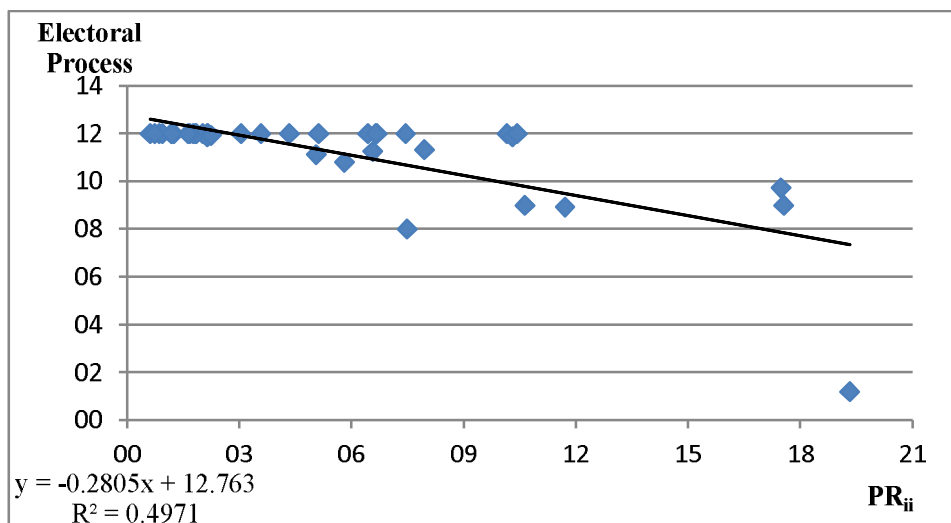
Figure 23: FH Electoral Process Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

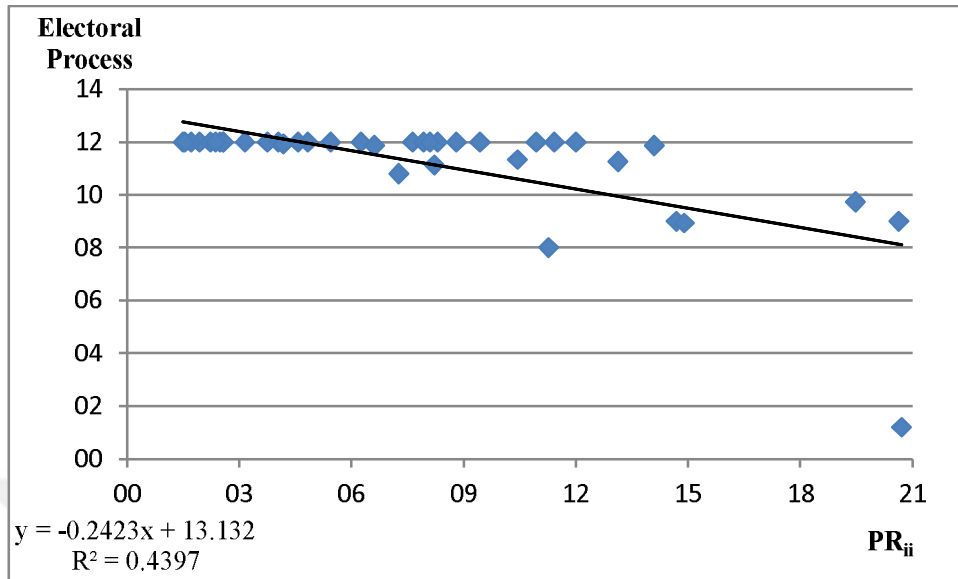
When we run the same scatter plots for the long run of 1950-2017, we find slightly higher R^2 values. Figures 24 and 25 show that the R^2 of the plot between PR_i and Electoral Process goes up from 0.477 to 0.497, while that of the plot between PR_{ii} and Electoral Process goes up from 0.41 to 0.44.

Figure 24: FH Electoral Process Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 25: FH Electoral Process Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)

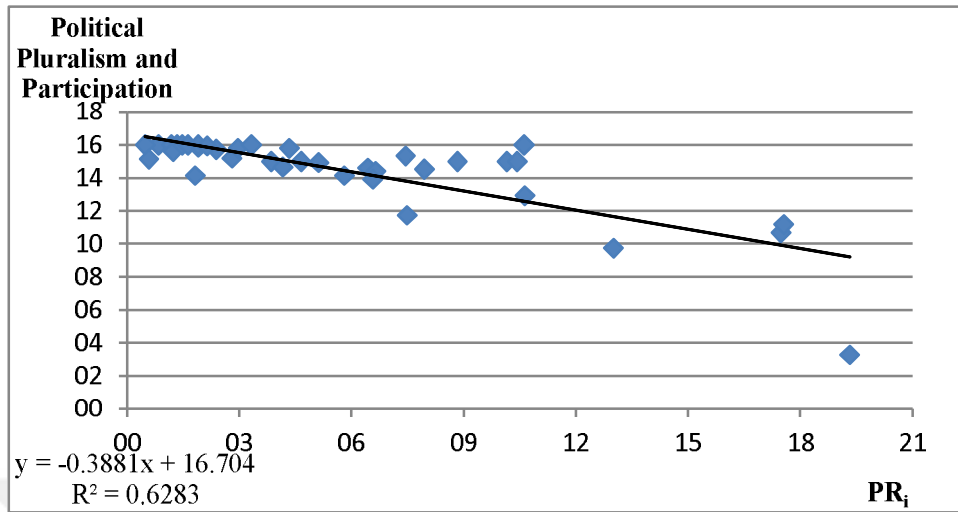


Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

3.1.2.2.4. PR_i and PR_{ii} versus FH Political Pluralism and Participation

The calculations in producing the Political Pluralism and Participation indicator of Freedom House also utilize a significant share of information regarding citizens' participations in elections and other representation-related organizations as listed above, such as party membership, attendance to and organizations of meetings and rallies, media access to a political news, restrictions on running in elections as candidates and issues related to discriminations. We therefore find it natural to expect a statistically significant relationship between this indicator and the PR_i and PR_{ii}. Confirming our reasoning, the statistical significance of the relationship between the Political Pluralism and Participation indicator and the PR_i is 0.629, available in Figure 26.

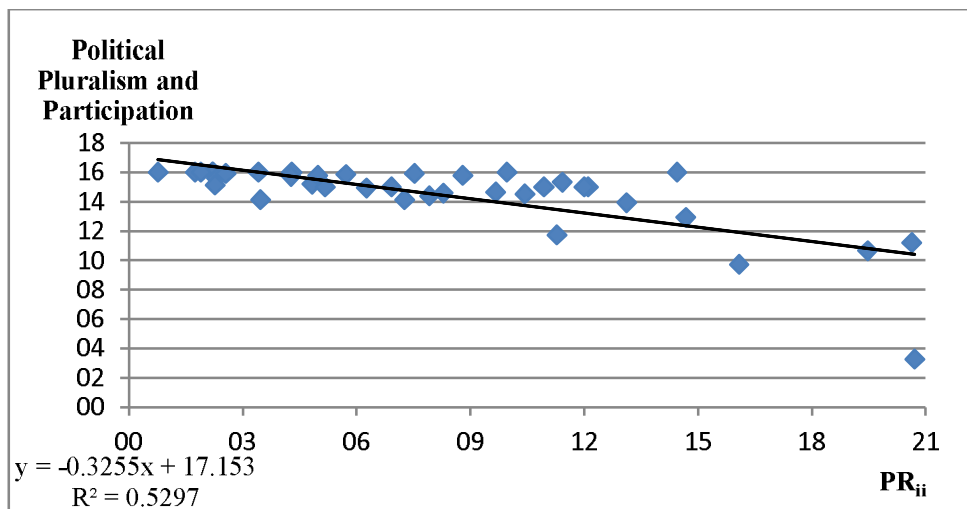
Figure 26: FH Political Pluralism and Participation Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

The relationship of Political Pluralism and Participation with PR_{ii} , on the other hand, reveals that around 53 percent of the variation in the former can be explained by the latter, and vice versa (Figure 27). While the significance of this relationship is lower than that of the PR_i , it is still high enough to lead us to infer that both of our indicators are well-equipped in establishing a link with the concept of political participation in the European countries.

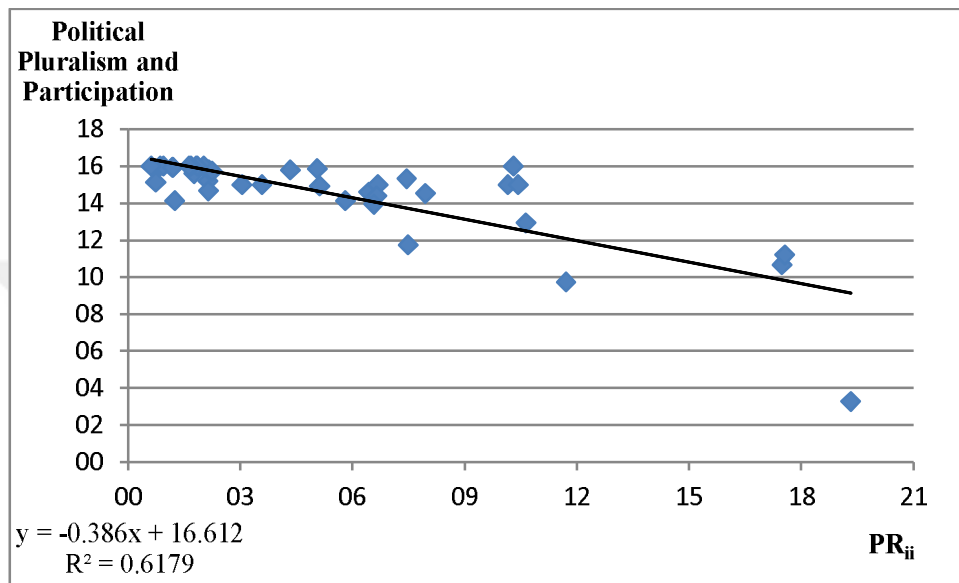
Figure 27: FH Political Pluralism and Participation Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

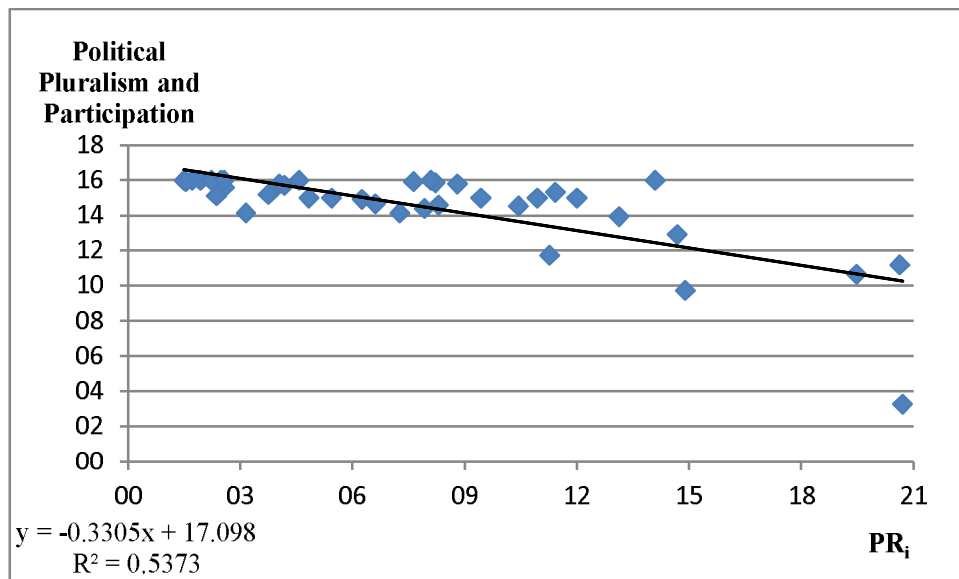
As we display in the Figures 28 and 29, the long-run relationships between the indicators are also significant, this time slightly less so in the case of PR_i and slightly more so in the case of PR_{ii} , with R^2 values of 0.537 and 0.62, respectively.

Figure 28: FH Political Pluralism and Participation Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 29: FH Political Pluralism and Participation Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)

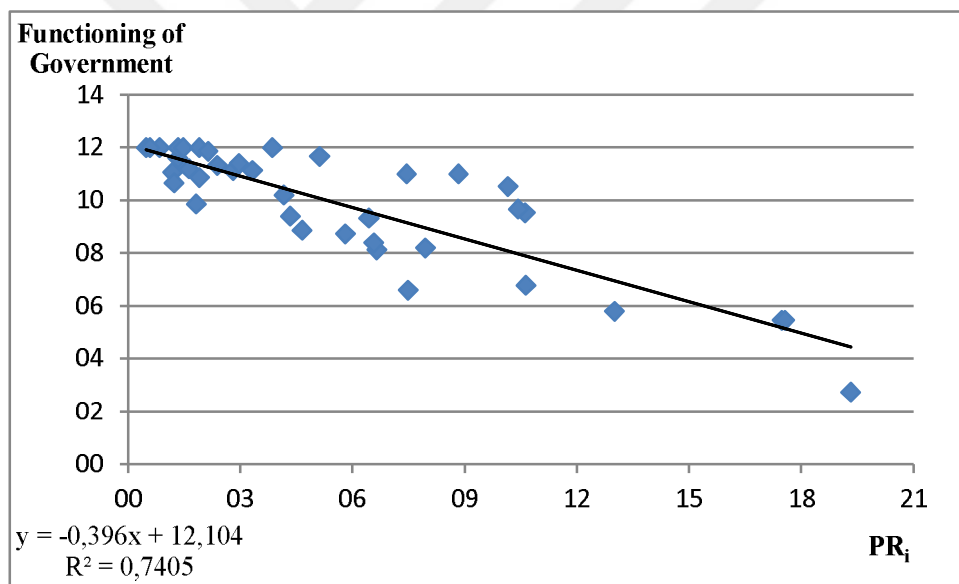


Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

3.1.2.2.5. PR_i and PR_{ii} versus FH Functioning of Government

Freedom House's Functioning of Government indicator concerns issues such as whether election results actually produce governments and government policies, whether there are safeguards against corruption, levels of government transparency, openness and intervention of armed forces in democratic processes. Figures 30 and 31 reveal that the relationship between the FH Functioning of Government Indicator and our indicators of political representation are the strongest in the whole group of FH indicators.

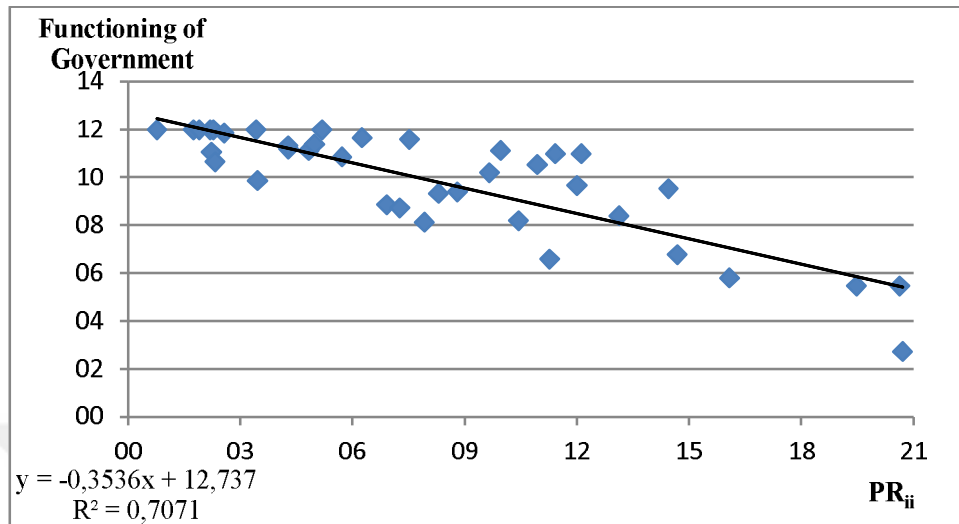
Figure 30: FH Functioning of Government Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

A 70 percent of the variation in the Functioning of Government indicator can be explained by how inclusive the institution of political representation is in European democracies. We believe that this result constitutes a remarkable finding: Governments which are inclusive and incorporate a wider range of political interests into the political process, seem to function better, and vice versa: Governments who function better are more inclusive regarding the political interests of a larger portion of the society.

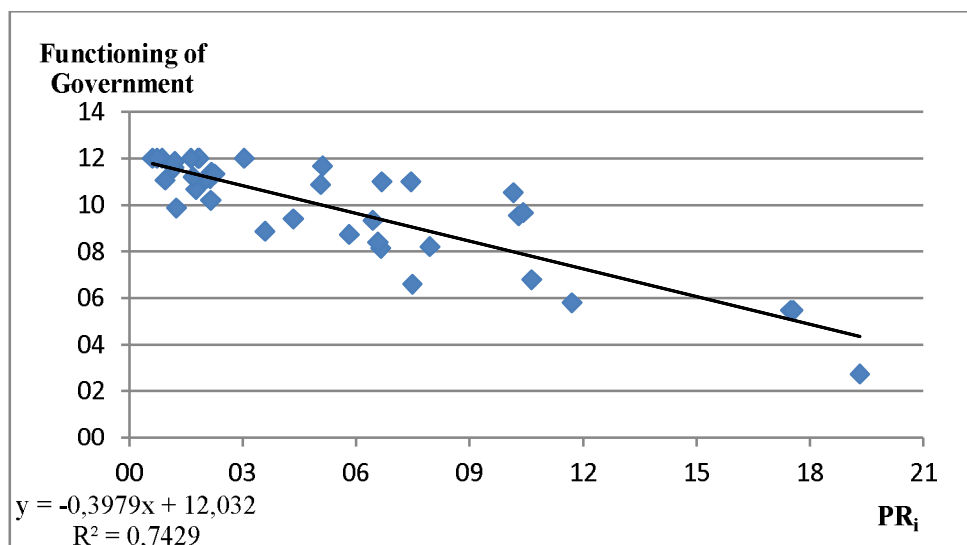
Figure 31: FH Functioning of Government Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

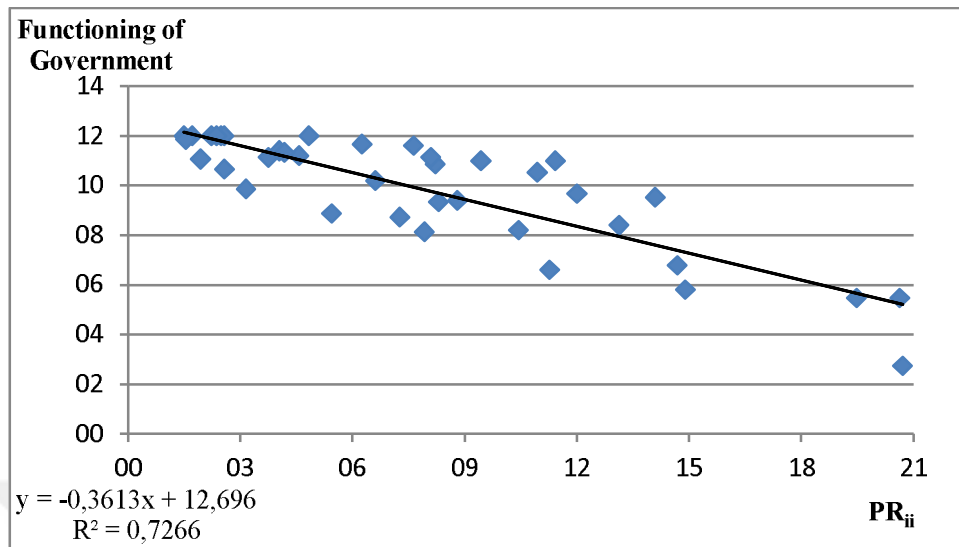
The relationship is also highly significant in the case of the PR_{ii}, with an R^2 value of 0.707. On the other hand, long-run averages of the PR_i and PR_{ii} are also highly correlated with the FH Functioning of Government indicator, with R^2 values at 0.743 and 0.723 (Figures 32 and 33).

Figure 32: FH Functioning of Government Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 33: FH Functioning of Government Mean Scores (2006-2019 vs. PR_{ii} Mean Scores (1950-2017)



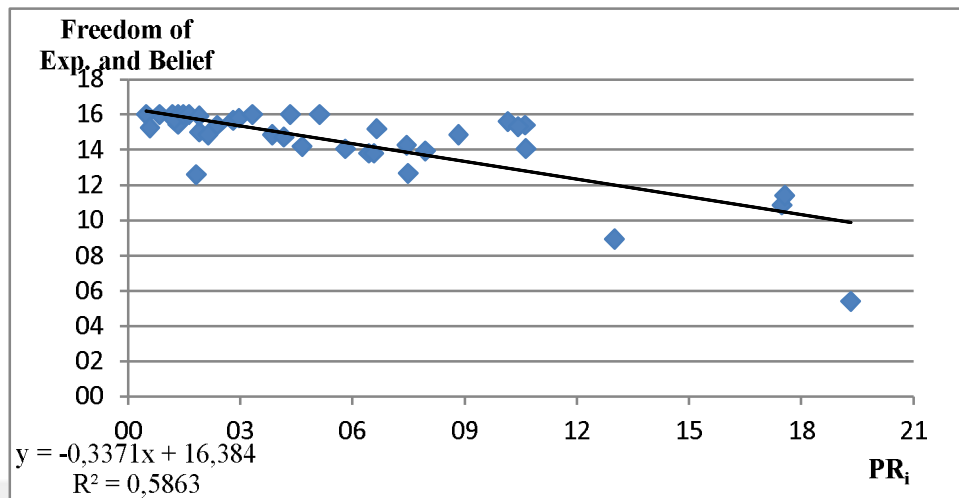
Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

3.1.2.2.6. PR_i and PR_{ii} versus FH Freedom of Expression and Belief

The Freedom of Expression and Belief sub index is also a relevant measure of democracy by the Freedom House, focusing on basic personal rights in democracies. As we would expect, we find a high degree of correlation between this index and both the PR_i and PR_{ii} (Figures 34 and 35).

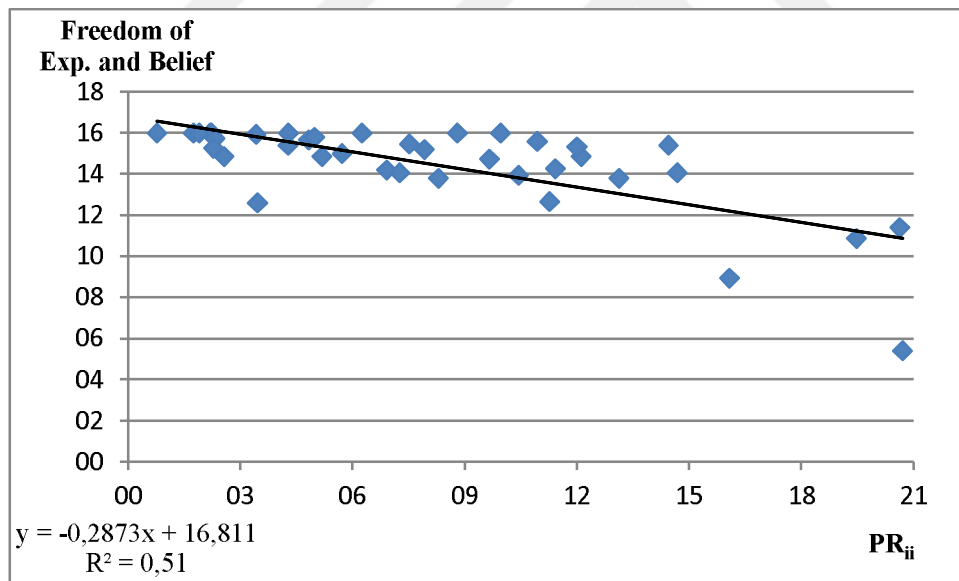
Figures 36 and 37 also exhibit an almost equally significant relationship between the indicators, when we take into account the PR_i and PR_{ii} averages for the 68 years in our dataset. It is no surprise that countries who include the representation of a higher share of their population in the political process are also the countries who have more developed opportunities for freedom of expression and belief. Once again, there is reason to hypothesize that rights and freedoms tend to be persistent in most cases, even in the long run.

Figure 34: FH Freedom of Expression and Belief Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



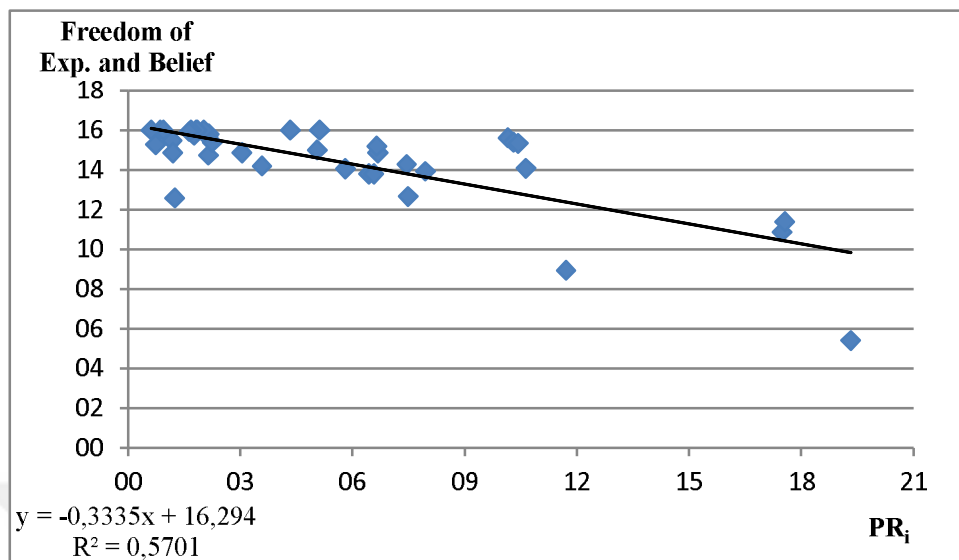
Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 35: FH Freedom of Expression and Belief Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



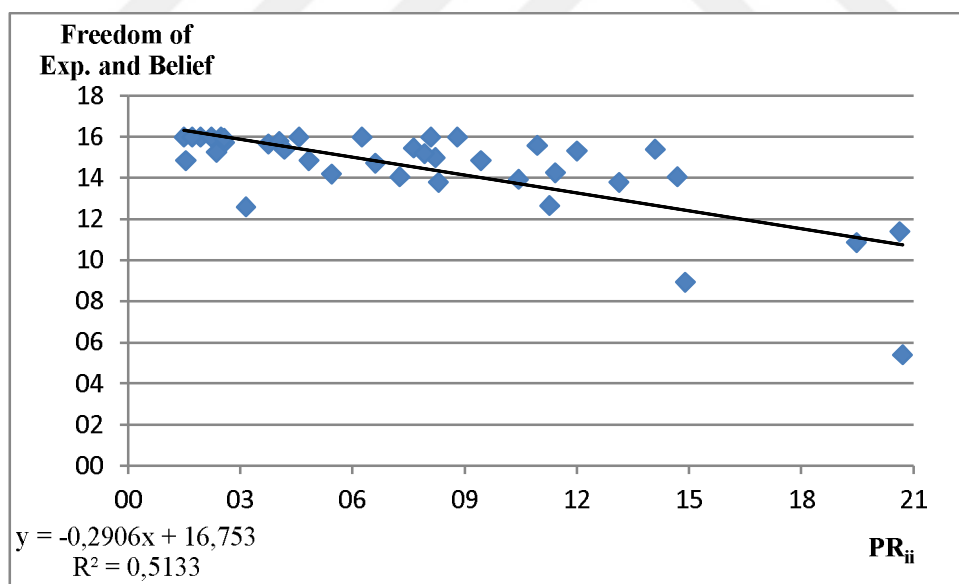
Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 36: FH Freedom of Expression and Belief Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 37: FH Freedom of Expression and Belief Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)

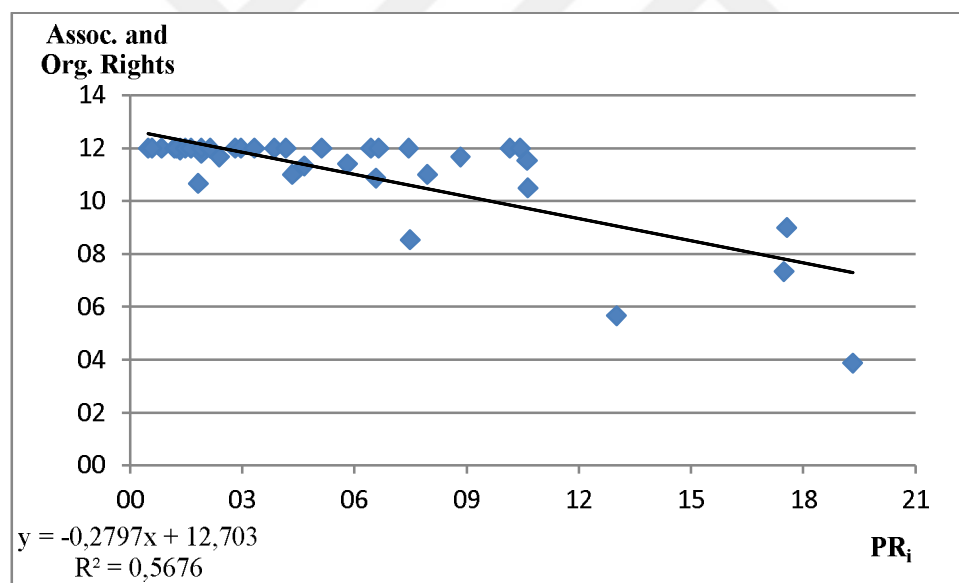


Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

3.1.2.2.7. PR_i and PR_{ii} versus FH Associational and Organizational Rights

The development of associational and organization rights in a society is an important indicator of the level of economic development. There is a significant literature studying the role played by various kinds of associational networks in facilitating institutional advantages and economic growth. Doner and Schneider (2000:261) mention, for instance, the extensive role of business associations in the rapid economic growth in East Asian countries. Looking at the Figures 38 and 39, we see that our indicators of PR_i and PR_{ii} are able to explain approximately half of the variation in the Freedom House's Associational and Organizational Rights index.

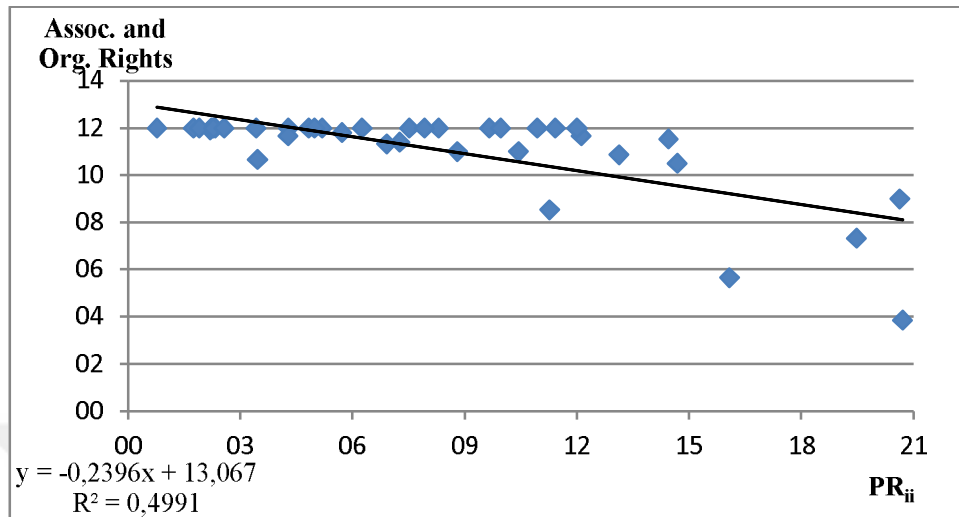
Figure 38: FH Associational and Organizational Rights Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Within the context of the 38 European countries in our sample, we can state that nations with more inclusive policy-making processes also have more developed associational and organizational rights. As was the case in most of our scatter plots, the coefficient on the PR_i variable, -0.28, displays that increases in the inclusiveness of political representation go hand to hand with very significant increases in the level of associational and organizational rights in a society.

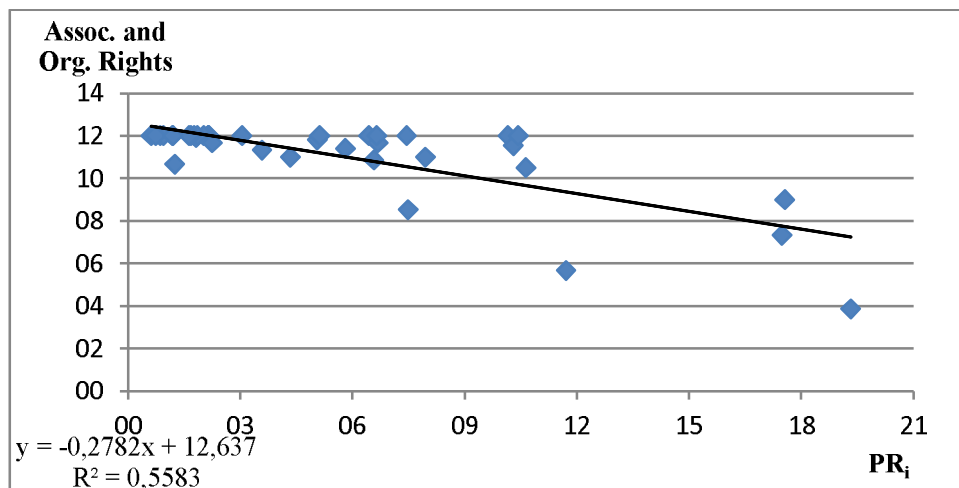
Figure 39: FH Associational and Organizational Rights Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

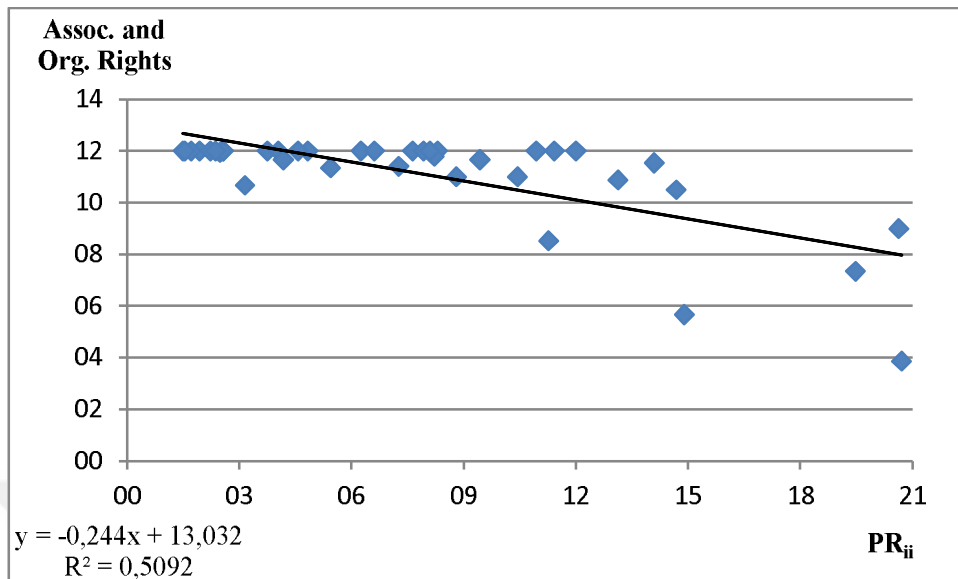
When we look at the relationship between the FH indicator and the long-run averages of our indicators, the significance of the relationships still stays the same, with marginal changes in the R^2 values (Figures 40 and 41).

Figure 40: FH Associational and Organizational Rights Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

Figure 41: FH Associational and Organizational Rights Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)



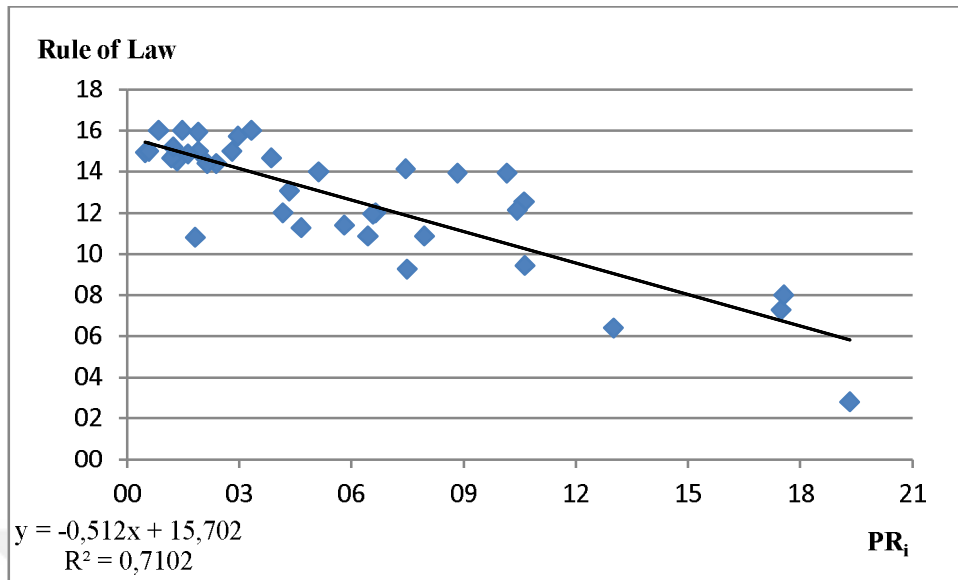
Source: <https://freedomhouse.org/report/freedom-world>, (06.06.2019) and own calculations.

3.1.2.2.8. PR_i and PR_{ii} versus FH Rule of Law

The Freedom House's Rule of Law indicator is one of the popular indicators employed in political science to study the political institution of rule of law (Haggard and Tiede, 2010; Skaaning, 2010; Merry et al. 2015). In a highly influential work, O'Donnell (2004:36) asserts that an ideal legal system in a democracy must uphold political rights and freedoms, through the rule of law. Within this context, then, granted that the PR_i and PR_{ii} are meaningful indicators of the quality of a country's representative institutions, we should expect a statistically significant relationship between the Freedom House Rule of Law indicator and the PR_i and PR_{ii}. Figures 42 and 43 demonstrate a very strong interaction between the indicators.

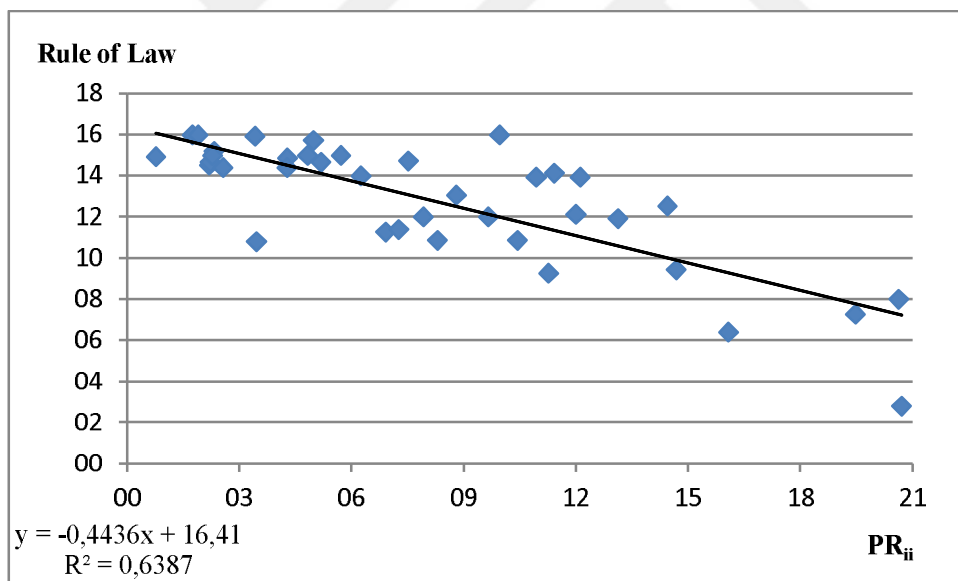
Figures 42 and 43 indeed exhibit R² values of 0.71 and 0.639 between the Freedom House Rule of Law indicator and the PR_i and PR_{ii}. Around 64 to 71 percent of the variation in the FH Rule of Law can be explained by the variations in our indicators for political representation. Basically, it can be stated that a more inclusive institution of political representation is related to a stronger rule of law in the European countries.

Figure 42: FH Rule of Law Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (07.06.2019) and own calculations.

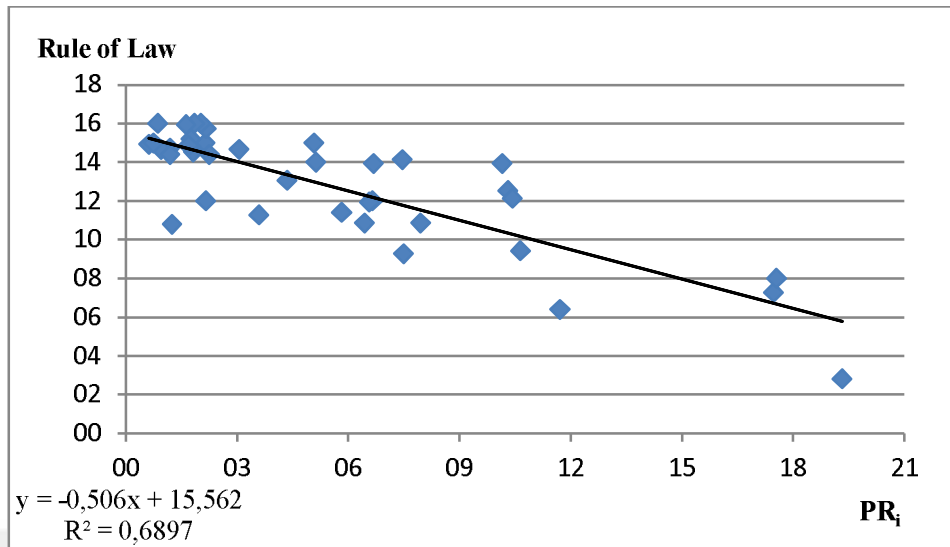
Figure 43: FH Rule of Law Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (07.06.2019) and own calculations.

Testing for the long-run persistence of the institution of political representation also results in similarly significant relationships between the indicators. When we run scatter plots of the same relationship with the 1950-2017 averages of the PR_i and PR_{ii} , the R^2 values go from 0.71 to 0.69 and from 0.639 to 0.642, respectively.

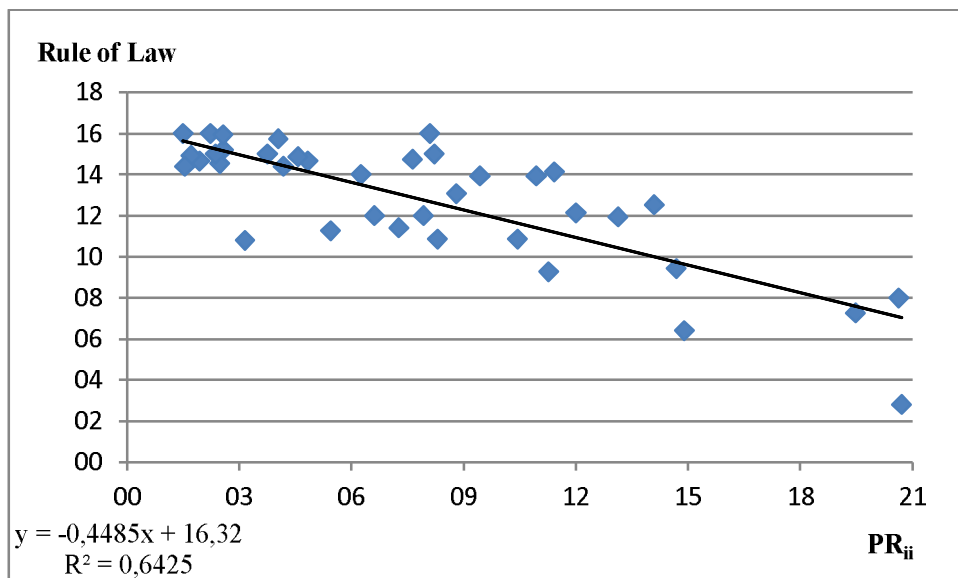
Figure 44: FH Rule of Law Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (07.06.2019) and own calculations.

While the R^2 values have marginally dropped, we find it safe to claim that the long-run trends in the inclusiveness of the institution of political representation are still closely related to the development level of rule of law in a democracy.

Figure 45: FH Rule of Law Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)



Source: <https://freedomhouse.org/report/freedom-world>, (07.06.2019) and own calculations.

3.1.2.3. Political Representation Dataset vs. Economist Intelligence Unit Indicators

Publications by the Economist Intelligence Unit constitute another popular source of indices and indicators for political science (EI Unit, 2012). The Democracy Index, being the main index produced by the EIU, covers a vast majority of the world's population, spanning 165 independent countries and 2 territories for a duration of 14 years (2006-2019). It is calculated based on the primary data gathered by the EIU regarding 60 different indicators of democracy, each of which ranks countries on a scale of 0 to 100 to form five sub-indices labeled as:

- (i) Electoral Process and Pluralism
- (ii) Functioning of Government
- (iii) Political Participation
- (iv) Political Culture
- (v) Civil Liberties.

Towering these five sub-indices is the Democracy Index, calculated as the simple average of the five sub-indices and assigning an overall score to each country and territory between 0 and 10, in addition classifying them as either a “full democracy” (scores greater than 8), a “flawed democracy” (scores equal to or less than 8, and greater than 6), a “hybrid regime” (scores equal to or less than 6, and greater than 4) or an “authoritarian regime” (scores equal to or less than 4)¹⁵.

Similar to the Freedom House indices and indicators, the Freedom Houses indices also comprise a significant deal of information on electoral processes. The sub-indices of Electoral Process and Pluralism, Political Participation and Political Culture are especially related to the institution of political representation. Before comparing the indices to the PR_i and PR_{ij} , it is once again essential to summarize their data sources in order to ensure the presence of a bias-free relationship between the indices and the PR_i and PR_{ij} .

¹⁵ The full methodology for forming the index can be found at:

http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=democracyindex2019_ (09.01.2020).

The election-related indicators used in forming the Democracy Index and its sub-indices mainly concern the following issues regarding the democratic processes in a country:

- Availability of free and fair elections for the national legislature, for the head of government and for the municipalities,
- Whether those elections are actually effective in determining government policies,
- Presence of universal suffrage for all voting-age individuals,
- Whether voters can cast their vote freely, without any threats to their security,
- Whether the rule of law secures equality for all candidates' campaigning opportunities,
- Transparent and fair financing of all political parties,
- Whether political power can be securely transferred from the previous incumbents to the winners of the current election,
- Ease of entry into politics for citizens,
- Presence of realistic prospects for opposition parties to achieve government in an election
- Opportunities for citizens to establish free political and civic organizations, free from intervention and surveillance from the government,
- The extent of influence of foreign powers, military and/or security services on the government, its functions and policies,
- Presence of other economic, religious or various groups who have the power to exercise a level political power that can rival that of the democratic institutions,
- Checks and balances and government accountability to voters
- Electorate's perceptions of the efficiency of their own political rights and free choice,
- Public confidence in government and political parties,
- Voter turnout in elections,

- Whether political rights of women and minority groups are being protected in the political process,
- Ranking of the percentage of the population who are members of political parties and other political organizations.
- Quality of efforts made by the authorities in order to promote political participation by the citizens
- Public perception of political leadership, in the form of a ranking of the proportion of the population who want to be ruled by a strong political leader who is above the democratic institutions,
- Degree of public support for democracy.

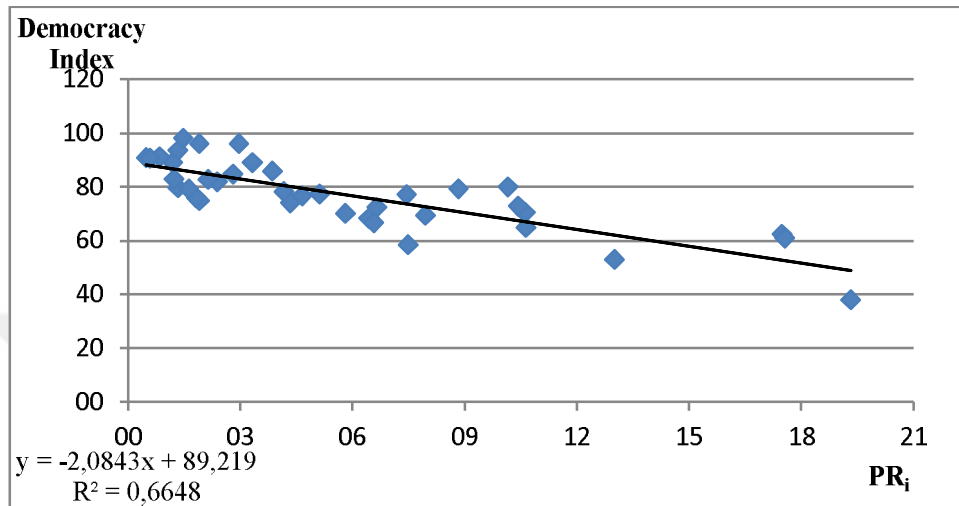
In forming the indices, The EIU itself answers a long list of questions regarding these issues for every country, in the form of a combination of a dichotomous and three point scoring system where the answers are chosen from two or three alternative answers depending on the questions, such as 1 (yes/high), 0.5 (moderate) and 0 (no/problematic). The scores for the 60 indicators are then combined in order to form the scores for the sub-indices and the resulting Democracy Index for each country. At this point, it is safe to infer that any meaningful correlation between the EIU's indices and the PR_i and PR_{ii} must be arising from a relationship that is not only statistically but also conceptually meaningful, as the data used by the EIU in forming the Democracy Index and its sub-indices do not contain common elements with the data we used in forming our indicators. Next then, we present the scatter plots we run between the EIU indices and our indicators.

3.1.2.3.1. PR_i and PR_{ii} versus EIU Democracy Index

Figure 46, we present the scatter plots between the EIU Democracy Index and the PR_i for the 38 European countries in our sample. The Democracy Index values are averages for the years 2006-2018. The PR_i scores are the averages for the years 1990-2017. Figure 46 displays a meaningful relationship between the Democracy Index and the PR_i , with an R^2 at 0.678. The PR_i is once again found to correspond to a good measure of the quality of democracy in the European countries in our sample,

paving the way for a possible way to measure political representation as a central political institution in democracies.

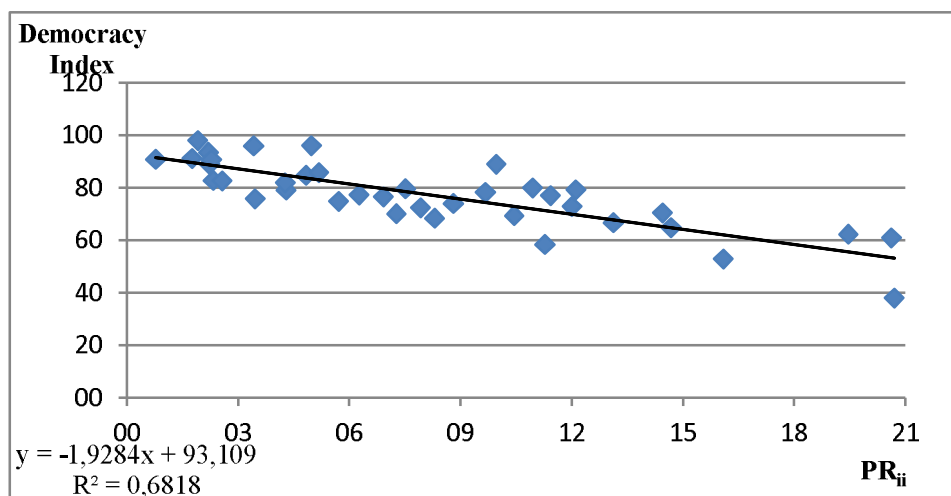
Figure 46: EIU Democracy Index Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

We find that the significance of the relationship marginally increases when we control for the invalid and blank votes in elections. Figure 47 presents this result, as the R^2 value of the relationship increases to 0.682.

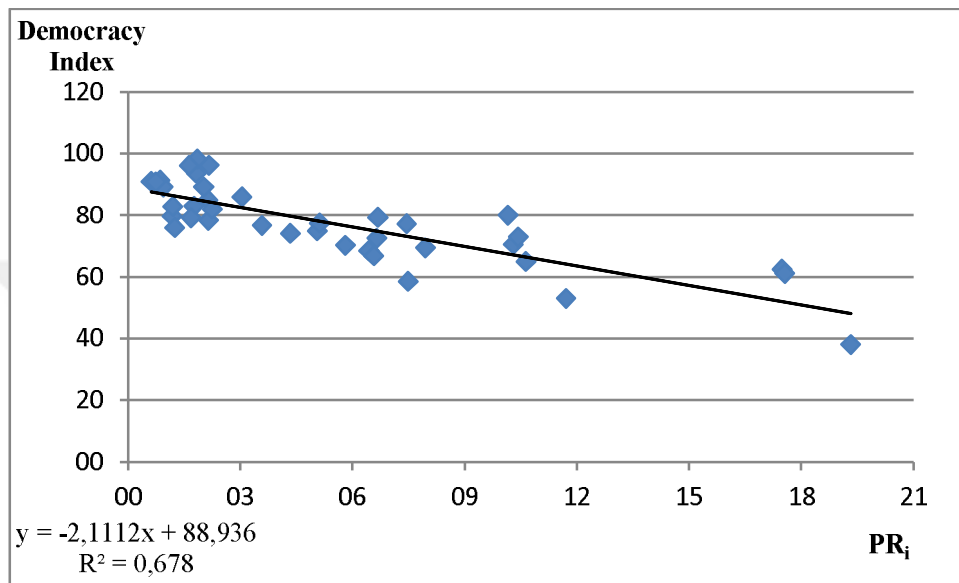
Figure 47: EIU Democracy Index Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

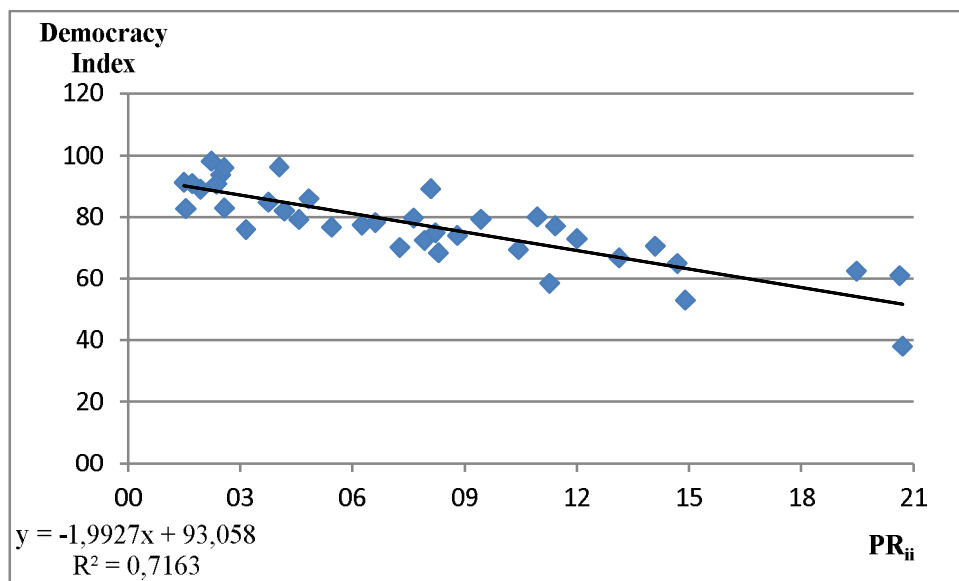
Next, we take into account the long-run averages of the PR_i and PR_{ii} , which further increases the statistical relevance of the relationship. As seen in Figure 48 and 49, the R^2 values rise to 0.678 and 0.716 for the RP_i and RP_{ii} , respectively.

Figure 48: EIU Democracy Index Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 49: EIU Democracy Index Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)



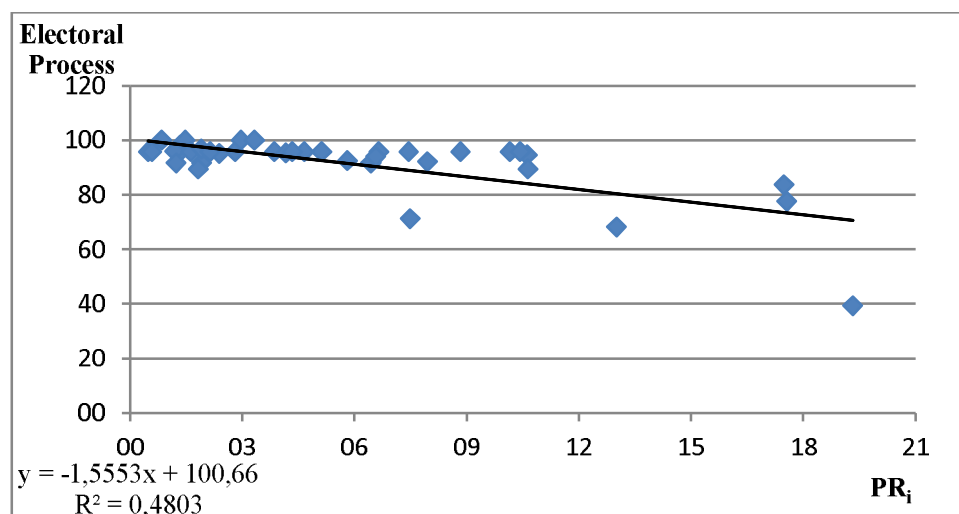
Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

After demonstrating a solid interaction between our indicators of political representation and the EIU's Democracy Index, we next turn to the five sub-indices published by the EIU. Since the Democracy Index is the average of these five sub-indices, significant correlations should be expected. We also believe that we have already summarized the conceptual significance of these indices as they are similar in nature to the indices we have examined until now, for which reason we will keep the discussions brief in these comparisons. Nevertheless we find the effort useful, as it helps us determine what aspects of political institutions are more significantly related to our indicators of political representation.

3.1.2.3.2. PR_i and PR_{ii} versus EIU Electoral Process and Pluralism

Much like the Freedom House's Electoral Process indicator, the EIU Electoral Process and Pluralism presents an alternative measure of the quality of electoral mechanisms worldwide. As seen in Figures 50 and 51, the statistical significance of the relationship between this indicator and the PR_i and PR_{ii} are very close to the case of the FH Electoral Process indicator. Here the R^2 values are 0.48 and 0.403, whereas regarding the relationship with the FH Electoral Process they were 0.477 and 0.41.

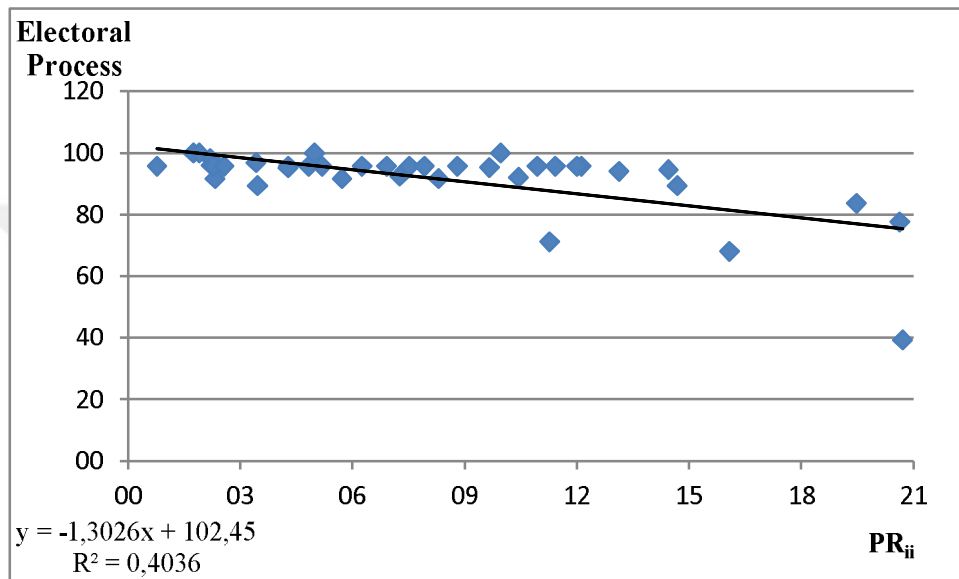
Figure 50: EIU Electoral Process and Pluralism Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

While the repeating significance of the relationship confirms the explanatory powers of our indicators, we also find this as an indication that the Freedom House and Economic Unit Intelligence have very similar mechanisms of evaluating countries' electoral mechanisms.

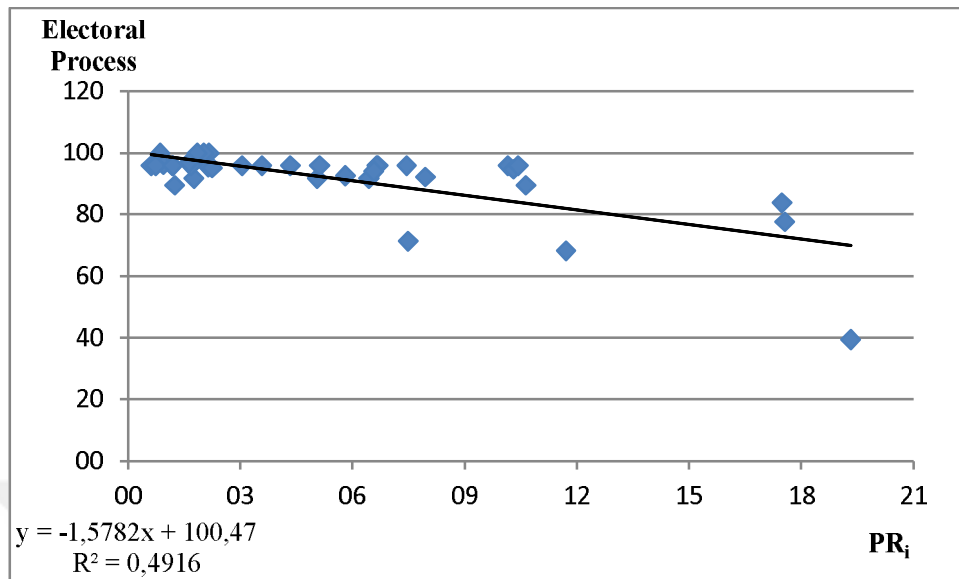
Figure 51: EIU Electoral Process and Pluralism Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

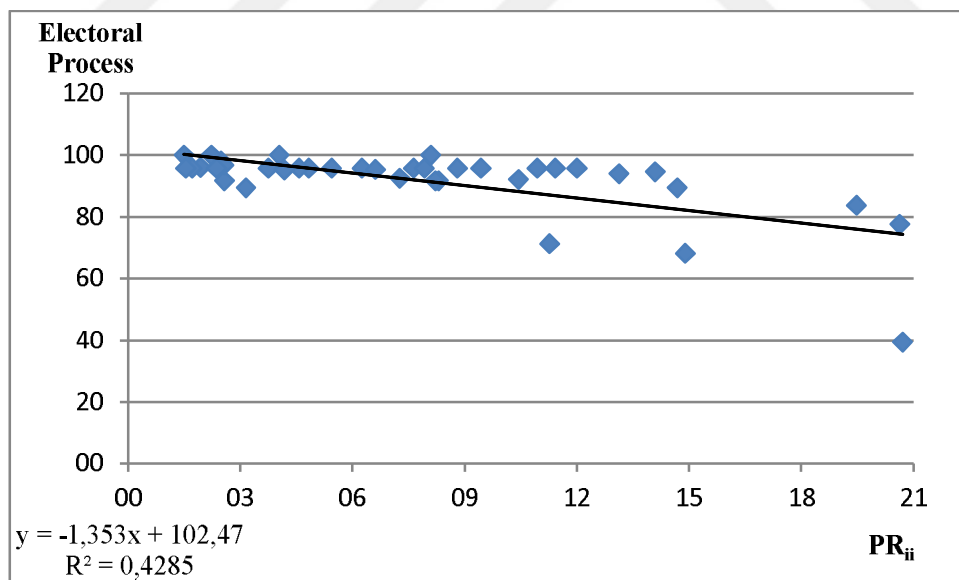
As seen in Figures 52 and 53, plotting the long-run mean scores of the PR_i and PR_{ii} against the EIU Electoral Process and Pluralism indicator eventually also reveals very similar results with the FH Electoral Process comparisons, with R^2 values of 0.492 and 0.429 in the case of the EIU indicator, in comparison to the 0.497 and 0.44 in the case of the Freedom House indicator.

Figure 52: EIU Electoral Process and Pluralism Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 53: EIU Electoral Process and Pluralism Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)

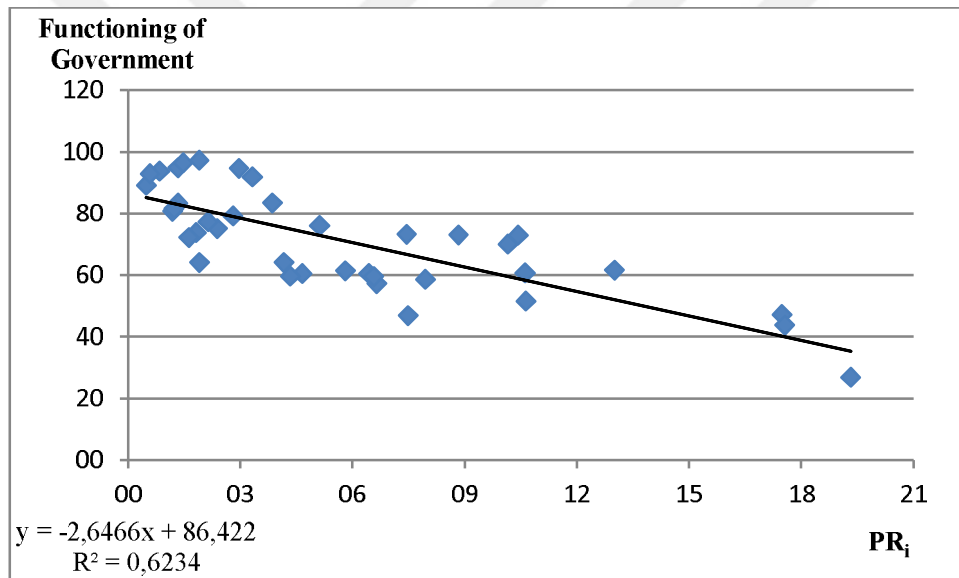


Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

3.1.2.3.3. PR_i and PR_{ii} versus EIU Functioning of Government

The second sub index of the Economist Intelligence Unit, Functioning of Government also presents an alternative account of how efficiently governments function around the world. Figures 54 and 55 show that the PR_i and PR_{ii} are less effective in explaining the variations in the EIU Functioning of Government indicator when compared with their performance against the FH Functioning of Government indicator, with R^2 values of 0.623 and 0.635, whereas the values were 0.74 and 0.70 in the case of the FH indicator.

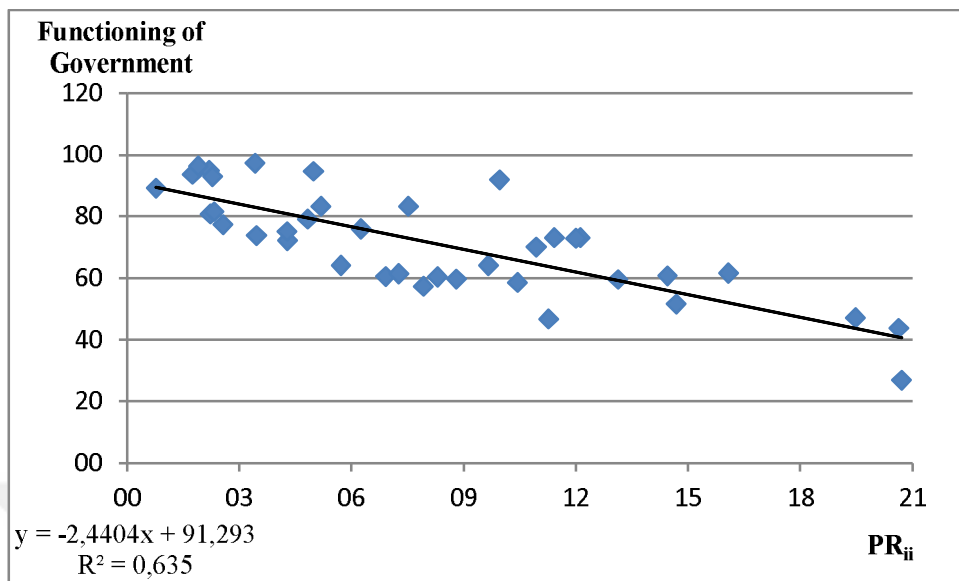
Figure 54: EIU Functioning of Government Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

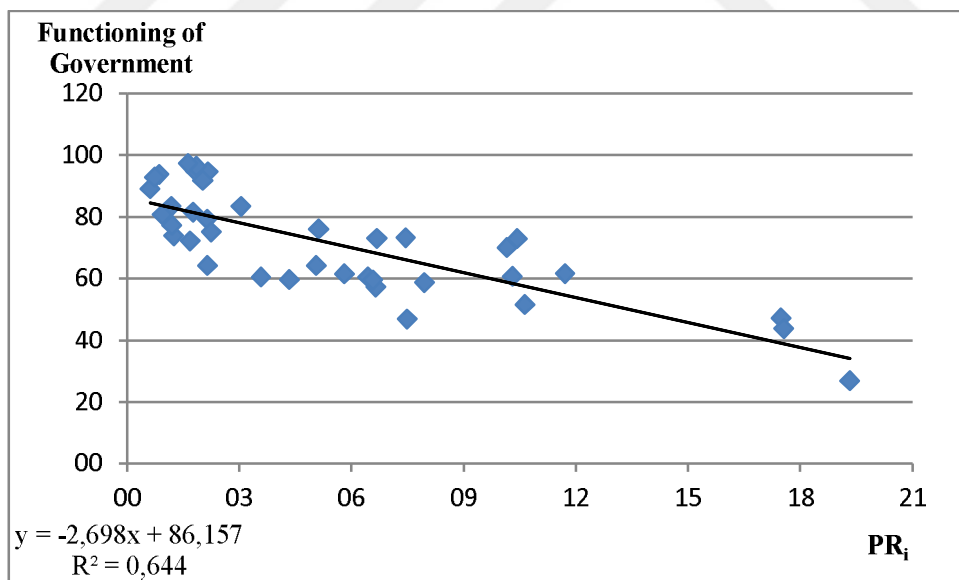
As was the case with the FH Functioning of Government indicator, plotting the long-run PR_i and PR_{ii} mean scores of the sample countries against their EIU Electoral Process and Pluralism mean scores results in an increase in the statistical significance of the relationship. This is reflected in the Figures 56 and 57, where the R^2 values increase to 0.644 and 0.666.

Figure 55: EIU Functioning of Government Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



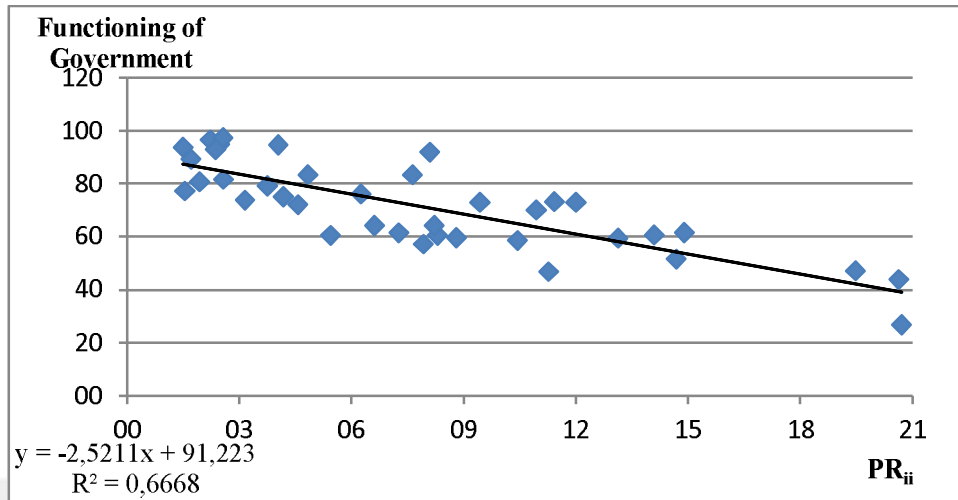
Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 56: EIU Functioning of Government Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 57: EIU Functioning of Government Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)



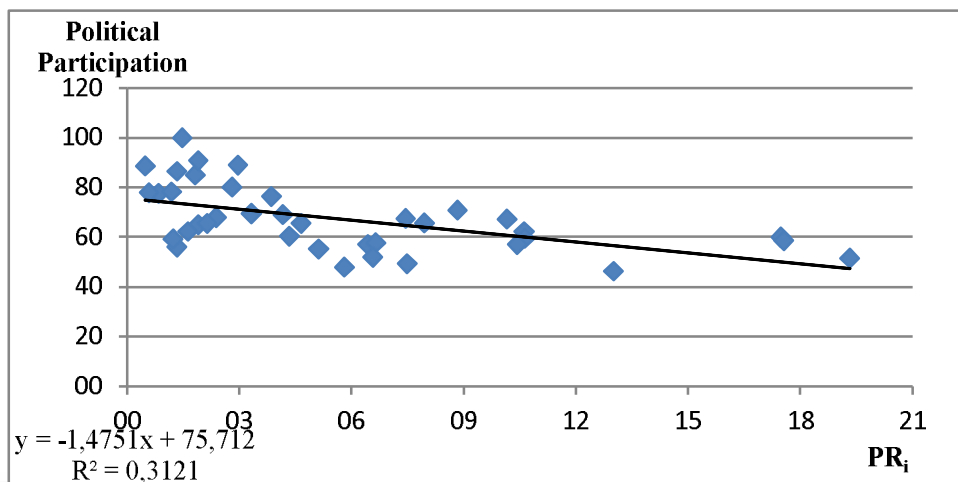
Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

3.1.2.3.4. PR_i and PR_{ii} versus EIU Political Participation

Figure 58 shows that the PR_i can explain only 31 percent of the variation in the EIU Political Participation index, while the PR_{ii} can explain a higher share of it, at almost 40 percent (Figure 59). These values are significantly lower than was the case with the Freedom House's Political Pluralism and Participation index, for which the values ranged from 52 percent to 63 percent in the four scatter plots.

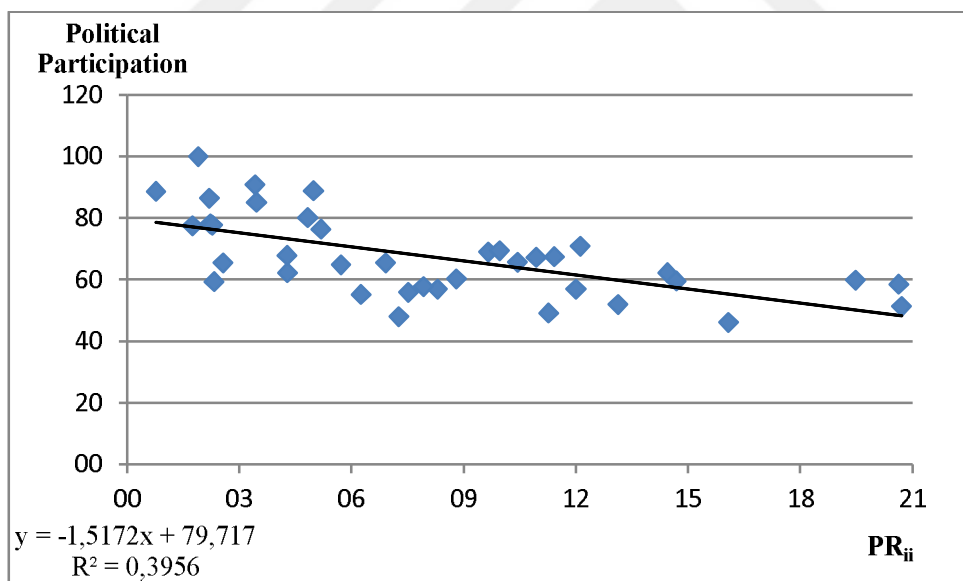
When we plot the long-run averages of the PR_i and PR_{ii} the R² values do not significantly increase, with only marginal rises of approximately two percentage points (Figures 60 and 61). While the relevance of the relationships is comparably less here, we believe that it is still not an irrelevant achievement for our indicators that they can explain around 30 to 40 percent of the variation in the EIU Political Participation index.

Figure 58: EIU Political Participation Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



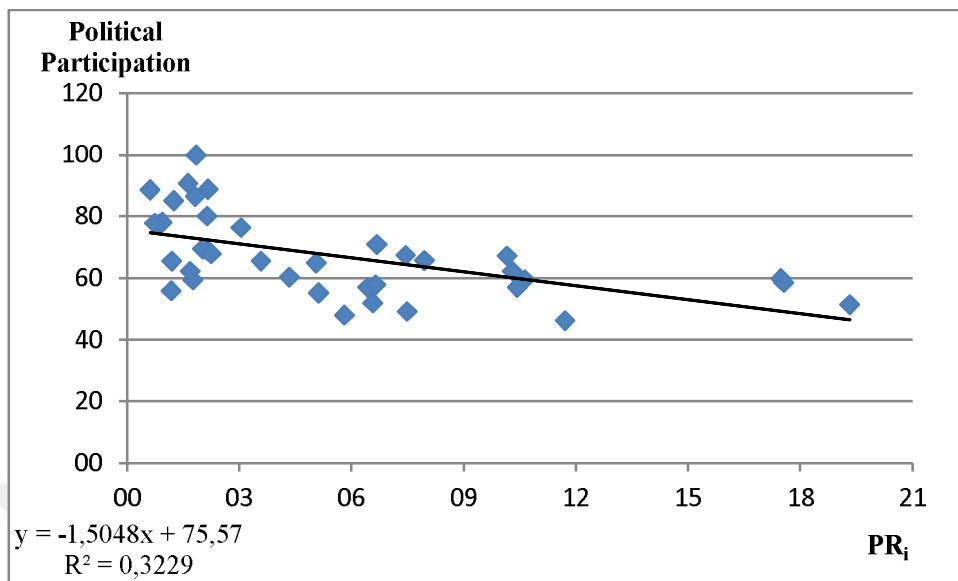
Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 59: EIU Political Participation Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



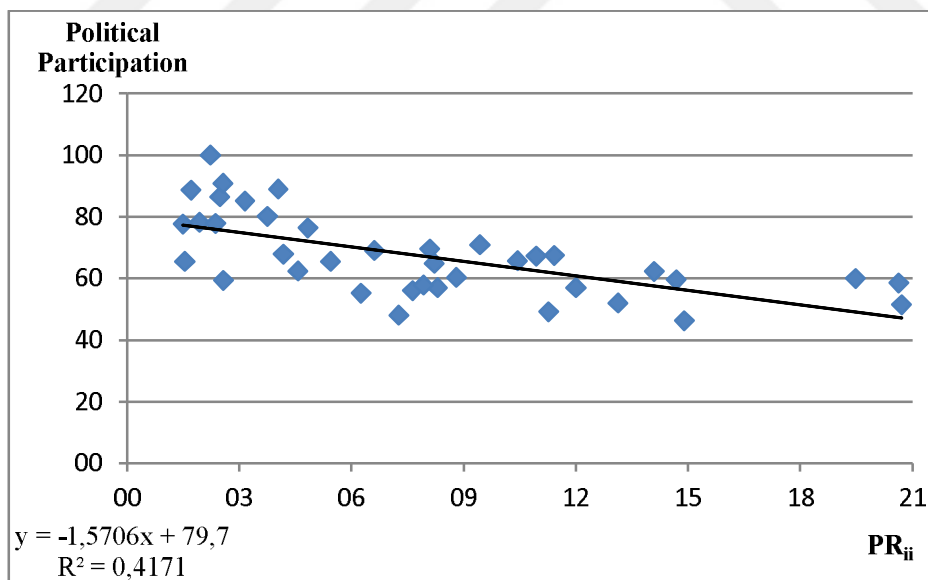
Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 60: EIU Political Participation Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 61: EIU Political Participation Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)

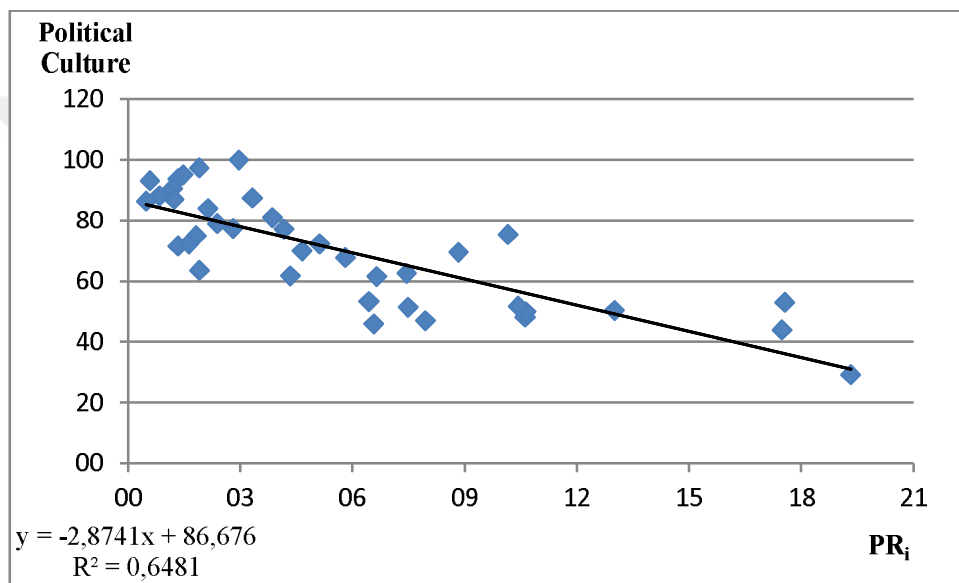


Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

3.1.2.3.5. PR_i and PR_{ii} versus EIU Political Culture

The comparisons with the EIU Political Culture index yield one of the most significant achievements for the indicators of PR_i and PR_{ii} . Figure 62 reveals that almost 65 percent of the PR_i can account for almost 65 percent of the variation in the EIU Political Culture index, which we find remarkable.

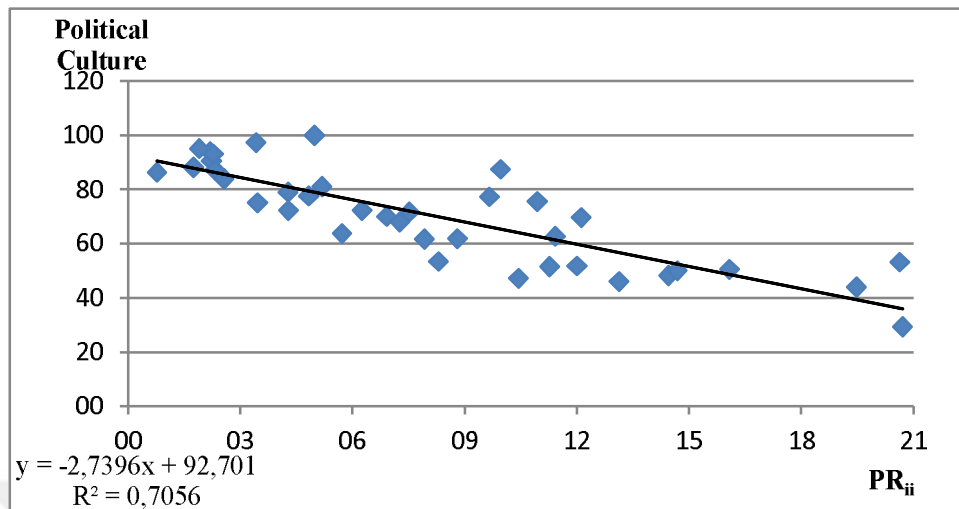
Figure 62: EIU Political Culture Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

The relationship is even stronger in the case of PR_{ii} , as shown in Figure 63, with an R^2 value of 0.706. We think that this relationship can be bidirectional, as in, vast inequalities in political representation can have a large negative impact on the development of a healthy political culture in a society, and while the lack of that culture can be influential in maintaining the inequalities in representation.

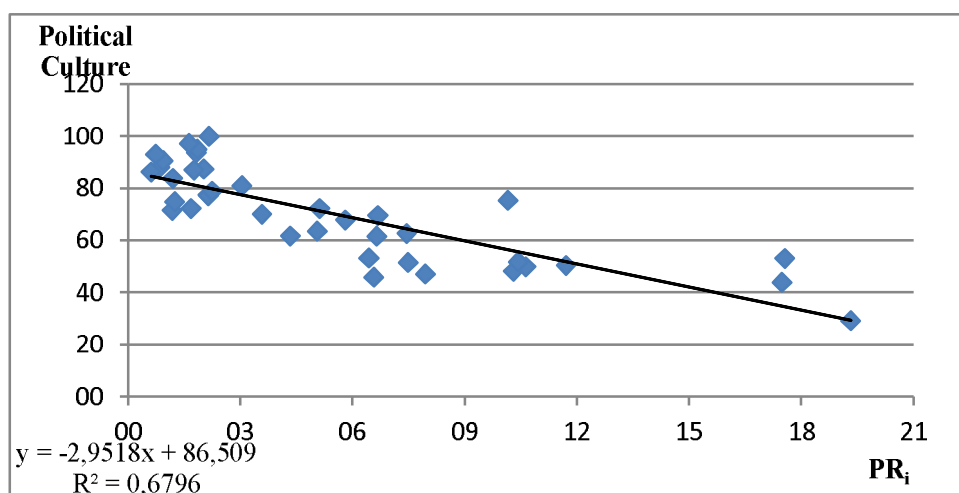
Figure 63: EIU Political Culture Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

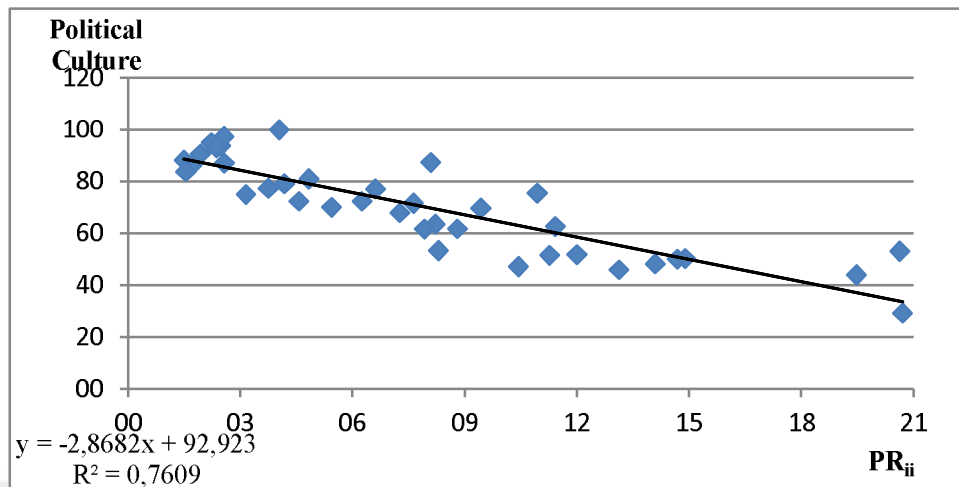
Comparisons with the long-run averages of the PR_i and PR_{ii} also result in significance increases in the relevance of the relationship between the indicators. Figures 64 and 65 show that the R² for the PR_i goes up by more than 3 percentage points, while the R² for the PR_{ii} increases by a more than 5 percentage points. We deem these findings as important indications that political representation and political culture are both more relevant in the long run.

Figure 64: EIU Political Culture Mean Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 65: EIU Political Culture Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)

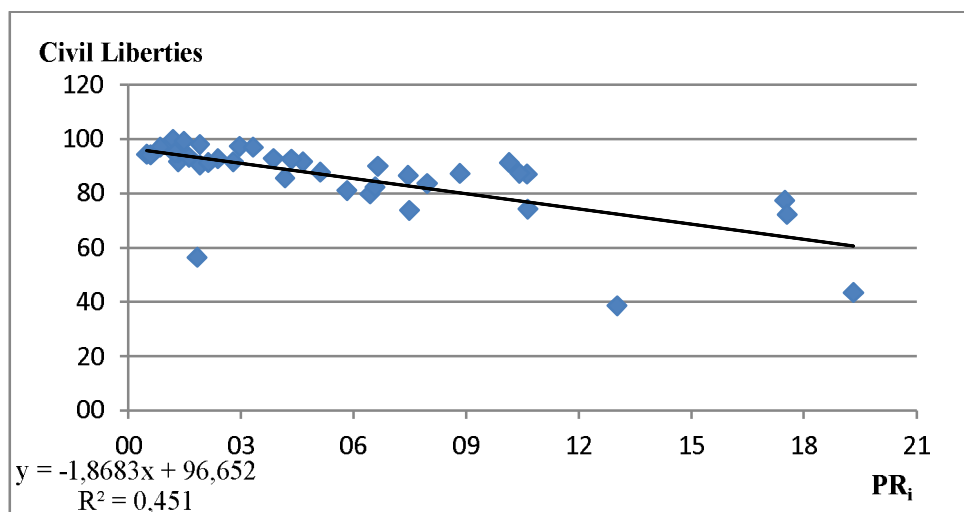


Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

3.1.2.3.6. PR_i and PR_{ii} versus EIU Civil Liberties

The last indicator with which we compare the PR_i and PR_{ii} is the EIU Civil Liberties index. Our indicators were able to account for approximately 50 to 58 percent of the variation in the Freedom House Civil Liberties index. In terms of the EIU index, we find that the explainable variation is less, but still constitutes a good share of fluctuation in the index.

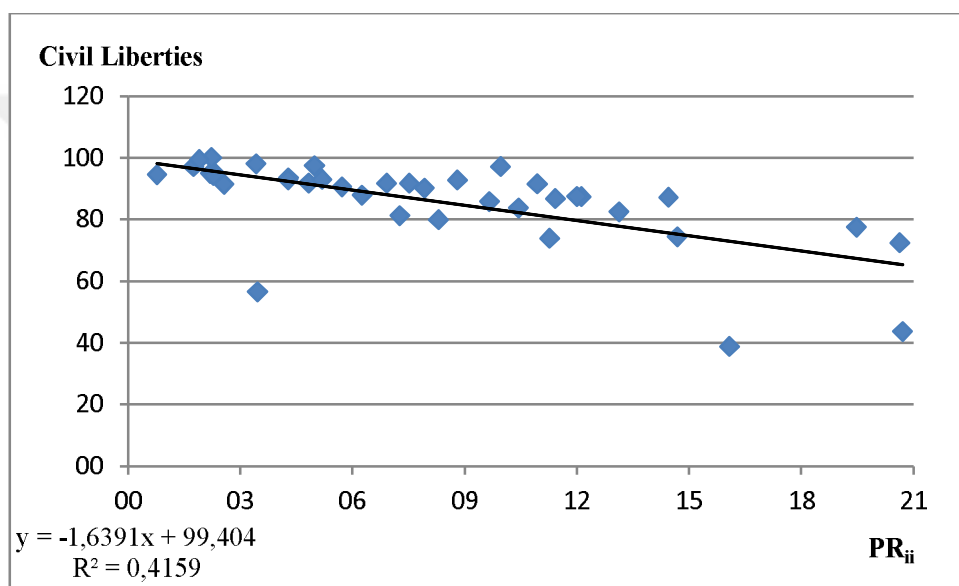
Figure 66: EIU Civil Liberties Mean Scores (2006-2019) vs. PR_i Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figures 66 and 67 show that the relationships between the PR_i and PR_{ii} are significant with respective R^2 values of 0.451 and 0.416. The drop in values in comparison to the Freedom House comparisons is not a normative issue, but rather implies existence of differences in the methodologies of the two institutions in evaluating the same political phenomenon. We are contended to find that our indicators are statistically significant against both of them and this finding only adds to the explanatory strength of our dataset.

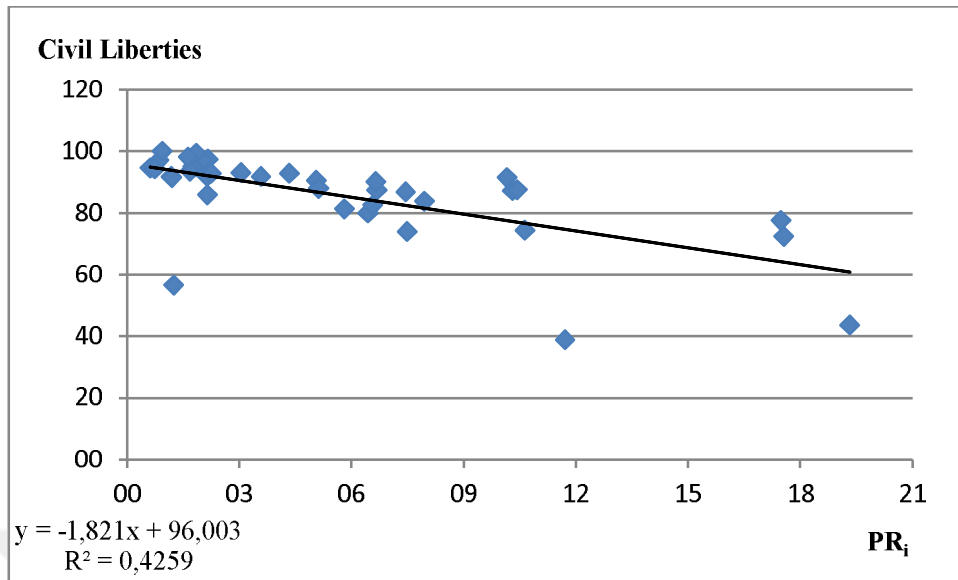
Figure 67: EIU Civil Liberties Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1990-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

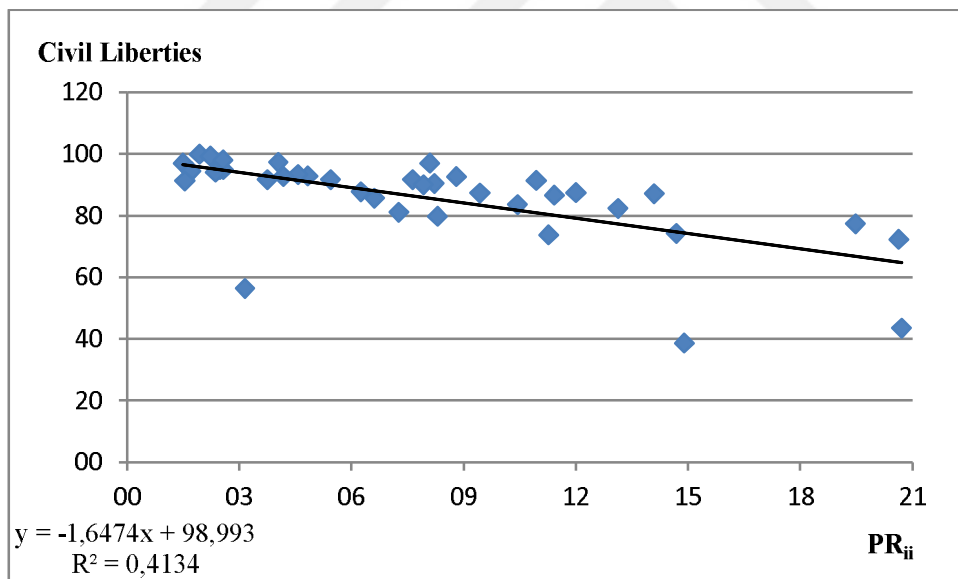
The long-run comparisons, in parallel, do not produce significantly different R^2 values. Figures 68 and 69 reveal, respectively, an approximately 2.5 percentage points of a decrease in the R^2 value for the PR_i , accompanied by an almost equivalent R^2 value for the PR_{ii} .

Figure 68: EIU Civil Liberties Scores (2006-2019) vs. PR_i Mean Scores (1950-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

Figure 69: EIU Civil Liberties Mean Scores (2006-2019) vs. PR_{ii} Mean Scores (1950-2017)



Source: <https://data.eiu.com/default.aspx>, (08.06.2019) and own calculations.

In conclusion, we can state that the examinations of the Political Representation Dataset in the context of other popular datasets in political science have deemed remarkably good results for our indicators of political representation. We are inclined to have a good level of confidence in the results of the empirical analyses we will be conducting with the data we have introduced as part of this

dissertation, as we hope to find out the economic growth implications of political representation.

Next, we introduce the other secondary data sources we have benefitted from in our study.

3.1.3. Other Data Sources

The rest of the data we utilize in our work are from the databases of relevant institutes and other scholarly work. The data used in the empirical analysis are as follows: Real GDP per capita, national saving rates, population, number of employed persons and human capital data are from Penn World Table 9.1. Average years of total schooling data are from Barro and Lee (2013). Trade openness and inflation rates are from World Bank Databank. The data used in descriptive analysis are as follows: Human Development Index, Inequality in Life Expectancy and Gender Inequality Index data are from United Nations Development Programme. Political Rights, Civil Liberties, Electoral Process, Political Pluralism and Participation, Functioning of Government, Freedom of Expression and Belief, Associational and Organizational Rights, Rule of Law data are from Freedom House. Democracy Index, Electoral Process and Pluralism, Functioning of Government, Political Participation, Political Culture, Civil Liberties data are from Economist Intelligence Unit.

3.2. METHODOLOGY

In this section we describe the empirical methodology of our work. We start with descriptive statistical analyses of the two major variables that we created. PR_i and PR_{it} scores of countries and then their relationship with economic growth rates are analyzed graphically. We then describe the panel-data model which we use in regression analysis, in order to provide a more structural answer to our research question.

3.2.1. Descriptive Statistics

We apply scatter plots of countries' average economic growth rates and their mean PR_i and PR_{it} scores in the post-1950 period, in order to take a first look at the relationship between political representation and economic growth rates before we delve into econometric analysis. In this section, we first examine the cross-country relationship between representation and growth, after which we look at the descriptive statistics of the relationship at the individual country-level in order to check whether countries differ in terms of the effects of their representative institutions on their economic growth rates.

3.2.2. Regression Analysis

After we are through with descriptive statistics, we move on to econometrical analysis. The theoretical foundation of our econometrical analysis is the Solow version of the neoclassical economic growth model. The seminal paper by Mankiw et al. (1992) famously revived the Solow growth model by proposing an augmented version of it that incorporated human capital as an additional determinant of economic growth. This way, the authors demonstrated that the Solow growth model indeed had significant explanatory power. Nevertheless, the cross-section approach in Mankiw et al. (1992) is found to be problematic in its estimation. The cross-section estimation eliminates a significant amount of valuable information by using a period average for every country in the sample. It also suffers from a high level of sensitivity to measurement error (Temple, 1998:372) and endogeneity bias (Card, 1999:1802).

Panel-data regressions are useful in solving some of the problems with cross-section estimations. Barro and Lee (1994) worked toward the solution of the endogeneity bias, as they split annual data between 1965 and 1985 into two ten-year sub-periods and applied a generalized least squares (GLS) method in which they instrumented endogenous variables by using the lagged values of those variables. While this method was valid only in the case of random effects, it has been reported that lagged values of dependent variables invalidate the random-effect assumption.

Despite the fact that the GLS method provides a solution for serial-correlation and some of the endogeneity bias, it does not correct for the omitted-variable bias and non-random country effects (Caselli et al., 1996:368).

Caselli et al. (1996:368) report that Knight et al. (1993), Loayza (1994), and Islam (1995) are some of the significant panel-data studies that deal with the issue of individual country effects, yet they suffer from the endogeneity bias which they totally ignore. The endogeneity bias in empirical studies of economic growth mostly arises from the fact that there can be two alternative accounts of the underlying relationship between education and income: While it is likely true that a higher level of education can pave the way for a higher level of income for individuals, it may also be equally possible that individuals with a higher level of income can simply have more resources with which they can easily choose to acquire more schooling (Card, 1999:1802). Thus, it becomes difficult to know whether schooling causes income, or income causes schooling; the dilemma of which cripples the empirical results of studies that do not deal with the endogeneity bias.

The generalized method of moments (GMM) estimator has been shown to be a more consistent estimator in cases of endogenous regressors (Windmeijer and Santos Silva, 1998:282) in comparison to ordinary least squares (OLS) and within-group estimators (Hsiao, 1986; Nickell, 1981). The GMM approach in Caselli et al. (1996), for instance, provided a more efficient solution both to measurement errors (Temple, 1998:373) and the endogeneity bias. On the other hand, the standard difference GMM estimation in Caselli et al. (1996) also performs poorly in empirical studies with relatively short panels, for the lagged observation values provide weak instruments for first-differenced variables (Blundell and Bond, 2000:322). The differenced GMM estimate of the lagged dependent variable will be biased downward in small samples when the instruments are weak (Blundell and Bond, 2000; Hoeffler, 2002). The system GMM estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998) has been reported to be the most effective solution to the endogeneity bias as the consistency and efficiency of its parameter estimates are not altered in the face of endogenous regressors. Bond et al. (2001) is a strong proponent of its use in empirical growth models and the estimator

has almost become the norm in empirics of economic growth, as it produces stronger instrument variables than the difference GMM estimation (Blundell et al., 2000).

In this study, we use a two-step System GMM procedure in estimating the convergence equation in Mankiw et al. (1992) in a panel setting, which has been shown by Blundell and Bond (1998, 2000), Blundell et al. (2000) and Windmeijer (2005) to produce more accurate inferences than one-step system GMM, with better asymptotic and finite sample properties. The two-step system GMM estimator is consistent as long as it is satisfied that there is no serial correlation in the error term and the instrument variables are strong, as such they do not correlate with the error term. The Arellano-Bond test is used in order to check for the presence of serial correlations in the first and second orders of the first differenced residuals. The Hansen test of overidentifying restrictions are used to check for the validity of the instrument variables. Additionally, the null hypothesis of the difference-in-Hansen test should not be rejected to confirm the lack of multiple instruments. Two other criteria for use of the two-step GMM estimation is that (i) the time points in the sample should be smaller than the number of cross-section units, which we achieve by splitting our time period into 5-year sub-periods in line with the widespread approach in the literature, and (ii) that the number of cross-section units should be larger than the number of instrument variables, which is related to the specification of the regression equation in the system GMM estimation. Following Mankiw et al. (1992), we estimate a human capital augmented version of the Solow model subject to the following regression equation, into which our indicators of political representation enter as our main variables of interest:

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

The model dictates that the dependent variable, economic growth rate of per capita real GDP is theoretically a function of the initial level of per capita real GDP at the beginning of a period, saving (investment) rate, human capital, and the sum of the three variables of population growth, technological change and depreciation. Hence, in Eq. (1), the dependent variable is the growth rate of real GDP per capita

$(\ln(y_{i,t}) - \ln y_{i,t-1}))$. The right-hand side variables include the determinants of economic growth. β_1 gives the coefficient of real GDP per capita of the previous period $(\ln y_{i,t-1})$ and is expected to be negative, which is consistent with the conditional income convergence idea. β_2 , β_3 , and β_4 are the coefficients of saving rate, effective depreciation rate of capital, and human capital, respectively. In line with the related literature, β_2 and β_4 are expected to be positive and β_3 is expected to be negative. In addition to the theoretical determinants of economic growth, we then add to the model our indicators of political representation, namely the PR_i and PR_{ii} (rp_{it}). μ_i and ϕ_t gives unobserved country-fixed effects and time effects, respectively, while ε_{it} is the usual error term.

In interpreting the regression output, the initial level of per capita real GDP should have a negative effect on the rate of economic growth. This relationship is the basic building stone of the convergence literature, as poorer countries are expected to grow faster. The investment/saving rate should have a positive effect on economic growth, as expected. While human capital should also have a positive effect on growth, the sum of population growth rate, rate of technological change and depreciation rate has an expected sign of negative. The expected signs of the PR_i and PR_{ii} indicators are, on the other hand, what constitutes our main interest in the empirical analysis. Concerning our first research hypothesis, a statistically significant coefficient of β_5 in our results would allow us to reject the null hypothesis of no relationship between political representation and economic growth, thus allowing us to declare the presence of a significant relationship between political representation and economic growth. If the sign on the coefficient is negative, we infer that a more inclusive institution of political representation has a positive effect on economic growth, and vice versa. If the coefficient is statistically insignificant, there is no visibly relevant relation between political representation and economic growth, at least concerning our measure of the institution.

In testing our second research hypothesis, we conjure two additional variables in the form of the natural logarithms of the squares of the PR_i and PR_{ii} . These variables allow us to test the hypothesized U-shaped relationship between political representation and economic growth. The combination of a statistically significant, negative sign for the PR_i (PR_{ii}) coupled with a statistically significant positive sign

for the PR_i (PR_{it}) would allow us to reject the null hypothesis and declare the presence of an inverse U-shaped relationship between political representation and economic growth. The equation for these two models is given in Equation 2 below.

$$\ln(y_{it} - y_{it-1}) = \beta_0 + \beta_1 \ln y_{it-1} + \beta_2 \ln s_{it} + \beta_3 \ln[n_{it} + g_{it} + \delta_{it}] + \beta_4 \ln h_{it} + \beta_5 \ln rp_{it} + \beta_6 (\ln rp_{it})^2 + \mu_i + \phi_t + \varepsilon_{it} \quad (2)$$

The time period covered by our econometric analysis is 61 years, between 1950 and 2010. While the Political Representation Dataset covers the years 1950-2017, the fact that human capital data in the Barro and Lee (2013) dataset is only available until the year 2010 forces us to drop the years 2011 to 2017 from our sample. The period is divided into 5-year sub-periods, in line with the widespread approach in panel-data economic growth empirics. The dependent variable in the 1955 observation, accordingly, is the average rate of economic growth between 1950 and 1955. The saving rates, level of human capital, population growth rates, rates of technological change, depreciation rates and the PR_i and PR_{it} scores are also the averages in the 1951-1955 period. Following the related literature, depreciation rate and technological change are assumed to be fixed over time and across countries. Hence, their sum $[g_{i,t} + \delta_{i,t}]$ are assumed to be equal to 0.05 following Mankiw et al. (1992), Islam (1995) and Caselli et al. (1996). We use the natural logarithm of all variables, in line with the literature. Table 2 presents a summary of our variables and their expected signs.

In the next section, we report on the results of our empirical analyses. We first provide information regarding our descriptive statistical analyses, in the form of scatter plots, followed by the results of our regression analyses, in order to shed light on the relationship between political representation and economic growth.

Table 2: Regression Variables

Dependent variable: log differences in GDP per working person			
Variable	Definition	Source	Expected Sign
$\ln(y_{it}-y_{it-1})$	Natural logarithm of average growth of per capita real GDP in a period	Penn World Table 9.1	(Dependent variable)
$\ln(y_{it-1})$	Natural logarithm of initial level of per capita GDP in a period	Penn World Table 9.1	(-)
$\ln(s_{it})$	Natural logarithm of average saving rate in a period	Penn World Table 9.1	(+)
$\ln(h_{it})$	Natural logarithm of average human capital index in a period	Penn World Table 9.1	(+)
$\ln(sch_{it})$	Natural logarithm of average total schooling years in a period (instrument)	Barro and Lee (2013)	
$\ln(n_{it}+g_{it}+\delta_{it})$	Natural logarithm of average of sum of population growth rate, rate of change of technology and depreciation in a period	Penn World Table 9.1	(-)
$\ln(rpi_{it})$	Natural logarithm of the average of proportion of voters excluded from processes of political representation to the whole electorate in a period, excluding invalid and blank votes	Own calculations on election data on every individual country. Sources in Appendix 1.	(?)
$\ln(rpii_{it})$	Natural logarithm of the average of proportion of voters excluded from processes of political representation to the whole electorate in a period, including invalid and blank votes	Own calculations on election data on every individual country Sources in Appendix 1.	(?)
$\ln(rpi_{it})^2$	Square of $\ln(rpi_{it})$	Own calculations	(?)
$\ln(rpii_{it})^2$	Square of $\ln(rpii_{it})$	Own calculations	(?)

CHAPTER FOUR

EMPIRICAL RESULTS

In this section we present and discuss our empirical findings. We first present scatter plots of the relationship between the sample countries' mean per capita real GDP levels and their mean PR_i and PR_{ii} scores in the 1950-2010 period, as a first experiment. While the relationship between per capita income levels and political representation is conceptually and empirically different than the relationship between per capita income growth and political representation, we believe that it serves as a good starting point from which we can then move on to empirics of economic growth. We then look for a relationship between mean growth rates and mean PR_i and PR_{ii} scores in the same period, also in the form of scatter plots. We conclude our descriptive analysis by reporting on the relationship between political representation and economic growth at the country level. After the descriptive analysis, we present the results of our econometric analysis in the form of a two-step system GMM estimation of the augmented Solow growth model.

4.1. DESCRIPTIVE STATISTICS

Figure 70 demonstrates the relationship between mean per capita real GDP levels and mean PR_i scores of the 38 European countries in our sample between 1950 and 2010. It is apparent that around 27 percent of the variation in the average per capita real GDP of the countries can be explained by the variation in the average PR_i scores in this same period, vice versa. While this result does not have directly relevant implications for the relationship with economic growth, we can initially infer that richer countries have more inclusive processes of political representation, without reservations for the direction of causation.

Figure 71, on the other hand, displays that the explanatory power of political representation increases to account to a total variation of 33 percent in average incomes in the same period, when we take into account invalid and blank vote (PR_{ii}). While still holding no relevance for what consequences political representation may have for economic growth, we believe that these results constitute valuable findings

in their own domain, as a first experiment into the relationship between representation and the growth rates of per capita income.

Figure 70: Average Per Capita Real GDP (1950-2010) versus Mean Scores of PR_i (1950-2010)

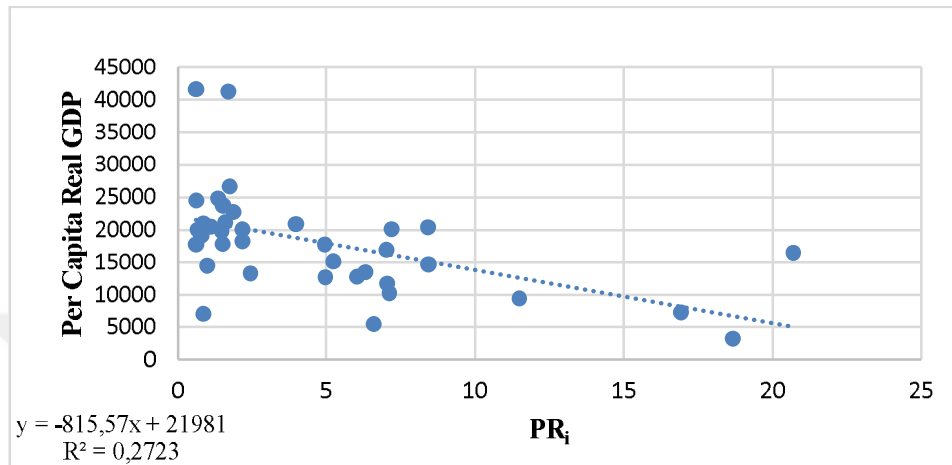
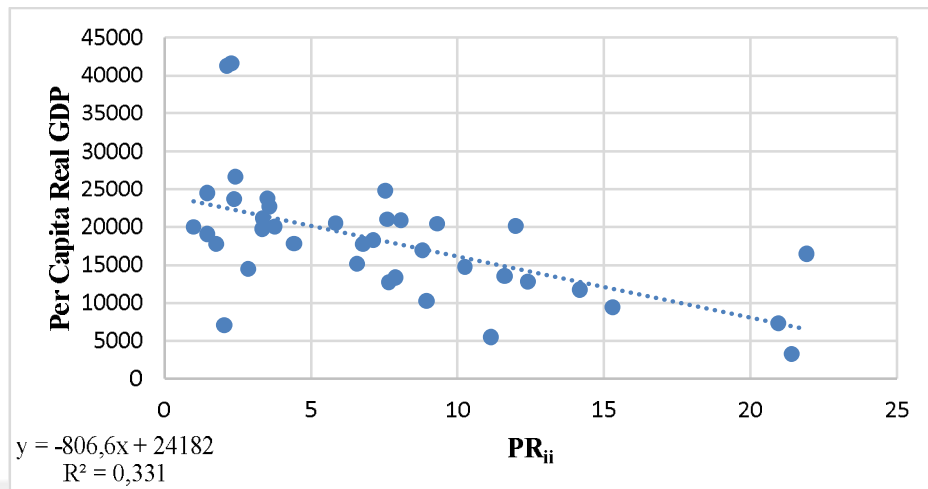


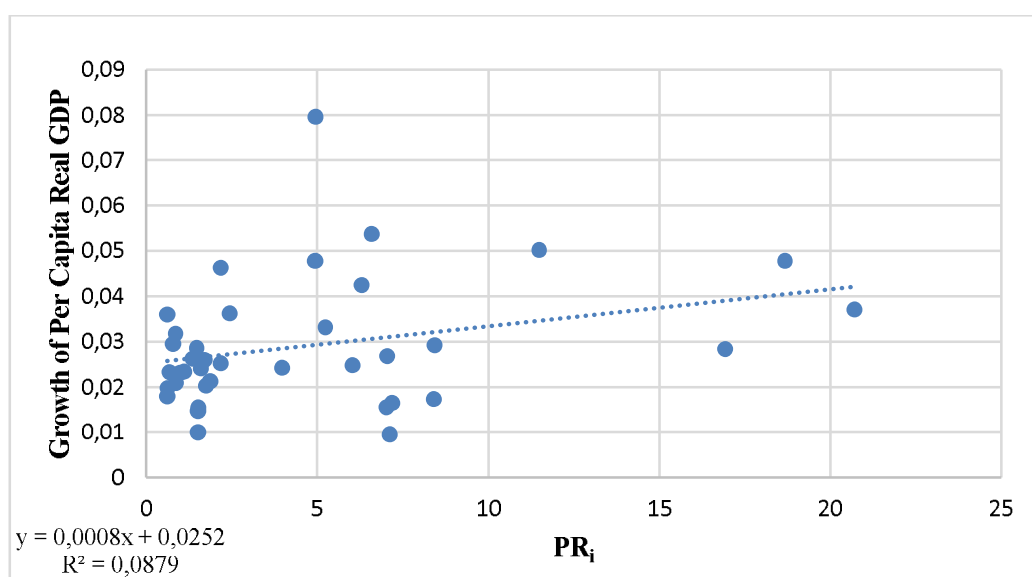
Figure 71: Average Per Capita Real GDP (1950-2010) versus Mean Scores of PR_{ii} (1950-2010)



Source: www.ggd.net/pwt, (19.05.2018) and own calculations.

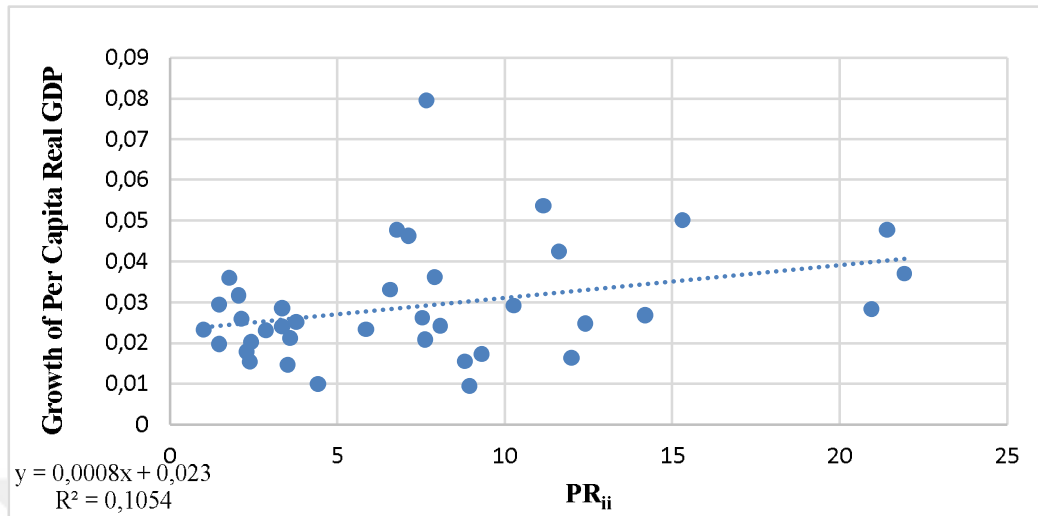
Figure 73 demonstrates that the R^2 increases to 0.105 when we utilize the PR_{ii} instead of the PR_i . While this level of the R^2 does not indicate a totally non-existent relationship, it is still weak, obviously far from being robust enough to allow us to infer that there seems to exist a significant relationship between political representation and economic growth in European democracies.

Figure 72: Average Growth of Per Capita Real GDP (1950-2010) versus Mean Scores of PR_i (1950-2010)



Source: www.ggd.net/pwt, (19.05.2018) and own calculations.

Figure 73: Average Growth of Per Capita Real GDP (1950-2010) versus Mean Scores of PR_{ii} (1950-2010)



Source: www.ggd.net/pwt, (19.05.2018) and own calculations.

As a last step before we report the results of our econometric analysis, we want to report our findings regarding the country-level relationships between political representation and economic growth. The intuition behind this inquiry arises from the complexity of the institution of political representation that have also made it difficult to gather stable cross-country data in the literature: Since countries vary significantly in terms of the mechanisms of their representative institutions, we suspect that the institution can also vary in its effect on economic growth, from country to country. Some nations may have made advances in the institutional arrangements surrounding their representative institutions which allow for stronger links from political representation to economic growth, while some may not have performed equally well in that respect, leaving the political institution of representation in a state of irrelevance for economic growth. In order to shed light into whether such heterogeneity exists between countries in terms of the growth-implications of their processes of political representation, we present in Table 3 the R^2 values for each country, of the relationship between annual, rather than average, values of the PR_i and PR_{ii} and the corresponding annual economic growth rates, throughout the 1950-2010 period.

Table 3: Annual Economic Growth Rates Versus Annual PR_i Scores

Rank	Country	R ²	Coef. Sign	Democracy Category	EIU Democracy Index (2019)
1	Latvia	0.61	+	Flawed Democracy	7.49
2	Croatia	0.36	-	Flawed Democracy	6.57
3	Ukraine	0.31	+	Hybrid Regime	5.9
4	Italy	0.29	-	Flawed Democracy	7.52
5	Cyprus	0.25	+	Flawed Democracy	7.59
6	Poland	0.25	+	Flawed Democracy	6.62
7	France	0.20	-	Full Democracy	8.12
8	Sweden	0.14	-	Full Democracy	9.39
9	Serbia	0.13	-	Flawed Democracy	6.41
10	Spain	0.11	+	Full Democracy	8.29
11	Israel	0.10	-	Flawed Democracy	7.89
12	Greece	0.10	-	Flawed Democracy	7.43
13	Germany	0.09	+	Full Democracy	8.68
14	Slovenia	0.09	+	Flawed Democracy	7.5
15	Bulgaria	0.08	-	Flawed Democracy	7.03
16	Czechia	0.08	-	Flawed Democracy	7.69
17	Turkey	0.06	+	Hybrid Regime	4.09
18	Austria	0.06	+	Full Democracy	8.29
19	Romania	0.06	+	Flawed Democracy	6.49
20	Ireland	0.06	+	Full Democracy	9.24
21	Portugal	0.05	-	Full Democracy	8.03
22	Belgium	0.05	+	Flawed Democracy	7.64
23	Malta	0.05	+	Flawed Democracy	7.95
24	Denmark	0.04	+	Full Democracy	9.22
25	Moldova	0.03	+	Hybrid Regime	5.75
26	Estonia	0.02	+	Flawed Democracy	7.9
27	Hungary	0.02	-	Flawed Democracy	6.63
28	Russia	0.02	-	Authoritarian Regime	3.11
29	Slovakia	0.02	+	Flawed Democracy	7.17
30	Iceland	0.02	-	Full Democracy	9.58
31	Finland	0.02	+	Full Democracy	9.25
32	Lithuania	0.02	+	Flawed Democracy	7.5
33	United Kingdom	0.01	-	Full Democracy	8.52
34	Luxembourg	0.00	-	Full Democracy	8.81
35	Albania	0.00	+	Hybrid Regime	5.89
36	Switzerland	0.00	-	Full Democracy	9.03
37	Netherlands	0.00	+	Full Democracy	9.01
38	Norway	0.00	+	Full Democracy	9.87

Source: PR_i data are based on own calculations on election data. Economic growth rates are from Penn World Table 9.1. Democracy category and Democracy Index data are from Economist Intelligence Unit's Democracy Index.

http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=democracyindex2019, (29.04.2020)

Table 3 ranks countries according to the respective R^2 values produced by the scatter plots (which we do not display here for space concerns) between their annual economic growth rates in the 1950-2010 period and their annual PR_i scores in the same period. In other words, the countries at the top of the list display stronger a relationship between the degree of the inclusiveness of their processes of political representation and their economic growth rates, while the countries at the bottom display weak to non-existent relationships in that respect. The signs of the coefficients in the scatter plots, in which the PR_i scores are taken as the independent variables, are seen to change from country to country. For instance, Latvia, the country at the very top of Table 3 exhibits a positive relationship between PR_i and economic growth, which suggests that the economy of Latvia may have grown faster under less inclusive, in other words, more extractive processes of political representation. Italy, on the other hand with an R^2 of 0.29 and a negative coefficient on PR_i , may have grown faster under more inclusive processes of political representation in the post-1950 period. A trend toward a negative relationship between the inclusiveness of political representation and economic growth can be seen in four of the top six countries in Table 3, all of which are flawed democracies. Additionally, a peculiarity about Table 3 is that the top of the list is dominated by flawed democracies, while the bottom of the list is dominated by full democracies. This pattern can be traced more clearly in the sixth column of Table 3 that displays countries' EIU Democracy Index values in 2019, and may indicate that the institution of political representation may have influenced economic growth more significantly in less democratic nations, albeit in varying directions, than in advanced democracies, which is also supported by the result that a majority of the countries with very low R^2 values in Table 3 are those who have never had serious problems with democracy, such as Norway, Switzerland, Netherlands, Finland, United Kingdom, Iceland. We find this finding to be worthy of further investigation in itself, invoking ideas for future studies, perhaps in the form of separate regressions for different democracy categories in the sample. The pattern may be due to the advanced democracies having gone past the point for democracy to be influential on economic growth: Rights and interests of large portions of the society are already being represented at a significantly democratic level and the within-country

inclusiveness of the institution is stable in the long run, with little apparent variation. Thus, the inclusiveness of the representation of rights and interests may no longer account for variations in the economic growth rates since these statistics are within-country only. In flawed democracies, on the other hand, the institution of political representation is flawed as well, showing significant within-country variation across time. The fact may be that such variation can have consequences for economic growth due to its impact on the inclusiveness of policy-making. The nature of those consequences can vary as greatly as the findings within economics literature regarding the subject of democracy's impact on economic growth. As such, periods of less democracy (in other words, less inclusive processes of political representation) may have produced higher rates of economic growth in some flawed democracies, while an opposite form of the relationship may have been in effect in others. As we have suggested, we believe that the issue constitutes a valuable area for future research.

Table 4 repeats the same exercise, this time regarding the relationship between annual growth rates and annual PR_{it} scores of countries in the post-1950 period. The results are similar, with minor changes in the ranking of countries. A few of the fully democratic countries have moved further upward in their ranking, such as Netherlands, but we can still infer that the top of the table is dominated by less democratic nations in comparison to the bottom of the table, with mixed play in the middle sections of the table where the R^2 values are low.

Our discussions so far of a descriptive statistical look at what implications political representation may have for economic growth have produced mixed results. In summary, we can suggest that we do not expect a unified effect of the institution on economic growth, due to the high level of variation in the processes of political representation among countries. Next then, we provide the results of our econometric analysis in order to check for the existence of a general trend between political representation and economic growth, if any.

Table 4: Annual Economic Growth Rates Versus Annual PR_{ii} Scores

Rank	Country	R ²	Coef. Sign	Democracy Category	EIU Democracy Index (2019)
1	Latvia	0.66	+	Flawed Democracy	7.49
2	Croatia	0.37	-	Flawed Democracy	6.57
3	Italy	0.30	-	Flawed Democracy	7.52
4	Ukraine	0.23	+	Hybrid Regime	5.9
5	Poland	0.22	+	Flawed Democracy	6.62
6	France	0.21	-	Full Democracy	8.12
7	Cyprus	0.20	+	Flawed Democracy	7.59
8	Netherlands	0.18	+	Full Democracy	9.01
9	Germany	0.18	+	Full Democracy	8.68
10	Sweden	0.14	-	Full Democracy	9.39
11	Spain	0.11	+	Full Democracy	8.29
12	Austria	0.10	-	Full Democracy	8.29
13	Israel	0.10	+	Flawed Democracy	7.89
14	Greece	0.08	-	Flawed Democracy	7.43
15	Ireland	0.08	+	Full Democracy	9.24
16	Czechia	0.08	-	Flawed Democracy	7.69
17	Turkey	0.07	+	Hybrid Regime	4.09
18	Bulgaria	0.07	-	Flawed Democracy	7.03
19	Iceland	0.05	-	Full Democracy	9.58
20	Malta	0.04	+	Flawed Democracy	7.95
21	Belgium	0.04	+	Flawed Democracy	7.64
22	Albania	0.04	-	Hybrid Regime	5.89
23	Romania	0.03	+	Flawed Democracy	6.49
24	Hungary	0.03	-	Flawed Democracy	6.63
25	Serbia	0.03	-	Flawed Democracy	6.41
26	Denmark	0.02	+	Full Democracy	9.22
27	Estonia	0.02	+	Flawed Democracy	7.9
28	Russia	0.01	-	Authoritarian regime	3.11
29	Portugal	0.01	-	Full Democracy	8.03
30	Switzerland	0.01	+	Full Democracy	9.03
31	Slovakia	0.01	+	Flawed Democracy	7.17
32	United Kingdom	0.01	-	Full Democracy	8.52
33	Slovenia	0.01	+	Flawed Democracy	7.5
34	Finland	0.01	-	Full Democracy	9.25
35	Lithuania	0.01	-	Flawed Democracy	7.5
36	Luxembourg	0.00	-	Full Democracy	8.81
37	Moldova	0.00	+	Hybrid Regime	5.75
38	Norway	0.00	-	Full Democracy	9.87

Source: PR_{ii} data are based on own calculations on election data. Economic growth rates are from Penn World Table 9.1. Democracy categorizations are from Economist Intelligence Unit's Democracy Index.

http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=democracyindex2019, (29.04.2020)

4.2. REGRESSION RESULTS

Table 5 presents the results of our two-step system GMM estimation of the augmented Solow model of economic growth. Before explaining our findings, we first mention the statistical properties of our models. Firstly, the Arellano-Bond tests are conducted in order to check whether our models suffer from serial correlation. The null hypothesis of the Arellano-Bond test is that the residuals are serially uncorrelated. A rejection of the null hypothesis means that the GMM estimator suffers from serial correlation. Second, Hansen's J-test and the difference-in-Hansen test are conducted in order to test instrument validity. The null hypothesis of Hansen's J-test is that the instruments are valid, while the null hypothesis of the difference-in-Hansen test is that the required moment restrictions for system GMM are valid. As presented in Table 5, none of the Arellano-Bond (A-R z-values), Hansen's J-test (Hansen p-values) and the difference-in-Hansen test (Diff-in-Hansen p-value) results in our models allow us to reject the respective null hypotheses, providing evidence that our models are robust and our instruments are valid. Additionally, our models include year-specific fixed-effect dummies, following Ding and John (2011), which help reduce the impact of cross-sectional error dependence in estimations of shorter dynamic panels. Also following Roodman (2009), we reduce the number of our instruments by using three lags for the instruments and also collapsing the instrument sets in the GMM model specification.

The first regression in Table 5 provides a core estimation of the augmented Solow model. All the variables are statistically significant with the expected signs, except for the variable of $\ln(n_{it}+g_{it}+\delta_{it})$, which is insignificant in every estimation. The insignificance of $\ln(n_{it}+g_{it}+\delta_{it})$ does not pose a problem for the strength of our models. It is known that the augmented Solow model can result in insignificant coefficients for its main variables when the number of countries in the model is not very high. For instance, the study of Mankiw et al. (1992) itself finds insignificant coefficients for the variables of saving rate and population growth in the OECD sample. In comparison, the core variables in our model have performed well in explaining variation in economic growth rates across Europe, in all five regressions.

In the second and third regressions, we add into the models our indicators of PR_i and PR_{ij} . In both estimations, the core variables of the Solow model are equally

meaningful, yet while the political representation indicators have the negative sign, they are far from having any statistical significance. Hence, we infer that regarding the 38 European countries in our sample, the degree of inclusiveness of political representation have not acted as a systematic determinant of economic growth in the post-1950 period.

Table 5: Regression Results

Dependent variable: log differences in GDP per capita					
	System GMM (1)	System GMM (2)	System GMM (3)	System GMM (4)	System GMM (5)
Constant	1.44 (1.32)	1.61 (1.19)	1.58 (1.26)	2.83** (2.28)	2.21 (1.64)
$\ln(y_{it-1})$	-0.86*** (-6.02)	-0.88*** (-5.44)	-0.87*** (-6.29)	-0.98*** (-6.32)	-0.94*** (-6.34)
$\ln(s_{it})$	0.83*** (5.79)	0.83*** (5.64)	0.82*** (5.51)	0.79*** (4.82)	0.80*** (4.72)
$\ln(h_{it})$	0.96** (2.23)	0.96** (2.30)	0.94** (2.07)	0.99** (2.1)	1.06** (2.19)
$\ln(n_{it}+g_{it}+\delta_{it})$	-0.05 (-0.23)	-0.05 (-0.24)	-0.05 (-0.24)	-0.05 (-0.17)	-0.05 (-0.25)
$\ln(rpi_{it})$		-0.02 (-0.31)		0.03 (0.4)	
$\ln(rp_{ii}_{it})$			(-0.02) (-0.27)		0.15 (1.20)
$\ln(rpi_{it})^2$				-0.05 (-1.45)	
$\ln(rp_{ii}_{it})^2$					-0.07 (-1.31)
# of obs.	269	269	269	269	269
# of groups	38	38	38	38	38
# of instruments	35	36	36	37	37
A-B z-values (2)	0.79	0.81	0.80	0.73	0.79
Hansen p-value	0.11	0.11	0.12	0.10	0.12
Diff-in-Hansen p-value	0.40	0.43	0.58	0.58	0.47

Values in parentheses are t-values.

*** Significant at 1%

** Significant at 5%

* Significant at 10%

In the fourth and fifth models, we test the presence of an inverse U-shaped relationship between political representation and economic growth by also adding to

the respective models the squares of our indicators of political representation as additional variables. Once again, we rule out the possibility of a systematic effect from political representation to economic growth. While the indicators of PR_i and PR_{it} have been significantly related to various aspects of economic development in the sample countries in the post-1950 period, we suggest that the case is simply not so in the context of economic growth.

We believe that our findings regarding the lack of a significant relationship between political representation and economic growth, in spite of mixed relationships at the country-level, raise a number of questions to be answered within the field of institutional economics. As representation is a political institution with relevant implications for democracy, the complexity of its implications for economic growth pose a puzzle to be solved with rigorous work into the functioning of the institution. If democracy is good for economic growth, what constitutes a more 'democratic' process of political representation? What aspects of the institutional arrangements surrounding political representation allow a seemingly significant link between the institution and economic growth in some countries? What aspects of it, on the other hand, cancel out the possibility of an inter-country-level relationship between the two phenomena? While these questions are currently out of the scope of the study at hand, we believe that they constitute important research questions to be addressed in future work we also aim to engage in, in order to further delve into the issue of what implications democracy, with political representation being one aspect of it, have in store for economic growth.

In conclusion, while the faces of democracy are many and our measure of political representation constitutes only one of them, we are confident that it constitutes a good one. Our previous discussion of the potential influencers of the relationship between political representation and economic growth justifies the findings in our empirical analysis, as we put forth a number of reasons why the institution might and might not matter for economic growth. Apparently, the most prominent of these reasons is valid, in that the processes of political representation do not always result in growth-inducing policy decisions, possibly due to asymmetrical information between the electorate and the elected, which can allow corrupt practices in governance and lobbying activities to distort the institution of

political representation. The countries 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 in our sample, yet individual countries exhibit forms of statistically significant relationships between the two phenomena. While our investigation of the country-level relationships has remained at the simple level of descriptive statistical inference, we suggest that the topic is worthy of more systematical analysis, for it holds the potential to produce valuable insight into a better understanding of the workings of the institution of political representation.



CONCLUSION

Representation is a political institution that sits at the heart of practically all policy-making processes in contemporary democracies. Any discussion about political representation is potentially a discussion about a majority of all things related to democracy. Despite not having received much attention from the field of economics yet, we believe that research into this peculiar institution has the potential to make important contributions to our understanding of the relationship between various aspects of democracy and economic welfare. As the academic research into what democracy may imply for economic growth seems to be never-ending, we are of the conviction that no less should be expected about investigations into what political representation may have in store for economic growth as well.

The implications in political representation for economic growth can be both normative and positive in their nature, the subject matters of which are different than one another. The normative aspect can be touched on by a simple, an almost humanitarian question: Is it more desirable, from a growth-oriented perspective, that every individual interest in a society gets represented in policy-making? In other words, is it *fair* to leave some interests out of the policy-making process in order to achieve a higher rate of economic growth? After all, there are only so many policy decisions that can be made at a given point in time and there will always be trade-offs, given that every policy decision will leave some other political and economic interests out. Whose interests should be included into processes of policy-making? Should mechanisms of political representation be dictated by the growth-quality of interests, at the cost of political, thus economic inequality? Or is it more preferable that a fair representation of all rights and interests in a society is rather the main priority in the political process?

These kinds of normative questions can be asked for every kind of political decision in the making. For instance, is it convenient, in order to achieve a higher rate of growth for an economy, to consult the opinion of every member of a society regarding the construction of nuclear power plant? Whose opinion should count the most? The marginal utility of environmental quality is obviously different for every individual, so are the individual financial interests embedded in the construction of a

nuclear power plant, and so are the levels of knowledge possessed by individuals regarding the risks and benefits of nuclear plants. Should we rely on the opinions of nuclear scientists and ignore what everyone else is saying? What about environmentalists? Business tycoons? Obviously, not all of those opinions could ever be represented equally when it's time to make the decision to build or not build the plant, as those opinions are not mutually inclusive. What kind of a political device of representation would make way for faster growing economy? Is it really *the* definitive question to ask?

These questions can hardly ever be answered in a way to satisfy everyone. Representation is a complex phenomenon, not only as a political concept but also as a political institution. Its mechanisms vary from country to country. The line between economic growth and economic development is also thin at times, as such, if the current state of the field of economics were to reveal a consensus among economists that economic growth should ultimately be the most important policy objective in an economy no matter what the development-consequences are, perhaps it would then be easier to solve the dilemma of what to do in complicated cases, such as the above example. Instead, even economists cannot seem to agree on what constitutes a crossing of the line between economic growth and economic development, in which regard, there can often not be an ethically legit rationale for ignoring some individuals' interests while designing policies that will ultimately have consequences for their welfare.

Still, the reality of life dictates that some decisions are made, and some interests are left out. The positive aspect of what political representation can mean for economic growth, rather than the normative one, is then related to the fact that the two far-ends of the potential answers to the questions above would have very distinct consequences for economic growth. Does political representation actually matter for growth? If so, how? If not, why not? Since the study at hand concerns itself with making a positive statement regarding the relationship between political representation and economic growth and not a normative one, these are the types of questions that we have been interested in answering.

According to a popular perspective within the institutional economic theory – among the proponents of which one of the most acclaimed works can be deemed as

that of Acemoğlu and Robinson (2012) – the best outcome for economic growth could be achieved by leaving as little a portion of interests in a society as possible. The more inclusive, proposes this line of thought, political institutions are, the faster an economy will grow. More competitive political institutions will give rise to more competitive economic institutions, which will result in a higher level of economic welfare for everyone involved. According to this perspective, we can expect a positive relationship between the degree of inclusiveness of political representation and economic growth. If nations want to implement the policies that will facilitate higher rates of economic growth, they must allow processes of political representation that are as inclusive as possible.

According to a view that clashes with the perspective above – an example of which can be seen in the work of Przeworski (2007) – there exists a growth-impeding effect of realizations of political and economic interests of poor classes in a society. This effect arises from the fact that the needs of poor classes are rather consumption-oriented, which results in a decrease in domestic saving, leaving little room for investment opportunities in an economy. The result is a diminished role attributed to the degree of the inclusiveness of political institutions in facilitating economic growth. The idea therefore suggests an inverse U-shaped relationship between the inclusiveness of political representation and economic growth as the institution approaches full inclusiveness; since the representation of elite interests are thought to be growth-impeding, that of the middle class is thought to be growth-inducing, and that of the poor classes is, again, growth-impeding. Thus, according to this perspective, if nations want to implement the policies that will facilitate higher rates of economic growth, they must do so at the cost of some of the political and economic interests of certain groups within their societies.

Forming the third and fourths point of view, we propose that the degree of the inclusiveness of the institution political representation may have a negative effect on economic growth as well, or it may simply not be sophisticated enough to matter for economic growth at all. Some nations can grow faster under less democratic political institutions, or for some nations, the degree of the inclusiveness of political institutions may have no influence on growth either. Constituting the institution through which all kinds of interests and rights in contemporary democracies are

either protected or ignored, we believe that the role of political representation in policy-making deserves rigorous research in order to provide answers to these kinds of questions. Whether the above perspectives can actually explain the influence of representative institutions on economic growth is worthy of further theoretical and economic investigation. Is the institution really sophisticated enough to automatically filter out bad political/economic interests through elections, allowing only the economically productive interests to dominate processes of policy-making in contemporary democracies? Do the people vote to elect the right politicians who will make the best policy decisions? Can the elected politicians represent the interests of the electorate to the best of their ability, resulting in good policy-making that facilitates economic growth?

We have discussed, as part of our work, a series of reasons for which political representation may indeed realize the above roles attributed to it, mostly through the mechanism of a concept called the economic vote. On the other hand, we have also listed a series of reasons why it may not be efficient in doing so, arising from the negative consequences of corrupt practices in governance and lobbying activities in the political process, allowed by the asymmetry of information between the electorate and the elected, most often in favor of the latter. Regarding the current state of the representative institutions in contemporary democracies, then, we find that it is difficult to provide definitive answers to the above questions. Our discussion led us to draw a mixed picture. If we were to cling to one idea about what political representation may mean for economic growth, it would be that the institution is prone to being bent and deviated from its basic definition of ‘serving the best interest of the people’. The institution forms a platform over which various interests in a society can battle each other to come on top and win the right to get realized through policy-making. Yet, the criteria for what kind of interests win that battle is rather complex, depending on many factors. While every policy choice is a representation of *some* interests in the society, the question of *whose* easily gets complicated. It is apparently not always the interests of those whose main priorities lie in achieving a higher rate of growth for the whole economy.

The definitive step to take in answering the questions implied by the title of this dissertation then, would be in the conduction of robust empirical analyses to test

the relationship between political representation and economic growth, which could only be possible through use of highly stable, cross-country quantitative data on political representation. To the best of our knowledge, no current data in existence allows for empirical studies on the state of political representation in a large number of countries and consistently many points across time. Many empirical studies into political representation have attempted to measure aspects of the institution by relying on public opinion polls, party manifestos or expert surveys, neither the time frames nor the contents of which provide a balanced match between countries. While the lack of useful empirical data is due to the fact that representation is a complex political concept and institution, with countries differing vastly in the qualities and mechanisms of their processes of representation, we believe that it is also a primary reason for the lack of interest shown by economists into the institution.

In an attempt to aid the data problems faced by the field, a significant contribution of our work to the field of institutional economics concerned the construction of a novel dataset that allows for cross-country studies on political representation, namely the Political Representation Dataset as we call it. The Political Representation Dataset is the product of rigorous efforts into an exploitation of the phenomenon of ‘wasted votes’ in data on general election results, regarding a total of 587 parliamentary elections in Europe that took place between the years 1946 and 2017. The dataset currently consists of two indicators of political representation, namely the PR_i and PR_{ii} , that span 38 European countries and 68 years (1950-2017), in panel-data form. The PR_i and PR_{ii} are two measures of the proportion of the citizens in an electorate who have been officially excluded from processes of political representation, to the whole electorate, in a given year and country, due to their votes being ‘wasted’, i.e. did not generate the right to be politically represented in a parliament as a result of electoral design mechanisms such as electoral thresholds, district magnitude or gerrymandering. The indicators take the values between 0 and 100 in each observation, implying a more inclusive institution of political representation as the value approaches 0.

As we have demonstrated in the Data and Methodology section of our work, the PR_i and PR_{ii} do remarkably well in explaining approximately 40 to 70 percent of variations in a number of other development indices and indicators that have come to

be most-often utilized in social sciences, such as the United Nation Development Programme's Human Development Index, the Freedom House's Political Rights and Civil Liberties indices, the Economist Intelligence Unit's Democracy index and others. In this regard, we are of the conviction that the Political Representation Dataset has the potential to be of good service to studies of political institutions, as it may open new doors to investigations of a wide range of issues regarding political representation in democracies. We plan to release the dataset as shortly as possible after this dissertation will be completed – free of charge eventually – on a website¹⁶ that is currently under construction.

In order to answer the question that gave rise to this dissertation, that is, the issue of whether more inclusive forms of the institution of political representation have induced economic growth in Europe in the post 1950-period, we have employed our indicators of political representation in an empirical analysis that consists of both descriptive statistical inference and a two-step system GMM estimation of the augmented Solow growth model. In these analyses, our findings have been mixed.

Descriptive statistical analysis shows that the variations in PR_i and PR_{it} can explain an almost one third of the variation of the average per capita income levels of the 38 European countries in our sample in the 1950-2010 period. On the other hand, they cannot seem to convincingly explain the variation in average economic growth rates in the same period. When we look at the within-country relationships between the countries' annual economic growth rates and their annual PR_i and PR_{it} scores in the same period, respectively, we find that there exists a great deal of heterogeneity among countries in that while some countries exhibit no significant relationship between the two phenomena, others show statistically significant relationships in varying directions. A peculiar finding at this stage was that the influence of the degree of the inclusiveness of political representation on economic growth seems to be statistically more significant in flawed democracies than in advanced democracies. Further study on the within-country relationships between representation and growth, in our opinion, can constitute a productive area for future work.

¹⁶ The internet address of the Political Representation Dataset website is: <http://politicalrepresentation.com> (23.05.2020).

The results of our econometric analysis in order to uncover the prevalence of a systematic influence of political representation on economic growth, one that surpasses the borders of within-country investigations, revealed that no such relationship seems to exist at an international scale. The two-step system GMM estimations we conducted shows that the level of the inclusiveness of processes of political representation, despite having been shown to be closely related to various aspects of economic development in the sample countries in previous descriptive analyses, have had no significant impact on economic growth rates between 1950 and 2010. We believe that this result should not come as a surprise, after all. As we reported earlier, the findings in the institutional economics literature regarding the relationship between democracy and economic growth are very mixed, thus any kind of a result regarding the relationship between political representation – as a proxy for democracy – and economic growth should also come expected. Some scholars have argued that democracy is a pro-growth institution, some have argued that it has no significant impact on economic growth and some have actually argued that it is bad for growth – with famous economists in all three fronts. As such, political representation is an indispensable component of today's democratic institutions and it is not surprising to think that an empirical analysis on the relationship between political representation and economic growth may find no significant interaction between the two concepts. We believe that the institution of political representation has certain flaws that prevents it from systematically influence the economic growth rates of countries through its determination of policy-making processes.

Our conviction concerning the subject matter of this dissertation is that the institution of political representation, in its current form, should not be expected to be sophisticated enough to result in growth-inducing economic policies, consistently across time and space. While it is true that the world has come a long way from the days of totalitarian regimes dominating most parts of the world up until a few centuries ago to elections being held in those same places today, it is also true that consequences of being on the losing side of an election can vary widely for people living in different parts of the world. While we have only investigated the case of European democracy in this dissertation – the continent on which a majority of the world's advanced democracies are positioned – what about the other parts of the

world? Surely an average Swiss citizen can perceive herself to have very little to lose by voting for a party that didn't make it into the National Council (perhaps as evident from the voter turnout rates of 48.4% in 2015), in comparison to a South Sudanese who lives in a state riddled with social conflict and who may be running risks of losing some of his rights at best or even his life at worst, only because his favorite political party lost in the general elections.

In such a nonideal state of the world, expecting that a well-functioning institution of political representation through competitive elections should produce a high growth rate for economies all the time may be like rolling dice and expecting six every time. The institution can be fragile, in the face of both corrupt governance practices and also pressures from interest groups that occur in the form of lobbying activities, under the prevalence of ever-present information asymmetries between voters and their political representatives. The two-hundred-year-old arrangements surrounding modern elections are apparently not in a state to ensure, by themselves, an effective selection of economic policies through representations of interests via certain qualitative, objective criteria that separate winners from losers in elections. Thus, the resulting policies in the political process can have almost random consequences for economic growth. Transparency in representation is currently far from being realized in policy-making, the lack of which is maybe a primary reason why political representation may be failing to result in the best economic interests of nations.

As our last words, we would like to state that research into the economic consequences of political representation are very far from being over, as such, in fact it may just be starting, at least in our case. As a future effort into the continuation of our work, we will be hastily enlarging the Political Representation Dataset through inclusion of a higher number of countries before we release it online. In fact, the PR_i and PR_{ii} calculations of many Latin American and Asian countries have already been completed, but we have chosen to not include them in this dissertation as we investigate the case of European democracy in this work, due to the European countries being at similar levels of development in terms of their representative institutions. On the other hand, a larger sample may allow for more robust tests of the institution and produce different results in the future, concerning a wide number of

issues such as economic growth, various aspects of economic development, redistributive policies, economic, political and social inequality, taxation policies and many others. The question of how wide an array of interests is being represented in a country's policy-making process can concern hypothetically every single social issue that can be imagined to be influenced by the institution of political representation, and we believe that the Political Representation Dataset can help us in answering many such questions.



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APPENDIX

APPENDIX 1: Data Sources for Election Results

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