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Natural Externalities of Economic Growth Stabilization in XXI Century: Geography Seeking Revenge

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ABSTRACT

Studying the factors of national economic growth stabilization is especially topical and relevant under the conditions of growing economic interdependence of the states which objectively limits the regulatory functions of national governments, in parallel to which regionalization gradually establishes oneself as an alter-trend to globalism. In our research we stem from the analysis of the macroeconomic statistics and of the dynamics of economic progress in the selected countries of the world, so that to determine the correlation between the indicators of economic growth stability for a selected group of countries with their integration into the world markets. Conclusions of our analysis outline the regularities in stable economic growth strategies' implementation along with the key factors contributing to economic stabilization under contemporary conditions. The important role of geography is emphasized, inter alia, since geography is the key precondition for development and implementation of the long-term strategies of economic progress for world regions.

Keywords: economic growth; foreign trade; export & import; stabilization; sustainable development; externalities of economic stabilization

Journal of Economic Literature (JEL) Classification: F02, F49, O10

1. INTRODUCTION

Sustainable economic growth today can be seen as the positive dynamics of macroeconomic indicators, without any serious fluctuations in value during a relatively long period of time, moreover, these indicators are supposed to be growing steadily and proportionally, in parallel to each other. Stable/sustainable economic growth of a country is the most obvious evidence of its internal efficiency which, in its turn,

means that the already formed and functioning system of national resources' exploitation and further distribution of assets (for example, between the state and the business, or among the members of society etc.) complies to the requirements of national development and at the same time satisfies the interests of all participants within a national socioeconomic system. Moreover, sustainable development serves as a proof of country's external (global-level) competitiveness and its external attractiveness (for foreign investors, migrating highly qualified laborers, importers etc.) since through its sustainable growth the country is able to demonstrate its resistance to negative fluctuations at the market.

Stabilization of economic growth has always belonged to top priorities of any nation, therefore, all related issues have often become the subject of numerous research studies, worldwide. Moreover, this research interest can be also explained by the rapidly changing economic conditions and newly arising problems of the world economy, including, first of all, the following:

- the obvious limits of the resource potential. The latter has served, for many years, as the supporting system for extensive economic growth in a range of countries and sectors. Today, when the international markets of natural resources are very much globalized, the states which still have abundant natural resources are unable to control and/or impact the world markets and their rules since any market today is first of all consumer-oriented and the very procedure of setting prices for strategic natural resources takes place at the global level, where states have no or very little influence;
- the limitedness of consumer markets, especially in the already developed countries, the so-called world economic leaders. The limited nature of local consumer markets leads to quite intensive search for internal/national reserves so that to support and maintain the current dynamics of economic growth (for example, through lower costs, introduction of new technologies, less spending on the workforce etc.). And considering this is happening in the process of ongoing monopolization of the most profitable markets and within the global pyramid of competitiveness (Delyagin, 2006), this can only emphasize the global inequality, thus depriving the big groups of states of their social platforms for further stabilization of long-term economic strategies;
- several problems are aggravating today concerning the sustainable social development, since not many countries are ready and capable to guarantee the satisfaction of our generation's demands, keeping at the same time equal opportunities for future generations (and making sure these future generations are actually having such opportunities assumes the stabilization of economic growth rates, inter alia).

Seriousness and topicality of the problems outlined above have predetermined the objective of our research here: to analyze the macroeconomic indicators of the selected countries of the world so that to determine the impact level of country's inclusion into the world trade upon the stability of its economic growth.

According to the objective set, we will perform the following research tasks:

- using our own methodology we will determine the stability index for both export and import growth and also for the trade balance of the contemporary state in the recent 15 years. Further, countries will be classified according to their values in this index, and these values will be compared with other relevant macroeconomic indicators of the same states (including GDP per capita, natural resource potential, consumer market potential);
- to determine the correlation between the indicators of economic growth stability and external trade intensity. Countries will be again classified according to their dynamics of economic growth;
- to reveal and explain what are the current factors of national economic growth stabilization in the context of external trade dynamics. Once these factors are known and explained, authors' recommendations will be offered concerning the potential strategic guidelines for economic development stabilization for the selected countries of the today's world.

Our initial hypotheses are formulated as follows:

- High rates of economic growth stability are observed for those states which have already achieved rather high level of welfare, while in poor and developing countries the economic growth rate is mostly unstable.
- 2. Economic growth is most stable in European countries and also in English-speaking countries of the Pacific region.
- 3. Homogeneity of economic growth stability rates inside the country groups will be very different for geographically predetermined groups and economically predetermined ones. Less homogeneity will be observed under geographical division, while much more homogeneity will be observed inside the groups formed according to the welfare level.
- 4. Correlation between economic growth stability and national export/import stability will be significant only when the countries are grouped by the level of their welfare. Geographical proximity and/or countries' cultural similarities are irrelevant for stabilization of economic growth.

2. LITERATURE OVERVIEW

The fundamental problems of economic growth have been studied always, from the day of economics' emergence as a science. However, today, under the escalating instability of global economy many issues behind the essence of economic growth as such and the factors predetermining this growth are being reconsidered, sometimes radically, like, for example in (Gillis et al., 1992). Their research, which originally was supposed to be an empirical study on 20 countries turned out to be a fundamental theoretical study in which the authors make extensive use of the theoretical tools of classical and neoclassical economics in order to contribute to better understanding of the problems surrounding economic development. More specifically, these authors have analyzed a range of factors (human resources, savings and investment,

international trade) influencing the stability of economic growth of a country in general and its separate sectors (agriculture, natural resources, and industry).

Pritchett (2000) has carried out the historical analysis of growth stages in domestic production of the USA and therefore has proved that development of national socioeconomic system is cyclical in nature. Moreover, same cyclicity can be applied to the role of the world markets, international economic organizations and foreign business role in stimulation of country's economic growth overall and of its separate sectors in particular.

King and Levine (1994) were looking at economic growth from the standpoint of financial determinism and thus they critically evaluate the roles of investment and physical capital accumulation for economic growth and development. Isham et al. (2005) illustrated how countries which are dependent on point source natural resources (those extracted from a narrow geographic or economic base, such as oil and certain minerals) and plantation crops heightened economic and social divisions and weakened their institutional capacity.

J. C. Dissart (2003) concentrated on several issues in this regard such as: theoretical foundations for increased economic diversity as a development goal; common empirical measures of economic diversity, and empirical study on economic diversity and its effect on regional economic stability.

Overall, the very topic of economic growth indeed belongs to the core of economic science due to its obvious socioeconomic relevance for all states worldwide. Therefore, by now, it has been thoroughly studied in all its aspects and all its contributing factors which are supposed to provide and maintain economic growth.

For example, John F. Helliwell (1994) evaluated the two-way linkage between democracy and economic growth to find that it is still not fully possible to identify any systematic net effects of democracy on subsequent economic growth.

A wide variety of factors contributing to the dynamics and stability of economic growth has been studied for example, by Frenken, Van Oort & Thijs Verburg (2007). Quite a lot of research has been also carried out to determine the impact of foreign investments on the rate and stability of national economic growth. For example, E.Borenszteina et al. (1998) tested the effect of foreign direct investments (FDI) on economic growth in a cross-country regression framework, utilizing data on FDI flows from industrial countries to 69 developing countries over the last two decades and suggested that higher productivity of FDI holds only when a host country has the minimum threshold stock of human capital. Thus, FDI contributes to economic growth provided sufficient absorptive capability of advanced technologies is available in a host economy.

Chinese researchers Xiaoying Li and Xiaming Liu (2005) found significant endogenous relationship between FDI and economic growth from the mid-1980s onwards. At this, they grounded that FDI has mostly indirect impact on economic growth dynamics, same impact, in their view, is also observed for the role of country's human potential which serves as an additional factor making foreign investment efficient. Blomstrom et al. (1993) examined the shares of fixed capital in GDP and the rates of economic growth for

more than 100 countries over successive 5-year periods. And they have found more evidence to prove that increases in growth precede rises in rates of capital formation than that increases in capital formation precede increases in growth.

M. Sarel (1996) found evidence of a significant structural break in the function that relates economic growth to inflation. This break is estimated to occur when the inflation rate is at 8%. Below that rate, inflation does not have any real effect on economic growth, or it may even have an insignificant positive effect. When the inflation rate is above 8 percent, however, the estimated effect of inflation on growth rates is significant, robust, and extremely powerful.

Always interesting seems to be the research concerning the impact of cultural, religious and other highly specific features on the progress of socioeconomic systems. For example, (Hofstede et al., 1988) studied how Confucianism impacted the economic progress, (Evans & Rauch, 1999) analyzed the same effect for the phenomenon of bureaucracy, while (Baklouti, Boujelbene, 2016) researched the impacts of political life and its key features on economic rate. (King, 1993) studied the influence of local entrepreneurship intention on economic growth of territories, while (Démurger, 2001) analyzed the same impact for social infrastructure. Curiously, even inbound international tourism, in the view of (Lee, Chang, 2008), may contribute significantly to the overall economic growth of a country.

In our research further on we would like to assess, in our turn, how the dynamics of exports and imports (in both absolute and relative terms) can serve as a factor of economic growth stabilization for certain groups of countries during the early years of the 21st century. Groups of countries we decided to have by two positions – geographical groups and countries grouped by their welfare level. To the best of our knowledge, our study is different from the already published ones by both vision and method, and in it we hope to assess the transformations of stabilization factors as applied to economic growth dynamics. Moreover, most of the studies on such correlations with economic growth have been carried out in the 20th century context, while today's global economic environment has been already changed, and significantly.

3. RESEARCH METHODOLOGY

In our research we have been operating mostly the statistical information of the World Bank (from the worldbank.org) for the period from 2000 to 2015. We have extracted data on 150 countries worldwide, and in the course of our research we have classified them into 9 geographical/geopolitical (to some extent) groups: English-speaking countries on both sides of the Pacific – the USA, Canada, Australia and New Zealand (together – ECPAC); Asian Pacific countries – 16 countries in total; South Asian countries – 7; African countries – 41; Latin America – 21 countries; Western Europe – 18 countries; Middle East and North of Africa – 14 countries; Eastern Europe – 15 countries; former USSR – 14 countries.

Additionally to that, the countries have been divided by the income level: super rich (over 25000 USD GDP per capita) - 18 countries; rich countries - from 18000 to 25000 USD of GDP per capita - 15

countries; middle level of GDP per capita – 11000-18000 USD – 23 countries; poor countries – 5000-11000 USD of GDP per capita – 30, and finally hardcore poor countries – with GDP per capita being less than 5000 USD – 64 countries.

In order to determine the stability index for economic growth we have applied the statistical method of calculating the mean square deviation of economic growth dynamics as well as the indicators of national export and national import growth for all analyzed countries throughout the period of 15 years. The averaged values for the countries divided into geographical groups are presented in Table 1 below.

Table 1. Stability indicators for economic growth, national export and national import during 2000-2015, by geographical country groups (calculated by the authors)

Stability of economic growth			Stability of national exports			Stability of national imports		
#	Region	Indicator	#	Region	Indicator	#	Region	Indicator
1	ECPAC	5,31	1	West Europe	24,66	1	ECPAC	21,14
2	South Asia	10,77	2	ECPAC	27,29	2	West Europe	23,94
3	West Europe	11,1	3	Asia Pacific	35,26	3	Latin America	39,57
4	Latin America	11,35	4	East Europe	37,73	4	East Europe	39,81
5	Asia Pacific	11,77	5	Former USSR	44,15	5	Former USSR	40,51
6	East Europe	13,71	6	Latin America	47,14	6	Asia Pacific	42,3
7	Africa	15,9	7	Middle East	49,18	7	Middle East	44,51
8	Middle East	18,69	8	South Asia	50,44	8	South Asia	46,14
9	Former USSR	19,65	9	Africa	61,9	9	Africa	66,55

As Table 1 clearly shows, the most stable economic growth during the whole 15 years in question has been demonstrated by the English-speaking countries on the both sides of the Pacific ocean. Next but with a significant gap inbetween the groups go the countries of South Asia. Despite all the economic stereotypes, economic stability of Latin America is very much comparable with that of Western Europe. While political instability, fluctuations at the world markets of raw materials and poor diversification of the economies have made Middle East and post-Soviet countries the outsiders in terms of national economic growth and its stability.

However, considering the stability of national exports separately (see Table 2 below) we can observe that the positioning and ranks of geographical/geopolitical regions change significantly. For example, Eastern Europe and Pacific Asian region move upward in the global ranking, while African countries as well as South Asia become the global outsiders. Same low positions these regions actually get when it comes to national imports: Pacific Asia is again not among the leaders which are represented mostly by the import-dependent countries of Latin America and Eastern Europe. Therefore, we can assume that our Hypothesis #2 is confirmed only partially.

Table 2. Leaders and outsiders among geographical groups by the stability of economic growth, national export and national import, 2000-2015 (calculated by the author)

Country	groups	Stability of economic growth	Stability of national export development	Stability of national import development		
ECPAC ¹	Leaders in the group	Australia,United States Canada	Canada, United States Australia	Canada, Australia United States		
South Asia ²	Leaders in the group	Bangladesh, Nepal, Pakistan India, Sri Lanka	Sri Lanka, Pakistan Nepal, India, Bangladesh	Nepal, Sri Lanka, Bangladesh, India, Pakistan		
	Leaders in the group	Norway, France, Switzerland Austria, United Kingdom	Sweden, France, Cyprus United Kingdom, Denmark	Norway, United Kingdom Sweden, France, Cyprus		
Western Europe	Outsiders in the group	Finland, Iceland, Turkey Greece, Ireland	Italy, Portugal, Iceland Greece, Turkey	Italy, Spain, Greece, Turkey Iceland		
	Leaders in the group	Guatemala, Bolivia, El Salvador Colombia, Jamaica	Costa Rica, Mexico, El Salvador Paraguay, Chile	Mexico, Colombia, Paraguay El Salvador, Costa Rica		
	Outsiders in the	Dominican Republic, Uruguay	Ecuador, Cuba, Kiribati	Uruguay, Guatemala Argentina		

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