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The Impact of the State on the Quality of an Economic System: A Cross-Country Analysis

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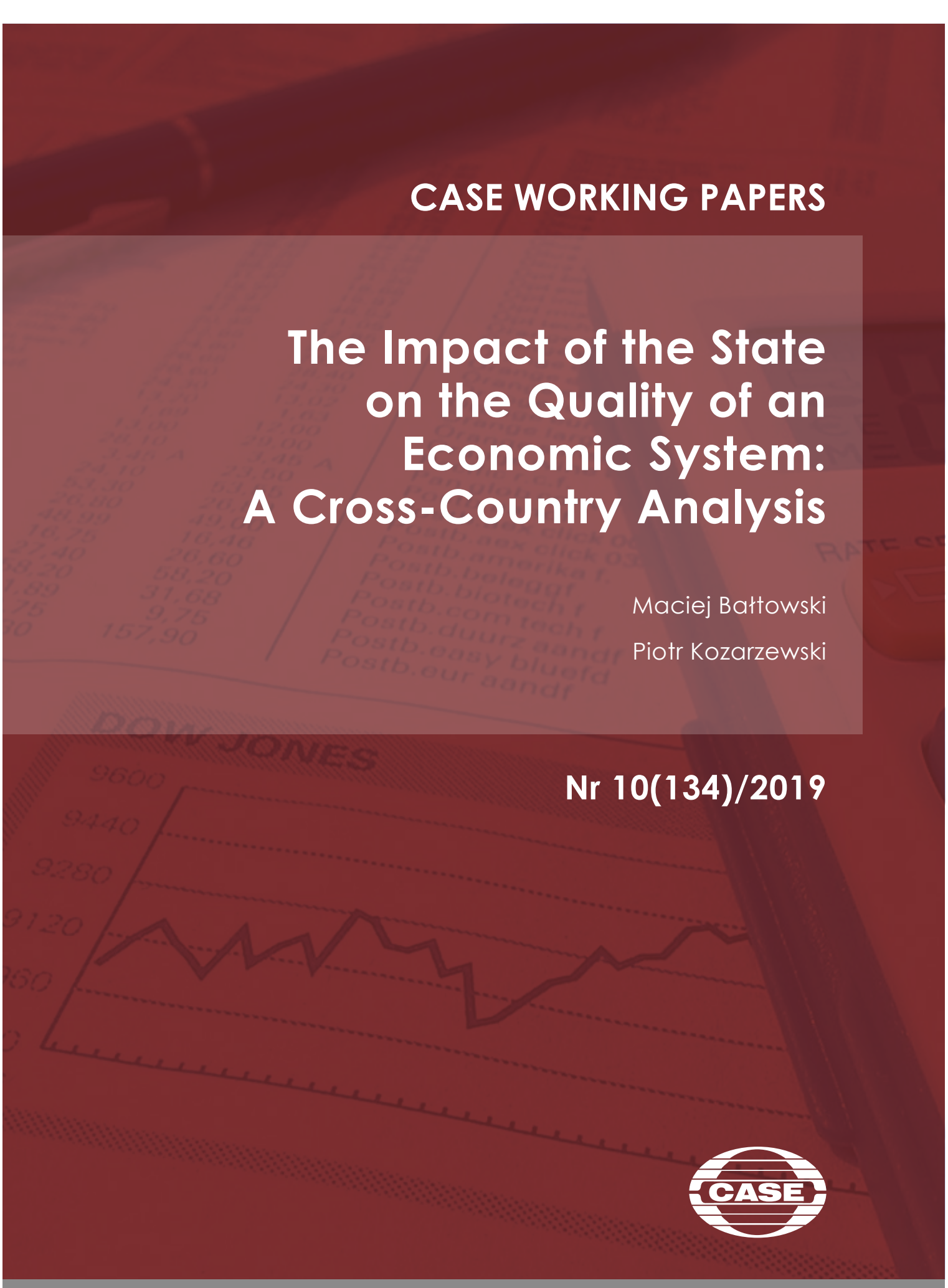

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Abstract

The paper discusses the role of the state in shaping an economic system which is, in line with the welfare economics approach, capable of performing socially important functions and achieving socially desirable results. We describe this system through a set of indexes: the IHDI, the World Happiness Index, and the Satisfaction of Life index. The characteris-tics of the state are analyzed using a set of variables which describe both the quantitative (government size, various types of governmental expenditures, and regulatory burden) and qualitative (institutional setup and property rights protection) aspects of its functioning. The study examines the "old" and "new" member states of the European Union, the post-communist countries of Eastern Europe and Asia, and the economies of Latin America. The main conclusion of the research is that the institutional quality of the state seems to be the most important for creation of a socially effective economic system, while the level of state interventionism plays, at most, a secondary and often negligible role. Geographical differentiation is also discovered, as well as the lack of a direct correlation between the characteristics of an economic system and the subjective feeling of well-being. These re-sults may corroborate the neo-institutionalist hypothesis that non-economic factors, such as historical, institutional, cultural, and even genetic factors, may play an important role in making the economic system capable to perform its tasks; this remains an area for future research.

1. Introduction

The main goal of this research is to contribute to the understanding of the nature of the varieties of capitalism in modern economies and the factors which lay behind their diversity. An attempt has been made, through looking at the problem from a normative perspective, to examine the nature of the impact of state involvement in economic policy on the efficiency of a country's economic system – that is, its ability to perform socially important functions and achieve socially desirable results. In other words, this is the "quality" of the economic system. The importance of the topic derives from the recent widespread statist trends in economic policies around the world: the shift towards the more active role of the state – far beyond its previous regulating roles, acquiring more active and interventionist functions. According to the new approach, the state plays a more pronounced role in regulation and enforcement. The state is also more interventionist as an active supporter of players in the market and increases its role as a business player itself.

The following hypotheses were tested in the course of the study:

1. Similar types of state stimuli (or similar characteristics of state participation in the economy) have different effects in different groups of economies (economic systems);
2. Different characteristics of the state have different impacts on the quality of the economic system.

The paper is organized as follows. Section 2 is a theoretical and methodological introduction to the study. The major challenges arising in contemporary comparative studies of economic systems are discussed here. Section 3 presents a short overview of the existing empirical literature on the various forms of the state's impact on – generally speaking – the quality of the economic system. Section 4 presents the assumptions for the empirical research. It also discusses the simplifications introduced in the model and presents the sets of variables used for the analysis, which describe the quality of the economic system, the scope and level of state interventionism, and the cultural specificities of the countries studied. Section 5 presents the results of the empirical research and Section 6 discusses the main findings and suggests topics for further research.

2. Theoretical and methodological framework

2.1. Impact of the state on the economy

The relationship between the state and the economy has been regarded as important since the very beginning of economics. However, it was only after the Second World War, when Keynesian ideas gained in popularity, that it became crucial for the understanding and analysis of economic systems. Presently, economists have no doubts that the actions of governments – specifically their scope and means of conducting economic policy – can affect the workings of the market and, consequently, how economic wealth and prosperity for the population is created. At the same time, as in many other areas of economics, there is no single and absolute truth or solution that is efficient every time. In this respect, there are two primary issues of importance.

First, the impact of the state on the economy and its effects are strongly predetermined by the cultural context and institutional diversity of the economic system. And, sometimes, history matters as well, as in the case of post-socialist economies. Neoclassical mainstream economics, as Hodgson (1996) rightly pointed out, was blind to the cultural and institutional characteristics of various types of capitalism. However, over the last 20 years, a pronounced trend in comparative economic studies has developed which examines differences in capitalist economies, in particular focusing on institutional structures across countries. The "varieties of capitalism" (VoC) approach, developed by Hall and Soskice (2001), as well as research on the diversity of capitalism by Amable (2003) are important to mention here. To a large extent, this diversity also applies to the relationship between the state and the economy, including the effects of economic policy. The same type of stimuli or behavior of the state towards the economy can cause different reactions in different economic systems. This created an important and fertile area for the economic, political, and sociological research of post-socialist economies, which were developing quickly after 1990 (McMenamin 2004).

Second, the main feature of the economy as a subject of economics is its constant changeability. This feature has gained in importance over roughly the last 12 years in connection with rapid technological change, accelerated social and civilization change, and ecological challenges. In economic research, in contrast to physics or biology, the results obtained have a short duration. The results of empirical research from 15 or 20 years ago have only historical significance. Furthermore, the results cannot be repeated, because the subject of the research – the economy – has changed significantly since then. Changes in economic systems, the emergence of new facts and economic phenomena, and the formulation of new goals for economic activity and economic policy constantly require new analyses, which brings new results. This, in turn, creates

feedback for a better, deeper understanding of the economic reality and for defining the new rules and directions for economic policy.

Despite the diversity and changeability of modern capitalism, its impact on the economy has features common across all its models (this is why we still refer to them as "capitalism"). This includes common factors that may determine the state policy's efficiency in meeting its goals, which is very important for this study. Here, we apply the neo-institutionalist approach, which tries to fill to a certain extent the gap emerging in practice between the ideal image and the actual actions of the state in the economy. New institutionalists did not assume the way Keynesians did that, as a rule, the state acts rationally; instead, they focused on identifying the conditions and factors that cause the state to be deficient. They claimed that nations are wealthy when they are capable of creating a proper institutional structure for the economy – a structure capable of creating a sort of rules of play and setting limitations that apply to all economic actors, including the state. As North (1990, p. 3) wrote, the quality (effectiveness) of an economic system depends on the right structure of incentives, whether economic, social, or even political, and these, in turn, are determined by the operation of the institutions that have emerged through society's evolution. Institutions are complex, multi-disciplinary phenomena which, as said above, cause the diversity of economic systems. However, they also create a framework which allows us to examine across countries the factors which co-determine the efficiency of the policy of the state.

2.2. What is the "quality of an economic system"?

In studies on the impact of the state on the quality of an economic system, the basic question is to determine what the "quality of an economic system" is and how it should be measured. In a theoretical sense, this is a fundamental and very complex problem, because it concerns the axiological and teleological foundations of the functioning of economic systems.

The ideal model of an economic system is time and context specific. Nevertheless, some common and general features of a "good" economic system may be formulated. Nowadays, it is already beyond any doubt that the capitalist free market economy system is the basis and point of departure for creating the Smithian "best of all possible worlds." For the great majority of economists, it is equally obvious that this system must be subject to significant regulation by the state. The substantive scope of the "regulation by the state" category has been significantly extended and diversified in recent years in real economic systems – as compared to that found, for example, in Keynesian economics – and goes far beyond the state failure/market failure dilemma. This extension is generally due to state regulation taking into account social and economic factors (most of all, issues involving the differentiation of a society's income and wealth).

Thus, the contemporary understanding of a good economy also takes into account, in addition to "traditional" economic growth and national wealth, other factors that impact a society's well-being (Stiglitz et al., 2009). Direct reference to the term "good economic system" in this sense is made by Stiglitz (2012, p. 84); although, using another set of words, the concept of a

good economy can be found in welfare economics, especially in the perspective of Sen (1999), the author of the capabilities approach. Welfare economics puts at the center of attention fair national income distribution, a proper tax system, and broadly defined issues of social welfare, which justify state interventionism and the extensive subordination of the economy to politics. Welfare economics, as rightly observed by Blaug (1997), is concerned with the ethical criteria by which we decide that one economic state of the world is more desirable than another.

The welfare economics approach gave birth to the human development concept, defined as the process of enlarging people's choices (UNDP 1990, p. 10), thus shifting the definition of development from purely an economic discourse in enhancing human well-being to a wider approach which takes into account the possibility to pursue individual goals. According to this theory, freedom of choice consists of two elements: well-being (which in its turn consists of people's values and capabilities to obtain them) and freedom to act in order to achieve what a person regards as important (UNDP 2016, p. 1-2).

In this context, the theory of public goods should also be mentioned – the origins of which are ascribed to Paul Samuelson (1954) in the mid-20th century, and which was later developed by Olson (1965) and Stiglitz (1977), among others. According to this theory, a significant and necessary component of social welfare – the result of a good economy – is the access of all citizens to a given pool of goods manufactured or provided directly by the state (Samuelson 1954). In this perspective, the state, in the framework of a good economy, should not only run a proper Keynesian economic policy and develop and guard a proper institutional system, but it should also effectively produce and fairly distribute public goods, which, in the modern world, determines the level of social welfare.

Presently, for the needs of the study presented in this paper, a good economy may be defined as *an economic system which is capable of generating people's well-being, understood as the possibility to pursue their life goals and achieve life satisfaction*. It is based mainly on the human development concept and is enhanced by adding a subjective dimension (feeling of life satisfaction) as a desired consequence of enhancing people's capabilities. This assumption is corroborated in cross-country studies (Veenhoven 1996), which stress the importance of life satisfaction for quality of life.

The authors are aware that this definition is a general one, which may incur problems with the choice of its measures. It is possible that at further stages of research, the definition of a good economy will become more specific.

2.3. Need for the right data

The above-mentioned issues of a theoretical and methodological nature are connected with the problem of the availability of statistical data and their comparability, which is very important in all empirical economic studies. The problem can be considered in three dimensions: horizontal, temporal, and objective. The horizontal dimension of the availability of statistical data means that it is now possible to cover a much larger number of countries (economies) than was possible

before. In order to identify, analyze, and assess the effects of the above-mentioned contextuality as a feature of contemporary economic systems, at least from the perspective of the variety of reactions of different economic systems to similar state stimuli, it is necessary to have a sufficiently wide set of statistical data – that is, a set which covers various types of economies, and not only, for example, OECD member countries.

The temporal dimension of empirical studies means the necessity to take into account that modern economic systems undergo deep changes in time, which is one of their main features, as has been shown above. It often poses serious methodological problems, because the dependent and independent variables used in previous research are not always still valid. Here, a number of extremely interesting questions and problems arise. For example, do the economic data in different periods, and therefore at different levels of development, respond in the same way to similar state stimuli? Are such regularities, if they exist, universal or do they manifest themselves with greater intensity in some specific groups?

Finally, the objective dimension means that the transformation of economic systems is accompanied by the continuous increase in the range of statistical data that can be obtained and used. This results both from the development of official statistics and from the emergence of non-governmental organizations which collect and publish new statistical data on a global scale, which were previously completely inaccessible. Most often, these are data in the form of synthetic indicators referring to various qualitative characteristics of economic systems. They were either ignored or unobtainable by public statistics. Thus, it is now possible to conduct research of a different and broader nature than before.

3. Literature overview

There is a large body of empirical research using "the state" as an independent variable and where the dependent variables are different characteristics of the economic system or, more broadly, the socio-economic system of a country. These studies (e.g. Chen and Lee 2005; Yamamura 2009) do not explicitly refer to "the state" in their models, preferring to use a metric of "government size," most often the share of total government expenditure in gross domestic product (GDP). Other measures are used as well, such as government investment expenditure in GDP or total tax share in GDP (Fölster and Herekson 2001). In a comprehensive, well-documented study conducted within a European Central Bank project, Afonso and Jalles (2011, p. 13) apply two different proxies of government size. The first is standard: total government expenditures as share of GDP. The second is a composite variable, consisting of the following elements: government consumption expenditures (as a percentage of total consumption), transfers and subsidies (as a percentage of GDP), the underlying tax system (proxied by top marginal tax rates), and the number of government enterprises.

There are also studies where the authors attempt to look at "the state" as a category more broadly, attempting to encompass an institutional perspective rather than just a quantitative or financial one. In this line of inquiry, "the state" consists of many forms of regulatory policy, while government size is taken to proxy for the "regulatory burden" on the market economy (Jalilian et al., 2007). In addition, research focusing on the non-economic dimensions of the state also has an institutional angle, treating various non-economic characteristics of the state as factors of economic growth. For example, the relationship between the types of political regime (i.e. democracy versus autocracy) and economic development or growth feature in this literature (Tang and Tang 2018).

There are a diverse set of dependent variables which describe an object or area influenced by the state or, more precisely, an area in which the effects of various characteristics of the state are manifested. Historically, most studies looked for the influence of the state (most often as the "government size") on economic growth, measured by changes in GDP per capita. One of the reasons apparently was that access to comprehensive, comparable data on GDP per capita was possible, while other data was generally lacking at that time. This type of research also prevails today, primarily on post-socialist and developing countries. However, in the case of highly developed countries, for which rapid growth is not a basic feature of their economic systems, there are research attempts to show the influence of the state (in the various dimensions discussed above) on economic or socio-economic characteristics such as prosperity and life satisfaction,

among others. They became possible because, as we mentioned previously, the scope of comparable statistical data has significantly expanded in recent years.

However, there are still no comprehensive studies on the impact of the state on this extended set of characteristics. Existing studies usually use the perspective of dependent variables looking for factors that influence them, with the paper by Sušnik and van der Zaag (2017) being an example. Furthermore, the (often indirect) effects of state policy (such as GDP or GDP per capita), rather than the policy itself are used as independent variables. In other studies, indicators depicting what we see as a possible effect of state involvement (e.g. human development as measured by the Human Development Index [HDI] or the Inequality Adjusted Human Development Index [IHDI]) are used as independent variables (Teker and Güner 2016). Additionally, studies such as this usually discuss select issues, leaving behind the "big picture" of both state involvement in the economy and its effects. In this context, studies on the impact of economic policy on life satisfaction should be mentioned. This was analyzed first from the perspective of the level of state interventionism and opposite conclusions were drawn: while Bjørnskov et al. (2007) show that life satisfaction decreases with higher government spending, Flavin et al. (2014) argue that increasing state interventions lead to a higher degree of life satisfaction.

Everything discussed previously means that our research is difficult to compare directly to similar (and not numerous) studies from the past. It comes both from a different economic reality, with other independent and dependent variables being important at that time, and a different approach towards the scope of research in contemporary studies.

4. Methodological assumptions for the empirical study

4.1. Introductory notes

The empirical analysis presented below is based on previously made observations and methodological assumptions. First, we have deliberately chosen groups of various (possibly diverse) economic systems as the object of our research, expecting results that are not fully universal but contextual in nature – which is reflected in our hypothesis #1.

Second, when examining the "impact of the state," we emphasize the various dimensions of the category called "state," which is reflected in our hypothesis #2. This takes into account the characteristics which currently seem to be important but were (or were perceived as) much less relevant previously, decades ago, or which were impossible to use because of the limited availability of data. Additionally, we distinguish between quantitative indicators describing the scope (scale) of government activity (overall and in selected areas) and qualitative indicators describing the efficiency (effectiveness) of government activity.

As mentioned above, most of the empirical studies were devoted to the influence of the state on economic growth or other economic categories. Since the time they were conducted, two changes have taken place. First, many more variables are currently available; second, especially after the global crisis of 2008-2009, economic growth has ceased to be treated as a fetish of economics and economic policy. For these reasons, in our research we attempt to identify the influence of the state on characteristics with a broader, qualitative character (both objective and subjective), which create the foundation in a society for quality of life and the capabilities to achieve it.

4.2. Variables used in the study

The choice of appropriate variables had to meet the following general criteria. First, variables had to reflect – in the most precise way possible – some aspect of the problem in question. Second, they must be available for all the countries studied (or at least for a substantial majority in each country group). For this reason, among others, we had to resign from the OECD Product Market Regulation indicators (as a measure of the state's impact on the economy), which while very sound methodologically are calculated only for OECD member countries.

In our model, we use **independent variables**, both quantitative and qualitative, that characterize the state very broadly.

The quantitative indicators depict *the extent of the state's influence on the economy*. We use relatively simple indicators popular in economic research which represent two different approaches towards measuring the size of the government, which were mentioned above. The appropriate data for measuring this with the level of government expenditure are easy to obtain and quite reliable, but do not always reflect the government's involvement in a conclusive way. First, there are countries where governments exert strong control but are fiscally conservative, not spending much. Second, governments may intervene in the economy in many different ways, for example, through controlling the behavior of private enterprises, acting as an owner of certain enterprises, acting as an investor, and implementing price controls, among others. Thus, the following variables have been used:

1. Government Expenditure (as a percent of GDP): this variable is developed by the Heritage Foundation (2017) and is the most commonly used proxy for measuring state involvement in the economy;
2. Size of Government: a complex variable developed by the Fraser Institute (2017), which includes government consumption, transfers and subsidies, the share of the state in the enterprise sector and investments, and top marginal tax rate;
3. Regulation: a complex indicator developed by the Fraser Institute (2017), which describes the regulatory burden imposed by the state on the credit market, the labor market, and business activity;
4. Government Consumption (as a percent of total consumption): developed by the Fraser Institute (2017) and used as a proxy for the production of public goods;
5. Government Enterprises and Investment: developed by the Fraser Institute (2017) as a measure of the state's involvement as an owner and investor.

The qualitative indicators show several *institutional aspects of the quality of governance*, which we consider as having a substantial impact on the way the state influences the economy. We use the synthetic indicators available in various reports for a large number of countries or partial indices that make up synthetic indicators. They include:

1. Government Integrity: an indicator developed by the Heritage Foundation (2017) which shows the extent of widely understood corruption in public administration;
2. Property Rights: an indicator developed by the Heritage Foundation (2017) which depicts "the ability of individuals to accumulate private property, secured by clear laws that are fully enforced by the state;"[1]
3. Government Effectiveness: one of the Worldwide Governance Indicators developed by the World Bank (2016), which measures the quality of the government's functioning (public service, civil service, and policy formulation and implementation).

Two additional variables which show the extent of the quantitative and qualitative influence of the state on the economy have been created. They represent simple averages of the first three quantitative variables (because the last two are part of the "size of government" variable) and all three qualitative variables after their normalization. We resigned from weighting the variables

1 https://www.heritage.org/index/property-rights.

used following the Fraser Institute researchers view that weighting variables gives no credible results especially in situations when their relative importance and interdependence is not sufficiently known.[2] The additional variables are:

1. SQT – the quantitative impact of the state on the economy;
2. SQL – the quality of the state impact on the economy.

The selection of **dependent variables**, which depict the *quality of the economic systems*, is crucial for our research. As mentioned above, for us, the quality of the economic system is more than economic growth and wealth; thus, we used indicators that, in a synthetic way, depict society's well-being. They are:

1. IHDI (Inequality-adjusted Human Development Index): developed within the United Nation's Development Programme (UNDP) Human Development project, this variable, in addition to being a purely economic measure (GDP per capita), takes into account the significant non-economic characteristics that determine people's capabilities – health condition (life expectancy) and education level (mean and expected years of schooling). All three elements have an inequality measure added.
2. Happiness Index: developed by the United Nations Sustainable Development Solutions Network for its World Happiness Reports (SDSN 2017), this indicator takes into account the social, economic, and institutional factors that determine peoples' ability to feel happy.
3. Satisfaction of Life: a variable of a purely subjective nature from the World Database of Happiness (Veenhoven 2017) which was used to assess the subjective dimension of a good economy (reaching its ultimate goal of making people's lives more happy and satisfactory).

No single synthetic index of a good economy has been developed at this stage of the research, mainly due to some conceptual problems yet to be solved.

A question may arise if the presented division of variables is relevant from the causality point of view: whether good governance leads to an increase of the quality of an economic system or if it is a "good" economic system (with a high level of human capital, wealth, and happiness, among others) that is the driving force for good governance. The existing literature seems to corroborate the first approach; however, it was typically only the relationship between governance and growth that was studied (Olson et al., 2000; Kaufmann and Kraay 2002; Jalilian et al., 2007; Acemoğlu and Robinson 2012).

All of the variables used, when necessary, were rescaled to fall within the range of 0 and 100. If data were available for several different years, the latest were chosen. In the Fraser Institute database, no data were available for Belarus and Uzbekistan; additionally, there were no data for Argentina and Colombia for the Government Enterprises and Investment indicator.

2 https://www.fraserinstitute.org/economic-freedom/approach.

4.3. Countries studied

In total, the research sample consists of 52 countries divided into 4 groups differing both in the level of economic development and the level of institutional maturity (Table 1). As mentioned above, the economic transition of the post-socialist countries has created a new, fruitful area of empirical comparative studies on economic systems. In our analysis, we distinguish two groups of these countries. The first group consists of the leaders of transition; this success allowed them to become members of the European Union (EU) ("New Europe"). The second group consists of countries that have chosen their own development path outside the EU or that, for various other reasons, have not been able to apply for accession. It consists of the members of the Commonwealth of Independent States (CIS), Georgia, and Mongolia ("East Europe and Asia," EEA). The third group consists of the developed countries of Western Europe ("Old Europe"). The fourth group, treated in our research as a comparative group for both groups of post-socialist countries, consists of the independent Latin American countries with market economies, excluding Cuba and Venezuela ("Latin America"). These countries are often treated as a benchmark because of the alleged economic and institutional similarities between Latin American and transition countries. This group for decades represented hybrid varieties of the capitalist market economy, where social welfare increased very slowly and with various perturbations. Because of a lack of data, the Dominican Republic and Haiti were excluded from the analysis.

Table 1. Country groups

	Old Europe	New Europe	EEA	Latin America
1	Austria	Bulgaria	Armenia	Argentina
2	Belgium	Croatia	Azerbaijan	Bolivia
3	Denmark	Czech Republic	Belarus	Brazil
4	Finland	Estonia	Georgia	Chile
5	France	Hungary	Kazakhstan	Colombia
6	Germany	Latvia	Kyrgyzstan	Costa Rica
7	Ireland	Lithuania	Moldova	Ecuador
8	Italy	Poland	Mongolia	Guatemala
9	Luxembourg	Romania	Tajikistan	Honduras
10	Netherlands	Slovakia	Ukraine	Mexico
11	Norway	Slovenia	Uzbekistan	Nicaragua
12	Spain			Panama
13	Sweden			Paraguay
14	Switzerland			Peru
15	United Kingdom			Uruguay

5. Tentative results

Most of the variables chosen show statistically significant variance across country groups. The variance was insignificant only for Government Enterprises and Investment and less significant for the SQT variable (Table 2). Old Europe countries are characterized by bigger governments which produce a greater amount of public goods; at the same time, regulatory burden and microeconomic involvement are the lowest. In terms of quality of governance, they are also clear leaders. These countries achieve – better than any other group – the outcome of their policies both in the objective and subjective dimensions. In most cases, the post-socialist countries belonging to the EU show the second-best results (apart from the Happiness Index and Satisfaction of Life). The EEA and Latin American countries present quite similar results, the former showing more involvement in the economy, but less regulatory burden and slightly worse quality of governance. These countries have better predispositions for development (higher IHDI values), but significantly lag behind the Latin American countries in making their societies happy and satisfied with life.

Correlations for the whole dataset (Table 3) show the following regularities:

- Within the variables which are used as independent and depict the different characteristics of state involvement, quantitative involvement is generally positively correlated with qualitative involvement. There are two exceptions from this rule. The first is that the state playing the role of an entrepreneur is not correlated with any variable under study. The second is regulatory burden, which is strongly negatively correlated with the level of government consumption (counterintuitively, governments with overregulated economies seem to spend less on the production of public goods) and all the qualitative parameters of the state's impact on the economy (which is quite obvious).
- Within the dependent variables which measure the quality of an economic system, the Happiness Index is strongly correlated with both the IHDI and Satisfaction of Life, while the correlation between two latter variables is much weaker, albeit still statistically significant.
- Looking at relations between the characteristics of the state and the quality of an economic system, we can see a strong correlation between most of them (with a notable exception of Enterprises and Investment). All but regulatory burden show positive linkages, the latter being especially counterproductive for the level of the IHDI.

- While the SQL index shows a high level of correlation with almost all other variables, the SQT variable shows a much weaker correlation with them. It turned out to be that the composition of the SQT is not homogenous enough, its source variables showing an adverse correlation with the other variables used in this study. For this reason, it is excluded from further analysis.

Table 2. Mean values of the variables in the country groups

Country groups	Old Europe	New Europe	EEA	Latin America	Total	One-way ANOVA
Government Expenditure	47.3	41.3	34.8	29.2	38.1	0.000
Size of Government	50.8	41.3	30.9	28.5	38.3	0.000
Government Consumption	29.5	24.6	18.8	17.5	22.8	0.000
Government Enterprises and Investment	15.4	19.2	27.6	23.7	20.9	0.168
Regulation	20.6	22.5	29.7	36.0	27.3	0.000
Government Integrity	76.5	53.1	37.1	40.2	52.5	0.000
Property Rights	85.0	68.7	50.2	49.5	63.7	0.000
Government Effectiveness	81.4	64.6	42.7	47.7	59.6	0.000
SQT	39.5	35.0	31.5	31.2	34.6	0.014
SQL	81.0	62.1	43.3	45.8	58.6	0.000
IHDI	83.8	77.0	65.4	56.9	70.6	0.000
Happiness Index	69.9	57.2	51.8	62.4	61.0	0.000
Satisfaction of Life	74.4	60.3	55.3	72.0	66.5	0.000

Source: Own calculations.

Table 3. Correlation between main variables (Spearman's rho)

Variables	Government Expenditure	Size of Government	Government Consumption	Government Enterprises and Investment	Regulation	Government Integrity	Property Rights	Government Effectiveness	SQT	SQL	IHDI	Happiness Index	Satisfaction of Life
Government Expenditure	1.000	0.867**	0.820**	0.080	-0.267	0.447**	0.505**	0.540**	0.881**	0.487**	0.677**	0.298*	0.094
Size of Government	0.867**	1.000	0.850**	0.260	-0.272	0.517**	0.547**	0.578**	0.905**	0.538**	0.658**	0.420**	0.234
Government Consumption	0.820**	0.850**	1.000	-0.029	-0.491**	0.674**	0.683**	0.735**	0.721**	0.707**	0.802**	0.480**	0.255
Government Enterprises and Investment	0.080	0.260	-0.029	1.000	0.154	-0.199	-0.179	-0.205	0.264	-0.195	-0.186	-0.174	-0.148
Regulation	-0.267	-0.272	-0.491**	0.154	1.000	-0.727**	-0.767**	-0.724**	0.064	-0.763**	-0.729**	-0.325*	-0.160
Government Integrity	0.447**	0.517**	0.674**	-0.199	-0.727**	1.000	0.910**	0.939**	0.283*	0.970**	0.845**	0.612**	0.410**
Property Rights	0.505**	0.547**	0.683**	-0.179	-0.767**	0.910**	1.000	0.930**	0.295*	0.965**	0.857**	0.604**	0.436**
Government Effectiveness	0.540**	0.578**	0.735**	-0.205	-0.724**	0.939**	0.930**	1.000	0.350*	0.974**	0.897**	0.670**	0.491**
SQT	0.881**	0.905**	0.721**	0.264	0.064	0.283*	0.295*	0.350*	1.000	0.288*	0.434**	0.295*	0.124
SQL	0.487**	0.538**	0.707**	-0.195	-0.763**	0.970**	0.965**	0.974**	0.288*	1.000	0.876**	0.634**	0.436**
IHDI	0.677**	0.658**	0.802**	-0.186	-0.729**	0.845**	0.857**	0.897**	0.434**	0.876**	1.000	0.529**	0.289*
Happiness Index	0.298*	0.420**	0.480**	-0.174	-0.325*	0.612**	0.604**	0.670**	0.295*	0.634**	0.529**	1.000	0.851**
Satisfaction of Life	0.094	0.234	0.255	-0.148	-0.160	0.410**	0.436**	0.491**	0.124	0.436**	0.289*	0.851**	1.000

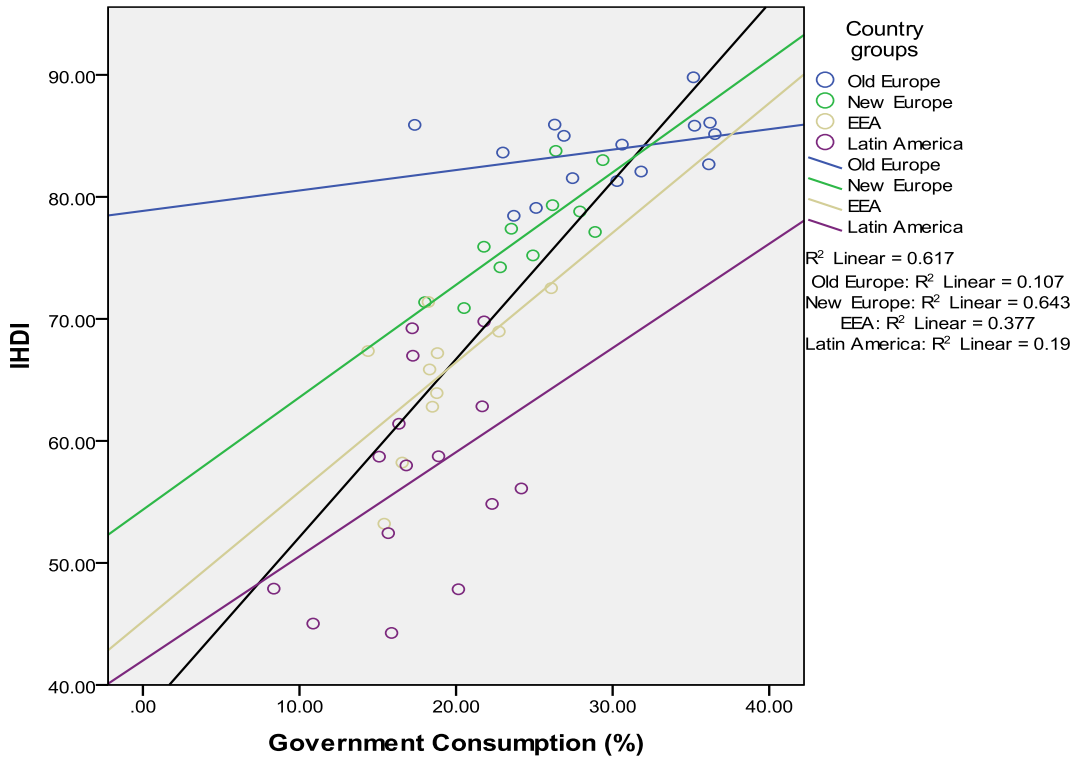
* Correlation is significant at the 0.01 level (2-tailed).
** Correlation is significant at the 0.05 level (2-tailed).
Source: Own calculations.

In summary, the most general interdependencies for the whole set of countries studied seem to show that state impact on the economy really matters for the quality of the economic system. "Big" governments with high expenditures – especially for producing public goods – and a low regulatory burden are beneficial first of all for the creation of wealth and the capabilities of societies. At the same time, the qualitative characteristics of the state are positively linked with both the objective and subjective dimensions of a "good" economic system.

A more detailed analysis shows that the type of economy matters as well. Variety of capitalist models (roughly divided in this study into four groups according to a mix of geographical and political economy factors) create different patterns of links between variables which are used as dependent and independent. In some cases, there were no essential differences between the selected groups of countries, whereas in other cases, they were quite pronounced, although the coefficients of determination often were low.

Comparison of IHDI with Size of Government, Government Expenditures, and Government Consumption shows basically the same picture, being statistically insignificant for the countries of Old Europe and to a greater or lesser extent beneficial for the other groups of countries (Figure 1).

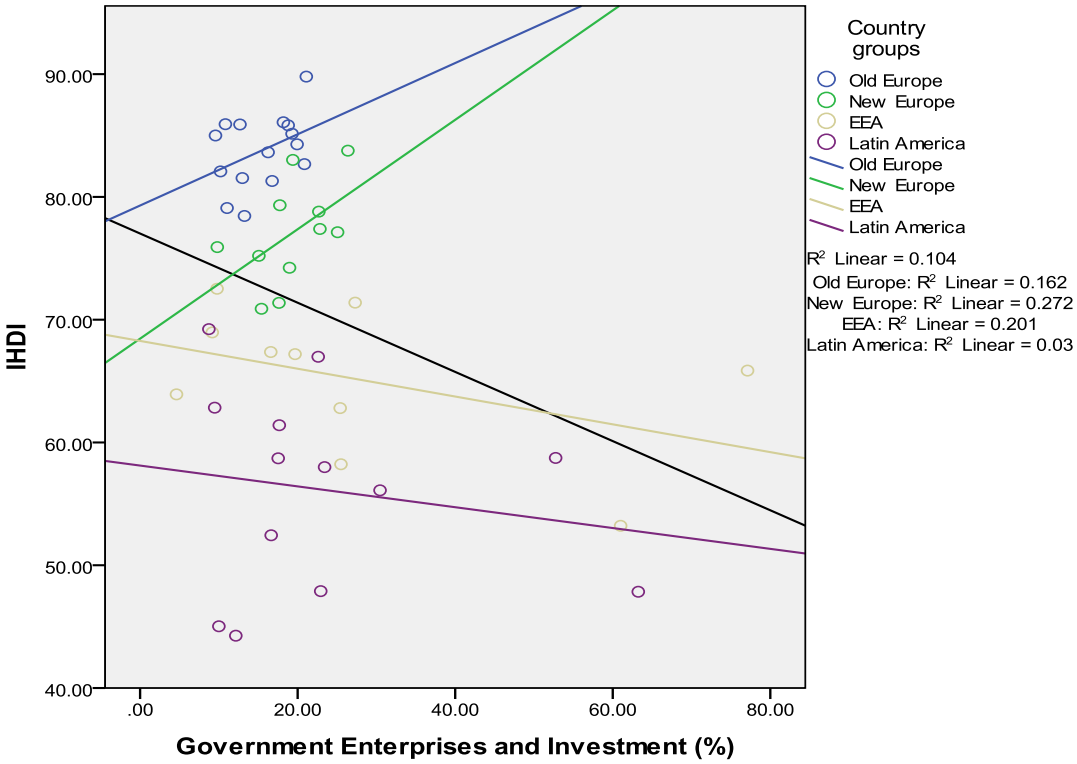
Figure 1. IHDI 2015 and Government Consumption for the selected groups of countries



Line of best fit for the whole set of countries is marked black.
Source: Own calculations.

Whereas for the whole dataset, the involvement of the state as an owner and investor has a slightly negative effect on the IHDI, among country groups, this is the case mainly for EEA countries. In EU countries, the effect is adverse, although with low levels of significance (Figure 2).

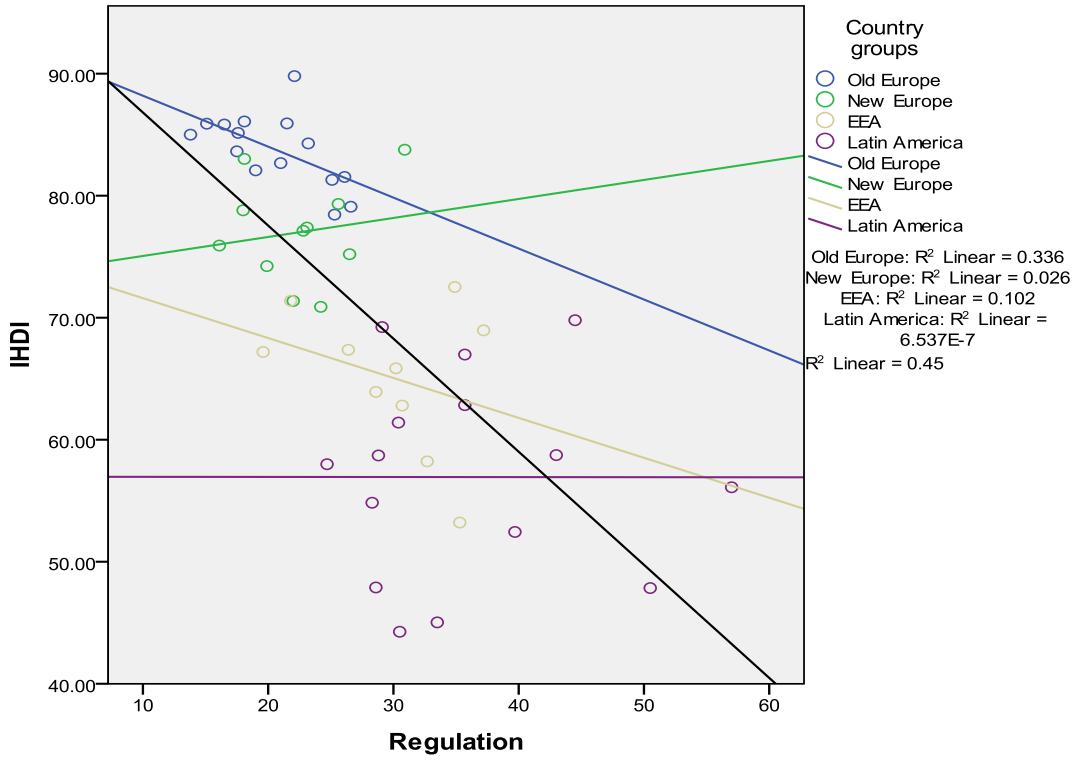
Figure 2. IHDI 2015 and Government Enterprises and Investment for the selected groups of countries



Line of best fit for the whole set of countries is marked black.
Source: Own calculations.

The significance of regulatory burden for the level of IHDI also varies across country groups: it has the most adverse effect in the countries of Old Europe and to a lesser extent in EEA countries. This factor is insignificant for the countries of New Europe and Latin America (Figure 3).

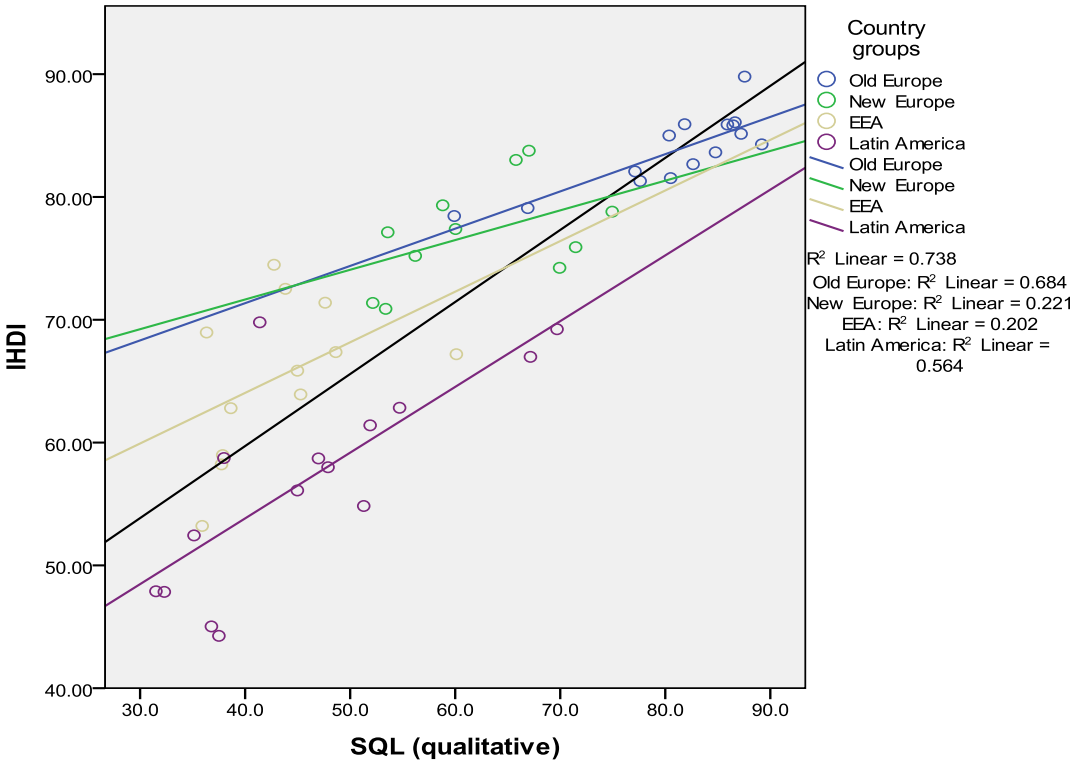
Figure 3. IHDI 2015 and Regulation for the selected groups of countries



Line of best fit for the whole set of countries is marked black.
Source: Own calculations.

In all country groups, all qualitative characteristics of the state remain beneficial for IHDI level, and generally with high significance. The SQL variable is shown as an example in Figure 4. No essential differences between the country groups were found.

Figure 4. IHDI 2015 and SQL (quality of the state impact on the economy) for the selected groups of countries

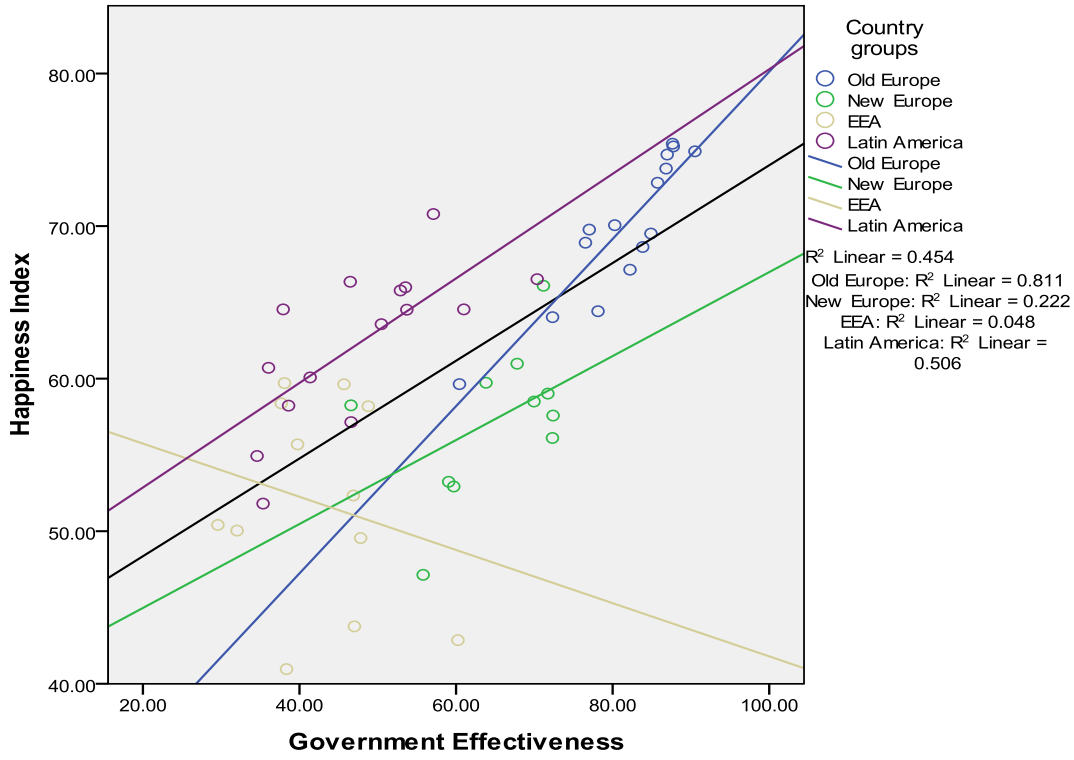


Line of best fit for the whole set of countries is marked black.
Source: Own calculations.

The differentiation of results in the case of the Happiness Index as a dependent variable shows an even more mixed picture. There are no statistically significant differences between the country groups for Size of Government and Government Expenditures; in the case of Government Consumption, only the countries of Old Europe show a positive albeit weak link between these variables. Much more profound are the links between the index in question and the qualitative characteristics of the state. The most significant statistically manifest themselves in the case of the New Europe and (to a lesser extent) Latin American groups of countries, especially regarding the Government Effectiveness variable. Results for the EEA countries are not significant (Figure 5).

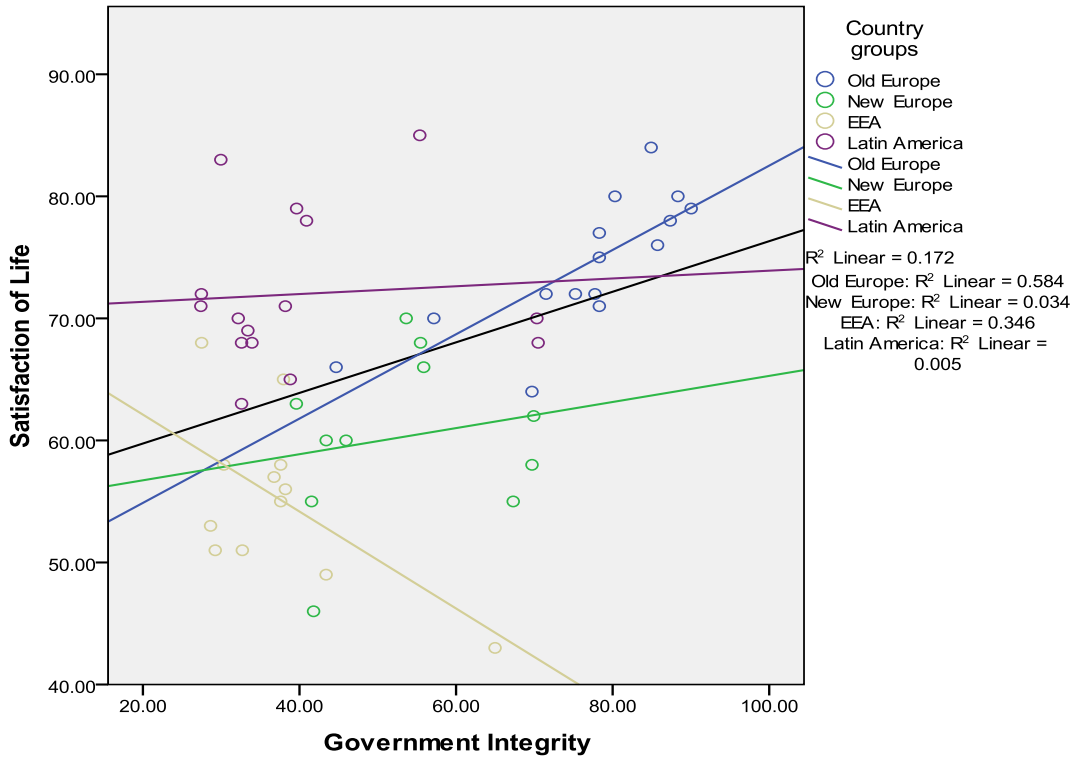
Finally, the results for Satisfaction of Life generally show the weakest and, in some cases, counterintuitive links with the characteristics of the state. Understandably, the relatively strongest role here belongs to links with the qualitative variables. However, it is hard to find a plausible explanation why Government Integrity is clearly counter-beneficial for the EEA group of countries (Figure 6).

Figure 5. Happiness Index and Government Effectiveness for the selected groups of countries



Line of best fit for the whole set of countries is marked black.
Source: Own calculations.

Figure 6. Satisfaction of Life and Government Integrity for the selected groups of countries



Line of best fit for the whole set of countries is marked black.
Source: Own calculations.

To create a synthetic picture of the differences between the country groups, the correlation between the independent and dependent variables for each group was calculated. One should be aware, however, that these groups are too small to perform sound correlation analysis. Nevertheless, Kirk (2007) argues that Spearman's rho can be used with caution for samples above 10 cases.

Table 4. Correlation between main variables (Spearman's rho) within the country groups

Country groups and variables	Government Expenditure	Size of Government	Government Consumption	Government Enterprises and Investment	Regulation	Government Integrity	Property Rights	Government Effectiveness	SQL (qualitative)
Old Europe									
IHDI	-0.229	0.104	0.325	0.264	-0.568*	0.778**	0.499	0.814**	0.757**
Happiness Index	0.093	0.200	0.400	0.389	-0.429	0.849**	0.602*	0.879**	0.821**
Satisfaction of Life	-0.056	0.224	0.448	0.481	-0.520*	0.853**	0.567*	0.868**	0.804**
New Europe									
IHDI	0.527	0.655*	0.791**	0.627*	0.109	0.127	0.418	0.709*	0.473
Happiness Index	-0.182	-0.027	0.164	0.091	-0.318	0.264	0.191	0.345	0.336
Satisfaction of Life	0.297	0.548	0.434	0.493	0.251	0.155	0.301	0.507	0.288
EEA									
IHDI	0.070	-0.127	0.479	-0.382	-0.188	0.567	0.196	0.559	0.448
Happiness Index	0.000	0.370	0.018	0.394	0.103	-0.263	-0.196	-0.259	-0.154
Satisfaction of Life	0.102	-0.012	-0.085	0.348	-0.012	-0.364	0.060	-0.084	-0.126
Latin America									
IHDI	0.118	0.468	0.400	-0.187	0.077	0.757**	0.443	0.871**	0.736**
Happiness Index	-0.025	0.227	0.359	-0.360	0.149	0.415	0.368	0.729**	0.576*
Satisfaction of Life	-0.287	-0.145	-0.075	-0.498	-0.294	-0.014	0.230	0.302	0.275

* Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

Source: Own calculations.

Therefore, the obtained results, although interesting, may not be sound enough. The data presented in Table 4 generally corroborate the observations made above showing that countries in each group indeed differ not only by the values of the variables (as shown on Table 1), but also by the patterns of the correlations between the variables.

The group of Old Europe countries is characterized by correlations between the qualitative characteristics of the state (first of all Government Effectiveness, where correlations are extremely strong) and the three variables that depict the quality of an economic system. The quantitative factors, apart from regulations, are not significant. New Europe countries, on the contrary, exhibit correlations only with selected quantitative parameters (first of all, Government Consumption) and only with the IHDI. All other correlations, which include the qualitative

indicators as well as the remaining dependent variables, are not statistically significant. In the group of EEA countries, none of the correlations are significant. In the Latin American countries group, we can see a strong correlation between some of the qualitative features of the state and the IHDI and, to a lesser extent, the Happiness Index. There is no correlation between any parameter of the state and the subjective feeling of life satisfaction.

The close connection between many of the variables used in the study and the hypothetic existence of other, yet to be identified, factors which may influence both the "goodness" of economies and the independent variables themselves poses the question of the importance of the variables used for the explanation of variances in the analyzed groups of countries. Furthermore, whether or not the differences between the groups of countries are truly essential for the development of their economic systems should be examined. In other words, we should look at how strong membership in these groups is among the other independent variables used in the research as well as what other factors are the most important in this respect.

To analyze this, a linear multiple regression analysis was performed for the three dependent variables: IHDI, Happiness Index, and Satisfaction of Life. The following predictors were used:

1. Government Expenditure;
2. Size of Government;
3. Regulation;
4. Government Consumption;
5. Government Enterprises and Investment;
6. Government Integrity;
7. Property Rights;
8. Government Effectiveness;
9. Country Group (in the form of 4 binary variables: belongs to the group = 1, other countries = 0).

The results are presented in Tables 5-7. As with the correlation analysis presented above, these results must be treated with caution – and even more so because, according to the most relaxed "rules of thumb" (VanVoorhis and Morgan 2007), the sample is slightly too small even for testing an overall fit of the model, not to mention testing the individual predictors.

However, they allow us to make several observations. First, belonging to a specific country group does matter, but seems to be of secondary importance in the case of the objective characteristics of the economic system. Furthermore, it is different for different country groups. Being a Latin American country, *ceteris paribus*, is not beneficial in the case of IHDI level, but is beneficial for the Happiness Index (Tables 5 and 6). In the latter case, being a country of Old Europe also gives better prospects for having better institutional conditions for happiness. For the subjective feeling of life satisfaction, among the predictors tested, not living in a post-socialist country (especially in the EEA) is essential (Table 7).

Table 5. Regression analysis: IHDI

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adjusted R Squared
	B	Std. Error	Beta			
1						
Government Effectiveness	0.123	0.009	0.895	13.734	0.000	0.796
2						
Government Effectiveness	0.098	0.006	0.709	16.198	0.000	0.927
Latin America	-0.113	0.012	-0.405	-9.256	0.000	
3						
Government Effectiveness	0.090	0.007	0.658	13.513	0.000	0.932
Latin America	-0.105	0.012	-0.376	-8.450	0.000	
Size of Government	-0.009	0.004	-0.106	-2.125	0.039	
4						
Government Effectiveness	0.079	0.008	0.577	10.255	0.000	0.939
Latin America	-0.101	0.012	-0.360	-8.466	0.000	
Size of Government	-0.016	0.005	-0.184	-3.244	0.002	
Government Enterprises and Investment	-0.001	0.000	-0.113	-2.486	0.017	

Stepwise method.
Source: Own calculations.

Table 6. Regression analysis: Happiness Index

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adjusted R Squared
	B	Std. Error	Beta			
1						
Government Effectiveness	0.673	0.103	0.691	6.552	0.000	0.486
2						
Government Effectiveness	0.889	0.094	0.913	9.473	0.000	0.648
Latin America	0.959	0.191	0.484	5.025	0.000	
3						
Government Effectiveness	0.591	0.120	0.607	4.928	0.000	0.717
Latin America	1.011	0.172	0.510	5.881	0.000	
Old Europe	0.790	0.227	0.416	3.485	0.001	

Stepwise method.
Source: Own calculations.

Table 7. Regression analysis: Satisfaction of Life

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adjusted R Squared
	B	Std. Error	Beta			
1						
EEA	-1.536	0.287	-0.615	-5.346	0.000	0.365
2						
EEA	-1.897	0.230	-0.759	-8.244	0.000	0.623
New Europe	-1.280	0.222	-0.530	-5.758	0.000	
3						
EEA	-1.605	0.249	-0.643	-6.443	0.000	0.660
New Europe	-1.268	0.211	-0.526	-6.004	0.000	
Government Effectiveness	0.265	0.108	0.236	2.446	0.018	

Stepwise method.

Source: Own calculations.

Second, for the first two dependent variables, the strongest predictor is Government Effectiveness, a variable which depicts the institutional quality of the functioning of the government. Its significance is especially strong in predicting IHDI values (Table 5). In the model where it is the sole predictor, it explains 80% of the dependent variable variance. In the case of the Happiness Index (Table 6), it explains almost half of this indicator's variance.

Third, other predictors proved not to be strong enough to fit the models. Only in the case of the IHDI in one of the models can we see two quantitative indicators of state characteristics (Size of Government and Government Enterprises and Investment); however, the increase in the R-Squared value in comparison with the model without these variables is very small. This is a counterintuitive result, especially in the case of Government Expenditures in predicting IHDI values, because one can expect that providing the population with public goods and financing various social programs must be highly beneficial for the state of human capital and the welfare of society. When we exclude qualitative predictors from the regression analysis, the Government Consumption variable begins to fit the models (Table 8). Used as a sole predictor, it accounted for over 60% of the IHDI variance. The second most important indicator (with negative effect) was the level of regulatory burden.

Table 8. Regression analysis (without qualitative predictors): IHDI

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adjusted R Squared
	B	Std. Error	Beta			
1						
Government Consumption	1.455	0.161	0.797	9.048	0.000	0.628
2						
Government Consumption	1.119	0.129	0.613	8.652	0.000	0.799
Regulation	-0.640	0.100	-0.454	-6.401	0.000	
3						
Government Consumption	0.652	0.247	0.357	2.643	0.011	0.825
Regulation	-0.698	0.100	-0.494	-7.002	0.000	
Latin America	-6.539	2.341	-0.234	-2.793	0.008	
4						
Government Consumption	0.245	0.277	0.134	0.887	0.380	0.844
Regulation	-0.621	0.098	-0.440	-6.352	0.000	
Latin America	-12.198	3.109	-0.436	-3.923	0.000	
EEA	-6.672	2.584	-0.218	-2.582	0.013	

Stepwise method.
Source: Own calculations.

Fourth, a look at the adjusted R-squared values shows that whereas the predictors chosen allow for the explanation of almost all the variance of the IHDI variable and more than 70% of the variance of the Happiness Index, the explanatory gap for Satisfaction of Life is much wider. This suggests that there are other factors not identified in this research which are essential for the subjective feeling of well-being, apparently unrelated to the economic policy of the state and the mix of political and geographic characteristics used in distinguishing the four country groups. Indeed, research on happiness and life satisfaction is abundant. And according to the results of these studies, happiness and life satisfaction are related to a variety factors, including physical and mental health, satisfying basic needs, and meeting other personal goals (Prasoon and Chaturvedi 2016). Even genetic factors may matter specifically for a given nation (Minkov and Bond 2017). The economic policy of the state can impact most of these factors, but largely in an indirect way, making the importance of the independent variables used in our study secondary.

6. Conclusions and discussion

This study allowed us to positively verify both the hypotheses that were formulated at the beginning of the article. However, our work is far from over. The factors and the mechanisms which lay behind the observed phenomena are not fully clear and require further investigation.

As to Hypothesis 1, the effects of similar types of state stimuli (or similar characteristics of state participation in the economy) were not uniform across different groups of economies. For the most developed countries studied (Old Europe), the key characteristic for the state was its institutional integrity, the positive impact of which was seen in all dimensions of the economies, both objective and subjective. For the post-socialist countries of New Europe, the main stimulus affecting the economic system was its involvement in financing public needs: "bigger" government meant better outcomes for the wealth and capabilities of the society. However, it affected only this aspect of a country's economic system. The qualitative characteristics of the state, while still important, played only a secondary role. Not much can be said about the group of countries from East Europe and Asia (EEA). The EEA's peculiarity is the lack, as a rule, of clear links between the characteristics of the state and the economic systems. Some of the existing links, which were quite weak, differed from those of other groups of countries – for example, better subjective parameters of their economic systems were detected in the EEA countries with low performing governments. Finally, the Latin American countries to some extent resembled the Old Europe countries in regard to the importance of institutions, but on a much smaller scale; besides, the variance in the subjective dimension of their economic systems remained unexplained.

Many of the weaker links identified in the last three groups, and especially in the EEA countries, need further explanation. Are there are other important factors (not necessarily additional characteristics of the state) that matter? Or, perhaps the way in which the countries were grouped in this study does not reflect the essential peculiarities of their economic systems? At this stage of research, an affirmative answer for both questions seems plausible. We found that the biggest explanatory problems occurred when analyzing the factors that influence the ability of the state to meet the subjective needs of the population. Therefore, we can expect that the factors which have not been taken into account in our research may primarily be of a non-economic character, depicting some institutional or cultural features of the states and societies. Or perhaps it is that these groups may be too heterogeneous, containing countries at levels of development and with institutional setups that are too different from each other.

Regarding Hypothesis 2, we discovered that despite the differences across the country groups, the economies do share some common features. The most common similarity, however,

is quite commonplace, and is described in the literature as "institutions matter." Institutions are of crucial importance for the quality of the state's impact on the economy and are a key factor in how economic systems are shaping up – both in creating wealth and capabilities for the population and reaching the ultimate goal of all modern economies: to make people happy and satisfied with life. No matter whether the state is more liberal or more interventionist, whether it acts as an owner and investor on a wider or a narrower scale, or whether it produces many or few public goods – the quality, not the quantity, of state intervention matters the most.

However, this does not mean that the quantitative characteristics of the state's impact on the economy do not matter at all. Depending on the development model adopted, it may be crucial to provide the population with public goods and/or finance some other social or economic goals (among others). In our research, an important, positive role of state expenditures, especially on government consumption, was identified; however, it was clearly of secondary importance to good governance, which ensures the use of state resources in an efficient way.

As the study presented in this paper may be considered as being at a rather interim stage, the to-do list is inevitably quite extensive. It includes, among others:

- To improve the concept of the good economy, making it more specific and functional;
- To refine the breakdown of countries into groups, perhaps in line with the VoC approach;
- To look for other variables which may be more precise in describing the various aspects of both the "goodness" of economic systems and the factors that affect it;
- To pay more attention to the ways of assessing the quality of the state impact on the economy – particularly, the quality of the public goods produced by the state.

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