THE «RESOURCES CURSE» AND SPECIAL FEATURES OF THE ECONOMIC GROWTH IN UKRAINE

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ABSTRACT

The features of «resources curse» phenomenon display within the world economy limits are considered and its influence on the economic growth tendency is determined; structure and dynamic of Ukraine national wealth forming and countries of Visegrad Four are compared; author position in relation to the deployment of «resources curse» effect within national economy limits - national wealth growth through natural capital exhausting which additionally increases insufficient reproduction of capital assets is validated.

Keywords: resources curse, economic growth, natural capital, produced capital, insufficient reproduction of capital assets.

JEL Code: F43, O57, P51

1. INTRODUCTION

Ukrainian natural resources have played an important role in strategy of socio-economic development. Ukraine has significantly strong natural resources potential, that is visibly reflected on the industrial agglomerates formation process: fuel and energy, metallurgical and chemical. At the same time, not only are the economic growth rates in this country unsatisfactory, but there are certain displays of regress and socio-economic system degradations as well. In this aspect we have returned to the question of whether there is any relationship between a Ukrainian endowment of natural resources and its rate of economic growth.

An actual for today conception of steady development assumes the obligatory taking into account natural capital when a deep estimation of the efficiency of the socio-economic system is being considered. The quantitative indexes that have been worked out within the framework of this conception allow estimating the degree to which natural resources contribute in the process of the national product creation. The economic system, in which added value is created mostly due to the labor and capital resources exploitation, carries an intensive character, as it mortgages possibilities for the further recreation and balanced development. The more considerable is the contribution of natural capital in the national income receipt process, the more economic activity carries an extensive character of growing consumption, abbreviating possibilities for future development. The unevenness of natural capital territorial allocation, its structure and degree of bringing in in reproductive processes directly influence the model of separate region and even the whole country social and economic development.

The results of the recent researches dedicated to the process of an effective socio-economic development model forming are rather contradictory. Thus, the World Bank

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research group under the direction of D. Lederman and J. Maloney (2007) has come to the conclusion, that a so-called phenomenon as "the resources curse" does not exist at all. Accordingly, the natural capital concentration has positive correlation with the rates of the economic growth. However, an outstanding research held by Professor J. Sachs (1995) illustrates a negative influence of the natural resources surplus on long-term tendencies on national economies development all over the world. In addition to that, several convincing proofs of the existence of "the resources curse" were studied in the work of P. Collier (2007) and points out that only countries with effective market institutes can avoid a resources surplus negative influence. An ineffective institutional structure of the transforming economies, high level of public and private consumption, not significant or irrational investments and several trials to replace productive activity by easily achievable margins are all these sources of "the resources curse".

Within the considered problems framework, the interrelations between "natural resources - transforming economy - an economic growth" are the most interesting for a national researcher. The main goal of the article is a deep research of the "resources curse" phenomenon in the context of the world economic system development and determination of the features that reflect in the Ukrainian economy.

2. THEORETICAL FOUNDATIONS OF THE FACTORS AFFECTING NATIONAL WEALTH AND ECONOMIC GROWTH

One of the most detailed natural capital descriptions is provided in the studies of R. Costanza and G. Daly (1992) where it is seen as a stream of natural services source and real natural resources. This term embraces both physical resources and environment. The main natural capital components are the following:

- depletable natural capital (non-renewable energy resources),
- recyclable or cyclically used natural capital (non-energy mineral resources),
- renewable or potentially renewable natural capital (soil and environment in general).

A natural capital (NC) being the factor of the economic growth finds the display only in totality with other types of capital. Within the limits of conception of national wealth, offered by the World Bank, a strong intercommunication is formed between three capital types: natural, produced and intangible capital. A produced capital (PC) includes a supply of machineries, equipment, raw materials and buildings that can be used for a further production. It is a natural capital witch has been transformed by a human labor into physical assets that is able to continue generating goods and services. An intangible capital (IC) in practice is settled as the remains or, in other words, as a difference between the general national wealth volume and the sum of natural and produced capitals.

According to the World Bank recommendations, the \( W_t \) gross value at the moment of time \( (t) \) may be calculated in the following way (Word Bank 2006: 144):

\[
W_t = \int_{s}^{t} C(s) e^{-r(s-t)} ds
\]  

(1)

Where \( C(s) \) — the gross level of consumption at the moment, \( R \) — a social investments' profitability rate, that represents the alternative costs that are charged to the society and which are constrained with abandonment from investing in a private sector in favor of the public one. The constituents of this index are: a net sentinel profits rate (p); a
product of utility elasticity goes in accordance to the consumption level (µ) and the growth of consumption (Δc) rate. In the following calculations the 25-year period and the corresponding social rate of 1.5 percent are used (Pearce and Ulp 1999).

An intangible capital (IC) is the most ponderable constituent of national wealth regardless the level of the proceeds. Specific gravity of this index increases simultaneously with the national wealth increase. An increase in the intangible capital absolute size and a respective fall in its specific gravity in countries with the income below the average is the display of «the middle income trap» effect (Canuto and Cavallary 2012). High rates of wealth increase in the lower middle income sector are conditioned by investment streams repressing aspiration in a produced capital. The cheap labor force presence and subzero production charges are allowed by an extensive way to support the GDP increase and a welfare promotion. However, the potential of such increase that is settled exceptionally in the real capital may deteriorate very quickly: the increase of salary and living standards does not allow the national producers to compete on export markets with countries that experience higher production subzero charges. A competition becomes impossible both with low-income countries and with the most developing economy. Overcoming this "trap" is stipulated only by an intangible capital. A future improvement in the human capital quality, institutional structures perfection and innovative alteration will form several additional factors of the economic growth and will definitely provide the increase in the intangible capital productivity.

3. ANALYSIS OF THE NATIONAL WEALTH STRUCTURE IN VISEGRAD FOUR AND UKRAINE

The results of the conducted analysis do not allow to simply effect on positive or negative natural capital influence on the economic growth, coinciding with some international specialist’s viewpoints. At the same time, there is a possibility to complement the conclusions set by Professor P. Collier (2007). In countries with the low level of incomes and a weak institutional structures a certain form of "resources curse" undoubtedly finds the display the insufficient level of the intangible capital provision and, consequently, in its insignificant cost estimation. The countries of this group are only theoretically, but not yet actually able to realize a potential that is located in the natural capital.

In countries with the higher level of incomes the effect of "resources curse" is almost absent, and too high natural capital efficiency is mostly conditioned by the efficiency of the intangible capital. At the third group of countries (with incomes that are higher than average) the influence of resources on national welfare should be considered as neutral, that is conditioned by a repressing orientation on the innovative economics sector development.

The national wealth structure mostly depends on the states starting positions in the moment of their transitional period formal beginning. For example, substantial socio-economic changes in Ukraine began only after the Soviet Union disintegration, and in the former countries of socialistic camp in Central and East Europe — have been formed within few years or even decades before the event, that defined their leadership in the process of market reforms realization. Regarding this aspect, it would be quite interesting to compare Ukraine with the state of the Visegrad Four countries: the Czech Republic, Poland, Slovakia and Hungary. It is clear that these countries have far passed Ukraine on the way to the market transformation and to the process of assimilation to European socio-economic community. Also, a very high economic, sociocultural and, in a certain understanding, paternalist influence of Russia on the choice of priority directions of the development of Ukraine deserves to be taken into account.
During 2000-2005, it was possible to establish a considerable break between the levels of national wealth in Ukraine and in the Visegrad Four (table 1). The natural capital volume in 2000 almost coincided with the level of the Czech Republic, Slovakia and Ukraine, 7440 USD, 7797 USD and 7235 USD per capita respectively. During a five-year period, the use of natural capital in reference countries decreased at about 34 – 36 percent, and in Ukraine — only at 4.7 percent. A substitution for the natural capital took place due to the increase in both produced and intangible capital - on the average in the Visegrad group at 12.4 percent and 33.7 percent. For the same period, the use of the produced capital in Ukraine fell down almost at 8 percent or 626 USD per capita. The national increase of the intangible capital laid down at almost 203 percent.

On one hand, such results can be interpreted as the tendencies to overcoming "the middle income trap", passing to the intensive economic growth. But on the other hand, it is evident from the figures that in 2005 the GDP level per capita in Ukraine amounted to only 1828 USD, that is far fewer than the limits of origin of the primitive and the secondary "trap" (11.0 thousand USD and 15.0 thousand USD (Eichengreen et al. 2013: 4).

Second, the intangible capital increase is accompanied by the absolute fall in volume of natural and produced capitals. Thus, infrastructural and institutional changes in Ukraine, that found the reflection in the increase of non-material capital during 2000-2005, are the certificate of the real capital "eating" away. The economic growth in Ukraine carries "artificial" character, and the authenticity of economic collapse rises in a long-term period (after the produced and natural capitals resources exhaustion).

**Table 1. The National Wealth structure according to the types of capital (Visegrad group and Ukraine)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Wt, USD</th>
<th>IC</th>
<th>NFA</th>
<th>PC</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>152 942</td>
<td>70,35</td>
<td>-0,60</td>
<td>25,38</td>
<td>4,86</td>
</tr>
<tr>
<td>Hungary</td>
<td>134 456</td>
<td>74,31</td>
<td>-4,54</td>
<td>23,54</td>
<td>6,70</td>
</tr>
<tr>
<td>Poland</td>
<td>113 350</td>
<td>76,72</td>
<td>-1,95</td>
<td>15,74</td>
<td>9,49</td>
</tr>
<tr>
<td>Slovakia</td>
<td>112 471</td>
<td>68,51</td>
<td>-1,22</td>
<td>25,78</td>
<td>6,93</td>
</tr>
<tr>
<td>Ukraine</td>
<td>19 693</td>
<td>25,88</td>
<td>-2,62</td>
<td>40,00</td>
<td>36,74</td>
</tr>
<tr>
<td><strong>2005</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>180 820</td>
<td>74,83</td>
<td>-1,85</td>
<td>24,47</td>
<td>2,54</td>
</tr>
<tr>
<td>Hungary</td>
<td>173 007</td>
<td>81,67</td>
<td>-5,45</td>
<td>20,32</td>
<td>3,45</td>
</tr>
<tr>
<td>Poland</td>
<td>135 941</td>
<td>80,87</td>
<td>-2,51</td>
<td>15,10</td>
<td>6,54</td>
</tr>
<tr>
<td>Slovakia</td>
<td>142 373</td>
<td>77,45</td>
<td>-3,39</td>
<td>22,44</td>
<td>3,50</td>
</tr>
<tr>
<td>Ukraine</td>
<td>29 322</td>
<td>52,81</td>
<td>-1,06</td>
<td>24,73</td>
<td>23,53</td>
</tr>
</tbody>
</table>

If the recyclable natural capital (minerals) use does not provide forming the other types of wealth and spend only for consumption, then we will have its complete exhaustion without any alternative assets that would be able to generate income. The inefficient administrative mode and ineffective specification of ownership rights can stipulate the recyclable part of natural capital exhaustion.
In obedience to international classification, Ukraine is attributed to the countries with the lower middle income level. The domestic structure of national wealth is very near to the world average indexes of a corresponding group. However, the pattern of the use of capital has substantial differences. The elasticity in national wealth increase according to the level of natural capital is 10.52 units (every additional percent of wealth abbreviates natural capital on 10.52 percent). A corresponding index is calculated for the volume of produced capital – 6.14 percent. And all this is accompanied by the national wealth increase on 48.89 percent. Such nonsense may be explained by two main factors. First, the national wealth logic settlement as totalities of the discounted consumer charges, but not of the real material and non-material assets cost estimation could be a reason. Thus, a growing Ukrainian intangible capital is a synthetic and conditional index. Second, the exhaustion and capital assets recreation in Ukrainian national economy are the sources of such "increase" as well. Expansion of current consumption exists due to the conscious leading out of money from an investment sphere. Correlation between the degree of assets depreciation and the GDP level in Ukraine could serve as a bright illustration of this process.

In a period from 2001 to 2013 assets depreciation degree in national economy grew from 4 percent to 77 percent. At the same time, GDP in settling per capita increased from 796 USD to 3862 USD. However, already in 2013 the falling of GDP (according to the official sources) amount to 0.13 percent. The process of produced and natural capital "eating" has a certain limit and the Ukrainian economy attained it. Thus, the use of the economic growth formed model in the future is not only inefficient, but it is simply not possible.

4. CONCLUSION

One might argue that within the Ukrainian economy it’s observed a good example of irrational and wasteful natural resources use. We have found the relationship between a country’s rate of economic growth and the relative abundance of its natural resources depends on each country’s national wealth structure. This thesis considered several explanations for the perceived poor performance of resource-intensive Ukrainian economy. First, use of natural capital in reference countries decreased by about 34 – 36 percent, and in Ukraine — only by 4.7 percent. And all this is accompanied by 48.89 percent the Ukrainian national wealth increase, and in Visegrad Four — by 23 percent. For the same period, the use of the produced capital in Ukraine fell down almost by 8 percent or 626 USD per capita. To summarize this argument, we find evidence of a possible negative impact of natural resource abundance on long-term growth.

The problem of domestic economy consists of ineffec tiveness and existent market institutes imperfection as well as of the state administration system in general. Excessive connection between political forces and economic groups, as well as actual lobbying of a certain group of oligarchs interests under a significant guidance of government, results in inefficient and uncontrolled natural and produced capital exhaustion. On a background of economic stagnation, the expansion (though very moderate) of the government social necessities spending as an instrument that provides the electorate loyalty is evident. Simultaneously, the resources are removed from the productive sphere in the sphere of economic rent extraction. As a conclusion, the totality of all these factors directs Ukraine to the social and economic collapse.

Only after solving these problems Ukrainian natural resource sector can be seen as a real driver of economic development with competitive advantages, not as a “resource curse” of domestic economy. Future research should continue to explore the interaction between natural capital imperfections and the growth determinants.
REFERENCES


