

THE TYPOLOGY OF THE WORLD'S MACRO-REGIONS

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Key-words: the complexity of the world, divergence and convergence, global processes, typology, world's macro-regions.

Abstract. The article deals with changing differences among the world's macro-regions. It examines whether these differences tend to expand or not. Do convergent or divergent trends prevail within the global system? Changes are studied on the basis of the so-called world's macro-regions that have a high degree of social, economic, and cultural homogeneity. In the parts 'The Forming of the World's Macro-Regions' and 'The Typology of the World's Macro-Regions' the authors explain different macro-regions including their typology. The core part of this article critically evaluates trends in the development of the world's macro-regions; changes in the basic indicators in different macro-regions between 1990 and 2016 are explained. Contradictory trends (divergence and convergence) often appear. The findings are further discussed in a broader geopolitical framework.

1. INTRODUCTION

The ongoing global changes strongly influence the current structure of the world, as well as the changing nature of the world's different regions. These changes, however, are diverse. Thus, the crucial question is whether such uneven change dynamics depend on the level of wealth, or rather on lower-than-average development. This study examines the following aspect: are the gaps among the different world regions widening or not? In other words, is it convergence that prevails within the global system, or is it divergence? To address this issue, the authors have chosen the following intermediate steps:

- (1) Geographical units were chosen where global processes would be examined;
- (2) These units were sorted into classes (the typology was established) using different economic and social data, with respect to geographical position;
- (3) Suitable indicators were chosen.

One of the key questions examined in this study is whether the global trends of the post-bipolar world have now a tendency to reverse. The long-time dominance of the "West" (seen as the core of the global system – see Wallerstein, 1979), which was typical throughout the entirety of the 20th century (Taylor, 1989; Lindert & Williamson, 2001; Landes, 1998; Novotný, 2007; Pieterse, 2011; Brauer & Dymitrow, 2017), seems to be slowing down or even disappearing. Rapid economic growth of many semi-peripheral and especially peripheral countries was enhanced by the financial and economic crisis and stagnation of the most developed countries (Hampl, 2014). Many questions related to this goal have already been answered in our previous work (Anděl, Bičík & Bláha, 2020).

Many economists support this trend referring to the dynamic progress of BRICS states (Brazil, Russia, India, China, and South Africa). A number of political scientists and political geographers support this idea, too, and talk about the "end of North Atlantic dominance" and the "end of the unipolar world" (Layne, 2006; Zakaria, 2008; Pieterse, 2011; Bradshaw, 2009).

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Both divergent and convergent trends are examined using the world's macro-regions that were defined in the other authors' publications (Anděl, Bičík & Zavadská, 2017; Anděl, Bičík & Bláha, 2018a; Anděl, Bičík & Bláha, 2020 etc.). Macro-regions are explained further on in the text. According to Wallerstein (1991), they can be divided into core, semiperipheral, and peripheral regions. Trends are evaluated using the appropriate indicators, such as gross domestic product, literacy, or life expectancy.

2. THE FORMING OF THE WORLD'S MACRO-REGIONS

Divergent and convergent trends of the contemporary globalized world are difficult to assess when only nation states are taken into account. Such an analysis would have only partial results – bigger regions (the world's macro-regions) are more convenient in this case.

The World's macro-regions should be economically, socially, and culturally homogeneous. They are expected to be contiguous and similar in size. When creating these regions, different authors use different approaches: social-economic (Morris, 1972), social-cultural (De Blij & Muller, 1997; Huntington 1996; Fellmann, Getis & Getis, 2008), or technical-economic ones (Cole, 1996).

The approach adopted in this study (Anděl, Bičík & Bláha, 2018b) is based on the following ideas and methodical frameworks. The World is divided into ten relatively homogeneous units (unlike continents that are much more heterogeneous). These macro-regions are evaluated as single units; subsequently, possible internal differentiation are discussed. For the sake of comparison, similar indicators are used for all regions.

From the methodical standpoint, it is a synthesis combining four relatively different concepts: those adopted by De Blij & Muller (1997), Cole (1996), Huntington (1996), and Hampl (2009). Social and cultural aspects ("civilizations") that roughly reflect Huntington's concepts (1996, see Fig. 1) form the most important factor. Secondly, economic interconnection and similarities are taken into consideration as regards the level of economic development. Thirdly, geographical complexity (in the sense of internal integrity) is also seen as an important factor.



Fig. 1 – Civilizations according to Huntington (1996).

Source: Huntington (1996).

Huntington's (1996) work reveals some interesting findings that are closely related to the topic of the present study. We have summarized them in the following eight points.

1. For the first time in history, global politics has a multi-polar and at the same time multi-civilizational (multi-cultural) character; modernization is no longer a synonym for the “westernization” of non-Western societies, and its result is not even universal civilization in some meaningful challenge of the word.
2. The power balance among civilizations (cultural regions of the world) is changing: the influence of the “West” is relatively declining (i); the economic, military and political power of Asian “civilizations” is growing (ii); a demographic revolution is taking place in Islamic countries, which has had destabilizing effects both for those countries in and of themselves, as well as for the rest of the world (iii); in general, “non-Western” countries are rediscovering the values of their own cultures and gaining political and economic power (iv).
3. A world order based on civilizations is born. States that are culturally close cooperate with each other, and macro-regions are created. Efforts to “enforce” a company from one civilization to another are not successful. The states of the macro-region are grouped around the leaders of said states, the leaders of their civilization.
4. Universalist demands are increasingly leading the “West” into conflicts with other civilizations, with Islamic countries, as Russia and China are becoming more serious. It appears there is the threat of local conflicts shifting towards a wider global conflict.
5. The survival of the “West” depends on the United States confirming its Western identity, and on whether the people of the “West” recognize that their civilization is unique, though not universal. Global conflict can be avoided if the leaders of the world’s powers accept the multi-civilizational character of the world.
6. The “West” is currently the most powerful civilization and will remain so in the near future. However, its power in relation to other civilizations is declining. By promoting their values and protecting their interests, the “West” presents non-Western societies with an easy choice. Some of them are trying to imitate the West, thus more or less adding to its values, while others societies, especially Confucian and Islamic societies, are instead trying to increase their economic and military force so that they can stand up to the “West” and reach a “balance” in their relationship with it.
7. After the end of the Cold War, at the turn of the 9th decade of the 20th century, it became, therefore, the main axis of global politics, given the interaction between the economic and cultural power of the West and the economic and cultural power of non-Western civilizations.
8. Today, the world is made up of seven or eight major civilizations. The most important states of the world (economically and politically) more often than not come from different civilizations (the USA, the EU, Japan, China, Russia, India, Iran, Turkey). The main models of political and economic development differ from civilization to civilization, and differences between civilizations are key issues of contemporary international life. The “West”, which has long enjoyed its dominant position in the world, is losing power, which shifts to non-Western societies. Global politics has already acquired a multi-polar and multi-civilizational (multi-cultural) character in the globalizing world.

Assigning appropriate names to the world’s macro-regions poses a real challenge. The different concepts mentioned above often include the geographical position of respective regions on the globe and such names are sometimes rather complicated (South-western Asia and Northern Africa or some of the regions used by Huntington). This study uses the terms coined by Hampl (2009), with two exceptions (the Angloamerican macro-region and the Indonesian macro-region).

The economic standards of various macro-regions, as well as convergent (divergent) trends are evaluated by representative indicators, reflecting economic, social, and demographic aspects. Economic well-being is measured with the aid different indices aggregated into the Human Development Index (HDI; Stanton, 2007). HDI is made up of the Gross Domestic Product (GDP), the Expectancy Index, and the Educational Index. The latter has been modified into Literacy Rate for the purpose of this study.

In our humble opinion (Anděl, Bičík & Bláha, 2018a, 2020), the World is divided into ten contiguous macro-regions. These are as homogeneous as possible in terms of social and economic development and cultural integrity (Fig. 2).

1. The European macro-region (except for Belarus and Ukraine, that are part of the Russian macro-region)

- is based on the concepts of European civilization that include cultural, social, and ethical values,
- has very high living standards (the highest life expectancy of all – 78 years for men, 83 for women, a literacy rate close to 100%),
- has the biggest share of the world's gross domestic product (25.6%),
- is quite homogeneous, both economically and culturally,
- the idea of European identity is important through the existence of the European Union.



Fig. 2 – The world's macro-regions, as defined by Anděl, Bičík & Bláha (2018a, 2020), modified.
 Source: Anděl, Bičík & Bláha (2018a, 2020).

2. The Angloamerican macro-region

- covers the United States of America, Canada, and Greenland,
- most of its people speak English,
- enjoys high prosperity, includes the most economically developed parts of the world,
- has the highest share of world's gross domestic product (25.3%),
- has high level of economic and cultural homogeneity,
- is rather homogeneous, both economically and culturally.

3. The Russian macro-region (Northern Eurasia)

- is identical to the former Soviet Union (except for Moldova, and the three Baltic countries),
- is the second largest of the world's macro-regions according to area (16.2%),
- the heritage of former Soviet Union acts as the main integrating factor,
- has a large distance between the main economic centers of the macro-region,
- industrial branches generate low added value,
- has a focus on the export of raw materials and weapons,
- natural conditions vary greatly across the region.

4. The Australian-Oceanic macro-region

- is the least populous of all macro-regions (only 0.5% of the world's population),
- has a very low population density (just 4.5 people per sq km),
- enjoys significant cultural and linguistic diversity,
- displays a stark contrast between the population of Australia and New Zealand on the one hand, and some Pacific islands on the other.

5. The Sino-Japanese macro-region, including China, Japan, the Korean Peninsula, Taiwan and Mongolia (Eastern Asia)

- holds a high share of the world's population (22.6%) and economy (22.0% by GDP),
- is the second most populous of the world's macro-regions and the third strongest by GDP,
- has had high dynamics of economic development in last 60/30 years in Japan/China
- its national economic systems are export-oriented,
- deals with complicated relations between communist and democratic countries,
- faces a high number of nature-related risks (extremely polluted environment, desertification, volcanic activity, earthquakes, tsunamis).

6. The Indonesian macro-region (South-East Asia)

- is a special macro-region that includes countless islands, channels and straits,
- its economic activities tend to be clustered around the coastal area,
- has a long colonial past, as well as a relatively recent creation of independent states,
- has caused the geographic isolation of the islamic country of Indonesia from other Islamic countries,
- is greatly influenced both by the Chinese and the Indian macro-regions,
- copes with a number of social and economic problems,
- has extraordinarily high linguistic diversity.

7. The Indian macro-region

- covers the former area of British India (India, Pakistan, Bangladesh), Afganistan and Nepal,
- is the most populous of macro-regions (23.7% of the world's population),
- deals with overpopulation, high birthrate and relatively low mortality,
- religion plays an important role (Hinduism and Islam)
- having a common history under the British rule is a typical integrating factor,
- due to poor economic conditions, GDP per capita is the lowest among macro-regions,
- has a high proportion of rural population,
- has a low life expectancy (67 years for men, 70 for women)
- has a high literacy rate (43%),
- enjoys a high degree of cultural and economic heterogeneity.

8. The Islamic macro-region

- is made up of a belt of predominantly Islamic countries, from Morocco in West to Iran in the East,
- the Islamic religion is the most important integrating factor,
- internal cultural and ethnic differences often lead to high tensions within the macro-region,
- the economic progress of many of its countries is based on oil and gas extraction,
- encompasses the most conflict-prone areas of the contemporary Word, repeatedly plagued by foreing interference (the United States, Russia, China).

9. The Latin American macro-region

- covers the southern and central part of the Americas up to the US-Mexican border,
- has high level of integration based on the use of Romance languages and on the Christian religion,

- has a high rate of urbanization and a low population density,
- deals with widespread crime (often linked to the drug business),
- has extreme economic disparities between its countries.

10. The African macro-region

- includes the African countries located south of Morocco, Algeria, Tunisia, Libya and Egypt,
- is the largest of the world's macro-regions (18.4% of Earth's landmass),
- tackles poverty, widespread illiteracy (one third of the population cannot read or write), frequent epidemics, overpopulation, ethnic tensions, and colonial heritage as the typical and integrating factors into the macro-region,
- undemocratic regimes prevail, often under military rule,
- produces just 2% of the world's nominal GDP,
- economic and cultural differences are extraordinarily high, caused mainly by complex ethnic patterns,
- many states of the macro-region are nowadays plagued by ethnic and religious tensions,
- a high incidence of corruption and so-called tribalism are typical aspects of the region.

At the turn of the 3rd decade of the 21st century, we are seeing an increase in the prices of goods on world markets. This includes food, oil, precious metals, strategic metals, industrial products and other goods. Economists and political scientists are asking the question whether we are at the beginning of a new, longer-running economic supercycle that may have an impact on changing the balance of power between the world's macro-regions. The supercycle is defined as a long period of rising prices of goods and services as a consequence of strong economic growth. Perič (2021) points out that in the 20th century the world experienced a supercycle only three times.

The first supercycle was caused by industrialization and the subsequent development of urbanization in the United States associated with the First World War. The result has been, among other things, a significant improvement in the US's economic and geopolitical standing in the world. The second supercycle was associated with the reindustrialization of (Western) Europe and Japan after the Second World War, which again brought an improvement in the economic and geopolitical position of these two regions on the world stage. The third supercycle was brought about by the post-1990 industrialization and urbanization of China. Over the past 20 years we have had the opportunity to observe its unprecedented economic growth and success in gaining an important geopolitical position in the world. All three of these supercycles were driven by demand related to the revolutionary process of industrialization and urbanization. At the same time, there was a lack of capacity in the required volume of several product categories, especially energy, metals and minerals.

Perič (2021) points out that in the next 10–15 years we may very well see two potential triggers for greater economic expansion, which could lead to the beginning of a new supercycle. One is a country capable of influencing world economy and commodity prices just like China did 30 years ago. That country is India, where not only strong industrialization and urbanization can be expected in the near future, but given its potential in finance, informatics, commercial services and, of course, a huge number of educated young people, a significant shift in building a post-industrial society can also take place.

As in China thirty years ago, these changes are very likely to bring significant economic growth to India and possibly an improvement in its geopolitical position in the world. The second possible impetus for the new supercycle is the expected large-scale construction of new energy infrastructure to support climate goals, which several countries have included in their strategic development plans. An extensive fiscal stimulus related to the Covid-19 pandemic could also help trigger the supercycle (Perič, 2021).

3. THE TYPOLOGY OF THE WORLD'S MACRO-REGIONS

The Economic prosperity of a country or region is routinely measured by gross domestic product (GDP) per capita. According to this standard, the European macro-region ranks 1: the European share of the world's population equals 7.3%, while that of the world's GDP is 25.6%. Similar numbers apply for the Angloamerican macro-region (4.9% of the world's population, 25.3% of world's GDP) and the Australian-Oceanic macro-region (0.5% and 2.2%, respectively).

The European and Angloamerican macro-regions combined make up more than half of the world's economy. Four macro-regions (Russian, Sino-Japanese, Islamic, and Latin American) have roughly equal shares in the world's total population number and GDP. Major inequalities, however, can be noted in the African macro-region (13.4% of the world's population, 2.2% of the world's GDP), the Indian macro-region (23.7% and 3.4%), and the Indonesian macro-region (8.5% and 2.9%).

The above-mentioned differences become very clear when GDP per capita (measured by purchasing power parity, PPP) is taken into consideration. GDP per capita (PPP) in the most economically developed regions is more than ten times higher than corresponding figures for the poorest regions. The comparison of GDP per capita (without PPP correction) would show even higher inequalities (25:1) – see Table 1.

Table 1

The world's macro-regions according to population and GDP (2016)

No.	Macro-region	1	2	3	4	5
1	European	541	7.3	19.4	25.6	35.9
2	Angloamerican	363	4.9	19.2	25.3	52.9
3	Russian	286	3.8	2.4	3.2	8.4
4	Australian-Oceanic	39	0.5	1.7	2.2	43.6
5	Sino-Japanese	1,668	22.6	16.7	22.0	10.0
6	Indonesian	629	8.5	2.2	2.9	3.5
7	Indian	1,755	23.7	2.6	3.4	1.5
8	Islamic	502	6.8	4.3	5.7	8.6
9	Latin American	630	8.5	5.6	7.4	8.9
10	African	994	13.4	1.7	2.2	1.7
	Total	7,407	100.0	75.8	100.0	10.0*

1 – Population (millions); 2 – Population (%); 3 – GDP (trillions); 4 – GDP (%); 5 – GDP per capita (thousands of USD).

Source: the World Bank, the CIA World Factbook, the United Nations. Note: * mean value.

The literacy rate surpasses 90% in most macro-regions, with the exception of the Indian (57%), African (64%), and Islamic (75%) ones. The most economically advanced regions also show the highest levels of life expectancy; at the other end of the spectrum, the African macro-region is at the bottom of the list (life expectancy is 57 years for men, 60 for women). The Russian, Indian, Indonesian, and Sino-Japanese macro-regions as a whole also display relatively low figures; Japan itself, however, belongs among the countries with the highest life expectancy.

The World's macro-regions can be sorted into different classes according to social and economic standards. The European and Angloamerican macro-regions are undoubtedly the most developed ones, making up over 50% of the world's economy. The Australian-Oceanic macro-region also has very good values (GDP per capita, economic prosperity); however, in this region there are more pronounced internal differences (to be discussed further on). The Russian and Sino-Japanese macro-regions are comparable in terms of social and economic standards; the same applies for the Islamic and Latin American macro-regions. A critical situation persists in the African macro-region, where GDP per capita is more than ten times lower in comparison to Europe. More than one third of the

population is illiterate in Africa. The Indonesian macro-region, still below the world's average, has rather good prospects for the future (social aspects, literacy rate).

Table 2

Main indicators of the world's macro-regions (2016)

No.	Macro-region	1	2	3	4	5	6	7	8
1	European	3.7	7.3	106	25.6	100	78/83	***	***
2	Angloamerican	16.0	4.9	17	25.3	100	77/82	***	***
3	Russian	16.2	3.8	13	3.2	100	65/75	**	***
4	Australian-Oceanic	6.2	0.5	5	2.2	95	75/79	**	*
5	Sino-Japanese	8.6	22.6	141	22.0	95	66/70	*	***
6	Indonesian	3.3	8.5	140	2.9	91	68/74	**	*
7	Indian	3.7	23.7	344	3.4	57	67/70	**	*
8	Islamic	8.9	6.8	41	5.8	75	71/75	**	***
9	Latin American	15.0	8.5	31	7.4	90	72/79	**	***
10	African	18.4	13.4	40	2.2	64	57/60	*	*
	Total	100.0	100.0	54	100.0	80	68/72	.	.

1 – Area (%); 2 – Population (%); 3 – Population density (sqkm); 4 – GDP (%); 5 – Literacy Rate (%); 6 – Life Expectancy (years M/F); 7 – Homogeneity (economic); 8 – Homogeneity (cultural).

Source: the World Bank, the CIA World Factbook, the United Nations. Note: *, ** and *** represent the level of homogeneity (from the bottom – up).

In addition to economic prosperity, the economic and cultural homogeneity of the world's macro-regions is also examined. The indicators shown in Table 2 allow us to formulate general conclusions and create different types of macro-regions (Fig. 3).



Fig. 3 – The typology of the world's macro-regions.

3.1. Type I – The European, Angloamerican, and Australian-Oceanic macro-regions

These regions, also called *core regions*, display high levels for all parameters (GDP per capita in excess of 35,000 USD, a literacy rate of 95% or more, a life expectancy of 75 years for men, 79 for women). These macro-regions are quite homogeneous regarding economic prosperity (all subregions

are well developed) and cultural patterns (all belong to one single civilization, *the western civilization*, as defined by Huntington, 1996, Fig. 1). The only exception is cultural heterogeneity in the case of the Australian-Oceanic macro-region where pronounced differences exist between Australia and New Zealand on one side, and the Pacific islands on the other. An interesting work dedicated to the macro-regions of the world was submitted by Polonský (2012), who defined the same 10 macro-regions of the world as the authors of the presented study. In his work, the author evaluated the integrated power potential of macro-regions. Polonský (2012) defines the integrated power potential as an indicator consisting of the values of GDP per capita, the share of the population in the total population of the world, and the share of the area of the macro-region in the land area of the Earth. An interesting finding of the author's is the fact that the share in power potential of the Type 1 macro-regions decreased from 1950 to 2008 from 48.8% to 34.0%. The European macro-region dropped from 24.4% to 16.3% (Germany decreased from 4.4% to 2.6%, Great Britain from 4.5% to 2.2% and France from 3.6% to 2.2%), the Angloamerican macro-region from 22.8% to 16.3% (the USA went from 22.8% to 14.5%) and the Australian-Oceanic macro-region went from 1.6% to 1.4%.

Values of Type I macro-regions (2016):

- 25.9% of total area, 12.7% of total population, 53.1% of total GDP
- 8 members of the “G20” platform (France, Germany, Italy, the United Kingdom, the European Union, the USA, Canada and Australia; see chapter 5).

3.2. Type II – The Russian, Sino-Japanese, and Latin American macro-regions

Most parameters show values around the world's average (GDP per capita 15,000 to 20,000 USD, a literacy rate of 95% or more, a life expectancy of 65–70 years for men, 70–79 for women). Cultural homogeneity for these *semiperipheral regions* is rather high (Orthodox, Chinese, Japanese, and Latin-American civilizations), while economic homogeneity is around average. According to Polonský (2012), the integrated power potential of Type 2 macro-regions for the 1950–2008 period increased from 30.3% to 37.5%. However, the change in the integrated power potential of individual macro-regions of this type is remarkable. While in the Russian macro-region we noted a decrease from 9.6% to 4.4% over the period under review, the share of the Sino-Japanese macro-region increased from 12.6% to 24.4% (China increased from 9.0% to 17.2%, and Japan from 3.1% to 4.4%) and the share of the Latin American macro-region remained virtually unchanged (only slightly increasing from 8.1% to 8.7%). As already mentioned several times in this article, this increase in the integrated power potential of Type II macro-regions can be “accounted for” primarily by the rapid growth of China's economy since the 1990s.

Values of Type II macro-regions (2016):

- 39.8% of total area, 34.9% of total population, 32.6% of total GDP
- 7 members of the “G20” platform (Russia, China, Japan, South Korea, Mexico, Argentina, Brasil).

3.3. Type IIa and IIb – Islamic and Indonesian macro-regions

These regions show similar levels of life expectancy (roughly 65 years for men, 75 years for women) and economic performance. Economic homogeneity is rather low. Literacy rate, however, varies significantly – in the Islamic macro-region it is quite low, especially women's literacy rate. The Islamic macro-region is culturally quite homogeneous, while in the Indonesian macro-region the opposite is true. The integrated power potential of Type IIA and IIB macro-regions over a period of 58 years, from 1950 to 2008 increased from 8.0% to 12.1% (Polonský 2012). The Islamic macroregion (increase from 4.2% to 6.2%) and the Indonesian macroregion (increase from 3.8% to 5.9%) contributed equally to this increase in integrated power potential. As shown in points throughout the

paper, the increase in the integrated power potential of this type of macro-region can be mainly “accounted for” by the dynamic development of the population of both macro-regions of this type.

Values of type IIa and IIb macro-regions (2016):

- 12.2% of total area, 15.3% of total population, 8.7% of total GDP
- 3 members of the “G20” platform (Saudi Arabia, Turkey, Indonesia).

3.4. Type III – Indian and African macro-regions

All indicators point to very low values (GDP per capita barely reaches 4,000 USD, the literacy rate is below 65%, life expectancy is also low). Economic and cultural heterogeneity is quite high in both macro-regions. The existing civilization, as defined by Huntington (1996), is extremely diverse ethnically in these *peripheral macro-regions*. A slight increase in the integrated power potential was also observed for Type III. The increase from 13.0% in 1950 to 16.4% in 2008 is mainly due to the population explosion of the Indian macro-region, mainly in India. While the Indian macro-region increased its integrated power potential from 8.2% to 11.1% (by almost 3%, India increased from 6.6% to 8.8%) over the period under review, the integrated power potential of the African macro-region changed only slightly, from 4.8% to 5.3%.

Values of Type III macro-regions (2016):

- 22.1% of total area, 37.1% of total population, 5.6% of total GDP
- 2 members of the “G20” platform (India and South Africa).

4. THE WORLD’S MACRO-REGIONS: CURRENT TRENDS

This part analyses changes in population and GDP in different regions over the 1990–2016 period. Tables 2 and 3 show the positioning of the different world macro-regions within the global system. Different dynamics in different parts of the world can be compared.

In terms of total GDP, Europe was part of the dominant world regions in 1990: with about 10% of the world’s population, the European macro-region accounted for almost one third of the world’s economy (measured by GDP). A similar ratio (GDP per capita) was applied to the Australian-Oceanic macro-region – the population of this part of the world, however, is twenty times lower.

The Angloamerican macro-region was the most economically advanced in the early 1990s. GDP per capita exceeded that of Europe by 50% (though nominal GDP was slightly lower). The European and Angloamerican macro-regions combined accounted for more than 60% of global GDP. On the contrary, the four weakest macro-regions (African, Indian, Indonesian, and Islamic) made up only 7.3% of the global GDP, with roughly 43% of the world’s population. The difference between the strongest and weakest regions (Angloamerican vs. Indian) measured by GDP per capita was quite confounding – 62:1.

GDP per capita (the mean value for the whole world) rose 2.5 times between 1990 and 2016. Such an increase, however, was uneven when considered region by region. Developing countries (regions) show the fastest progress – also due to rather low starting levels. The Indonesian, Indian, Islamic, and African macro-regions now account for 53% of the world’s population and 10.8% of the world’s GDP. The most advanced regions (Angloamerican and European) produce 50.9% of world’s GDP, which means a significant decrease compared to 1990. Moreover, the share of developed regions in terms of the world’s population dropped to 12.2%. The differences between the strongest and weakest regions (Angloamerican vs. African and Indian) measured by GDP became much smaller (35:1).

Table 3

The world's macro-regions according to population and GDP (1990)

No.	Macro-region	1	2	3	4	5
1	European	508	9.9	6.8	31.8	13.0
2	Angloamerican	277	5.4	6.1	28.3	21.8
3	Russian	280	5.4	1.5	6.9	5.3
4	Australian-Oceanic	28	0.5	0.4	1.7	12.7
5	Sino-Japanese	1.320	25.5	4.1	19.0	3.1
6	Indonesian	437	8.5	0.3	1.6	0.8
7	Indian	1.100	21.4	0.4	1.9	0.4
8	Islamic	255	4.9	0.5	2.5	2.1
9	Latin American	481	9.3	1.1	5.0	2.2
10	African	483	9.4	0.3	1.3	0.6
	Total	5,167	100.0	21.5	100.0	4.1*

1 – Population (millions); 2 – Population (%); 3 – GDP (trillions); 4 – GDP (%); 5 – GDP per capita (thousands of USD).

Source: The Calendario Atlante De Agostini, the World Bank, the CIA World Factbook, the United Nations.

Note: * mean value.

A comparison between Tables 2 and 3 shows that convergent trends prevail – in other words, the differences between the world's macro-regions are becoming smaller. More detailed characteristics such as differences among economic sectors (which are quite important) are not taken into consideration here.

Table 4 shows a different approach that enables the measurement of relative changes of GDP per capita in different regions. The Angloamerican region had the highest GDP per capita in 1990 as well as in 2016. These values are compared to the GDP of other macro-regions. Thanks to the fact that in 1990 all developing regions displayed rather low figures, their increase (in relative terms) was 2.8 to 4 times higher than that of developed regions over the past 26 years.

In other words, differences among regions decreased. From this perspective, we may discuss whether it is appropriate for other countries in Eastern Asia to share the same region as China and Japan owing to very different starting positions. Still, the Sino-Japanese macro-region shows significantly higher changes of GDP than the world's average over the 1990–2016 period.

The Indonesian macro-region recorded the highest increase in GDP per capita compared to the Angloamerican macro-region: the index rose from 3.7 (800 USD) to 6.6 (3,500 USD). Conversely, the Russian macro-region lost a significant amount (from 24.3 in 1990 to 15.8 in 2016).

Table 4

Changes in GDP per capita in different world macro-regions (1990, 2016)

No.	Macro-region	1	2	3	4	5	6
1	European	13	59.6	35.9	67.9	2.76	8 th
2	Angloamerican	21.8	100.0	52.9	100.0	2.43	9 th
3	Russian	5.3	24.3	8.4	15.8	1.58	10 th
4	Australian-Oceanic	12.7	58.3	43.6	82.4	3.43	5 th
5	Sino-Japanese	3.1	14.2	10.0	18.9	3.23	6 th
6	Indonesian	0.8	3.7	3.5	6.6	4.38	1 th
7	Indian	0.4	1.6	1.5	2.8	4.29	2 th
8	Islamic	2.1	12.4	8.6	16.2	4.10	3 th
9	Latin American	2.2	9.6	8.9	16.8	4.50	4 th
10	African	0.6	2.8	1.7	3.2	2.83	7 th
	Total	4.1	10.8	10.0	18.9	2.44	.

1 – GDP per capita 1990 (thousands USD); 2 – GDP per capita 1990 related to the Angloamerican macro-region (%); 3 – GDP per capita 2016 (thousands USD); 4 – GDP per capita 2016 related to the Angloamerican macro-region (%); 5 – Index 2016/1990 – GDP per capita in 2016 related to GDP per capita in 1990; 6 – Rank (sorted by index).

Source: the World Bank, the CIA World Factbook, the United Nations.

5. THE NEW POSITION RUSSIA, CHINA, INDIA AND BRASIL IN GLOBAL ECONOMY

By the middle of the first decade of the 21st century, the tendencies of changes in “leadership” in the world economy were already evident. The roles of various informal groupings of developed countries into different “G groups” were also discussed. In connection with the emergence and establishment of new centers of economic and political power, the former emerging economies of China, India, Russia and Brazil and their new position and role in the world economy were most frequently mentioned. Everyone is familiar with the relatively new term “BRIC”, respectively BRICS, a grouping of four countries, Brazil, Russia, India and China, to which South Africa was added in 2011. This designation, still BRIC at the time, was first used by Goldman Sachs investment bank in 2001. According to this report, some time between 2035 and 2040, the total GDP of these four countries will surpass the GDP of the six currently most developed economies in the world (the USA, Japan, Germany, Great Britain, France and Italy) (Haggett, 2001).

It is clear that more attention needs to be paid to two trends that shape the growth of the economies of the four major emerging world economies (China, India, Russia and Brazil), which have different conditions and trajectories of economic (and social) development compared to previous world economy leaders. The second trend is the stagnation of several regions, especially in Africa and part of the Islamic macro-region.

The informal G20 group was founded in 1999 with the aim of studying, reviewing, and promoting high-level discussions regarding policy issues pertaining to the promotion of international financial stability. The G20 is the latest in a series of post-World War II initiatives aimed at the international coordination of global economic policy. France, Germany, Italy, the United Kingdom, the European Union and the European Central Bank (the European macro-region), the USA, Canada (Angloamerican), Russia (Russian), China, Japan, South Korea (Sino-Japanese), India (Indian), Indonesia (Indonesian), Saudi Arabia, Turkey (Islamic), Mexico, Argentina, Brasil (Latin American), South Africa (African) and Australia (Australian-Oceanic) are part of the “G20” global world platform. Economic development, territorial and cultural attributes were respected when selecting the members of the “G20” platform.

In assessing the current development of these four economies, a number of questions arise, the most important of which seems to be the following: Can this aggressive growth of the BRIC economies be maintained for the following 20–30 years or is the current development only a situation where large amounts of money are sought abroad for new investment opportunities and are found today, especially in these four economies? A similar topic has been discussed with China for 20 years, but as the data in Tables 5 and 6 show, containing the GDP growth of these four countries and three advanced economies since 1990, it still works in China. Of course, it is very difficult to assess the economies of the BRIC countries as a whole. Each of them has their own particular type of economic development. The consequences of these changes will be reflected not only in the transformation of the world economy, but also in the redistribution of wealth and poverty reduction in the World (Haggett, 2001).

However, these four countries are well aware of their special standing in global politics and are trying to use every opportunity to clarify practices in the emerging global economy. Following the outbreak of the global crisis of 2009, the economies of these countries represented protruding islands in the sinking world economy and the hope of a faster solution to the global economic problems brought about by the crisis. The economies of the four countries are also expected to play a positive role in the coming crisis following the end of the Covid-19 pandemic.

Table 5

GDP and GDP per capita – annualized growth rates for the 1990–2015 period

Country	Marco-region	1	2
Germany	European	3.1	2.9
United Kingdom	European	3.6	3.1
France	European	2.6	2.2
USA	Angloamerican	4.6	3.6
Canada	Angloamerican	3.9	2.9
Russia	Russian	3.6	5.9
Japan	Sino-Japanese	3.2	2.8
China	Sino-Japanese	14.3	3.7
Indonesia	Indonesian	7.6	6.1
Turkey	Islamic	5.9	4.5
Saudi Arabia	Islamic	7.1	4.3
Iran	Islamic	-1.7	-3
India	Indian	13.3	7.7
Pakistan	Indian	6.8	4.6
Mexico	Latin American	5.7	4
Brasil	Latin American	5.7	4.3
Argentina	Latin American	5.9	4.7

1 – GDP annualized growth rate 1990–2015 (%); 2 – GDP *per capita* annualized growth rate 1990–2015 (%).

Source: List of countries by GDP growth 1980–2010. Wikipedia, available March 25th, 2021.

Table 6

GDP per capita between 1990 and 2019 in select countries (%)

Rok	Germany	USA	Russia	Japan	China	India	Brasil
1990	5.26	1.86	-3.00	5.20	3.80	5.53	-4.30
1991	5.11	-0.19	-5.05	3.35	9.20	1.06	1.51
1992	2.23	3.34	-14.53	0.97	14.20	5.48	-0.47
1993	-0.80	2.69	-8.67	0.25	14.00	4.77	4.67
1994	2.66	4.06	-12.57	1.10	13.10	6.65	5.33
1995	1.89	2.54	-4.14	1.96	10.90	7.57	4.42
1996	0.99	3.75	-3.60	2.75	10.00	7.56	2.15
1997	1.80	4.55	1.40	1.57	9.30	4.05	3.37
1998	2.03	4.22	-5.30	-2.05	7.80	6.19	0.04
1999	2.01	4.49	6.40	-0.14	7.60	7.39	0.25
2000	3.21	3.69	10.00	2.86	8.40	4.03	4.31
2001	1.24	0.76	5.09	0.18	8.30	5.22	1.31
2002	0.00	1.61	4.74	0.26	9.10	3.77	2.66
2003	-0.22	2.52	7.35	1.41	10.00	8.37	1.15
2004	1.06	3.65	7.14	2.74	10.10	8.28	5.72
2005	0.78	3.08	6.40	1.93	10.40	9.35	3.16
2006	2.87	2.87	7.40	2.40	11.60	9.67	3.97
2007	2.48	2.00	8.10	2.10	13.00	9.06	5.67
2008	1.30	1.10	7.30	-0.70	9.00	7.09	5.08
2009	-5.71	-2.54	-7.80	-5.42	9.40	7.86	-0.13
2010	4.18	2.56	4.50	4.19	10.64	8.50	7.53
2011	3.93	1.55	4.30	-0.12	9.55	5.24	3.97
2012	0.42	2.25	4.00	1.49	7.86	5.46	1.92
2013	0.44	1.84	1.76	2.01	7.77	6.39	3.01
2014	2.21	2.53	0.74	0.38	7.43	7.41	0.51

Table 6 (continued)

1015	1.49	2.91	-1.97	1.22	7.04	8.00	-3.55
2016	2.23	1.64	0.19	0.52	6.85	8.26	-3.28
2017	2.60	2.37	1.83	2.17	6.95	7.04	1.32
2018	1.27	2.93	2.54	0.32	6.75	6.12	1.32
2019	0.56	2.16	1.34	0.65	5.95	4.18	1.14

Source: GDP growth (annual%) – Germany, USA, Russia, Japan, China, India, Brasil, China. | Data (worldbank.org), available March 25th, 2021.

6. CONCLUSIONS

The above-mentioned changes happened over quite a short stretch of time of just 26 years. That being said, the positions of different macro-regions (and nation states) on the global stage are undergoing significant shifts. The type of changes depends on the indicators used as well as on the nature of regions (developed vs. developing). As an example, life expectancy or literacy rate show clear convergent trends, though the speed with which change occurs remains uneven.

The Lorenz curve proves that the former dominance of Angloamerican and European macro-regions (measured by GDP) became significantly weaker (50.9% of world's GDP in 2018, down from 60.1% in 1990) (Anděl, Bičík & Bláha, 2020). However, the economic progress of the poorest macro-regions (African and Indian) is not really fast (an increase from 3.2% to 5.6% – share of world's GDP). The Islamic macro-region shows the best improvements (a change from 2.5 to 5.7%).

In total, the graphs show slight convergent trends as regards the distribution of population and GDP in the 1990–2016 period. The world average GDP per capita increased 2.5 times between 1990 and 2016 (from 4,100 USD to 10,000 USD). While in 1990 there were only four macro-regions that showcased above-average figures, in 2016 there were seven such macro-regions. Some 45.6% of the world's population now live in below-average regions (the African, Indian, and Indonesian macro-regions), while in 1990 the figure was 79%.

There are great inequalities between individual types of macro-regions. Type I (European, Angloamerican, and Australian-Oceanic macro-regions) for example, obtains 12.7% of total population only, but generates 53.1% of the total GDP and its 7 countries + the EU and the ECB belong to the “G20” platform. On the other hand, Type III (Indian and African macro-regions), with 37.1% of the total population, generates a meager 5.6% of the total GDP, while its 2 countries are part only of the “G20” platform.

A number of scholars have strived to explain the above-mentioned inequalities including the effects on society. Regional differences are reflected in the changing patterns of international labour markets and in the creation of global production chains (Hampl, 2009, 2014). The study carried out by Cox (2012) examines the qualitative aspects of global economy that are inevitably linked, on the one hand, with science, research, and technologies, and with structures and the financial strength of multinational corporations on the other.

The ongoing global changes, however, should not be examined purely from the economic standpoint. Uneven economic development and distribution of wealth is crucial for the reshaping of the global power structure; it has, however, a number of social, cultural, and environmental consequences (Giddens, 1990; Jackson, 2000; Hagggett, 2001; Layne, 2006; Holton, 2006; Zakaria, 2008). Some scholars emphasize the geopolitical aspects of the above-mentioned changes (Pieterse, 2011; Agnew, 2009; Acemoglu & Robinson, 2012).

The changing character of the world's macro-regions may explain some reasons for the dynamic changes suffered by selected areas or nation-states like China or India (Turner, 2016). The borders of the world's macro-regions and their stability (increasing or decreasing) have become a new research direction (Longo, 2017). The authors of this article are preparing a new study that ought to interpret

the findings (core, semi-peripheral, and peripheral macro-regions) and expand the time scope of the research (including a comparison with the era of the bipolar world).

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Received November 10, 2020

