The influence of globalization on selected constitutive and regulating elements of the economic mechanism on the example of regional economic growth of new and old member states of the European Union

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Abstract. The constitutive principles, which define the economic order in the basic outline and set its basic parameters, together with the regulating principles that regulate the economy in the logic of its desirable economic and social development, form the basic building blocks of the economic mechanism. Globalization has significantly changed economic policy in both practical and theoretical terms. It has affected both elements constituting private property institute, pricing mechanism, free competition, law enforcement, contractual freedom and perfect information, as well as elements regulating in the form of general rules, short-term and long-term regulation instruments. The subject of this paper is the description and analysis of the influence of globalization processes on the development of selected constitutive and regulating elements of the economic mechanism, which ultimately influence the development of individual economic units. These globalization processes have either contributed to the convergence of the economic level of selected European regional economies, ie to real convergence, or have contributed to deepening the gap between European regions. The surveyed economic units will be the regional economies of the new and old EU Member States, which are regularly monitored by the European Union Statistical Office. This analysis will cover regional economic growth, specifically the development of regional gross domestic products.

1 Introduction

In search for answers to basic economic questions of “what, how and for whom to produce” the economic theory comes with two basic types of economic mechanism, namely the mechanism of centrally planned economy (command economy) and the market mechanism. Each of these mechanisms is characterised by the existence of two attributes, which are elements of a constitutive (system-forming) nature and elements of a regulating nature. Constitutive elements define the basic parameters of the given economic mechanism and
regulating elements regulate it within the defined parameters. Constitutive and regulating elements are an important part of economic policy, for they determine specific instruments by which the state influences the desired economic development. Likewise, the fact that “...the choice of particular constitutive elements is at the same time the choice of certain elements and the exclusion or reduction of operation of other regulating elements (instruments) of the economic policy.” [1] holds true.

From the outset, economic policy has gone through various stages, characterised by smaller or greater state interferences in the normal course of the economy. Periods of liberal or interventionist approach of the state to the country economy regularly alternated. According to some authors, from about the second half of the 19th century, a new phenomenon has emerged in the global economy, which is the process of globalization gaining ever in its significance [2]. Globalization processes, which have gradually intensified or overshadowed the importance of individual constitutive and regulating elements of the economic mechanism, have resulted in a different economic development of individual national or regional economies. The result was either a convergence of the economic level of regional economies or, on the contrary, deepening of the economic gap between them. This paper aims to analyse the impact of globalization on real convergence or divergence of selected regional economies of the old and new member states of the European Union on the background of changes in the selected constitutive and regulating elements of the economic mechanism. At first, the constitutive and regulating elements of the economic mechanism will be defined in the first part. The second part will focus on the impact of globalization processes on these elements. The third part of the paper will provide an empirical comparison and analysis of economic development of the selected European regions on the background of constitutive and regulating elements of the economic mechanism influenced by the globalization.

2 Constitutive and regulating elements of economic mechanism

The term “economic policy” is used in economic literature in the dual meaning. In the first case it relates to practical activities of the government, in the second case it is a theoretical scientific discipline [3]. The practical work of the government is usually based on its economic programme, which pursues both the general objectives (maximizing social welfare by ensuring freedom, justice, social security and progress) and the traditional objectives (real product growth, stable price levels, high employment, balanced external relations). Economic policy as a scientific discipline, which originated as a response to the economic depression in the 1930s, is characterised by an effort to synthesise the macroeconomic theory and the institutional framework of the economy, in which every government finds itself in its decision-making. For this reason, in addition to economic theory, economic policy is based on the knowledge of political science, law, economic history, etc. In this comprehensive form, it can provide governments with solutions to economic problems based on the knowledge of economic theory.

To meet the objectives of economic policy, governments use a wide variety of instruments. The first group of these instruments is called “constitutive (system-forming) elements”, the second one is called “regulating elements”. The constitutive elements decide whether a specific economic mechanism will be of a centrally planned or market type. According to Šulc [1], constitutive and regulating instruments have been applied since the very inception of practical and theoretical economic policy. Practical economic policy can already be mentioned in the mercantilism period in connection with the efforts to regulate the public revenues of the feudal state. These were the French physiocrats who are, under the watchword “laissez-faire, laissez-passer”, associated with the beginnings of the constitutive role of the state. This is done through the legal regulation of property relations,
civil and contract law, antitrust laws, etc. The following stage of the system-forming activity of the state is associated with the Russian Revolution in 1917, namely in connection with the efforts to establish a mechanism of centrally planned economy. The period after the First World War can be characterised by regulating state interventions in the form of public works, interventions in pricing, nationalisation of companies or industries, etc. As already mentioned, the subsequent period of the Great Depression in the thirties has led to the development of economic policy in its theoretical form. The theory of economic policy has been developing in two main streams: the Anglo-American stream and the Continental stream. The Anglo-American stream, based on the already spontaneously existing institutional structure of the economy, conceives economic policy as a short-term booming economic policy with an emphasis on achieving full employment, stable currency and prices, etc. The Continental stream, represented mainly by the West German and Swiss economists, conceives economic policy as a constitutive (system-forming) activity with minimal direct state interventions. The difference in the theoretical concept of economic policy of both streams is not accidental. The spontaneous development of the American economy without the previous stage of feudalism led to the formation of an institutionally organised society through the clash of various interest groups even before the emergence of the theoretical economic policy. The situation on the European continent was different. The conflict between the capitalist order and the feudal one first took place in liberal approaches. The period after the First World War and the crisis of the 1930s led to the return of state interventions. In particular, the German option in the form of a centrally planned economy while maintaining private property brought only a seeming solution, which perished after the defeat of Nazism. For this reason, especially German Ordoliberals, led by W. Eucken, prefer a constitutive approach to economic policy.

According to Eucken [4], the constitutive principles of the competition system include: the creation of a functional pricing system of perfect competition, the primacy of monetary policy, openness of markets, private ownership of means of production, contractual freedom, liability, economic policy stability and togetherness of constitutive principles. Klusoň [5] states that Ordoliberals are convinced that the functional pricing system “… is the basic criterion of any economic and political measure.” Therefore, it is necessary to resist state subsidies, price regulation, the creation of monopolies, etc., i.e. all activities that restrict the functionality of the pricing system. The separation of the political sphere from the business sphere plays an important role. The primacy of monetary policy is based on the belief that monetary stability, eliminating inflation and deflation, leads to stronger motivation of economic entities and reducing their uncertainty. The primacy of monetary policy is another precondition for creating the market system. The openness of markets is related to the efforts of the state to prevent closing markets in order to hinder the emergence of a competitive environment, since any possibility of imposing barriers to entry into the sector supports its monopolization. Private ownership of the means of production is another precondition for establishing the market mechanism, including the subsequent competition system. However, the Ordoliberals emphasise the fact that under the conditions of a monopoly market, unrestricted private ownership can lead to damage in the form of exercising the power over other interested parties (workers, customers, etc.). With respect to contractual freedom, Krabec [6] emphasises its necessity, but at the same time also its inadequacy, which lies in the possibility of creating secret cartels in a situation where freedom to conclude contracts is not sufficiently defined and limited. The liability institute is important in terms of responsibility of the person liable for the implementation of specific plans of market participants, with broader liability leading to a decrease in the uncertainties being undertaken. Stability of economic policy enables market players to make easier decisions about future investment plans by reducing uncertainty about the future development. It also restricts the undesirable formation of industrial groups that
would be established in an unstable business environment in order to coordinate their business plans. It would result in the restriction of the competition. According to Eucken [4], the togetherness of the constitutive principles means that for the existence of the competition regulation it is necessary to apply all the constitutive principles together as a whole without isolating any one of them. In such a case, the competition regulation would be weakened.

Summing up the above-mentioned constitutive elements of the economic mechanism, we can formulate the basic institutional conditions of market economy [7] which are as follows: (i) the right to private ownership associated with enforceability, transferability and restriction of property rights; (ii) free movement of prices; (iii) free competition.

In addition to the constitutive principles of the competition system, the Ordoliberals also emphasise the role of the regulating principles, because, despite the consistent application of the constitutive elements, the economic policy correction or adjustment is necessary owing to the emergence of various barriers to free competition. Krabec [6] also adds the following ones to the regulating principles: control over monopolies, correction of market distribution of national pensions, economic accounting (regulation of externalities) and anomalous supply behaviour. Since even the consistent application of constitutive principles cannot rule out the spontaneous emergence of monopoly structures, this obstacle to free competition needs to be suppressed as much as possible. Of the possible solutions, the most effective seems to be the existence of an independent state authority that would be able to force monopolies to comply with the competition rules. The market distribution of pensions needs to be corrected because of undesirable social tensions which could occur in a situation where pensions are distributed only based on the price mechanism. A suitable instrument for this regulation is progressive taxation, dampening unbearable pension inequalities, while the maximum level of progression must not prevent savings, i.e. investments. Economic accounting is related to the existence of positive and negative externalities. In this context, Klusonš [5] refers to the regulation either through state interventions, for example in the form of subsidies and taxes, or through a more precise definition of property rights. The last regulating principle is the anomalous behaviour of supply, for example in a situation where the rising labour supply as a result of a growing population leads to a decrease in wages. Regulation is subsequently implemented by increasing the labour mobility, increasing the qualifications of the unemployed, introducing a minimum wage, etc.

The aforesaid has been a brief definition of the constitutive and regulating elements of the economic mechanism. The next chapter will deal with the influence of globalization processes on the selected constitutive and regulating elements.

3 The influence of globalization processes on the constitutive and regulating elements of economic mechanism

The effort to determine the influence of globalization processes on the constitutive and regulating elements of the economic mechanism is complicated by the inconsistency of the term “globalization” itself. For example, Žídek [8] works with two opinion streams, the first of which links globalization to qualitatively new forms of internationalisation, while the second one to continuing integration tendencies. Kocourek, Bednářová and Laboutková [9] consider globalization, among other things, to be associated with global forms of governance, with the increasing interconnection of markets, with the increasing role of transnational entities that restrict national sovereignty etc. Besides other things, Hejduková [10] relates globalization to current social determinants. Hejduková and Kureková [11] currently ascribe the global human resource migration to globalization. Rojíček [12] as well as Urban [7] link the current phase of globalization to the high growth dynamics of world
trade and foreign investment. In the last two decades, economic globalization has been viewed as a crucial phenomenon of the entire globalization process [13].

According to Breinek [2], if we focus our attention solely on economic globalization, liberalisation of international trade and capital transactions belong to the important factors of globalization. Here, liberalisation means the gradual removal of tariff and non-tariff barriers to trade. Let us add that according to Mankiw [14], barriers to market entry are the main cause of monopolies, with one of them being also the government’s production licenses, patents or trademarks. The economic globalization associated with removing trade barriers has a direct impact on the openness of markets, which is one of the constitutive elements of the market mechanism leading to the creation of a competitive environment. Closed markets are the opposite of open ones. Closed markets were typical of centrally planned economies. The process of their economic transformation initiated in the 1990s has led to the change of the economic mechanism into a market economy, which in itself has meant a gradual, more or less rapid opening of markets. It can be assumed that the process of globalization has further accelerated the opening speed of the new EU Member States’ markets and led to the growth of international trade.

Liberalisation linked to globalization has increased the role of private entrepreneurship [2] as another constitutive element. As already mentioned, private ownership of the means of production is one of the important institutional prerequisites of the market system. Šíma [15] demonstrates that when searching for the causes of the present welfare of Western societies historians conclude that social, not natural, factors play a decisive role, because only the existence of the social order helps society to cope with all possible pitfalls. The ownership institute forms the basis of the social order. Respect for the ownership institute results in prosperity, disrespect for it results in destruction and poverty. Private ownership allows Smith’s “invisible hand of the market” to harmonise individual interests with social interests [16]. A butcher, brewer or baker will satisfy the interests of the society only if the butchery, brewery or bakery is in their ownership. Let us emphasise that in a centrally planned economy, the economic basis is social ownership in the form of state and cooperative ownership, since only nationalized enterprises are well controlled. Therefore, logically, one of the essential pillars of the transformation process was privatization, ensuring the necessary transfer of ownership rights from the state hands to the hands of private entities. Again, it can be assumed that private ownership of the means of production supported by globalization should lead to faster economic growth in the new EU Member States of Central and Eastern Europe. Let us add that private ownership of the means of production has also enabled the functionality of another constitutive element, namely liability, since it clearly determines persons liable for the implementation of specific plans of market entities. At the same time the effective exercise of ownership rights is impossible without contractual freedom as another one of the constitutive elements.

In terms of the design of a functional pricing system, the influence of three factors can be mentioned. The aforesaid trade barriers constitute the first factor. One can conclude that as a result of removing trade barriers, the pricing system will not be subject to price distortions resulting from the application of trade barriers in the form of tariffs and quotas. The second factor is related to inflation. As Jarý [17] adds, the growing share of foreign trade in the total world production leads to the gradual disappearance of regional (national) markets. Companies must therefore adapt their pricing policy to global markets, which usually leads to dulling of various inflationary pressures. Let us add that transnational monopolies able to achieve lower production costs also play an important role, according to Jarý [17]. The third factor concerns the separation of the political sphere from the business sphere. As reported by Jeniček [18], one of the consequences of globalization is a significant weakening of the role of national governments. Domestic interest groups and rent conquerors thus have considerably less room for their activities [19]. Of course, this
has a positive impact on price stability. A more functional pricing mechanism can thus coordinate the behaviour of economic entities in the market economy more easily. Free price formation on the market of products and services, of production factors and money allow prices to fulfil their information, motivation and allocation functions.

The above-mentioned overview clearly shows the impact of globalization on the effective functioning of the market mechanism. The following chapter deals with the empirical comparison and analysis of the economic development of the selected European regions of the old and new EU Member States after the year of 2000 from the perspective of the constitutive and regulating elements of the economic mechanism influenced by globalization.

4 The development of the regional gross domestic product per capita in the selected NUTS 2 regions

To empirically compare the economic development of individual European regions, we will use Eurostat’s annual data on the development of gross domestic product per capita at the current market prices for NUTS 2 regions [20]. The data will be expressed in the purchasing power parity, which considers the different price levels in the individual European regions. The European regions selected for the purposes of this article are all the Czech and Slovak regions. Germany is represented by the fastest growing region of the former German Democratic Republic, Saxony, the least developed region of the former Federal Republic of Germany, Schleswig-Holstein, and the developed region of Upper Bavaria with the capital of Munich. Poland is represented by one of the poorest European regions, Warmińsko-Mazurskie, and Hungary is represented by the similarly poor region of South Alföld. The gross domestic product data are from 2000 to 2017 (with the exception of Poland and Hungary, where the period of 2006 to 2017 is used, since the data from 2000 to 2005 are not available *). Table 1 shows the specific data on GDP per capita at current market prices for the NUTS 2 regions in the purchasing power parity.

Table 1. GDP per capita at current market prices by NUTS 2 regions, average GDP growth rate.

| REGION                  | PPS PER INHABITANT | g  | REGION                  | PPS PER INHABITANT |
|-------------------------|--------------------|-----|-------------------------|--------------------|
|                         | 2000               | 2017|                         | 2000               |
|                         | 25 100             | 3,41|                         | 21 100             |
|                         | 23 300             | 3,35|                         | 18 200             |
|                         | 19 000             | 2,84|                         | 16 300             |
|                         | 22 600             | 3,45|                         | 53 000             |
|                         | 24 400             | 4,06|                         | 28 000             |
|                         | 22 000             | 3,94|                         | 30 400             |
|                         | 22 100             | 4,25|                         | 14 700             |
|                         | 53 800             | 5,51|                         | 14 500             |

Source: Eurostat, own processing

To calculate the average GDP growth rate per capita, the following formula is used:

$$g = 100 \left( n \sqrt[n]{\frac{Y_{t+n}}{Y_t}} - 1 \right) \quad (1)$$

where g is the growth rate, n is the number of years, $Y_{t+n}$ is the product after n years, $Y_t$ is the product at the beginning of the period under review. Table 1 (column g) shows the calculated values.

Except for the poorest Polish and Hungarian regions, the calculated figures show that the regions of the new EU Member States have been growing since 2000 faster than the regions of the old EU Member States. The main cause of faster growth rates is certainly the process of economic transformation initiated in the 1990s (the transition from centrally planned economies to market economies). The fact that the market economy system is more
efficient than the centrally planned economy is demonstrated by both the economic theory and the statistical data. However, the transformation process itself has been intensified by globalization effects in many regions of the EU, helping to change the constitutive elements of the economic mechanism and the regulating elements linked to them more quickly. The fact that the underdeveloped regions can benefit from globalization only to a small extent is confirmed by our calculations for the Warmińsko-Mazurskie and Southern Alföld Regions. In this case, globalization has a negative effect in the form of deepening regional differences.

Table 1 also clearly shows that even after almost thirty years after the start of the transformation processes in the countries of Central Europe, the value of gross domestic product per capita in the old and new EU member states has not been equalized. An example is the Federal Republic of Germany, where even the most advanced one of the new regions, Saxony, which reached 93 percent of the average GDP per capita in 2017, has not yet drawn level with the least developed region of the former Federal Republic of Germany, Schleswig-Holstein, which has 101 percent of the average EU GDP per capita.

To have at least a general idea of to what extent the convergence process of the new EU Member States to the developed economies is real in time, let us make the theoretical calculations e.g. for the Regions of Southwest and Upper Bavaria.

Let us consider 2017 to be the starting period. The calculation will be made on the assumption that the monitored regions will maintain their growth rate for the past 17 years. The corresponding calculations are represented by Formulas 2 to 3.

\[
Y_{UpperBavaria} \times \left(1 + \frac{g_{UpperBavaria}}{100}\right)^n = Y_{Southwest} \times \left(1 + \frac{g_{Southwest}}{100}\right)^n
\]

\[
\log\left(Y_{UpperBavaria}\right) \quad \log\left(Y_{Southwest}\right)
\]

\[
\log\left(g_{UpperBavaria}\right) \quad \log\left(g_{Southwest}\right)
\]

\[
n = \frac{\log\left(Y_{UpperBavaria}/Y_{Southwest}\right)}{\log\left(53000/23300\right)} = 81
\]

The results prove that despite the academic, i.e. in practice unrealistic, setting of the initial conditions (the constant growth rate), the process of real convergence will take many decades and will affect several generations.

5 Conclusion

Globalization processes significantly help consolidate the constitutive elements of the market mechanism. Globalization has made itself significantly felt in the openness of markets, the private ownership of means of production, the functional pricing system and the primacy of monetary policy. The calculations have confirmed that in the period under review, i.e. after 2000, the regions of the new EU Member States have been growing at a faster rate compared to the economic growth in the regions of the old EU Member States. In addition to the impact of the economic transformation, globalization has also contributed to this fact. It is understandable that, due to the existence of dozens of different factors affecting the real economies, an isolated quantitative expression of globalization impact is impossible. The calculations have also shown that the process of convergence of the economic level of the selected European regions is “a very long-distance run”. In order to realise this convergence in the foreseeable future, it is necessary that individual regional economies receive also other impulses than just transformation and globalization ones.

This article was created within the project SGS-2018-042 “The Application of Quantitative Methods in Economics” at the Faculty of Economics of the West Bohemia University in Pilsen.
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