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Economic Globalization and Populist Demand

An analysis of the globalization-induced
economic roots of populist electoral strength

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ABSTRACT

Advanced democracies are determined to uphold globalization while committing to address its shortcomings, but it seems that they have not kept their promises. Populism, a strong challenging force for any political regime, has the capacity to spotlight the negative consequences of globalization forces. Already, populist actors are calling for a halt on globalization and meeting a strong populist demand in advanced economies. Populism asks the right questions but provides the wrong answers. If the answer to the populist claims and grievances is found within the liberal democratic framework, then maybe populism per se loses its reason of existence and liberal democracy won't be eroded.

This paper presents a study of globalization-induced economic roots of populist electoral support. The study is grounded on an econometric model using a sample of 17 advanced economies. The two main findings are that economic globalization factors partially explain populist electoral strength, and that both grievances and possible solutions have been identified. Grievances can be summarized in concerns for the economic environment, the rules of the game and unemployment, all sources of economic insecurity. Suggested solutions that deserve political attention are: compensatory policies, well-functioning cities and tackling corruption.

Key words: globalization, economic globalization, populism, electoral strength, econometric model, liberal democracy.

RESUMEN

Las economías avanzadas defienden la globalización a la vez que se comprometen a abordar sus deficiencias, pero aparentemente no están cumpliendo sus promesas. El populismo, una fuerte fuerza desafiante para cualquier régimen político, tiene la capacidad de llevar la atención a las consecuencias negativas de la globalización. Movimientos populistas piden detener la globalización y satisfacen así una fuerte demanda populista en las economías avanzadas. El populismo hace las preguntas correctas, pero proporciona respuestas incorrectas. Si la respuesta a las reivindicaciones populistas se encontrase dentro del marco democrático liberal, entonces tal vez el populismo per se perdería su razón de ser y la democracia liberal no se erosionará.

Este artículo presenta un estudio de las raíces económicas - inducidas por la globalización - del apoyo electoral populista. El estudio se basa en un modelo econométrico con una muestra de 17 economías avanzadas. Los dos hallazgos principales son que los factores de globalización económica explican en parte la fuerza electoral populista, y que tanto reivindicaciones subyacentes como posibles soluciones han sido identificadas. Las reivindicaciones se pueden resumir en preocupaciones por el entorno económico, las reglas del juego y el desempleo, todas fuentes de inseguridad económica. Las soluciones sugeridas, que merecen atención política, son: políticas compensatorias, ciudades con buen funcionamiento y la lucha contra la corrupción.

Palabras clave: globalización, globalización económica, populismo, fuerza electoral, modelo econométrico, democracia liberal.

INDEX   **Page**

INDEX OF FIGURES

INDEX OF APPENDICES

INTRODUCTION

"Until recently, it looked as if the world's economic and political order was set on an established, predictable course" (Rodrik, 2017, p1).

Globalization, as a seemingly all-encompassing concept, has for decades, if not centuries, carried the world in a path of ever increasing interconnectedness. The transfer of goods, services, people, ideals, values and knowledge have, although unevenly and inconsistently, increased. Technological innovation, particularly in the fields of transportation and communication, together with a proliferation of trade agreements, have made transfers increasingly feasible and profitable.

New actors, dynamics and relations seemed to accompany or even challenge national sovereignty, to the point where global governance - in one way or another - seemed feasible and foreseeable. Democratic values and norms, such as the separation of powers, free expression, representation and the rule of law have been spread unceasingly around the globe and strengthened where they already had taken root. Since the transfer dynamics have had uneven impacts around the globe, inequalities have surged and died out within and among states (Lang & Mendes, 2018). Notwithstanding, advanced democracies seemed determined to uphold globalization while committing to address its shortcomings. Globalization seemed unstoppable.

Things have changed recently. Populist actors and movements all across the political spectrum are calling for a halt on globalization, and populist actors are gathering increasing support and political power in developed nations or the "North" (Baldwin, 2016, p.5). As the following graph in Figure 1 shows, the aggregate populist vote shares in advanced economies have increased steadily since the 1990s, when the last gear change in globalization processes took place (Baldwin, 2016, p.142). In Europe, the rise of populist-nationalist parties has penetrated the political scenario in a considerably large number of countries, including France, the United Kingdom, Greece, Spain, Denmark and Austria, just to name a few (Bonikowski, 2016, p.18). However, the apogee was reached in the 2016 Brexit referendum, determining the British abandonment of the European common project, the European Union. In the United States,

the 2017 presidential election saw the rise of populist parties at the two ends of the political spectrum: Donald Trump on the right and Bernie Sanders on the left (Brubaker, 2017, p.33). And the list goes on, spanning from Canada to Australia (Sawer & Laycock, 2007).

Figure 1: Evolution of populist electoral support in the New Globalization
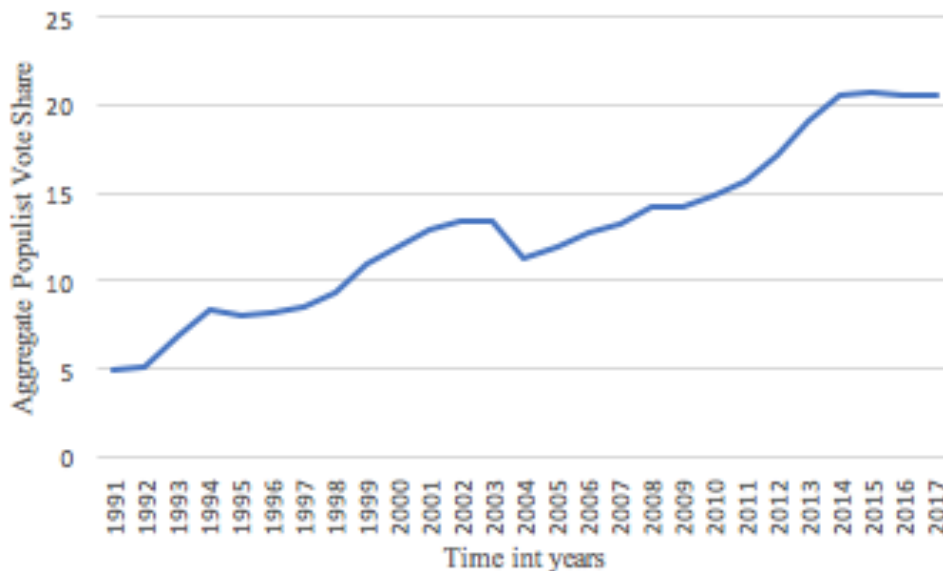
Note: "Aggregate" corresponds to the 17 countries included in the model (see section on Individuals, page 28).
Source: Elaborated by the author with data presented in Figure A5 in Appendix 4, retrieved from different sources presented in Figure A8 in Appendix 4.

"Populism is both a friend and a foe of (liberal) democracy" (Mudde & Rovira, 2017, p.51), and has both pros and cons that should be taken into consideration. Populism is a strong, challenging force for any political regime. Despite representation systems and the division of power being specifically designed to channel "popular passions", such as populism, into responsible political institutions, populism still finds a way into liberal democratic regimes (Kimball, 2018 p.4). Populism can manifest under different forms, in different styles, at different points in time, with different degrees of success. However, all populist actors have in common that, by moralizing the political debate, they bring back to the political spotlight disregarded issues and groups (Mudde & Rovira, 2017, p.159). **In a way**, populism can be considered a democratizing force as it empowers unrepresented groups in a step towards popular sovereignty (Mudde & Rovira, 2017, p.49). Populism's capacity to appeal to a wide range of electors increases voters' turnout and even party membership in a time where political participation is in

decline (Skocpol and Williamson 2012, p.197). **For the rest**, populism has the capacity to erode democratic institutions, foster political polarization and push existing party systems to tumble down (Pappas, 2013). Populism implies an absolute general will, which can legitimize authoritarian regimes (Mudde & Rovira, 2017, p.55). The pros and cons of populism could be summarized as 'asking the right questions, but providing the wrong answers'. The focus should therefore be on resolving the root causes of the issue raised by populist questions, not on palliating the symptomatic answers that populism provides. If the answer to the populist claims and grievances is found within the liberal democratic framework, then maybe populism per se loses its reason of existence.

Considering that populism acts as a counterforce to globalization forces, and having acknowledged the importance of paying attention to the issues raised by populist actors, this paper studies the globalization-induced economic roots of populism. More precisely the study pivots around the following research question:

¿Is economic globalization at the root of populist movements in advanced economies?

In order to answer to this question in a structured manner this paper is divided into 8 sections that follow the traditional structure of an econometric-based research paper. The first section is briefly states the motivations for this work. The second section puts the reader up to date with the current state of the art in the main matters treated in the paper: globalization and populism. The third section details the specific concepts from the state of the art that conform the theoretical framework of application through the paper. The fourth section briefly places the objectives and starting hypothesis guiding the rest of the paper. The fifth section describes the methodology used for the elaboration of the econometric model, going through the process step by step (from the selection of variables to the results of the model). The sixth section presents the analysis of the results (obtained in the econometric model of the previous section), using the concepts detailed in the theoretical framework of the third section. The seven section concludes this work, recapitulates the main takeaways of the analysis and introduces policy recommendations based on the analysis. The eight and last section of this paper complements the work by presenting its main limitations and proposing future research avenues.

PURPOSE AND MOTIVATIONS FOR THIS WORK

In the previous introduction, the relevance of the subject was laid out. Such relevance makes new contributions to the academic work pertinent. This current section presents the specific purpose and motivations for carrying out this work. These motivations are of different nature, namely: empirical, theoretical, methodological and practical.

Empirical: There are two current and contemporary trends with extensive social, political, cultural and economic implications across the globe whose connections this paper intends to analyze. The first is the increase in support for populist parties in advanced economies which has risen since the 1990s (see Figure 1). The second is seemingly unstoppable globalization trends of the last decennials and the increasing global interconnections (Baldwin, 2016). Globalization seem to have encountered a phenomenon that is "hitting the brake": populism.

Methodological: By carrying out an econometric model, the author of this paper pretends to contribute to the quantitative support for existing claims in the literature. In doing so, this paper represents an empirical-exploratory research aimed at unveiling a causal inference between globalization and populism.

Theoretical: Dani Rodrik's *theory of hyperglobalization* (Rodrik, 2011; Rodrik 2012) suggests that "the current advanced stages of financial globalization are promulgating instability rather than higher investment and more rapid growth" (Rodrik, 2011, p. 17). In line with other extensions of this *hyperglobalization* theory to other spheres of globalization, this paper aims at shedding some light on the political consequences of advanced stages of globalization.

Practical: By analyzing quantitatively various possible sources of demand for populism, the objective of this paper is to provide for start points from which policies can be drawn. Be it to target populism per se or the claims populist actors present, having a better understanding of how and why populism arises is essential.

STATE OF THE ART

GLOBALIZATION

DEFINING GLOBALIZATION

Globalization is a contested concept. It's time frame, dimensions and implications are - and will likely remain - in a constantly evolving debate. A definition of Globalization that englobes this debate and that serves the matters discussed in this paper is that offered by David Held: "Globalization may be thought of as a process (or set of processes) which embodies a transformation in the spatial organization of social relations and transactions—assessed in terms of their extensity, intensity, velocity, and impact—generating transcontinental or interregional flows and networks of activity, interaction, and the exercise of power" (Streger, 2017). Globalization denotes transformation and that it is an uneven process, impacting differently around the world. These processes take place both on the material level and the subjective level of human consciousness, where the global imaginary arises.

The start of the Second Wave of Globalization (Baldwin, 2016), starting sometime around the 1990s, is characterized by the spread of market driven economies after the collapse of the Soviet Empire in 1991 and the ICT revolution, which accelerated all processes. Technology (particularly airplanes and the information technology, such as the internet) is intrinsic to this last wave of globalization. However, these innovations stand on the shoulders of previous ones, and depending on how far back one chooses to stretch this causation, globalization can be seen to start at different times in history. Some stretch it back to the Industrial Revolution (1800s), other to the emergence of the capitalist world (1500s) and others as far back as the development of languages (Streger, 2017). These earlier forms of globalization were defined by a series of migrations, trade, empires, scientific and technological advancements, spread of religions, European domination, colonialism, capitalism and communism, industrialization, urbanization and wars. In this paper, the term globalization will be limited to the new contemporary globalization, keeping in mind its history.

DIMENSIONS OF GLOBALIZATION

"The ongoing academic quarrel over which dimension contains the essence of globalization represents a postmodern version of the parable of the blind men and the elephant"

(Streger, 2017, p51). Keeping in mind that globalization is not a single process but many simultaneous, interrelated and uneven processes, the following paragraphs briefly expose four key domains of globalization: political, cultural, economic and ideological.

THE POLITICAL DIMENSION OF GLOBALIZATION Political globalization refers to the intensification and expansion of political interrelations across the globe. Since the Peace of Westphalia in 1648, the world has been politically divided in nation-states, each centralizing political power, creating national identities, expanding administration and monopolizing means of coercion within their borders. These monolithic structures are being challenged. New actors have emerged in the political arena: global international organization like the UN or the OECD, regional multilateral organizations and agreements, municipal and provincial initiatives like the World Association of Major Metropolises and ultimately individuals, conforming a global civil society and organizing in the form of NGOs. Considerable coordination has been achieved in this line, as shown by the commitment of all 191 UN members states as well as numerous international organizations to first to the Millenium Development Goals (from 2000 until 2015) and then to the Sustainable Development Goals (from 2015 until 2030). This liaison between governments and international institutions in order to set a common agenda to care not only for the national society but for the global society shows a change in the paradigm of nation-states. David Held, and other globalizers, see this as a trend leading to the extension of democratic rights beyond national boundaries in the creation of a democratic global governance or what he calls a "cosmopolitan democracy" (Ritzer, 2007, p.153). Critics doubt its cultural feasibility: "the worldwide intensification of cultural, political, and economic interactions makes the possibility of resistance and opposition just as real as the benign vision of mutual accommodation and tolerance of differences" (Streger, 2017, p.123). Some of these critics have gone so far as to suggest that globalization is actually accentuating people's sense of nationality (Streger, 2017, p.106). While nation-states are still in considerable control in areas such as education, infrastructure and foreign policy, events like the increased trans-border migrations and refugee flows as well as global terrorist networks have highlighted the limitations of nation-states to unilaterally deal with global issues.

THE CULTURAL DIMENSION OF GLOBALIZATION. Cultural globalization refers to the intensification and expansion of cultural flows across the globe. Cultural exchanges are not new to globalization, "hardly any society in the world today possesses an 'authentic', self-contained culture" (Streger, 2017, p.131). However, the volume and speed of these exchanges brought by the internet, social media and mobile digital devices is new. Global cultural flows are to a large extent controlled and generated by global media empires. They have the power to shape people's identities and the creation of a global imaginary is intrinsically linked to the rise of global media. Pessimistic globalizers argue these increased exchanges are leading to a homogenized popular culture that follows Western norms and lifestyle: individualism, consumerism and certain religious discourses. The Americanization of the world is taking place and overwhelming vulnerable cultures. George Ritzer exemplifies this in his theory of the McDonaldization, regarding the spread of fast food restaurants around the world. A clear example of this homogenization is the globalization of languages, whereby few languages are increasingly used (English, Chinese and Spanish), whereas others loose speakers. Optimistic globalizers acknowledge the sameness brought by globalization, and embrace it. Some, like Francis Fukuyama, equate Americanization to the expansion of free markets and democracy (Fukuyama, 2006). Others highlight that cultural globalization takes place in local contexts, thus generating a hybrid cultural expression and even reinvigorating local cultures. This process of global and local interaction is what sociologist Roland Robertson has named "*glocalization*" (Robertson, 1995; Giulianotti & Robertson, 2006).

Strongly related to the cultural dimension of globalization but also to the political one, is the role of the media and the internet. "To a large extent, the global cultural flows of our time are generated and directed by global media empires that rely on powerful communication technologies to spread their message" (Streger, 2017, p.132). The rise of the global media together with the internet is greatly responsible for the rise of the global imaginary. Being the two greatest platforms for the flow of information, the media and the internet shape people's structures of desires around the world and ultimately their identities. As pointed out by sociologist Manuel Castells, in his Network society theory, the communication power, backed by the developments in ICT, is responsible for the creation of a global network society (Manuel Castells, 1996).

ECONOMIC DIMENSION OF GLOBALIZATION. Economic globalization refers to the intensification and stretching of economic connections across the globe. Since the Bretton Woods conference the global north has promoted the creation of a new international economic order which is best seen in the expansion of international economic institutions, trade, finance and TNCs. Three international economic organizations were created as a result of that conference, to administer and orchester the monetary system, the funding of development projects and the trade of goods and services: the IMF, the BIRD, now known as the WB and the GATT, today in the form of the WTO. The common aim of these organizations was to improve welfare in all societies by avoiding the economic mistakes that led to the great depression. Rebuild and strengthening the international economic network of trade was seen as a driving force for welfare improvement. Since the fall of the Soviet Union, they have contributed to the expansion of market driven economies, most notably through the Washington consensus policies, "unleashed on developing countries in the 1990s" (Streger, 2017, p.101) in the form of 'structural adjustment programs'. These austere economic programs "rarely produce the desired result of 'developing' debtor societies" (Streger, 2017, p.102) and the IMF and WB policies have been rethought consequently in the last years.

The expansion of trade as a consequence of the lowering of trade barriers and transportation advancements has had both benefits and drawbacks. Some benefits are: increased global wealth, lifting people out of poverty, enhance consumer choice, the spread of technology and know-how and enhanced productivity in participating nations. The main drawbacks are the growing inequalities in income and wealth across and within nations and the ecological consequences of the increase of consumerism. Furthermore, the revolutions in trade and technology have brought the liberalization of financial transactions: removal of credit controls, growth of investment banks, privatization of financial institutions, etc. Unfortunately, the world financial system has proved to be highly sensitive and volatile, as well as interconnected, transferring financial crisis from one country to its neighbors with little regulatory control. Additionally, trade and financial liberalization, together with an increasingly deregulated global labor market have led to the booming of TNCs, which skyrocketed from 7,000 in 1970 to over 100,000 in 2015 (Streger, 2017, p.95). These TNCs control most of the world's investment capital, location of industries, technology, trade flows and access to international markers.

Streger goes as far as to say that TNCs rival nations in their economic power as they influence nowadays the political, economic and social welfare of billions of individuals (2017, p.97).

ALL GLOBALIZATION DIMENSIONS ARE INTERCONNECTED. To end this brief overview of globalization, the interconnectedness of all the aforementioned dimensions of globalization must be highlighted, by looking at the negotiations over climate change. In this area, the spread of consumerist values, based on an anthropocentric paradigm whereby the environment is considered a resource to fulfill human wants, together with uncontrolled population growth are endangering the ecosystems on which we depend. Human-induced climate change is contributing to global warming, more extreme weather events, reduction of biodiversity, sea level and water temperature rise. There is an undeniable connection between problems that go beyond nation-states borders, best exemplified in the (mis)management of food crisis, health crisis and reconstruction processes. Thus, the solution to these problems lies not in the hands of individual nation-states, but in a combination of economic, political, and cultural efforts, through a coordinated global response. Unfortunately, most nations see measure to reduce carbon emissions and fight climate change as threats to their economic growth, which they privilege in a short-visioned strategy that only allows for international environmental treaties with little enforcement mechanisms. The Paris Agreement signed in Paris in December 2015 united for the first time all nations in tackling climate change, but already in August 2017, the Trump Administration announced its intention to withdraw the world's second biggest polluting country from the agreement.

IDEOLOGIES OF GLOBALIZATION

The debate over whether globalization is a "good" or a "bad" thing is an ideological debate. Ideologies are "powerful systems of widely shared ideas and patterned beliefs that are accepted as truth by significant groups in society" (Streger, 2017, p.157). They allow for the articulation of the Global Imaginary - "a background understanding of community and belonging increasingly tied to the global" (Streger, 2017, p.158) - into political programs. There are three contesting globalism ideologies: the ruling Market Globalism, Justice Globalism and Religious Globalism.

MARKET GLOBALISM. Market globalism is the dominant ideology of our time since the 1990s and it proposes a liberal-integrated-markets world with the idealization of economic freedom. Globalization is portrayed in deterministic language as an inevitable and irreversible natural force thus depoliticizing and irrationalizing the debate. It has become what is called a "strong discourse", difficult to resist, backed by powerful social forces (Streger, 2017, p.161). Globalization is equated to free trade and the spread of democracy, whose benefits are those of globalization, unequivocally a "good" thing for everyone.

JUSTICE GLOBALISM. Acknowledging the widening global disparities, cyclical financial crisis, and the "thin", 'low-intensity' or 'formal' market democracy, consequence of the dominance of Market Globalism ideology, the political left has also since the 1990s offered an ideological response to those inefficiencies. Justice Globalism proposes the "Global New Deal", a new world order dedicated to defending more equitable North-South relationships, protecting the global environment, fair trade, human rights and women's issues (Streger, 2017, p.167). This ideology is commonly associated with the 'Battle of Seattle' - a massive anti-WTO protest in 1999-, the Occupy movement of 2011, the 'global justice movement' - a network of NGOs belonging to the global civil society aforementioned-, the progressive journalist Naomi Klein and the human rights proponent Noam Chomsky in North America, Green parties in Europe and indigenous people's movement in the global South, among others (Streger, 2017, p.168).

RELIGIOUS GLOBALISM. Religious Globalism promotes an alternative, religiously inspired vision of global community, to be given primacy over other political structures. Its religious values are considered to be under threat by both consumerist and secularist forces. It includes "some fundamentalist Christian groups such as the Army of God and Christian Identity, the Mormon Church, the Falun Gong sect, the Aum Shinrikyo cult, and the orthodox Jewish movement of Chabad" (Streger, 2017, p.175). Although its most extreme manifestation is that of "Jihadist globalism", in the form of Islamist terrorism such as that of ISIL and Al Qaeda, carrying out terrorist activities around the globe to defend their view of global society. "Despite its chilling and violent content, their vision contains an ideological alternative [...] that nonetheless imagines community in unambiguously global terms" (Streger, 2017, p.179).

ANTI GLOBALIZATION VS ALTER GLOBALIZATION. It is important to make the distinction between alter-globalization - alternative global visions to that of Market Globalism, thus Justice or Religious Globalism - and anti-globalization - political propositions that oppose globalization dynamics in support of national homogeneous units -. Most anti-globalists cling onto the weakened national imaginary and propose national-populist and economic protectionist policies like those of "Donald Trump and most Tea Party adherents in the United States, Marine Le Pen in France, Nigel Farage in the UK, or Frauke Petry in Germany" (Streger, 2017, p.158).

POPULISM

Populism "truly is an essentially contested concept" (Mudde & Rovira, 2017, p.32). A consensual definition of the concept has not been agreed yet, and it seems like different definitions will coexist, each applicable to a different aspect of the concept, historical frame or geographical context. In this section, first the main approaches to populism will be discussed. Second, the consensual elements of populism will be presented.

DIFFERENT APPROACHES TO POPULISM

Three approaches to populism dominate the literature on the topic of populism, and will be briefly explained here: the ideational, the political discourse and the political strategy. Two other relevant approaches will be mentioned as well: the socioeconomic and the popular agency.

THE IDEOLOGICAL APPROACH. Populism is defined as a thin-centered ideology, providing a general framework-answer to all socio-political questions. The cornerstone of ideological populism is its appeal to "the people" and the popular sovereignty representing the general will, together with a denunciation of the morally corrupt and established "elite". Being a thin-centered ideology populism can be found across the political spectrum in combination with more developed political ideologies (such as liberalism or socialism) that fill-in the populist framework (Gideon & Bukowski, 2013, p.6).

THE POLITICAL DISCOURSE APPROACH. Populism is defined as a discursive style, employed to a greater or lesser degree by a myriad of parties across the political spectrum. This anti-status-quo discourse is "a Manichaean discourse that assigns a binary moral dimension to

political conflicts" (Gideon & Bukowski, 2013, p.8), distinguishing between 'us' and 'them'. Macula's contribution to populism is often associated with the political discourse approach. He argues that liberal democracy is the problem. The 'us' and 'them' 'empty signifiers' allow for a more radical democracy by "reintroducing conflict into politics and fostering the mobilization of excluded sectors of society" (Mudde & Rovira, 2017, p.34). The study of the political style of populism is also associated with the political discourse approach. This style is characterized as amateurish and unprofessional but effective in mobilizing the masses. As Mudde and Rovira put it "By disrespecting the dress code and language manners, populist actors are able to present themselves not only as different and novel, but also as courageous leaders who stand with "the people" in opposition to "the elite."" (Mudde & Rovira, 2017, p. 35).

THE POLITICAL STRATEGY APPROACH. Populism is defined as a form of political mobilization employed by a charismatic figure, "a specific type of leader who seeks to govern based on direct and unmediated support from their followers." (Mudde & Rovira, 2017, p.34).

THE POPULAR AGENCY APPROACH. Populism is defined as high popular engagement in politics, fostering democracy. Populism under this approach has a rather positive connotation, seen as "positive force for the mobilization of the (common) people and for the development of a communitarian model of democracy." (Mudde & Rovira, 2017, p.33).

THE SOCIOECONOMIC APPROACH. Populism or "populist economics" is defined as an irresponsible economic policy composed of a period of massive government spending (financed by foreign debt) and excessive redistribution and a period of consequent hyperinflation and the necessity of harsh economic adjustments (Mudde & Rovira, 2017, p.34).

ELEMENTS OF POPULISM

Three elements are present in all forms of populism, independently of the approach taken to analyze it: the people, the elite and the general will.

THE PEOPLE. 'The People' is a construction that simplifies reality making its interpretation easier. Various scholars argue the vagueness of the concept makes it analytically

useless (Mudde & Rovira, 2017, p.42). Contrarily, Layla argues that because it uses an 'empty signifier' that populism acquires power. Its vagueness and malleability "can generate a shared identity between different groups and facilitate their support for a common cause" (Mudde & Rovira, 2017, p. 40).

The people has three overlapping meanings: the people as sovereign, as the common people, and as the nation. People as sovereign draws upon democracy being a government by the people, where citizens are the ultimate source of political power, there still exists a gap between governed and governors, citizens are not rulers. This cleavage allows for a populist struggle "to give government back to the people" (Mudde & Rovira, 2017, p. 43). People as the common people are groups of people that are or consider to be excluded from power due to their socio-economic or socio-cultural inferior status that unite in an effort to mobilize against 'the elite' or 'the establishment'. This vision of the people draws upon an 'income/social class cleavage'. People as the nation refers to a national community, be it civic or ethnic, drawing upon an 'ethno-national/cultural cleavage.' "These cleavages can be orthogonal or overlapping, producing different patterns of alliances and political outcomes" (Rodrik, 2017, p.24).

THE ELITE. The elite englobes in a homogenous group those holding power in the fields of politics, the economy, the media and the arts. They are portrayed as corrupt and working against the general will of the pure people (Mudde & Rovira, 2017, p.46). While the distinction between elite and people is essentially moral, it is then identified on a broad variety of secondary criteria. "Though it would make sense that the definition of the elite would be based upon the same criteria as that of the people, this is not always the case" (Mudde & Rovira, 2017, p. 45).

THE GENERAL WILL. While the populist call can come in many different forms - be it an individual, a social movement or a political party - it always has "a carefully crafted image of the *vex popular*" (Mudde & Rovira, 2017, p.51). The notion of the 'general will' is linked to Rousseau's distinction between the general will - referred to the common interest- and the will of the people - a sum of particular interests-. Populist movements somewhat critique representative governments, calling for a more direct democracy, with institutional mechanisms allowing a more direct relationship between the rulers and their constituencies.

THEORETICAL FRAMEWORK

Before getting into the analysis of the relation between the consequences of globalization and the increase of populist support in advanced economies we ought to establish a clearer framework of what we understand both as "globalization" and as "populism". As exposed in the State of the Art section, these two concepts are not only contested, but also multidimensional, and for the sake of this work, we will take a narrower and more focused approach to both terms.

Concerning Globalization, the approach taken here is that of Richard Baldwin, in his book The Great Convergence, focusing on the economic dimension of globalization. As for Populism, we will take the ideational approach. This will allow for qualifying political parties as either populist or not as well as to study the demand and supply factors of populism.

GLOBALIZATION

OLD AND NEW GLOBALIZATIONS

Baldwin makes an important distinction between old and new globalization forms, which have had very different impacts on the economies of the global North. The old form of globalization, that took place from around 1800 or 1820 up until the 1990s, was triggered by steam power and a time of global peace that gave place to the spread of the industrial revolution. Low trade costs allowed for markets to be exported globally while high communication costs kept the industry, its innovation and growth clustered locally in the North. The growing North-South asymmetries led to a Northern domination of World trade and world GDP share in what is known today as "the Great Divergence" (Baldwin, 2016) (see Appendix 1).

Since the 1990s, a new form of globalization has taken place, led by the ICT revolution. ICTs allow for low communication costs, thus allowing for a breaking up of the industry-innovation-growth cluster that existed in the North, making offshoring technically possible. Furthermore, the asymmetries that arose during the Great Divergence led to a considerable North-South wage gap, making offshoring of manufacturing processes profitable. Consequently, being both profitable and possible, the creation of what Baldwin calls "Global Value Chains" (GVCs) revolutionized globalization (Baldwin, 2016, p.145). A small number of developing

economies became the target of offshoring and knowledge flows from northern TNCs, coupling a highly competitive combination of low wage and high tech. Other developing nations reacted by unilaterally cutting tariffs since the 1990s, in order to either attract offshoring and joining the GVCs or alternatively benefit from the commodities super cycle. The New Globalization had led to a partial rebalancing of world GDP shares, what Baldwin calls "the Great Convergence" (Baldwin, 2016) (see Appendix 1).

THE NEW ECONOMIC GEOGRAPHY HAS LOSERS

The partial decline in global inequality of the Great Convergence was accompanied by an increase in domestic inequality and cleavages. National competitiveness in the world economy is not driven any more by sector specialization but rather by occupations and production stages within sectors, leading to a "finer degree of resolution" (Baldwin, 2016, p.165-6).

Up to now, economic competitive policies - from education and training to tax breaks - have been thought in the framework of national comparative advantage (in specific sectors), each nation working on its national sources of competitiveness (Baldwin, 2016, p.13). However, the new globalization and the unbundling of TNCs has shifted the unit of analysis in comparative advantage from states to firms. Nowadays TNCs combine different sources of competitive advantage (such as northern know-how and southern cheap-labor) to create international production networks. Comparative advantage has thus been denationalized and the contours of industrial competitiveness are now defined by offshoring firms, not nation-states.

Stopper-Samuelson's economic theorem shows the negative distributional implication from opening up to trade (Stopper-Samuelson, 1941). A simpler reasoning with the same conclusion is that "under competitive conditions, [...] ruling out complete specialization – there is always at least one factor of production that is rendered worse off by the liberalization of trade. In other words, trade generically produces losers" (Rodrik, 2017, p.5). Consequently, the New Globalization has been "a blessing for some and a bane for others" (Baldwin, 2016, p.79).

On the one hand, globalization was very positive for exporters, TNCs, international banks, investors, and managerial or high-skilled workers - what Baldwin resumes as the "owners

of the rich nation's know-how" (Baldwin, 2016, p.161) - who could all benefit from larger markets and the opportunity to exploit their resources in more competitive ways. It has also been arguably beneficial for poor countries joining the GVCs (particularly China), increasing their growth and reducing poverty. The know-how flow "makes unskilled labor in the developing nations much more productive [...] it boosts their incomes" (Baldwin, 2016, p.162).

On the other hand, globalization is at the root of the process of "polarization" on "hollowing out" of the workforce in advanced economies, with low and middle skilled jobs greatly being offshored or replaced by technology. Manufacturing is the sector where the reversal of fortunes between the North and the South has been more visible, with the North experiencing a fall in value added shares and number of jobs in the manufacturing sector and the I6 experiencing mirroring trends (Baldwin, 2016, p.86). "When technology was national, international wage gaps adjusted to international technology differences" (Baldwin, 2016, p.12). Now that a rupture has occurred between advanced economies' firms and its workers, and technology is not bounded to national labor, wages in the advanced economies do not monopolize the benefits of their firms' technological advancements. Since TNCs can now look for workers across the globe, the national distribution of jobs has changed to a global one described by Paul Krugman and Fujita in their notion of the New Economic Geography: "the location of manufacturing is affected by wage gaps [...] The result is a tendency toward a spatial sorting of skill-intensive industries to high-wage nations and labor-intensive industries to low-wage nations." (Baldwin, 2016, p.186). The consequence is that relatively rewarding jobs for low-skilled workers are disappearing in advanced economies, or as Spurt et al. put it: "In an "information" or "knowledge" society, some basic information processing skills are needed to keep up to speed; thus, leaving the less educated vulnerable" (2016, p.335).

The de-industrialization generating advanced economies' losers was not only driven by forces of globalization. Automation and new digital technologies had a greater impact and let to greater inequalities. "But globalization became tainted with a stigma of unfairness that technology evaded" (Rodrik, 2017, p.21). Free trade and the exploitation of low wages in foreign countries is seen by the 'losers of globalization' (Kristi, 2014) as a form of cheating the previously existing system, in a way that does not benefit their position.

The advancement of globalization has generated inequalities, not only among nations (leaving many countries out of the GVCs) but also within nations, as Thomas Piketty alarmingly points (Piketty, 2014). Branko Milanovic, on a more positive note, highlights that income equality in a world aggregate level is in good direction, noticing the rise of a 'global middle class'. Unfortunately, his analysis also denotes the stagnation - and thus relative worsening - of the position of middle class groups in rich nations (Milanovic, 2016).

NEED FOR REDISTRIBUTIVE POLICIES

Globalization has brought overall progress, which involves change and thus pains and gains for different groups of people. There is a need for redistributive policies to rebalance the equation and ensure no group is left behind (Baldwin, 2016, p.225). "Trade economists, aware of the distributive implications of their models, have long called for such compensation" (Rodrik, 2017, p.10).

Policies in advanced economies should prepare for palliating the increased negative effects of globalization as well as taking advantage of the positive ones. The way to do this in order for it to be constructive in the long term, without hindering the national economy, is "to protect workers, not jobs" (Baldwin, 2016, p.237) by providing economic security and helping workers adapt to changing circumstances. The vulnerability of a job depends on its position in the global value chain, so the skills promoted should be flexible and central to the value chain. The focus should be put on creating sources of competitiveness that are likely to remain in the country and are able to adapt to fast changes, so that the nation implementing the policy does not see most of the benefit leaving to other nations or becoming obsolete. Factors of production such as human capital and skills have greater "stickiness" and less potential for spillover, thus benefiting the developed nation and securing the worker's future job (Baldwin, 2016, p.231). Since there has been a servification of industries, the manufacturing sector productivity growth comes from pre- and-post fabrication service stages. Thus, industrial policy should focus not on factories but on manufacturing linked services (such as engineering, science and management) (Baldwin, 2016, p.233). The new industrial zones are no more areas with factories but cities which become skill-clusters or brain hubs, which make talented people more productive. As Baldwin crudely puts it,

"well- functioning cities are one way G7 governments can "China- proof" their good jobs" (Baldwin, 2016, p.236).

POPULISM

THE IDEATIONAL APPROACH

As mentioned in the State of the Art section, the ideational approach to populism defines it as a thin-centered ideology marked by the distinction of two antagonistic and homogeneous groups in society: the 'pure people' channeling its 'general will' against the 'corrupt elite'. The concept of ideology can be resumed as "a body of normative ideas about the nature of man and society as well as the organization and purposes of society. Simply stated, it is a view of how the world is and should be" (Mudde & Rovira, 2017, p.37). Furthermore, the ideational approach provides a distinction between thin-centered and thick-centered ideologies. Thin centered-ideologies, such as populism, cannot stand on their own as they do not provide an answer or a purpose to political questions. Populism has thus accompanied through history different thin and thick-centered ideologies - more coherent ideological traditions - such as neoliberalism, socialism, agrarianism or nationalism. "Populism seldom exists in pure form. Rather, it appears in combination with, and manages to survive thanks to, other concepts" (Mudde & Rovira, 2017, p.38). Therefore, Populism serves as a set of ideas creating a mental map that allows the comprehension of a political reality. The interpretation of this same populist mental map can and has been carried out from different and contradictory ideologies, leading to both the anti-immigration far-right Front National in France and to the far-left economic populism of Chávez in Venezuela. Consequently, this thin-centered definition of populism allows for the malleability required to a concept used in such a myriad of different socioeconomic contexts, times and spaces (Mudde & Rovira, 2017, p.40).

THE SUITABILITY OF THE IDEATIONAL APPROACH

There are two main reasons for the selection of this approach as a theoretical framework, namely: that is allows for a dichotomous populist/non-populist classification of political parties and that it allows for a study not only the supply factors of populism but also the demand factors - the latter being the focus of this paper.

The main reason explaining the difficulty of framing populism into one agreeable theory is that it is a term used to describe very different political movements, ideologies, parties, and leaders, at very different times in history and across varied geographical contexts (Gideon and Bukowski, 2013, p.3). For the matter that occupies this paper (populism in advanced economies since the 1990s) the cleavage challenging a unified theoretical framework is that of the different ideologies that populism can be tied to, particularly neoliberalism and socialism, or right and left wing in political terms. For this reason, the ideational approach and its concept of a thin-centered ideology, able to define whether a party is or is not populist regardless of the tick-centered ideology it accompanies, is the ideal framework that will be applied.

The ideational approach has been in various occasions assimilated to the political discourse approach. However, studying populism from as a political discourse would lead to a classification of parties into a spectrum of populism, depending on whether and how often their discourse presents populist characteristics, losing the binary assessment necessary for this paper (Gideon and Bukowski, 2013, p.9). By defining populism as an ideology, both populist proposals and the grievances they connect with can be analyzed. In other words, the ideational approach "allows us to take into account both the demand side and the supply side of populist politics, where most accounts focus exclusively on the populist supply" (Mudde & Rovira, 2017, p.51).

DEMAND AND SUPPLY OF POPULISM

"To explain the success (and failure) of populist actors one has to take into account both the demand side and the supply side of populist politics" (Mudde & Rovira, 2017, p.136). It would be a mistake to reduce the study of populism to the formation of populist forces in the political arena. These forces performance depends not only on their ability to mobilize disenchanted voters, but also on the existence of that disenchantment. That existence depends on what is referred to as demands of populism, as opposed to the supply of populism, which will be explained in this section.

POPULIST DEMAND. The demands for populism are socioeconomic grievances that generate a perception that "threats to the very existence of society are present" (Mudde & Rovira, 2017, p.139). This populist attitude is more likely to arise in times of political failure,

such as in the event of dramatic economic downturns (like the Great Recession) or the disclosure of cases of systematic corruption (like the Tangentopoli corruption scandal in Italy in the 1990s). Not being able to trust the existing structures for providing security - be it political, economic or of any other form - makes voters eager to find a better and more reassuring solution.

POPULIST SUPPLY. "Populist attitudes are often latent, i.e., lying dormant or hidden until circumstances are suitable for their development or manifestation." (Mudde & Rovira, 2017, p.139). Drawing upon the existing cleavages in society and the circumstantial grievances, populist leaders offer a narrative that gives direction to those grievances (Rodrik, 2017, p.3). A successful populist supply will encourage a narrative of crisis, generating a sense of urgency and importance to the message they convey. To mobilize a heterogeneous political base around common concerns, populist movements supply narratives that connect the elements of 'people', 'elite' and 'general will' to existing demands of populism. Therefore, using a combination of populism and host ideologies, familiar to the electorate and already connected to societal grievances, populism offers a unifying 'common sense' solutions. "They present a story that is meant to resonate with their base, the demand side: here is what is happening, this is why, and these are the people who are doing it to you" (Rodrik, 2017, p.23). A clear example of this is the combination of populism and nativism in the ideological base of western European right-wing populist parties (Mudde & Rovira, 2017, p.161).

PAST POLITICAL BACKLASHES TO GLOBALIZATION

In order to do right in the present, we must learn from the past. Even though the world is more globalized today than it has ever been, there have been other moments in history when globalization pushed the pre-existing frameworks. Particularly, the study of the end of the 19th century, particularly in Europe and the United States, constitutes an illustrative example from which insightful lessons can be learned. The period from 1860 to 1914 - what Baldwin refers to as the Old form of Globalization (Baldwin, 2016, p.77-8) - was characterized by breakthrough globalization trends. First, growth and liberalization of trade, particularly in Europe. Second, huge flows of capital backed by the Gold Standard. Third, exchanges of information and workers, backed up by the expansion of communication and transportation networks (such as railroads, the telegraph and steamships).

Each of these trends ignited a political backlash. First, trade liberalization led to a decline in prices in agricultural and manufacturing sectors, and the consequent pressure demanding resumption of protectionist measures. All European countries (but Britain) raised their tariffs before the end of the 19th century (Bairoch, 1972). Second, the Gold Standard was perceived by American farmers in the 1880s as the cause of worsening credit conditions, high freight rates and low grain prices. "Together with workers' groups and Western miners, they militated against Northeastern bankers and financiers, whom they viewed as the beneficiaries of the Gold Standard and responsible for their hardship" (Rodrik, 2017, p.4). Even if this "History's first self-consciously populist movement" was eventually defeated, the tug-of-war between these groups' interests lasted and intensified over time. Third, immigration limits were set in the United States, targeting Chinese and Japanese immigration in 1882 and 1907 (Rodrik, 2017, p.4).

Polanyi points out how movements against disruptive globalization trends eventually gave birth to political parties forcing the passage of protective social legislation at the national level, the most extreme manifestations of these being German Nazism and Italian Fascism (Streger, 2017, p.182). As Jeffry Frieden (2006) summarizes it, the reaction to mainstream politics then took a sharp turn away from globalization. Noteworthy tendencies indicate social unrest is likely to burst one way or another. For example, Thomas Piketty warns that levels of social inequality today are approaching the disparities existing at the end of the 19th century (Piketty, 2014). Like in the 19th century, the Second Wave of Globalization represents, as it's denomination indicates, a new unleashing of globalization trends (described in the previous section). Rodrick argues that simple economic globalization is not propitious of political sustainability (Rodrik, 2017, p.26). In what he has coined as "*hyperglobalization*", Rodrik defines how advanced phases of globalization in which the relation between political and distributive costs to net economic gains, are likely to produce political backlashes (Rodrik 2011, in Rodrik 2017). Making reference to the lack of a political strength comparable to that of the economic tendencies of our time, Rodrick states that "in a world divided politically, markets face strong centrifugal forces as well" (Rodrik, 2017, p.26). "Economic history and economic theory both give us strong reasons to believe that advanced stages of globalization are prone to populist backlash" (Rodrik, 2017, p.2).

LITERARY REVIEW: EMPIRICAL PAPERS ON POPULISM AND GLOBALIZATION

Various empirical papers have examined the link between the rise of populist movements and trends associated with globalization. Most papers explore this relation in the framework of a particular event in a particular country, such as the Brexit vote on June 2016, or the American presidential election of 2017. Across the modest literature review carried out for this section, no paper has been found that targeted specifically advanced economies. However, these papers can guide the operationalization of the fuzzy concept of globalization and economic globalization into a set of concrete, measurable variables from which an empirical study can be carried out. Consequently, in the following paragraphs, an overview of papers analyzing the link between populist movements and globalization trends is presented.

- On the Brexit vote, Becker, Fetzer & Novy (2016) analyze 380 local authority areas in the United Kingdom as well as, in a finer level, wards within cities. They found little explanatory power for immigration and trade in determining the vote. However, industrial composition and demographic variables such as education levels or manufacturing employment has a significant determining role.

- Also on Brexit vote, Colantone and Standing (2016), find a causal relation between the imports shock from China (used as a proxy variable for economic globalization) and Leave vote shares. They point the relevance of effective compensation for the losers of globalization. Furthermore, they stress the predominant explanatory power of trade shock over both stock an inflow of immigrants.

- On electoral results in US congressional elections of 2002 and 2010, Autor et al. (2016) find that the China trade shock sharpened political polarization.

- Analyzing the impact of the China trade shock on electoral results in 15 European countries, Contalone and Stanig (2017) find that greater trade shocks are associated with greater support for nationalist parties.

- Studying European survey data on individual vote behavior Guiso et al. (2017) discover that economic insecurity - including competitive threats of immigration and imports - drives populist support. Furthermore, Guiso et al. (2017) highlight the relevance of considering the voter turnout in order to account for populist support as a whole and not only for populist vote share.

OBJECTIVES AND HYPOTHESIS

This general objective of this paper is to study the globalization-induced economic roots of populism. The claim is not, however, that globalization is the only source nor necessarily the most important source of those economic issues, nor that economic matters are the only nor main source of populism. The following question summarizes the general objective of this paper:

¿Is economic globalization at the root of populist movements in advanced economies?

In order to guide the process of answering the research question, specific objectives are set:
- Expose the ramification in the literature on the concepts of globalization and populism.
- Explore the existing literature linking globalization and populism as to build from the existing work, standing on the shoulders of giants.
- Present the methodological process leading to a trustworthy econometric model.
- Evaluate which variables better account for voting-decision-related consequences of economic globalization.
- Analyze the results in a way that provides useful insights both for the contribution to the existing literature and the elaboration of solidly grounded policies.

With the aim of making of this paper a rigorous work, a hypothesis is presented, from which the analysis will be developed. This hypothesis is influenced by the research undertaken, formerly been summarized in the State of the Art Section. All points of view in the existing debate in the literature have been included to the greatest possible extent. Always with the sincere aim of pursuing an objective analysis, a hypothesis is here presented to set a starting point that will be challenged across the paper:

The effects of economic globalization explain, to a great extent, the rise in support for populist

parties in states with advanced economies.

The specific hypotheses are presented further in this paper, and regard the expected relation between various variables and the support for populist parties. They can be found in the subsection Hypothesis, under the section Methodology and Development of the Econometric Model.

METHODOLOGY AND DEVELOPMENT OF THE ECONOMETRIC MODEL

PANEL DATA

Panel data sets consist of a group of cross-sectional unit data observed over time. The term individuals is used to refer to the units of analysis, generically, even when these units are not human beings. The number of individuals is denoted as N, and the number of time periods is denoted as T. In this line, Peter Kennedy (2003) offers a classification of panel data sets based on N and T: 'long and narrow' when N is small and T is large, 'short and wide' when N is large and T is small and 'long and wide' when both N and T are large.

Furthermore, a panel is considered balanced if for each individual, the number of time series observations is the same. If the quantity of observations is different across individuals, then it is an unbalanced panel. Even though most econometric software packages can estimate models from either balanced or unbalanced panels, it is preferable to have the highest possible number of observations to get the best estimation.

In the model developed in this paper, the units of analysis or individuals are states and N=17. The time periods are years from 1991 to 2017, so T=27. Therefore, the panel data set is relatively long (as T>N) and narrow. The original dataset was an unbalanced dataset. However, is was completed based on reasonable hypothesis and therefore the dataset used is balanced. Various reasons existed for the unbalance of the data set, and the way it has been completed as well as the hypothesis used are explained in the following section together with the description of the corresponding variable whose dataset has been completed.

INDIVIDUALS (N).

The individuals selected for this study are 17 (N=17) advanced economies, with free and fair elections, having celebrated at least 10 elections since the year 1990 and for which data on all the selected variables was available. Namely: Australia, Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, New Zealand, Portugal, Spain, Sweden and United Kingdom. The precise selection process for the individuals is defined, and a recapitulative table is presented to illustrate the process in Appendix 2.

TIME FRAME (T).

The time frame selected for this study goes from 1990 to the present, 2018. This period corresponds to the second wave of democratization as defined by Richard Baldwin in his book The Great Convergence (Baldwin, 2016). As mentioned in the State of the Art Section of this paper, the delimitation in time of Globalization processes can vary through literature. Since Richard Baldwin´s book was the inspirational root of this paper and due to the author's focus on Economic Globalization, it's trends, history and implications, his delimitation of the Second Wave of globalization seems appropriate for this study.

The data collected originally spammed from 1990 to 1017, since no data is yet available for the current year 2018. Furthermore, for various datasets the variation from one year to the next has been included as a variable per se. As the variation from the previous year could not be calculated for the year 1990, the final timeframe spams from 1991 to 2017, so T= 27.

VARIABLES

In the previous section, the individuals and the time frame of the econometric model were specified. In this section, an overview of the considered variables is presented. An econometric model based on panel data requires both an endogenous or dependent variable, here the 'Populist Vote', and a series of exogenous or independent variables. The objective of the model is to see in what way and to what extent the dependent variable and the independent variables are related. It is important to note that a panel data model requires variables that are comparable between different individuals and over time. For example, instead of comparing the GDP of two countries, the comparison is made between the GDP per capita or the GDP growth rate of two countries. All the sources of information and the data used for this paper is secondary, previously collected and elaborated by a variety of other researchers and institutions (see Appendix 5 for details).

ENDOGENOUS OR DEPENDENT VARIABLE

Populist Vote (POP). This variable represents the rise of populism. It accounts for the share of votes received by populist parties at national and European parliamentary elections.

Populism can be attributed to political parties, social movements and even individual leaders. In this paper, the individuals selected are parties, as availability of information and its orderliness is of greater usability than that of social movements and individuals. Under the ideational approach that serves in this paper as Theoretical Framework, the thin-centered ideological understanding of Populism allows for a dichotomous classification between populist and non-populist political parties. The full list of populist political parties used in the model, and the votes they received for each election can be consulted in Appendix 4, with the corresponding sources and explanations on how the populist character of parties is determined. Manipulations of the data based on reasonable hypothesis were made in order to obtain a balance panel data. The details of these manipulations can be found in Appendix 3.

EXOGENOUS OR INDEPENDENT VARIABLES

The exogenous variables of this model concern possible demand factors for populism, as the Theoretical Framework of this paper suggested. In the selection of demand factor variables two guidelines have been followed. On the one hand, exogenous variables have been selected in order to account for the effects of the economic globalization on states, and more precisely on their population. Examples of this are the variables: employment and value added by sector, the unemployment by education level, variables regarding the GDP, Trade Freedom, foreign direct investment or the urban population changes. On the other hand, other exogenous variables are included to account for sources of populism increase found in the literature, in the form of control variables, such as public spending, corruption and changes in foreign population.

The following paragraphs present the exogenous variables used in the econometric model. The corresponding sources for each variable have been gathered in Appendix 5 for clarity purposes. As mentioned in the previous section, a balanced panel data has been reached, starting from the unbalanced panel dataset collected. The details of this balancing process are fully detailed and schematized in Appendix 3.

Employment by sectors (EmpAgr, EmpInd, EmpServ). These three variables account for the differences by sector of the effects of economic globalization, with a focus on the direct

impact on citizens lives. The three variables show the share of agricultural, industrial and services employment, respectively, as a percentage of total employment. The series is part of the ILO estimates and is harmonized to ensure comparability across countries and over time by accounting for differences in data source, scope of coverage, methodology, and other country-specific factors. The estimates are based mainly on nationally representative labor force surveys, with other sources (population censuses and nationally reported estimates) used only when no survey data are available.

Value added by sector (ValAddAgr, ValAddInd, ValAddServ, VarAddManuf). These three variables also account for the differences by sector of the effects of economic globalization, this time with a focus on the contribution of the sector to the economy. The three variables show the percentage of value added (contribution of labor and capital to production) by sector, respectively agriculture, industry, services and manufacturing. The shares of each sector are calculated by dividing the value added in each sector by total value added. Value added is the value of the gross output of producers less the value of intermediate goods and services consumed in production, before accounting for consumption of fixed capital in production.

Unemployment by level of education (UnBasicEduc, UnIntermEduc, UnAdvEduc). These three variables show the percentage of unemployment among labor force with basic, intermediate and advanced education levels, respectively. These variables serve as a proxy variable for unemployment by skill level.

Gross Domestic Product growth (GDPgrowth) & Gross Domestic Product per capita (GDPpc). The variable GDPgrowth accounts for the reduced growth in advanced economies since the 1990s as a consequence of the second wave of globalization and demographic processes (Baldwin, 2016). The variable GDPpc (GDP per capita) accounts for the individual impact of this process on citizens. GDPgrowth shows annual percentage growth rate of GDP at market prices based on constant local currency, with aggregates are based on constant 2010 U.S. dollars. Despite its limitations, GDP is the most commonly used indicator of economic growth.

GDPpc shows GDP per capita as gross domestic product divided by midyear population, with data in current U.S. dollars. A limitation of this variables is that GDP is not distributed evenly among citizens of a state, and therefore a variable showing this inequality should be included. The problems preventing the inclusion of such variable are described in the section Other Variables Considered-Inequality. Even so, interesting insights can be drawn from analyzing the effects of GDPpc.

Trade Freedom Index (TradeFreed). This variable shows the Trade Freedom Index, a component of the Economic Freedom Index by the Heritage foundation. The Index of Economic Freedom englobes four aspects of the economic environment over which government typically exercise policy control: the rule of law, government size, regulatory efficiency and market openness. The Trade Freedom Index falls under the market openness section, it is a composite measure of the extent of tariff and nontariff barriers that affect exports and imports of goods and services. There are two components to the Trade Freedom Index score: the trade-weighted average tariff rate and the nontariff barriers. Each country is given a score from 0 to 100, with 100 being total trade freedom. The latter is determined both qualitatively and quantitatively, and includes different restrictions: quantity, price, regulatory, customs and government interventions.

Net Foreign Direct Investment Stock (NetFDIstock). This variable shows the net stock of FDI flows as percentage of GDP, calculated as the difference between the stock of outward and inward flow of FDI as percentage of GDP. In line with Trade Freedom that shows the openness of the economic environment, this variable exposes the results of such openness.

Urban Population (UrbPop) and its variation (VarUrbPop). The variable Urban Population shows the share of total state population living in urban areas, as a percentage of total population. Two manifest limitations of this variable are that population's classification as "rural" and "urban" differs across countries and that the population of a city or metropolitan area vary depending on the countries chosen. The variable Urban Population Variation shows the yearly absolute change in the share of total state population living in urban areas. Whereas UrbPop accounts for the specific share in one given year, VarUrbPop shows the effect of an increase or a decrease urban population.

Public Spending in Unemployment (PublSpenUn). This variable shows the expenditure on cash benefits for people to compensate for unemployment, as percentage of GDP. Compensations include among others the redundancy payments from public funds and payment of pensions to beneficiaries before they reach the standard pensionable age. This variable serves as a proxy variable accounting for the welfare provided by governments in each state.

Corruption Perception Index (CPI) and its variation (VarCPI). This variable shows the Corruption Perception Index score for each individual state. The corruption perception score is scaled from 0 to 100, where o is highly corrupt and 100 is not corrupt. This serves as a proxy variable for corruption and particularly corruption scandals, described in the literature as being a source for populist support (Brubaker, 2017), and thus serving here as control variable.

The variable Variation in CPI (VarCPI) shows the yearly relative change in the CPI score. Whereas the variable CPI accounts for the specific score, VarCPI shows the effect of an increase or a decrease in the corruption perception. This variable is meant to account for big changes due to corruption scandals.

Foreign Population (ForeignPop) and its variation (VarForeignPop). This variable shows the percentage of residents that have ever migrated from their country of birth to their current country of residence as a percentage of the total population of each state. It includes people born abroad as nationals of their current country of residence. This variable was preferred over foreign population as the latter depends heavily on rule of acquisition of citizenship in each country.

The variable Variation in Foreign Population (VarForeignPop) shows the yearly absolute change in the Foreign Population. Whereas ForeignPop accounts for the specific share in one given year, VarForeignPop shows the effect of a change, such as those provoqued by massive migrations.

CORRELATIONS & SELECTION OF VARIABLES

Figure 2 shows the heat-map representation of the correlation matrix between all the aforementioned variables (full correlation matrix in Appendix 6). We observe a high degree of correlation between the four variables accounting for value added by sector (ValAddAgr, ValAddInd, ValAddServ, VarAddManuf) among them and with the variables accounting for employment by sector (EmpAgr, EmpInd, EmpServ). This high degree of correlation is not surprising as both sets of variables account for fairly similar phenomena (we could say that employment variables account for the work put into one sector and that value-added variables account for the results of that work, in a very broad simplification). Furthermore, GDPgrowth unsurprisingly presents considerably high degrees of correlation with the variable GDPpc.

Including in the same model highly correlated variables can lead to problems of multicollinearity, leading to significant variables giving non-significant results and leading to unstable estimations. With the aim of avoiding these high-correlation-derived problems, the variables ValAddAgr, ValAddInd, ValAddServ, VarAddManuf and GDPgrowth will be excluded from the model. Both the variables accounting for employment by sector and GDPpc account for facts more closely related to the individuals taking the voting decisions and thus are fairly more interesting for our analysis than the eliminated variables. Another solution to correlated variables is to create an indicator that would synthetize in a unique variable the highly correlated variables, by applying the principal components analysis technique. However, in this paper the option of eliminating highly correlated variables is applied.

We also observe a high degree of correlation among the variables accounting for employment by sector (EmpAgr, EmpInd, EmpServ). The way these variables are defined makes them account for the totality of the unemployed population, with the sum of all three always being 100%. Therefore, we proceed to eliminating the variable EmpServ from the model. The agricultural and particularly the industrial sectors are those experiencing a downturn due to globalization forces in advanced nations. Since this is the effect we want to account for and test, it is coherent to eliminate EmpServ among the three.

Figure 2: Heat-map of the correlation matrix for all variables considered
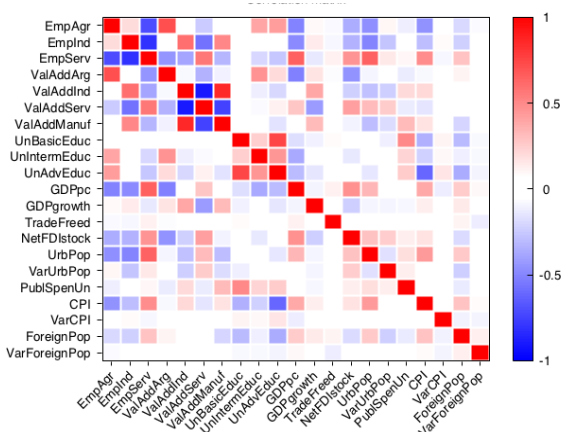
Source: Elaborated by the author using Gretl [1]

Figure 3: Heat-map of correlation matrix for variables included in the model
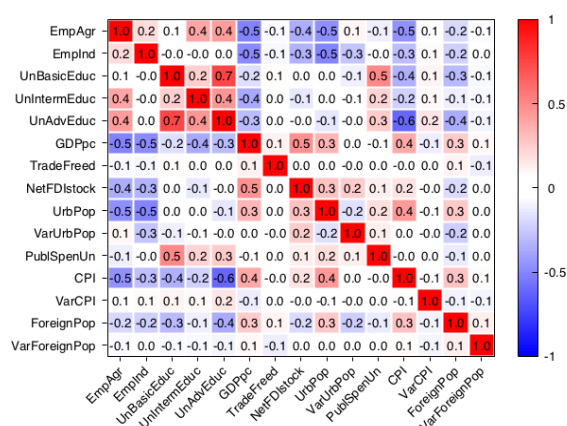
Source: Elaborated by the author using Gretl [1]

Figure 3 shows the heat-map representation of the correlation matrix between the remaining variables that will be included in the model (full correlation matrix in Appendix 7). The remaining correlations are not deemed problematic.

MAIN STATISTICS

To complete the previous description of the variables, and after having excluded those generating high correlation problems, Figure 4 presents the main descriptive statistics for each variable, namely: the mean, median, standard deviation (S.D.), minimum value (Min) and maximum value (Max).

As briefly mentioned when describing the variables, they each have limitations. All economic and social statistics have limitations. They are useful tool, but nevertheless remain an interpretation or a construction of reality rather than a mathematical certainty (Piketty, 2014). Whereas some countries such as France have a long history of social data collection and amelioration, other younger nations sometimes lack that expertise. Despite efforts of harmonization, both at the levels of the EU, the UN and among nations, the measuring processes can differ between nations. Furthermore, apart from measuring discrepancies, countries have differences that lead them to different realities, which are evident in the data.

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[1] *Gretl is an open-source econometric software.*

Figure 4: Main statistics of variables included in the model

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                 Mean     Median       S.D.        Min        Max
YPOP            12.90      8.400      14.18      0.000      65.20
EmpAgr          5.613      4.400      4.041      1.100      22.40
EmpInd          25.66      25.50      4.955      14.90      42.30
UnBasicEduc     13.26      12.20      6.189     0.3000      36.30
UnIntermEduc    11.15      8.600      10.51      2.000      88.80
UnAdvEduc       5.741      4.400      4.130      1.100      24.90
GDPpc           31622      28699      13996       3044      67709
TradeFreed      78.66      79.80      15.62      8.200      88.00
NetFDIstock    -1.955      1.350      22.36     -99.31      79.34
UrbPop          76.89      77.74      10.52      48.47      97.90
VarUrbPop      0.1877     0.1400     0.2358    -0.1900      1.280
PublSpenUn      1.296      1.124     0.9661      0.000      4.643
CPI             7.471      7.700      1.660      2.990      10.00
VarCPI       0.002912      0.000    0.04998    -0.2325     0.4708
ForeignPop      11.11      10.70      5.931      0.000      27.71
VarForeignPop  0.1366    0.07000      1.194     -12.90      12.61
```

Source: Elaborated by the author using Gretl

The large heterogeneity of the dataset is clearly observed, showing a strong behavioral difference across individuals. For all variables, the differences between the minimum value and the maximum value are large. We must acknowledge that, dealing with a panel data set, the minimum and maximum values do not correspond neither to the same countries nor to the same years. Therefore, the dispersion of values across time and individuals partially explains the large standard deviations. The heterogeneity will be evaluated with precision in the following sections.

HYPOTHESIS

Bearing in mind the description of the variables and the literature review, the following hypothesis are presented.

● Variables expected to have a positive and direct relation with the dependent variable: UnBasicEduc, UnIntermEduc, UnAdvEduc, TradeFreed, NetFDIstock, CPI, VarCPI, ForeignPop, VarForeignPop.

● Variables expected to have a negative and direct relation with the dependent variable: EmpAgr, EmpInd, GDPpc, UrbPop, VarUrbPop, PublSpenUn.

SPECIFICATION OF THE MODEL

POP = β1 + β2 EmpArg +β3 EmpInd + β4 UnBasicEduc + β5 UnIntermEduc + 6 UnAdvEduc

  + β7 GDPpc + β8 TradeFreed + β9 NetFDIstock +β10 UrbPop + β11 VarUrbPop

  + β12 PublSpenUn + β13 PublSpenUn + β14 CPI + β15 VarCPI + β16 ForeignPop

  + β17 VarForeignPop + u

CHOOSING WHICH MODEL TO USE

The theory and methodology of this model-selection process are described in Appendix 8.

The first step is to perform with Gretl the Breusch-Pagan test, with the following results:

```
Breusch–Pagan test –
  Null hypothesis: Variance of the unit-specific error = 0
  Asymptotic test statistic: Chi-square(1) = 1829.46
  with p-value = 0
```

With a p-value inferior to 0,001, the probability of making a mistake when rejecting the null hypothesis is inferior to 0,1%. The null hypothesis is thus rejected, at 99.9% confidence interval, in favor of Fixed and Random Effects Models. As the main statistics already pointed out, heterogeneity among individuals is large and should be accounted for.

The second step is to perform with Gretl the Hausman test, with the following results:

```
Hausman test –
  Null hypothesis: GLS estimates are consistent
  Asymptotic test statistic: Chi-square(15) = 18274.9
  with p-value = 0
```

The null hypothesis is rejected, again at 99.9% confidence interval, in favor of Fixed Effects Model. The Fixed Effects Models limitation of overlooking the randomness of the selection of individuals is omitted in this case, as individuals were non-randomly selected (see Appendix 2).

RESULTS OF THE ECONOMETRIC MODEL

The Fixed Effects Model performed on Gretl produces the results observed in Figure 5.

Figure 5: Results of the Econometric Model

```
Model 2: Fixed-effects, using 459 observations
Included 17 cross-sectional units
Time-series length = 27
Dependent variable: YPOP
Robust (HAC) standard errors
```

	coefficient	std. error	t-ratio	p-value	
const	−30.7959	51.1193	−0.6024	0.5553	
EmpAgr	−1.29077	0.372834	−3.462	0.0032	***
EmpInd	−0.769766	0.340587	−2.260	0.0381	**
UnBasicEduc	0.212125	0.202443	1.048	0.3103	
UnIntermEduc	0.0928043	0.0344376	2.695	0.0159	**
UnAdvEduc	0.0698246	0.629547	0.1109	0.9131	
GDPpc	−0.000203888	8.44214e−05	−2.415	0.0281	**
TradeFreed	0.0320939	0.0108443	2.960	0.0092	***
NetFDIstock	0.0497454	0.0516975	0.9622	0.3502	
UrbPop	1.18454	0.582115	2.035	0.0588	*
VarUrbPop	18.3756	7.99773	2.298	0.0354	**
PublSpenUn	−3.70262	1.77378	−2.087	0.0532	*
CPI	−2.23225	1.47957	−1.509	0.1509	
VarCPI	11.0203	4.85898	2.268	0.0375	**
ForeignPop	−0.240919	0.276913	−0.8700	0.3972	
VarForeignPop	0.438045	0.192387	2.277	0.0369	**

Source: Elaborated by the author using Gretl

All estimators are calculated with robust standard errors. This implies that the standard deviations of the random errors have been calculated in a way that allows for inference to be drawn even when heteroscedasticity problems may exist.

The coefficient of determination R2 for this model is equal to 0,492637, or 49%. R2 highlights what proportion of the variance of the dependent variable is foreseeable from the independent variables included in the model. In other words, the variables included in this model help explain only 49% of the variance in populist vote in advanced economies. As stated in the Objectives section of this paper, only globalization-induced economic roots of populism are the object of this study. Despite having included some control variables, many other sources of populism are not accounted for in this study, as the low R2 of the econometric model highlights.

Regardless of a low R2, the model provides significant results. 10 out of the 15 variables in the model are significant, with 2 being significant at a 99% confidence interval (denoted as ***), 6 being significant at a 95% confidence interval (denoted as **) and 2 being significant at 90% confidence interval (denoted as *). 5 exogenous variables were not significant at any of the three mentioned confidence intervals deemed high enough for making inferences. These 5 variables are UnBasicEduc, UnAdcEduc, NetFDIstock, CPI and ForeignPop, and no inferences will be made about them.

ANALYSIS OF THE RESULTS

Based on the results obtained in the econometric model, this section constitutes an analysis where discovered patterns are explained, contrasted with the original hypotheses and causal explanations for each pattern are suggested. This analysis is grounded both on theoretical and empirical support from the Theoretical Framework and the econometric model. Furthermore, "it is usually the case when estimating panel data models, we are most interested in the coefficients of the explanatory variables and not the individual intercept parameters" (Hill, 2011, p.549). Therefore, the coefficients of the explanatory variables will guide the analysis. The order of the analysis mirrors that from the description of the variables. First are studied the variables accounting for economic globalization effects. Second, the analysis dives into the results for the control variables. To guide this section, Figure 6 resumes for each variable its coefficient, p-value, significance level, hypothesis, model inference and whether these last two coincide.

Figure 6: Recapitulation of the econometric model results and hypothesis

Variable	Coefficient	P-value	Significance Level	Hypothesis	Inference	Coincide?
Employment-related variables						
UnBasicEduc	0,21213	0,3103	Not Significant	+	•	no
UnIntermEduc	0,09280	0,0159	High **	+	+	yes
UnAdvEduc	0,06982	0,9131	Not Significant	+	•	no
EmpAgr	-1,29077	0,0032	Very High ***	-	-	yes
EmpInd	-0,76977	0,0381	High **	-	-	yes
PublSpenUn	-3,70262	0,0532	Normal *	-	-	no
Other Economic Variables						
GDPpc	-0,00020	0,0281	High **	-	-	yes
TradeFreed	0,03209	0,0092	Very High ***	+	+	yes
NetFDIstock	0,04975	0,3502	Not Significant	+	•	no
UrbPop	1,18454	0,0588	Normal *	-	+	no
VarUrbPop	18,3756	0,0354	High **	-	+	no
Other Control Variables						
CPI	-2,23225	0,1509	Not Significant	+	•	no
VarCPI	11,02030	0,0375	High **	+	+	yes
ForeignPop	-0,24092	0,3972	Not Significant	+	•	no
VarForeignPop	0,43805	0,0369	High **	+	+	yes

"-" stands for negative and direct relation: a decrease in the endogenous variable is expected when the exogenous variable increases; "+" stands for positive and direct relation: an increase in the endogenous variable is expected when the exogenous variable increases; "•" means no inference can be made due to insufficient significance level.

ECONOMIC VARIABLES

Unemployment by Level of Education and Employment by Sector. Of the three variables of unemployment by education level accounted for in the model, only the intermediate education level has a direct effect on populism. More specifically, an increase of 1% in the unemployment rate of people with intermediate education entails an increase of the populist vote share of 0,09%. Whereas the positive correlation between unemployment in intermediate education and populist vote coincides with the starting hypothesis, this effect was also expected for the basic education level. In addition, an increase of 1% in the employment rate in the agricultural sector or the industrial sector entail a decrease of the populist vote share of 1.29% and 0.78%, respectively.

These results evidence the "finer degree of resolution" (Baldwin, 2016) that the new globalization brings. The "hollowing-out" or "job-polarization" of the workforce in advanced economies affects not the bottom-end of the skill distribution, but rather the middle range. Low-skill jobs are keeping up thanks to a considerable increase in caring and personal services (McIntosh, 2013), and high-skill jobs are on high demand. The decline is therefore more evident in intermediate skill jobs such as administration and production (McIntosh, 2013). These jobs are not only disappearing due to trade liberalization and delocalization, but also changing in nature as a consequence of technological advancements. "A shift in economic structure from labor intensive manufacturing to knowledge industries or care services is bad for those at home in the former sector and good for those suited to the latter" (Sandbu, 2018, p.2). This polarization process brings strong economic anxiety on people affected by technological displacement, unemployment and wage stagnation, it "has created a class of people who are economically left behind, a class that is rebelling against the liberal economic and political order" (Sandbu, 2018, p.2). Such economic anxiety "is closely associated with anti-establishment votes for political disruption or for extremist or populist parties." (Sandbu, 2018, p.1).

Public Spending in Unemployment Accounting for Redistribution. If states want their citizens to cope with the pros and cons of globalization, redistribution policies must be put in place. The results show that an increase of 1% in the GDP share of public spending on unemployment entails a decrease of the populist vote share of 3.7%. Therefore, compensatory

and redistributive policies are effective in diminishing the demand for populism. "The sustainability of national political strategies depends on their local effects. In that sense, all economics is local" (Sandbu, 2018, p.3). Displaced and unemployed individuals need economic security and retraining, for which the institutionalized opportunities and welfare state ought to provide (Rodrik, 2017, p.13; McIntosh, 2013).

GDP per Capita. An increase of 100 US$ in the GDP per capita entails a decrease of the populist vote share of 0.02%. Although the effect is relatively small, it is in line with the starting hypothesis. Contributing to economic security, GDP per capita growth related to less populist demand. Seen the other way around, dramatic economic downturns (such as GDP stagnation or recessions), like the economic crisis that hit the world since in 2008, represent an economic threat which will generate populist demand in search for a more reassuring solution.

Trade Freedom. An increase of 1 in the Trade Freedom score of a state entails an increase of the populist vote share of 0.03%. Once again, these results are in line with the hypothesis, despite the effect being relatively small. Trade freedom in seen by the 'losers of globalization' in advanced economies as change in the rules of the game that does not benefit them (Kristi, 2014). It can be said that the ignition of this group by freer trade backlashes in the form of populist support.

Urban Population and its Variation. Both the level of urban population and its increase have an incremental effect on the populist vote share. It is noticeable that whereas an increase in the level or urban population percentage entails an increase of 1.18% in the populist vote share, an increase of 1% in the relative variation of that same variable entails an increase of 18.37% in the populist vote share. These results are contrary to what the hypothesis stated. Cities generate jobs and income, and deliver education, health care and other services. An increase in urban population (or its variation) was expected to lower populism, as cities offer more job opportunities for relocation and training, and "well- functioning cities are one way G7 governments can "China- proof" their good jobs" (Baldwin, 2016, p.236). However, the results highlight the contrary, which can be explained by highlighting the 'well-functioning' element of the previous sentence. Even though cities provide more opportunities, an excess of demand can

lead to a saturation of the job market. Clark and Summer's theory of cluster supports this argument by explaining how a cluster of people searching for a job appears in highly qualified, high-demand environments. Although jobs are likely to be found, the saturation of the market increases the time it takes to do so, allowing for the creation of such unemployment clusters (Clark & Summers, 1982). Furthermore, cities also present opportunities for social mobilization, which coupled with a dissatisfied growing cluster can explain the positive relation between urban population and its variation and populist support.

CONTROL VARIABLES

   Corruption and Foreign Population, and their Variations. Although no inference can be made with regards to the level of corruption or of foreign population, the variation of these two factors is considerably significant and interesting to analyze. An increase of 1 in the CPI score of a country, or an increase of 1 in the yearly variation of foreign population percentage will respectively lead to increases in populist vote share of 11,02% and 0.44%. The explanation of these results is straightforward. Corruption scandals, not underlying corruption, generate populist demand. Corruption scandals evidence the dishonest behavior of the ruling elite, making voters susceptible to lose trust in the existing system and thus likely to interpret political reality through the lens of populism (Brubaker, 2017). The same inference, although with a much lower impact, can be made about large waves of immigration - or the perception of such - as in the case of the refugee crisis' reaching Europe since the start of the Syrian civil war in 2015.

CONCLUSION AND POLICY RECOMMENDATIONS

Globalization is increasingly feasible and profitable, and accelerating exponentially, to the point where it seemed unstoppable in the last centuries. Unfortunately, the uneven distribution of benefits from globalization is reducing inequalities among some states, while leading to growing inequalities within others, particularly in advanced economies (Lang & Mendes, 2018). It seems as if the democracies that had committed to address the shortcomings of globalizations were not keeping their promises. "The rise of populism forces a necessary reality check. Today the big challenge facing policy makers is to rebalance globalization so to maintain a reasonably open world economy while curbing its excesses" (Rodrik, 2017, p.27). Comprehensively, manifestations of social discontent arise, in different forms all across the political spectrum, to denounce and raise awareness of an existing problem. One of those manifestations is a surge in the support for populist movements across advanced economies.

Populism asks the right questions but provides the wrong answers. However, even when the messenger does not channel demands in the best way possible, scholars ought to make the effort to focus on the message. Instead of disregarding populist claims and proposals as unequivocally wrong, "they should seriously examine the extent to which the proposed policies have merit within a liberal democratic regime" (Mudde & Rovira, 2017, p.179). Therefore, liberal democracies whose institutions and stability are threatened by populist insurgencies ought to fight not populism per se, but the grievances that generate a demand for populism. Only then can a - still difficult - open dialogue with populist supporters and actors occur. This paper's main objective of studying the globalization-induced economic roots of populism provides insights on which grievances ought to be targeted. By focusing on the populist demand, the root cause allowing populism to exist.

The answer to the question "*¿Is economic globalization at the root of populist movements in advanced economies?*" is "yes, partially". The econometric model presented in this paper gives two main insights. First, many factors explaining the rise of populism are not accounted for in the model. More precisely, the model only explains 49% of the variance in populist vote in advanced economies. Therefore, economic globalization effects do explain, even if partially, the

rise in populist vote. Second, various effects of economic globalization with a direct effect on populist support, both positive and negative, have been found. Hence, the results of the model have provided grounded results on which grievances to target, and how to do so.

Three grievances have been detected: the first concerns the economic environment, the second related to the rules of the game and the third regards unemployment, all three are sources of economic insecurity. First, a good economic environment and country-wide prosperity will reduce populist demands. Oppositely, economic downturns and an environment of recession reflected in a decrease in GDP per capita contributes to igniting populist demands. Second, citizens facing economic insecurities see increases in trade freedom as a menace, and are thus more likely to support populist movements claiming to protect their interests above those of the corrupt elite. Whereas economic insecurities generated by technological displacement are considered fair, a change in trade agreements and leverage power of labor in advanced economies is seen as unfair and will make citizens look for representatives that promise to protect their interests, such as populist political parties (Kristi, 2014; Rodrik, 2017). Third, citizens with intermediate education levels facing employment should be paid particular attention to, as unemployment at this level is an explanatory factor of the rise of populist support while unemployment in other levels of education do not directly increase populist vote shares. Workers with intermediate skill jobs such as administration and production positions see their jobs disappearing due to trade liberalization, delocalization and technological advancements, and this inevitably contributes to their economic anxieties.

With regards to ways to target these grievances, four insights have been reached through this work. First, if states want their citizens to cope with the pros and cons of globalization, redistribution policies must be put in place. Compensatory and redistributive policies are effective in diminishing the demand for populism. Displaced and unemployed individuals need economic security and retraining. The focus should be put on creating sources of competitiveness that are likely to remain in the country and are able to adapt to fast changes, so that the nation implementing the policy does not see most of the benefit leaving to other nations or becoming obsolete. Second, well-functioning cities provide opportunities, but if the cities are not functioning well, an increase in urban population leads to greater insecurities that, coupled with

opportunities for mobilization, serve as silver plattered populist demands that populist supply will take advantage of. Third, the level of corruption in a country does not determine the support for populist parties, but a change in the level of corruption does have a considerable impact on the surge of populism. In other words: corruption scandals, not so much underlying corruption, generate populist demand. Fourth, the level of foreign population in a country does not determine the support for populist parties, but an increase in foreign population does relate to an increase in populism. However, this relation is not strong. It could be said that large waves of migration, not so much migration per se, generate populist demand. Consequently, instead of fighting immigration as a negative thing *per se*, the political focus should be on better dealing with the influx from large immigration waves, and the insecurities these might generate.

Since not only effective but also efficient policies should be aimed at, this solution prescription paragraph will end with a highlight of what have been found to be the most effective solutions. The variation in urban population and the variation in the corruption perception index have the greatest effect on generating populist demand. Therefore, policies fostering well-functioning cities and fighting corruption seem to be good starting points to tackle populism.

"The ultimate goal should be not just the destruction of populist supply, but also the weakening of populist demand. Only the latter will actually strengthen liberal democracy."

(Mudde & Rovira, 2017, p.179)

LIMITATIONS AND FUTURE RESEARCH AVENUES

This section englobes the proposals of the author for future research, together with the main limitations encountered in doing this paper, which again serve as possibilities for improvement in future research.

The multidimensional and contested characters of both concepts at stake in this paper (globalization and populism) have presented considerable limitations in carrying out this work. In particular, establishing representative proxy variables for each of the concepts inevitably left some of the dimensions of the concepts unobserved. For example, the success of populist political actors is most often measured as electoral strength - number of share of votes obtained-, as in this paper. But, such success can also be measured in terms of agenda-setting - the "ability to put topics on the public agenda" - or policy impact - the "capacity to shape public policies" (Mudde & Rovira, 2017, p.137). Although it is true that "in many places in the world populists attract a fairly limited number of votes, but, nevertheless, they play a notable role in terms of agenda-setting and policy impact." (Mudde & Rovira, 2017, p.137), this paper uses the electoral strength of political parties as a proxy variable.

Another limitation encountered in doing this paper (and particularly the econometric model) was the limited availability of the data researched. Particularly, and as is mentioned through the paper, inequality is a variable that presented such limitations that it was deemed necessary to exclude it from the model. Milanovic (2016), Piketty (2014) and Chen & al. (2018), among others, stress the direct impact of globalization in increasing inequalities within nations around the globe. Inequalities could very well be at the source of the discontent with the existing political options and thus de a source of populist demand, but this could not be tested due to lack of available data. More precisely, all the sources found for inequality indexes found provided data for very recent years, thus not covering the timeframe of the model. For example, for most countries, data on World Bank and OECD GINI inequality indexes is only available since 2004. The option of constructing a proxy variable from the income quintiles was considered, but once again there was not sufficient data for the timeframe considered in the model. The construction of a comparable inequality index that would spam further back in time would therefore be of great interest for the academic community.

Other factor for which no usable proxy variable was found and that would be interesting to complement this paper are: a variable that could account for the flexibility of the labor market, be it in regulatory or in de facto terms; a variable accounting for the voter turnout at elections or a variable accounting for effects of financial globalization such as deposit interest rates. Maybe if all these factors were accounted for, the main limitation of this paper would have been avoided, namely, the little explanatory power the econometric has for the dependent variable (a low R2 as explained in page 38).

It would be of great interest to continue the line of investigation of this paper by applying the presented model distinctively for left-wing and right-wing political parties, and comparing the results among these. As Rodrik suggests, "left-wing and right-wing variants of populism, […] differ with respect to the societal cleavages that populist politicians highlight and render salient" (Rodrik, 2017, p.2). Such assumption could be tested with the model presented in this paper, analyzing whether the same demands for populism are present in the two groups and with the same intensity.

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Notes:
- The sources of data are not included in this references section for clarity matters. They can be found in Appendix 4, Figure A4 and Figure A8.
- All formatting and citations in this paper have been carried out following the American Psychological Association's (APA) guideline found in OWL's Purdue Online Writing Lab (Paiz & al., 2018)

APPENDIX 1

The Great Convergence and The Great Divergence seen in world GDP shares evolution.

FIGURE 23: Spot the phase transitions: World GDP shares, year 1000 to 2014.

Before the Industrial Revolution, only a narrow slice of humanity lived above subsistence levels, so national shares of gross domestic product (GDP) lined up closely with national population shares. Given the sheer weight of numbers, Indians and Chinese dominated right up to the early nineteenth century when Phase Three initiated the 170-year crash shown in Figure 23.

The crash turned into a climb when the New Globalization started around 1990. Since then, the two Asian giants' share of world GDP has risen sharply—far faster than they fell in the preceding centuries. The share today is nothing like their historical standard of 50 percent, but they are well on their way. This is the Great Convergence.

DATA SOURCES: World Bank DataBank (GDP in U.S. dollars) and Maddison database (2009 version), pre-1960 with author's calculations.

Chart and explanation from Richard Baldwin's book, *The Great Convergence* (2016, p.81).

APPENDIX 2
INDIVIDUALS SELECTION PROCESS

The individuals, or countries, selected for this study were originally the 40 countries classified in the IMF's World Economic Outlook from 2010 as Advanced Economies. This categorization serves as a proxy to represent a summary of nations included in 'the Global North' (see first column of Figure A1).

Since this study draws on electoral results, it was necessary to exclude from the study countries where elections were not free and fair, and therefore did not represent the reaction of the citizens. The criteria used for this filtering was that of the Democracy Index elaborated by the Economist Intelligence Unit, in which countries receive a score from 0 (least democratic) to 10 (most democratic). This study classifies states into four different categories according to the aforementioned score: full democracies (above 8.0), flawed democracies (above 6.0), hybrid regimes (above 4.0) and authoritarian regimes (bellow 4.0). Countries with a categorization of hybrid regime, authoritarian regime or not included in the categorization in the past 10 years (from 2006 to 2017) were excluded from this study, reducing the number of individuals to 35. (details in Figure A2 and summary in column 3 "Full and flawed democracies" of Figure A1).

Other individuals were excluded from the study due to lack of available data for the selected variables. This data-availability criteria again reduces the individuals of the study, reaching and ending individuals number N of 17 countries, namely: Australia, Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, New Zealand, Portugal, Spain, Sweden and United Kingdom.

Figure A1: Countries Selection Process

Advanced Economi	Count	Full and flawed democracies	Count	Data availability	Count	10 elections	Count
Australia	1	Australia	1	Australia	1	Australia	1
Austria	2	Austria	2	Austria	2	Austria	2
Belgium	3	Belgium	3	Belgium	3	Belgium	3
Canada	4	Canada	4	Canada	4	Canada	
China	5	China					
Cyprus	6	Cyprus	5	Cyprus			
Czech Republic	7	Czech Republic	6	Czech Republic			
Denmark	8	Denmark	7	Denmark	5	Denmark	4
Estonia	9	Estonia	8	Estonia	6	Estonia	5
Finland	10	Finland	9	Finland	7	Finland	6
France	11	France	10	France	8	France	7
Germany	12	Germany	11	Germany	9	Germany	8
Greece	13	Greece	12	Greece	10	Greece	9
Hong Kong	14	Hong Kong					
Iceland	15	Iceland		Iceland	11	Iceland	
Ireland	16	Ireland	13	Ireland	12	Ireland	10
Israel	17	Israel	14	Israel	13	Israel	
Italy	18	Italy	15	Italy	14	Italy	11
Japan	19	Japan	16	Japan			
Korea	20	Korea	17	Korea			
Latvia	21	Latvia	18	Latvia			
Lithuania	22	Lithuania	19	Lithuania			
Luxembourg	23	Luxembourg	20	Luxembourg	15	Luxembourg	
Macao	24	Macao	21	Macao			
Malta	25	Malta	22	Malta			
Netherlands	26	Netherlands	23	Netherlands	16	Netherlands	12
New Zealand	27	New Zealand	24	New Zealand	17	New Zealand	13
Norway	28	Norway	25	Norway	18	Norway	
Portugal	29	Portugal	26	Portugal	19	Portugal	14
Puerto Rico	30	Puerto Rico	27				
San Marino	31	San Marino					
Singapore	32	Singapore					
Slovak Republic	33	Slovak Republic		Slovak Republic	28		
Slovenia	34	Slovenia		Slovenia	29	Slovenia	20
Spain	35	Spain		Spain	30	Spain	21
Sweden	36	Sweden		Sweden	31	Sweden	22
Switzerland	37	Switzerland		Switzerland	32	Switzerland	23
Taiwan (China)	38	Taiwan (China)		Taiwan (China)	33		
United Kingdom	39	United Kingdom		United Kingdom	34	United Kingdom	24
United States	40	United States		United States	35	United States	25

Legend:
- no data available at this stage
- did not meet the criteria at this stage
- countries selected as individuals for the econometric model

Source: Elaborated by the author using data from the IMF's World Economic Outlook (2010) for "Advanced economies", from The Economist Intelligence Unit's Democracy Index for "Full and flawed democracies", from various sources detailed in Appendix 5 for "data availability" and "10 elections".

Figure A2: Full and Flawed Democracies Selection Criteria:

Democracy Index Scores from years 2006 to 2017

Individuals	2017	2016	2015	2014	2013	2012	2011	2010	2008	2006	Always above 6?
Australia	9,09	9,01	9,01	9,01	9,13	9,22	9,22	9,22	9,09	9,09	yes
Austria	8,42	8,41	8,54	8,54	8,48	8,62	8,49	8,49	8,49	8,69	yes
Belgium	7,78	7,77	7,93	7,93	8,05	8,05	8,05	8,05	8,16	8,15	yes
Canada	9,15	9,15	9,08	9,08	9,08	9,08	9,08	9,08	9,07	9,07	yes
China	3,1	3,14	3,14	3	3	3	3,14	3,14	3,04	2,97	no
Cyprus	7,59	7,65	7,53	7,4	7,29	7,29	7,29	7,29	7,7	7,6	yes
Czech Republic	7,62	7,82	7,94	7,94	8,06	8,19	8,19	8,19	8,19	8,17	yes
Denmark	9,22	9,2	9,11	9,11	9,38	9,52	9,52	9,52	9,52	9,52	yes
Estonia	7,79	7,85	7,85	7,74	7,61	7,61	7,61	7,68	7,68	7,74	yes
Finland	9,03	9,03	9,03	9,03	9,03	9,06	9,06	9,19	9,25	9,25	yes
France	7,8	7,92	7,92	8,04	7,92	7,88	7,77	7,77	8,07	8,07	yes
Germany	8,61	8,63	8,64	8,64	8,31	8,34	8,34	8,38	8,82	8,82	yes
Greece	7,29	7,23	7,45	7,45	7,65	7,65	7,65	7,92	8,13	8,13	yes
Hong Kong	6,31	6,42	6,5	6,46	6,42	6,42	5,92	5,92	5,85	6,03	no
Iceland	9,58	9,5	9,58	9,58	9,65	9,65	9,65	9,65	9,65	9,71	yes
Ireland	9,15	9,15	8,85	8,72	8,68	8,56	8,56	8,79	9,01	9,01	yes
Israel	7,79	7,85	7,77	7,63	7,53	7,53	7,53	7,48	7,48	7,28	yes
Italy	7,98	7,98	7,98	7,85	7,85	7,74	7,74	7,83	7,98	7,73	yes
Japan	7,88	7,99	7,96	8,08	8,08	8,08	8,08	8,08	8,25	8,15	yes
Korea	8	7,92	7,97	8,06	8,06	8,13	8,06	8,11	8,01	7,88	yes
Latvia	7,25	7,31	7,37	7,48	7,05	7,05	7,05	7,05	7,23	7,37	yes
Lithuania	7,41	7,47	7,54	7,54	7,54	7,24	7,24	7,24	7,36	7,43	yes
Luxembourg	8,81	8,81	8,88	8,88	8,88	8,88	8,88	8,88	9,1	9,1	yes
Macao	8,81	8,81	8,88	8,88	8,88	8,88	8,88	8,88	9,1	9,1	yes
Malta	8,15	8,39	8,39	8,39	8,28	8,28	8,28	8,28	8,39	8,39	yes
Netherlands	8,89	8,8	8,92	8,92	8,84	8,99	8,99	8,99	9,53	9,66	yes
New Zealand	9,26	9,26	9,26	9,26	9,26	9,26	9,26	9,26	9,19	9,01	yes
Norway	9,87	9,93	9,93	9,93	9,93	9,93	9,8	9,8	9,68	9,55	yes
Portugal	7,84	7,86	7,79	7,79	7,65	7,92	7,81	8,02	8,05	8,16	yes
Puerto Rico											no data
San Marino											no data
Singapore	6,32	6,38	6,14	6,03	5,92	5,88	5,89	5,89	5,89	5,89	no
Slovak Republic	7,16	7,29	7,29	7,35	7,35	7,35	7,35	7,35	7,33	7,4	yes
Slovenia	7,5	7,51	7,57	7,57	7,88	7,88	7,76	7,69	7,96	7,96	yes
Spain	8,08	8,3	8,3	8,05	8,02	8,02	8,02	8,16	8,45	8,34	yes
Sweden	9,39	9,39	9,45	9,73	9,73	9,73	9,5	9,5	9,88	9,88	yes
Switzerland	9,03	9,09	9,09	9,09	9,09	9,09	9,09	9,09	9,15	9,02	yes
Taiwan (China)	7,73	7,79	7,83	7,65	7,57	7,57	7,46	7,52	7,82	7,82	yes
United Kingdom	8,53	8,36	8,31	8,31	8,31	8,21	8,16	8,16	8,15	8,08	yes
United States	7,98	7,98	8,05	8,11	8,11	8,11	8,11	8,18	8,22	8,22	yes

Legend:

8,1	Full democracies (above 8.0)
6,1	Flawed democracies (above 6.0)
4,1	Hybrid regimes (above 4.0)
0,1	Authoritarian regimes (bellow 4.0)
	No data available
	did not meet the criteria of being a full of flawed democracy for the past 10 years

Source: Elaborated by the author using data from The Economist Intelligence Unit's Democracy Index.

APPENDIX 3

OBTAINING A BALANCED PANEL DATA

A balanced panel data has been reached, starting from the unbalanced panel dataset collected. For all dependent variables, the two hypotheses leading to achieving a balanced panel data are the following. First, acknowledging that changes in some of the variables might be abrupt at some point in time, we estimate the variations to be overall incremental (hypothesis 1). Therefore, when a particular value was missing, a progressive and proportionate increase or decrease has been calculated between the previous and subsequent data available. Second, we deemed most reasonable to assume all missing values before the first available to be equal to the first available, and all missing values subsequent to the last available to be equal to the last available (hypothesis 2). A schematic illustration of this processes is presented in Figure A3.

Figure A3: Examples of calculations to obtain a balanced panel data

	A	B	C	D	E	F	...	Y	Z
	Variable 1	Individuals	1990	1991	1992	1993	...	2016	2017
1	Variable 1	Individual 1	C1	D1	E1	F1	...	Y1	Z1
2	Variable 1	Individual 2	C2	D2	E2	F2	...	Y2	Z2
3	Variable 1	Individual 3	C3	D3	E3	F3	...	Y3	Z3
4	Variable 1	Individual 4	C4	D4	E4	F4	...	Y4	Z4
...	...	...	...	...	...	...	...	...	...
11	Variable 2	Individual 1	C11	D11	E11	F11	...	Y11	Z11
12	Variable 2	Individual 2	C12	D12	E12	F12	...	Y12	Z12
14	Variable 2	Individual 3	C13	D13	E13	F13	...	Y13	Z13
14	Variable 2	Individual 4	C14	D14	E14	F14	...	Y14	Z14
...	...	...	...	...	...	...	...	...	...

Example calculations to obtain missing data:
$E1 = D1 + (F1-D1)/2$
$D3 = C3 + ((F3-C3)/3)*1$
$E3 = C3 + ((F3-C3)/3)*2$
$D11 = C11$
$D13 = C13$
$Z13 = Y13$

Legend:
- Available data
- Calculated using hypothesis 1
- Obtained using hypothesis 2

Source: Elaborated by the author.

APPENDIX 4

POPULIST PARTIES USED IN THE MODEL

Empirical studies using the ideational approach of populism focus on the study of partisan texts, implementing qualitative content analysis and more recently computational text analysis. "Given that the close reading of party materials is labor intensive, most studies in this tradition focus on specific country cases or engage in small sample cross-national comparisons." (Gideon and Bukowski, 2013, p.7). Doing an exhaustive analysis of each party within the 17 states selected and determining based on the ideational approach whether they are or not populist is out of the scale and scope of this work, and would hinder the purpose of including a reasonable amount of individuals in the model. Therefore, this paper bases the classification of parties as populist or non-populist on previous literature.

Parties are coded as populist if found to be labeled as such in the academic or journalistic literature at any time in history, as long as the justification fits the ideational approach cleavage between an in-group and an out-group. When available, academic sources explicitly stating the use of the ideational approach framework are employed. No distinction is made in this paper between political orientations (left-wing or right-wing political parties). The full list of the political parties used in the model, and the source for their classification as a populist party is presented in Figure A4.

Figure A4: Populist parties used in the model

State/Party	Source
Australia	
One Nation Party	13
Katter's Australian Party	5
Austria	
Freiheitliche Partei Österreichs (Freedom Party of Austria)	10; 12; 15; 16; 17; 21
Bündnis Zukunft Österreich (Alliance for the Future)	10; 17; 21
Team Stronach	7; 10; 21
Belgium	
Vlaams Blok (Flemish Block)	6; 10; 12; 15; 16; 21
Vlaams Belang (Flemish Interest)	6; 17
Parti populaire (People's Party)	20
Front National (National Front)	20; 16; 17; 21
Partij van de Arbeid (Workers' Party of Belgium)	20
Lijst Dedecker	6; 10; 21

State/Party	Source
Denmark	
Dansk Folkeparti (Danish Peoples Party)	15; 17
Fremskridtspartiet (Progress Party)	20
Estonia	
Eesti Konservatiivne Rahvaerakond (Conservative People's Party)	22
Eesti Iseseisvuspartei (Estonian Independence Party)	22
Eesti Keskerakond (Estonian Centre Party)	22
Eestimaa Ühendatud Rahvapartei (Estonian United People's Party)	22
Eestimaa Rahvalliit (People's Union of Estonia)	22
Erakond Res Publica (Res Publica Party)	14
Finland	
Perussuomalaiset – Sannfinländarna (Finns Party)	10
Perussuomalaiset – Sannfinländarna (True Finns)	10
France	
Front National (National Front)	10; 12; 15; 16; 17; 18; 21
Les Républicains (The Republicans)	10; 12
Lutte ouvrière (Workers' Struggle)	10
Ligue communiste révolutionnaire (Revolutionary Communist League)	10
Germany	
Alternative für Deutschland (Alternative for Germany)	10; 21
Deutsche Volksunion (German People's Union)	20
Nationaldemokratische Partei Deutschlands (National Democratic Party)	10; 12; 20
Die Linke / PDS (The Left / PDS)	10; 12
Partei des Demokratischen Sozialismus (Party for Democratic Socialism)	20
Greece	
Anexartitoi Ellines (Independent Greeks)	1
Laïkós Orthódoxos Synagermós (Popular Orthodox Rally)	1; 10; 12; 17
Laikos Syndesmos – Chrysi (Peoples Association)	1
Synaspismós Rizospastikís Aristerás (Coalition of the Radical…)	1; 10; 12; 18; 21
Ireland	
Sinn Féin	10; 21
People Before Profit Alliance	19
Socialist Party	19
Italy	
Lega Nord per l'indipendenza (North League for the …)	10; 12; 17; 21
Forza Italia (Go Italy)	10; 21
Movimento Sociale Italiano–Destra Nazionale (Italian Social Movement--	15
Alleanza Nazionale (National Alliance)	9; 15
Fratelli d'Italia – Centrodestra (Brothers of Italy)	10; 12
Movimento Sociale Fiamma Tricolore (Tricolor Flame Social Movement)	2
Movimento 5 Stelle (Five Star Movement)	10; 12; 18; 21
Netherlands	
Partij voor de Vrijheid (Party for Freedom)	6; 10; 12; 17; 20; 21
Centrumpartij '86 (Centre Party '86)	6; 20
Centrum Democraten (Centre Democrats)	6
Lijst Pim Fortuyn	2; 10; 20; 21
Leefbaar Nederland (Livable Netherlands)	10; 20; 21
Socialistiese Partij (Socialist Party)	10; 21

State/Party	Source
New Zealand	
New Zealand First Party	3
Portugal	
Spain	
Vox (Voice)	8
Podemos (We Can)	10; 12; 18
En Comú Podem (In Common We Can)	10; 12; 18
En Marea (In Tide)	10; 12; 18
Sweden	
Sverigedemokraterna (Sweden Democrats)	10; 12; 17; 21
Ny Demokrati (New Democracy)	4
United Kingdom	
United Kingdom Independence Party	10; 21
Democratic Unionist Party	11

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Source: Elaborated by the author.

Complementary, Figure A5 presents the values of the variable Populist Vote (POP), showing the votes received by each of the patties in Figure A4 for the elections used in the model, together with the calculations of the missing values as explained in Appendix 3 and detailed in the following paragraph.

National elections are not held every year. This lack of data has been solved in three ways. First, in states where less than 10 elections had been held since 1990, the results of the elections to the European Parliament have been added. If national elections coincide in the same year with the European parliamentary elections, European parliamentary elections are not included for that year. Second, for all states, a progressive and proportionate increase or decrease has been calculated for the years between elections (hypothesis 1 above). Third, for the years preceding the first election since 1990 and subsequent to the last election, the data from the first and last elections, respectively, have been applied (hypothesis 2 above). The results of this process are summarized in Figure A5

Figure A5: Populist Vote (POP)

Individual (State)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Australia	0,00	0,00	0,00	0,00	0,00	0,00	0,00	4,20	8,40	7,00	5,70	4,30	3,27	2,23	1,20
Austria	16,60	18,08	19,55	21,03	22,50	21,90	27,50	27,30	27,10	26,90	21,27	15,63	10,00	8,15	6,30
Belgium	14,00	14,00	14,00	14,00	15,20	10,70	10,88	11,05	11,23	11,40	11,95	12,50	13,05	13,60	17,10
Denmark	6,40	6,40	6,40	6,40	6,40	7,25	8,10	8,95	9,80	5,80	9,40	13,00	10,93	8,87	6,80
Estonia	0,00	0,00	0,00	6,70	13,40	20,10	22,45	24,80	27,15	29,50	38,43	47,35	56,28	65,20	32,20
Finland	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,33	0,67	1,00	1,15	1,30	1,45	1,60	0,00
France	12,40	12,40	12,40	12,40	12,80	13,53	14,27	15,00	12,95	10,90	11,87	12,83	13,80	13,10	12,40
Germany	2,40	2,90	3,40	3,90	4,40	4,88	5,35	5,83	6,30	5,80	5,20	4,60	4,00	5,05	6,10
Greece	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,55	1,10	1,65	2,20
Ireland	1,60	1,60	1,60	2,30	3,00	2,23	1,47	0,70	3,50	6,30	6,63	6,97	7,30	9,85	12,40
Italy	14,10	14,10	14,10	32,85	51,60	48,00	44,40	43,47	42,53	41,60	46,00	50,40	46,30	42,20	38,10
Netherlands	4,20	4,20	4,20	4,20	4,20	4,18	4,15	4,13	4,10	31,90	38,73	45,57	52,40	40,60	34,00
New Zealand	0,00	2,80	5,60	8,40	5,60	2,80	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,90	3,80
Portugal	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Spain	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sweden	6,70	6,70	4,87	3,03	1,20	0,00	0,00	0,00	0,00	0,20	0,60	1,00	1,40	1,25	1,10
United Kingdom	0,30	0,30	0,30	0,65	1,00	0,77	0,53	0,30	4,30	8,30	5,25	2,20	7,20	12,20	17,20

Individual (State)		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Australia		0,80	0,40	0,00	0,83	1,67	2,50	2,00	1,50	1,00	1,27	1,53	1,80	1,80	1,80
Austria		10,70	15,10	21,65	28,20	17,30	20,40	23,50	26,60	29,70	19,70	21,80	23,90	26,00	26,00
Belgium		17,67	18,23	18,80	17,25	15,70	13,00	11,98	10,95	9,93	8,90	8,90	8,90	8,90	8,90
Denmark		13,30	13,60	13,90	14,60	15,30	13,75	12,20	17,00	21,80	26,60	20,60	20,60	20,60	20,60
Estonia		32,53	32,87	33,20	30,75	28,30	26,85	25,40	26,17	26,93	27,70	33,00	33,00	33,00	33,00
Finland		1,37	2,73	4,10	6,95	9,80	14,45	19,10	17,03	14,97	12,90	17,70	17,70	17,70	17,70
France		9,70	7,00	4,30	8,35	12,40	12,80	13,20	13,60	19,85	26,10	27,07	28,03	29,00	29,00
Germany		10,30	11,08	11,85	12,63	13,40	11,55	9,70	7,85	6,00	15,50	17,60	19,70	21,80	21,80
Greece		4,40	6,60	8,80	9,50	10,20	19,23	28,27	37,30	39,75	42,20	47,60	47,60	47,60	47,60
Ireland		10,77	9,13	7,50	10,75	14,00	13,05	12,10	15,63	19,17	22,70	20,30	17,90	17,90	17,90
Italy		39,10	40,10	44,55	49,00	50,50	51,20	51,90	52,60	53,30	47,90	47,90	47,90	47,90	47,90
Netherlands		41,50	49,00	47,40	45,80	44,20	38,90	33,60	28,30	33,20	38,10	36,93	35,77	34,60	34,60
New Zealand		5,70	5,17	4,63	4,10	4,93	5,77	6,60	7,30	8,00	8,70	8,20	7,70	7,20	7,20
Portugal		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Spain		0,00	0,00	0,00	0,00	0,00	0,00	0,00	3,20	6,40	9,60	18,00	18,40	18,40	18,40
Sweden		2,00	2,90	3,03	0,00	3,30	5,70	7,50	9,30	11,10	12,90	12,90	12,90	12,90	12,90
United Kingdom		3,10	2,60	2,10	1,60	1,10	3,70	9,85	16,00	22,15	28,30	13,30	8,00	2,70	2,70

Legend:

Available data

Calculated using hypothesis 1

Obtained using hypothesis 2

See Appendix 3 and Figure A3 for details on these color categorizations.

Source: Elaborated by the author with data from the sources detailed in Figure A8.

Figure A6: Evolution of Populist Vote Shares per Country (as stock)
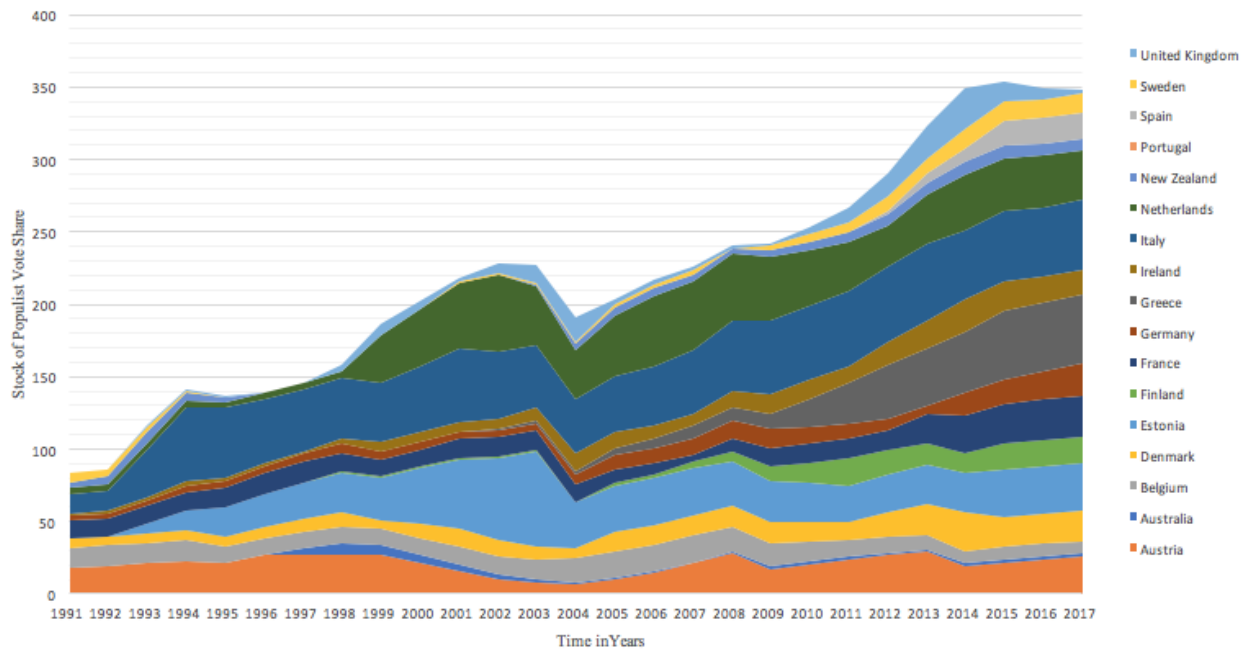
Source: Elaborated by the author with data presented in Figure A5 in Appendix 4, retrieved from different sources presented in Figure A8 in Appendix 4.

Figure A7: Evolution of Populist Vote Shares per Country
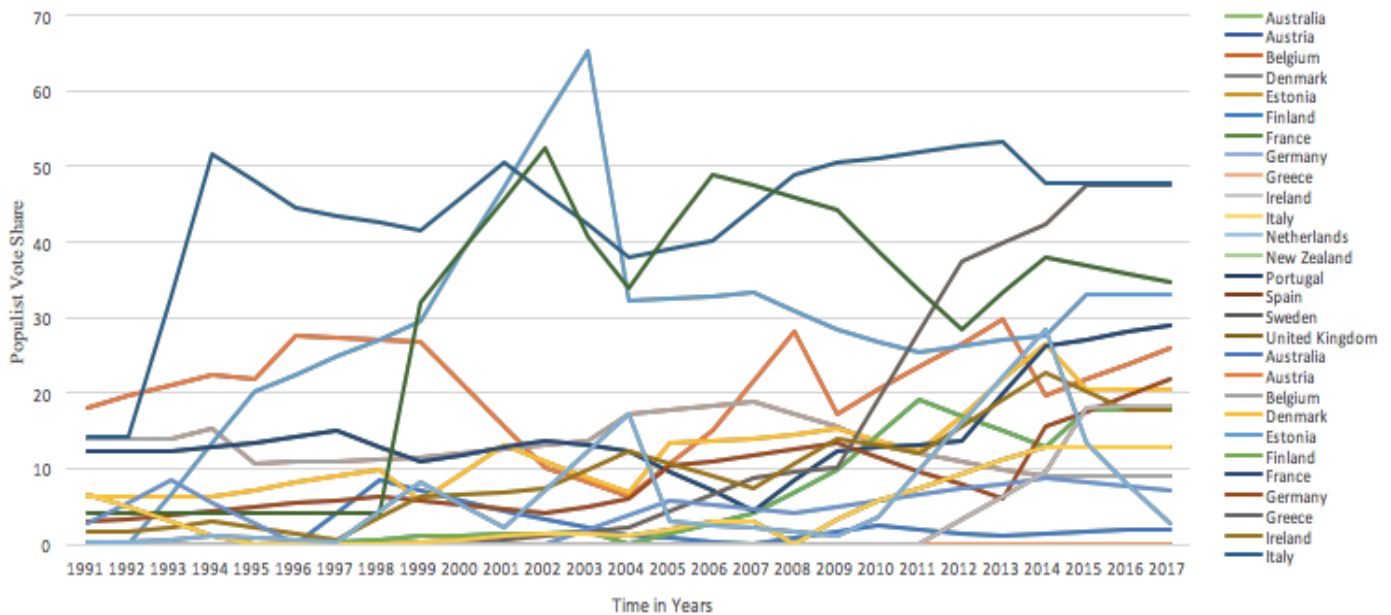
Source: Elaborated by the author with data presented in Figure A5 in Appendix 4, retrieved from different sources presented in Figure A8 in Appendix 4.

Furthermore, the data sources for the electoral results used in the model and presented in Figures 1, A5, A6 and A7 are summarized in Figure A8.

Figure A8: Sources of electoral results.

State	Sources of electoral results
Australia	Autralian Electoral Comission: https://results.aec.gov.au/
	Parliament of Australia -- Parliamentary Library: Barber, Stephen, Christopher Lawley, Scott Bennett, and Gerard Newman. 2008. Federal election results 1901–2007. www.aph.gov.au
Austria	Federal Ministry for the Interior- Austrian Federal Electoral Board. http://www.bmi.gv.at/
	Statistical Yearbook of Austria. http://www.statistik.at/web_en/publications_services/statistisches_jahrbuch/index.html
	Inter-Parliamentary Union's database on national parliaments (PARliaments onLINE). http://archive.ipu.org/parline/
	APA – Austria Presse Agentur (Austria Press Agency). http://www.historisch.apa.at/cms/apa-historisch/start.html
Belgium	European Journal of Political Research: Political Data Yearbook
	CEVIPOL Ressources – Electoral results. http://dev.ulb.ac.be/cevipol/en/elections.html
	IBZ Service public fédéral Intérieur . http://www.ibzdgip.fgov.be/result/fr/main.html
Denmark	Kringvarp Føroya (Broadcasting Corporation Faeroe Islands, Denmark). http://kvf.fo/
	Folketing election results and governments. http://www.ft.dk/
	Nohlen, Dieter, and Philip Stöver, eds. 2010. Elections in Europe: A data handbook. Baden-Baden:Nomos.
	Statistical Yearbook of Denmark. https://www.dst.dk/da/Statistik/Publikationer/VisPub?cid=016217
	European Journal of Political Research: Political Data Yearbook
	Danmarks Statistik valgside (Statistics Denmark election page). http://www.dst.dk/valg/index.htm
	Kalaallit Nunaata Radio (Greenlandic Broadcasting Corporation). https://knr.gl/en
Estonia	Bugajski, Janusz. 2002. Political parties of eastern europe: a guide to politics in the post-communist era.
	Vabariigi Valimiskomisjon (Estonian National Electoral Committee). https://www.valimised.ee/en
Finland	European Journal of Political Research: Political Data Yearbook
	Tilastokeskus – Statistikcentralen (Statistics Finland). http://www.stat.fi/til/vaa_en.html
	International Institute for Democracy and Electoral Assistance (International IDEA). https://www.idea.int/
	Ålands statistik- och utredningsbyrå (Statistics and Research Åland)
	Vaalit – Oikeusministeriö (Elections – Ministery of Justice Finland). http://vaalit.fi/etusivu
France	Assemblée Nationale (French National Assembly). http://www.assemblee-nationale.fr/elections/histoire.asp
	Nohlen, Dieter, and Philip Stöver, eds. 2010. Elections in Europe: A data handbook. Baden-Baden:Nomos.
	European Journal of Political Research: Political Data Yearbook
	France Politique. http://www.france-politique.fr/
	Résultats électoraux en France - Ministère de l'Intérieur. https://www.interieur.gouv.fr/Elections/
	Agence Europe. https://agenceurope.eu/
Germany	Valentin Schröder: Wahlen in Deutschland. http://www.wahlen-in-deutschland.de/
	Federal Returning Officer - Federal Statistical Office of Germany. https://www.bundeswahlleiter.de/
Greece	Nohlen, Dieter, and Philip Stöver, eds. 2010. Elections in Europe: A data handbook. Baden-Baden:Nomos.
	European Journal of Political Research: Political Data Yearbook
	Hellenic Republic - Ministry of Interior. http://www.ypes.gr/en/Elections/

State	Sources of electoral results
Ireland	Gallagher, Michael. 2009. Irish elections 1948-77: Results and analysis. Sources for the study of Irish politics 2. London. Routledge.
	Nohlen, Dieter, and Philip Stöver, eds. 2010. Elections in Europe: A data handbook. Baden-Baden:Nomos.
	European Election Database. http://www.nsd.uib.no/european_election_database/index.html
	Department of Environment Ireland. http://www.housing.gov.ie/local-government/voting/other/voting
	ElectionsIreland.org.
	European Parliament (EP) election report (based on official statistics)
Italy	ANSA (Agenzia Nazionale Stampa Associata). http://www.ansa.it/
	Archivio Storico delle Elezioni - Ministero dell'Interno. http://elezionistorico.interno.gov.it/
	European Journal of Political Research: Political Data Yearbook
	Ministero dell'Interno - Ministry of Internal Affairs (Italy). http://dait.interno.gov.it/elezioni
Netherlands	Dutch election results since 1918. http://www.nlverkiezingen.com/index_en.html
	European Journal of Political Research: Political Data Yearbook
	Kiesraad (Electoral Council Netherlands). https://www.kiesraad.nl/
New Zealand	New Zealand Official Yearbook http://www.massey.ac.nz/massey/research/library/find-information/subject-guides/nz-statistics/nzoyb.cfm
	Electoral Commission (New Zealand). http://www.electionresults.govt.nz/
Portugal	CNE – Comissão Nacional de Eleições (Portuguese National Election Commission). http://eleicoes.cne.pt/
	Inter-Parliamentary Union's database on national parliaments. http://archive.ipu.org/parline/
	European Journal of Political Research: Political Data Yearbook
Spain	Spanish Ministry of Interior. http://www.infoelectoral.mir.es/
Sweden	Inter-Parliamentary Union's database on national parliaments. http://archive.ipu.org/parline/
	European Journal of Political Research: Political Data Yearbook
	Sveriges officiella statistik – Statistiska centralbyrån (Official Statistics of Sweden – Statistics Sweden)
	Valmyndigheten (Swedish Election Authority). https://www.val.se/
	Swedish Election Authority. https://www.val.se/det_svenska_valsystemet/partier/registrera_partibeteckning/
United Kingdom	European Journal of Political Research: Political Data Yearbook
	Thrasher, Michael, and Colin Rallings. 2009. British electoral facts. Total Politics.
	The United Kingdom Office of the European Parliament. http://www.europarl.europa.eu/unitedkingdom/section/european-elections/european-elections
	Nohlen, Dieter, and Philip Stöver, eds. 2010. Elections in Europe: A data handbook. Baden-Baden:Nomos.
	The Electoral Commission (United Kingdom). https://www.electoralcommission.org.uk/
	European Parliament Elections 2014 – House of Commons Library. https://www.parliament.uk/

Source: Elaborated by the author

APPENDIX 5
DATA SOURCES FOR ALL INDEPENDENT VARIABLES USED

All the sources of information and the data used for this paper is secondary: collected and elaborated by a variety of other researchers and institutions. The following paragraphs present the data source and some brief comments for each of the variables used in this paper (excel for the dependent variable Populist Vote which is commented on in Appendix 4).

Employment by sectors (EmpAgr, EmpInd, EmpServ)

The data was retrieved from the WB, under the CC BY-4.0 license. The original source is the International Labor Organization (ILO), ILOSTAT database, with the data being retrieved in November 2017. The International Labor Organization (ILO) classifies economic activity using the International Standard Industrial Classification (ISIC) of All Economic Activities.

Value added by sector (ValAddAgr, ValAddInd, ValAddServ, VarAddManuf)

The data was retrieved from the OECD (OECD, 2018), and is also available at the WB, under the CC BY-4.0 license.

Unemployment by level of education (UnBasicEduc, UnIntermEduc, UnAdvEduc).

The data was retrieved from the WB original source is the International Labor Organization (ILO), ILOSTAT database, with the data being retrieved in November 2017. The classification of education levels is based on the International Standard Classification of Education 2011 (UNESCO, 2012).

GDP growth (GDPgrowth) & GDP per capita (GDPpc).

The data was retrieved from the WB World Development Indicators, under the CC BY-4.0 license. The original source is the WB national accounts data, and OECD National Accounts data files.

Trade Freedom Index (TradeFreed).

Data was retrieved from the Heritage Foundation. The data used by the Heritage Foundation is drawn from various sources, primarily the WB and the WTO.

Net Foreign Direct Investment Stock (NetFDIstock).

Data was retrieved from the UNCTAD. Data on stock of outward and inward flow of FDI as percentage of GDP were retrieved independently and the calculation of the difference was elaborated personally.

Urban Population (UrbPop) and its variation (VarUrbPop).

The data was retrieved from the WB, under the CC BY-4.0 license. The original source of the data is the World Urbanization Prospects of the United Nations Population Division.

VarCPI for year t is calculated personally for each state and year as $UrbPop_{t-1}-UrbPop_t$.

Public Spending in Unemployment (PublSpenUn).

Data was retrieved from the OECD.

Corruption Perception Index (CPI) and its variation (VarCPI).

The CPI is elaborated by Transparency International, and retrieved under the CC BY-4.0 license. As for 2017, the CPI draws on 13 data sources from 12 independent institutions specializing in governance and business climate analysis. The interest in using this particular index is that it provides data for all the states studied in this paper, that drawing from many different sources it compensates for eventual errors among them by taking the average of at least three different sources and that the scale provided allows for between countries and between years comparison of scores.

VarCPI for year t is personally calculated for each state and year as $(CPI_t-CPI_{t-1})/CPI_{t-1}$.

Foreign Population (ForeignPop) and its variation (VarForeignPop).

Data was retrieved from the OECD.

APPENDIX 6

CORRELATION MATRIX FOR ALL INDEPENDENT VARIABLES CONSIDERED

```
5% critical value (two-tailed) = 0.0915 for n = 459


        YPOP         EmpAgr        EmpInd       EmpServ
      1.0000        -0.2012       -0.0222        0.1325 YPOP
                     1.0000        0.1905       -0.7159 EmpAgr
                                   1.0000       -0.8218 EmpInd
                                                 1.0000 EmpServ


    ValAddArg     ValAddInd     ValAddServ    ValAddManuf
     -0.2088       -0.1936        0.2708       -0.0701 YPOP
      0.7074       -0.0521       -0.2502       -0.0491 EmpAgr
      0.0556        0.5908       -0.5803        0.5035 EmpInd
     -0.4504       -0.3899        0.5579       -0.3295 EmpServ
      1.0000       -0.0840       -0.3439       -0.1097 ValAddArg
                    1.0000       -0.9068        0.8537 ValAddInd
                                  1.0000       -0.7580 ValAddServ
                                                1.0000 ValAddManuf


   UnBasicEduc   UnIntermEduc   UnAdvEduc        GDPpc
      0.0833       -0.0730        0.0674        0.0997 YPOP
      0.0570        0.3933        0.4241       -0.5165 EmpAgr
     -0.0250       -0.0302        0.0274       -0.4861 EmpInd
     -0.0152       -0.2072       -0.2655        0.6455 EmpServ
     -0.0055        0.4619        0.1919       -0.5238 ValAddArg
     -0.0242       -0.1235       -0.2044       -0.0511 ValAddInd
      0.0252       -0.0790        0.1114        0.2698 ValAddServ
      0.0460       -0.0359       -0.1638       -0.0519 ValAddManuf
      1.0000        0.2412        0.7409       -0.1827 UnBasicEduc
                    1.0000        0.4457       -0.3773 UnIntermEduc
                                  1.0000       -0.3088 UnAdvEduc
                                                1.0000 GDPpc


    GDPgrowth     TradeFreed    NetFDIstock      UrbPop
     -0.1084        0.0841        0.1254       -0.1006 YPOP
      0.0828       -0.0821       -0.3620       -0.4724 EmpAgr
      0.1352       -0.0888       -0.3444       -0.5130 EmpInd
     -0.1441        0.1111        0.4548        0.6387 EmpServ
      0.1611       -0.0728       -0.4593       -0.0961 ValAddArg
      0.3849       -0.0210       -0.2322       -0.2877 ValAddInd
     -0.4309        0.0506        0.4131        0.3118 ValAddServ
      0.3135       -0.0291       -0.1028       -0.3044 ValAddManuf
     -0.1100        0.0754        0.0056        0.0227 UnBasicEduc
     -0.0477        0.0164       -0.1452        0.0323 UnIntermEduc
     -0.1528        0.0039       -0.0342       -0.1497 UnAdvEduc
     -0.0996        0.1099        0.4668        0.3274 GDPpc
      1.0000        0.0052       -0.2399       -0.0984 GDPgrowth
                    1.0000        0.0132        0.0190 TradeFreed
                                  1.0000        0.2862 NetFDIstock
                                                1.0000 UrbPop
```

VarUrbPop	PublSpenUn	CPI	VarCPI	
0.0109	−0.1478	−0.3412	0.0846	YPOP
0.0946	−0.1235	−0.4606	0.0614	EmpAgr
−0.2788	−0.0251	−0.2991	0.0747	EmpInd
0.1434	0.0893	0.4800	−0.0890	EmpServ
−0.0613	−0.1298	−0.0862	0.0499	ValAddArg
−0.2361	0.1945	0.2055	0.0133	ValAddInd
0.2484	−0.1284	−0.1572	−0.0336	ValAddServ
−0.1907	0.3141	0.1643	0.0322	ValAddManuf
−0.1183	0.4961	−0.3522	0.1019	UnBasicEduc
−0.0574	0.2188	−0.2287	0.0844	UnIntermEduc
−0.0283	0.2503	−0.6214	0.1571	UnAdvEduc
0.0291	−0.0547	0.3781	−0.1269	GDPpc
−0.0961	−0.0903	0.1234	0.0366	GDPgrowth
−0.0421	0.0225	−0.0019	0.0264	TradeFreed
0.2457	0.1216	0.1635	−0.0254	NetFDIstock
−0.1693	0.1808	0.4335	−0.0527	UrbPop
1.0000	0.1223	0.0436	−0.0367	VarUrbPop
	1.0000	−0.0157	0.0091	PublSpenUn
		1.0000	−0.0508	CPI
			1.0000	VarCPI

ForeignPop	VarForeignPop	
−0.1010	−0.0385	YPOP
−0.2015	−0.0761	EmpAgr
−0.2333	0.0056	EmpInd
0.2827	0.0402	EmpServ
0.0995	−0.0603	ValAddArg
−0.0086	0.0454	ValAddInd
−0.0340	−0.0173	ValAddServ
−0.2159	0.0346	ValAddManuf
−0.3135	−0.0866	UnBasicEduc
−0.1197	−0.0840	UnIntermEduc
−0.3674	−0.1015	UnAdvEduc
0.2516	0.0864	GDPpc
0.1386	−0.0333	GDPgrowth
0.1000	−0.1264	TradeFreed
−0.1908	0.0288	NetFDIstock
0.2601	0.0224	UrbPop
−0.2380	0.0087	VarUrbPop
−0.1318	0.0271	PublSpenUn
0.2801	0.0739	CPI
−0.1094	−0.0991	VarCPI
1.0000	0.1203	ForeignPop
	1.0000	VarForeignPop

Source: Elaborated by the author using Gretl.

This data is the source for "Figure 2: Heat-map of the correlation matrix for all variables considered".

Variables considered: EmpAgr, EmpInd, EmpServ, ValAddArg, ValAddInd, ValAddServ, VarAddManuf, UnBasicEduc, UnIntermEduc, UnAdvEduc, GDPgrowth, GDPpc, TradeFreed, NetFDIstock, UrbPop, VarUrbPop, PublSpenUn, CPI, VarCPI, ForeignPop, VarForeignPop

APPENDIX 7

CORRELATION MATRIX

FOR THE INDEPENDENT VARIABLES INCLUDED IN THE MODEL.

```
5% critical value (two-tailed) = 0.0915 for n = 459

      YPOP         EmpAgr        EmpInd     UnBasicEduc
    1.0000        -0.2012       -0.0222       0.0833 YPOP
                   1.0000        0.1905       0.0570 EmpAgr
                                 1.0000      -0.0250 EmpInd
                                              1.0000 UnBasicEduc

  UnIntermEduc    UnAdvEduc      GDPpc       TradeFreed
    -0.0730        0.0674        0.0997       0.0841 YPOP
     0.3933        0.4241       -0.5165      -0.0821 EmpAgr
    -0.0302        0.0274       -0.4861      -0.0888 EmpInd
     0.2412        0.7409       -0.1827       0.0754 UnBasicEduc
     1.0000        0.4457       -0.3773       0.0164 UnIntermEduc
                   1.0000       -0.3088       0.0039 UnAdvEduc
                                 1.0000       0.1099 GDPpc
                                              1.0000 TradeFreed

  NetFDIstock      UrbPop       VarUrbPop     PublSpenUn
     0.1254       -0.1006        0.0109      -0.1478 YPOP
    -0.3620       -0.4724        0.0946      -0.1235 EmpAgr
    -0.3444       -0.5130       -0.2788      -0.0251 EmpInd
     0.0056        0.0227       -0.1183       0.4961 UnBasicEduc
    -0.1452        0.0323       -0.0574       0.2188 UnIntermEduc
    -0.0342       -0.1497       -0.0283       0.2503 UnAdvEduc
     0.4668        0.3274        0.0291      -0.0547 GDPpc
     0.0132        0.0190       -0.0421       0.0225 TradeFreed
     1.0000        0.2862        0.2457       0.1216 NetFDIstock
                   1.0000       -0.1693       0.1808 UrbPop
                                 1.0000       0.1223 VarUrbPop
                                              1.0000 PublSpenUn

      CPI          VarCPI      ForeignPop   VarForeignPop
    -0.3412        0.0846       -0.1010      -0.0385 YPOP
    -0.4606        0.0614       -0.2015      -0.0761 EmpAgr
    -0.2991        0.0747        0.0056       0.0056 EmpInd
    -0.3522        0.1019       -0.3135      -0.0866 UnBasicEduc
    -0.2287        0.0844       -0.1197      -0.0840 UnIntermEduc
    -0.6214        0.1571       -0.3674      -0.1015 UnAdvEduc
     0.3781       -0.1269        0.2516       0.0864 GDPpc
    -0.0019        0.0264        0.1000      -0.1264 TradeFreed
     0.1635       -0.0254       -0.1908       0.0288 NetFDIstock
     0.4335       -0.0527        0.2601       0.0224 UrbPop
     0.0436       -0.0367       -0.2380       0.0087 VarUrbPop
    -0.0157        0.0091       -0.1318       0.0271 PublSpenUn
     1.0000       -0.0508        0.2801       0.0739 CPI
                   1.0000       -0.1094      -0.0991 VarCPI
                                 1.0000       0.1203 ForeignPop
                                              1.0000 VarForeignPop
```

Source: Elaborated by the author using Gretl.

This data is the source for "Figure 3: Heat-map of correlation matrix for variables included in the model".

Variables included in the model: EmpAgr, EmpInd, UnBasicEduc, UnIntermEduc, UnAdvEduc, GDPpc, TradeFreed, NetFDIstock, UrbPop, VarUrbPop, PublSpenUn, CPI, VarCPI, ForeignPop, VarForeignPop.

APPENDIX 8

METHODOLOGY FOR CHOOSING WHICH MODEL TO USE.

Various models and estimators exist for estimating a panel data equation. The three most common models are the Pooled Model, the Random Effects Model and the Fixed Effects Model. In the Pooled Model, "the data on different individuals are simply pooled together with no provision for individual differences that might lead to different coefficients" (Hill, 2011, p.540). The coefficients are assumed constant for all the individuals, across all time periods, thus not allowing for individual heterogeneity. In Pooled Models, the existence of individual characteristics is recognized by allowing the correlation between random errors across time. Another way to account for the individual characteristics is to allow for different individuals to have different coefficients. It is exactly what Fixed Effects Models do. Behavioral differences across individuals, known as individual heterogeneity, are assumed to be captured by the individual intercepts, called fixed effects. Thus, the individual intercepts account for time-invariant, individual-specific characteristics (Hill, 2011, p.544). A problem with this model is that randomly selected individuals are treated as non-random, or more precisely, their intercepts are treated as non-random. In the case of Random Effects Models, once again individual differences are assumed to be captured by the intercept parameters. However, in this case, the randomness of the selection of individuals is included, not overlooked as in the Fixed Effects Model. The random individual differences are accounted for by specifying the intercept parameter to consist of a fixed part that presents the 'population average' and 'random individual differences' from the population average. The random individual differences are called random effects. They are "analogous to random error terms, and we make the standard assumptions about them - namely, that they have zero mean, are uncorrelated across individuals and have a constant variance" (Hill, 2011, p.551).

With the previous short explanations of the three panel data models in mind, it seems that the Random Effects Model is the one providing more detailed information, and is preferred for several reasons (Hill, 2011, p.557). Furthermore, using a Pooled Model is somewhat restrictive and considerably ignores the panel nature of the data. However, determining which model to choose is not a question of preferences, and a certain methodology must be followed. In order to

determine whether a Pooled Model, on one side, or Fixed or Random Effects Models, on the other, is to be applied, one should acknowledge what they each provide. Both the Fixed and Random Effects Models account for the individual differences, known as the heterogeneity. Therefore, the two are appropriate when heterogeneity exists, and the Pooled Model is appropriate when heterogeneity does not exist. To determine whether heterogeneity exists, the Breusch-Pagan test (Breusch & Pagan, 1979) is used, also known by its further development as the Lagrange Multiplier. The null hypothesis of this test is that the variance of the intercept is equal to zero, in other words that there is no individual heterogeneity. A high p-value would support the null hypothesis, thus leading to the use of the Polled Model. A low p-value would reject the null hypothesis, in favor the Fixed and Random Effects Models.

If the null hypothesis of the Breusch-Pagan test is rejected, the selection of which model to use is reduced to two options. In order to choose between the Fixed Effects Model, on one side, and the Random Effects Model, on the other side, the Hausman Test is applied. This test checks whether the individual random effects and the explanatory variables are correlated. If they are, in large samples the random effects estimator becomes inconsistent. In they aren't, in large samples the random effects and the fixed effects estimates should be similar, and consistent (Hill, 2011, p.559). The null hypothesis of this test is that the random individual differences are uncorrelated with any of the explanatory variables, in other words that the random effects estimator is consistent in large samples and the estimators are the same for Fixed and Random Effects. A high p-value would support the null hypothesis, thus leading to the use of the Random Effects Model. A low p-value would reject the null hypothesis, in favor the Fixed Effects Model. It is important to acknowledge that "The null hypothesis will be rejected for any reason that makes the two sets of estimates differ, including miss-specified model. There may be nonlinearities in the relationship we have not captured with our model, and other explanatory variables may be relevant" (Hill, 2011, p.559).