

## REGIONAL DISPARITIES IN UKRAINE

*Different aspects of the disparities in socio-economic development across the countries and regions have been investigated during the last decades. This paper concerns the number of distinct hypotheses concerning different features causes and impacts of the regional disparities in Ukraine. Empirical verification of these hypotheses is based on computation of the Theil Index as a measure of the magnitude of regional disparities.*

*The study underlines the presense of the constantly deepening disparities between the groups of the regions in Ukraine caused among others by the differencies in amounts of direct foreign investments and the territorial structure of economy, which restrain the economic growth of the national economy.*

**Key words:** regional disparities, divergence, regional policy.

*Різні аспекти відмінностей у соціально-економічному розвитку в різних країнах і регіонах були досліджені протягом останнього десятиліття. Ця стаття належить до числа різних гіпотез про причини різноманітних особливостей та наслідків регіональних відмінностей в Україні. Емпіричні перевірки цих гіпотез засновані на обчисленні індексу Тейла в якості міри величини регіональних відмінностей.*

*Дослідження підкреслює постійне поглиблення розходжень між групами регіонів України, що викликало серед іншого відмінності в обсягах прямих іноземних інвестицій та територіальної структури економіки, що стримують економічне зростання національної економіки.*

**Ключові слова:** регіональні відмінності, розбіжності, регіональна політика.

*Различные аспекты различий в социально-экономическом развитии в разных странах и регионах были исследованы в течение последнего десятилетия. Эта статья относится к числу разных гипотез о причинах особенностей и последствий региональных различий в Украине. Эмпирические проверки этих гипотез основаны на вычислении индекса Тейла в качестве меры величины региональных различий.*

*Исследование подчеркивает постоянное углубление различий между группами регионов Украины, что вызвало среди прочего различия в объемах прямых иностранных инвестиций и территориальной структуры экономики, сдерживающие экономический рост национальной экономики.*

**Ключевые слова:** региональные различия, расхождения, региональная политика.

### 1. Introduction

The state policy is aimed to maintain the continuous and harmonious socio-economic growth of the state. Effectiveness of this policy can be measured by the degree to which the certain actions anticipate this objective. The development of the national economy cannot be considered apart from the regional economies. Harmonious growth of the state is a subsequent result of the ability to generate the gross product by each of the taxonomic units. This ability is determined by two groups of the factors: potential of the region and initial resources allocated within the region; and the way resources are spent. The differences in terms of the both groups of the factors cause imbalances across the regions.

The majority of studies consider regional disparities as a determinant of economic growth. Some of them contain

empirical estimates of disparities' impact on economic growth over a long period of time (Barro R. 1999) or across a range of countries (Barro R. 1999; Ravallion M. 2000; Banerjee A.V., Duflo E., 2000).

Besides the cross-country comparisons, significant number of studies have been dedicated to the regional disparities within certain developed countries: USA, UK, Italy, Germany, Netherlands, Belgium, Denmark, Spain, Canada, Sweden (Barrow. R, Sala-i-Martin X., 1991, 1995; Sala-i-Martin X., 1990, 1996; Shioji E. 1993; Coulombe S., Lee F., 1993; Amstrong H., 1993; Terrasi M., 1999; Perrson J. 1992).

Following the existing empirical studies the theoretical model of the relation between the rates of inequality and national economy growth is proposed (Fig. 1.).

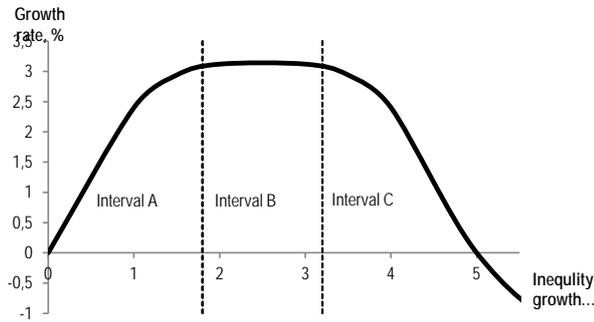


Fig. 1. Relation between inequality and economic growth

Assume that this relation may be divided into three distinct intervals, which represent three impact modes on economic growth:

- A – stimulative impact;
- B – neutral impact;
- C – restraining impact.

As it can be seen, there are some bounding rates of inequality growth, which switch the impact modes. The majority of the regional policies are concerned by scholars and governments of the countries impling the restraining impact of the regional disparities. The state policy of the regional development should be certainly

directed towards overcoming any negative impacts of this phenomenon. However empirical evidences of the certain impact mode should be gotten prior to the above mentioned policy implications.

The following hypotheses concerning different features, causes and impacts of the regional disparities in Ukraine have been empirically tested in the context of the common notions.

**2. Empirical analysis of hypotheses**

Hypothesis 1: The majority of East-European economies as well as Ukraine are suffered from the regional disparities constantly deepening.

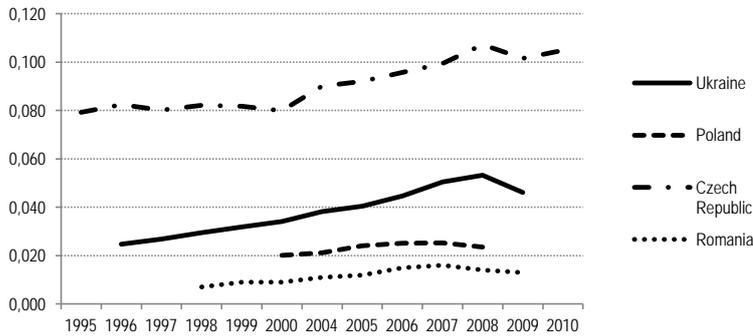


Fig. 2. Dynamics of the regional disparities in East-European countries (Source: Eurostat, Ukrstat)

Hereby the dynamics of the regional disparities in Czech Republic, Ukraine, Poland and Romania are illustrated (Fig. 2.). In advanced economies regional disparities are most frequently measured by unemployment rate and the level of economic output (GRP) per capita. Slightly less often regional variability is measured through the level of entrepreneurial activity. The applicability of the particular characteristics depends among others on the availability of quality data by the regional classification. Thereby the level of distribution of Gross Regional Product per capita was used to measure regional disparities in the following countries.

It is expressed in Theil Index of territorial distribution of GDP per capita.

As we can see the regional disparities have been increasing in the majority of given countries through the last decade. In general there is a relatively high level of

regional inequality in Ukraine, however in 2009 it has even decreased. This empirical evidence stipulates the regional policies to be on agenda of the major governments of East-European countries and Ukraine.

The causes of the present continuously tensing regional problem were founded by the soviet regional policy, when the issues of the territorial allocation of resources were primarily concerned in the context of political goal. As a consequence, initial contidions of reforming national economy were characterized by: industrial gigantism, imperfect sectoral structure of the major territorial complexes, ineffective utilization of local resources, monopolization of economic structures.

Soviet Union collapse radically changed geopolitical and economical state of the states which have been previously included to it. Economic relations of its regions have been broken, free access to ports, automobile

and pipeline communications have been lost. The new frontier regions have been emerged and have faced with new infrastructural and production obstacles.

The tendencies of regional disintegration are the crucial factor of the present economic development of the post-communist states. The evidence of the last decades shows that the implications of the regional policies do not consider continuous divergence. As a consequence, the rates of socio-economic development are declining as well as the events which may negatively affect the social order are being accumulated.

Hypothesis 2: Regional disparities have a negative impact on economic development of Ukraine.

Torsten Persson and Guido Tabellini (1994) developed a model, which implies that inequality in income distribution among different regions within a state has a negative long-run effects on economic growth.

According to Partridge (1997), substantial economic inequality restrains future economic development.

According to Benini (1999), excessive regional disparities in economic development cause the range of the following negative effects which demands for appropriate regional policies:

- regional obstacles for the future economic development including negative externalities, the low level of human capital qualifications, unsatisfactory results of business activities;
- declining internal demand as a result of population outflow, shortage of the local savings and tax proceeds to the local budgets;

- increasing governmental social spendings as a result of the high unemployment rate;
- emerging areas of political and social instability affecting social tensions and destabilization.

Other aspects of the negative impact of the regional disparities can be also mentioned:

- reinforcement of fragmentary and situational manner of state administration. Failure of holistic and effective macroeconomic regulation. Some of the macroeconomic policies, such as fiscal and monetary, may not actually have general desirable effects across the state.
- hampering distribution of economic resources and innovations among the regions. Intensive factors of economic growth are dominated by exhausting extensive factors.
- extensive factors are constantly heightening divergence trends.
- loosing state integrity, increasing risk of interregional conflicts and political destabilization.

Empirical evidence of the following hypothesis in Ukraine is indicated below (Fig. 3.), where the rate of growth of the Theil Index is put on the horizontal axe and the rate of growth of the Gross National Product per capita is put on the vertical axe. The average elasticity of the rates of growth of regional disparities to the rates of growth of economic development is less than 1 (0.96), which implies the fact that the economic growth is restrained by the regional disparities.

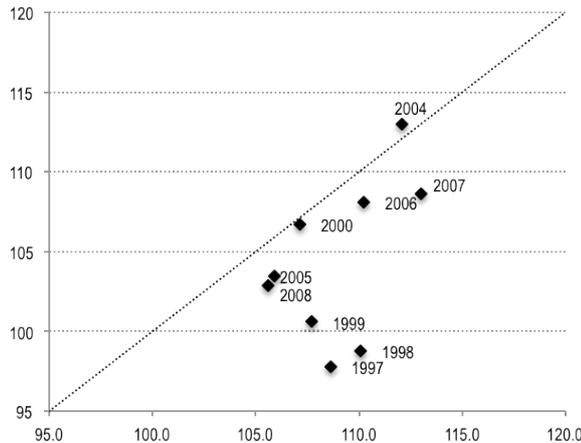


Fig. 3. Matching rates of regional disparities growth and economic development

Hypothesis 3: Regional disparities in Ukraine are exhibited in the intergroup dynamics.

Considering the regional disparities in Ukraine across the country the range of the regions (24 administrative districts and the Autonomous Republic of Crimea) have been placed into four distinct groups: Western, Central, Southern and Eastern. Regional disparities have been computed in two dimensions: interregional (among the groups) and intraregional (within the groups).

Empirical data shows that the intergroup component ( $T_{br}$ ) of the total Theil Index has been increasing much more dramatically than the intragroup one ( $T_{wr}$ ) (Fig. 4.). This significant difference between inter- and intragroup disparities is the evidence of imperfect interregional integration across the country. The primary cause of that fact is the territorial structure of economy: huge capacities of processing and mining industry are concentrated in Eastern and Central regions and do not have any connections with Western and Southern regions.

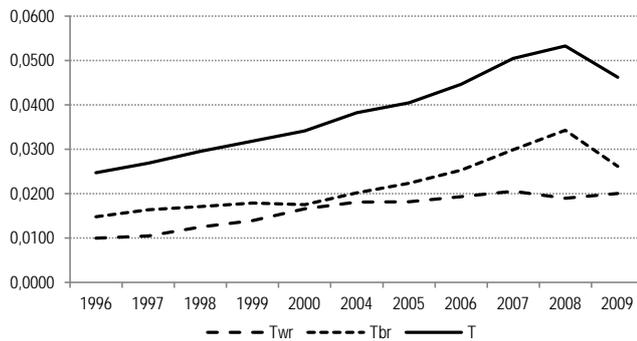


Fig. 4. Dynamics of the total, intergroup and intragroup divergence in Ukraine (in terms of GRP per capita)

Hypothesis 4: Interregional disparities are caused among others by foreign investments to the regions.

As it has been observed, the majority of foreign investments in Ukraine are directed to the Eastern

regions (Table 1.) and a significant part of them is from Cyprus at that. Those investments are likely directed to those industries as mining and processing, which are deepening the regional disparities of the regions not integrating them.

Table 1. Cumulative direct foreign investments to the regions up to January 2011, mln. \$

Region	Germany	Cyprus	France	Poland	Great Britain	Virgin Islands	Netherlands	Austria	Other countries	Total
Eastern	4774.2	4087.2	1454.9	30.8	583.9	473.4	783.8	126.1	1135.7	13450.0
Central	98.6	500.1	N/A	82.5	180.2	53.1	499.2	38.7	266.5	1718.9
Southern	N/A	304.8	N/A	N/A	225.1	N/A	186.7	N/A	656.2	1372.8
Western	506.4	466.1	65.2	1114.2	474.6	324.0	76.4	285.8	1990.2	5303.0
Total	5379.2	5358.2	1520.1	1227.5	1463.9	850.5	1546.1	450.6	4048.6	21844.7

Source: State Committee of Statistics of Ukraine

Hypothesis 5: Regional disparities in terms of personal income differs from the same in terms of GRP.

According to statistical data (Fig. 5.), it can be seen, that the general dynamics of regional disparities in terms of personal income per capita and GRP per capita from 2003 to 2009 are quite identical. As it has been noticed before concerning Theil index calculated on the basis of GRP per capita, intergroup component has been increasing more dramatically than intragroup. Despite this

part of hypothesis was not corroborated, another characteristic of personal income disparity has caught our attention. The rate of deepening the regional disparities in terms of personal income is lower than the rate of economic growth of Ukraine (Fig. 6.). It obviously means that income disparities are not restraining economic growth as so GRP disparities do. This evidence is also corroborated comparing average elasticity of each of the disparity indices to economic growth, which is higher in case of income distribution (1.21 against 0.96 respectively).

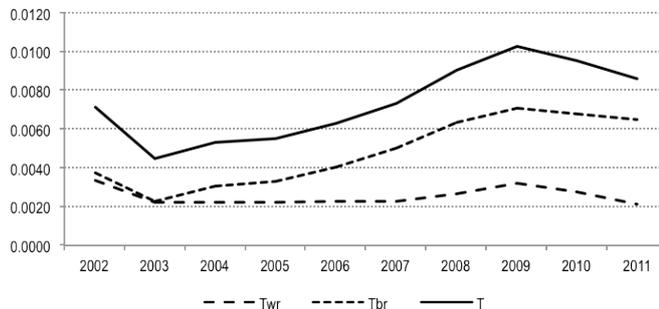


Fig. 5. Dynamics of the total, intergroup and intragroup divergence in Ukraine (in terms of personal income per capita)

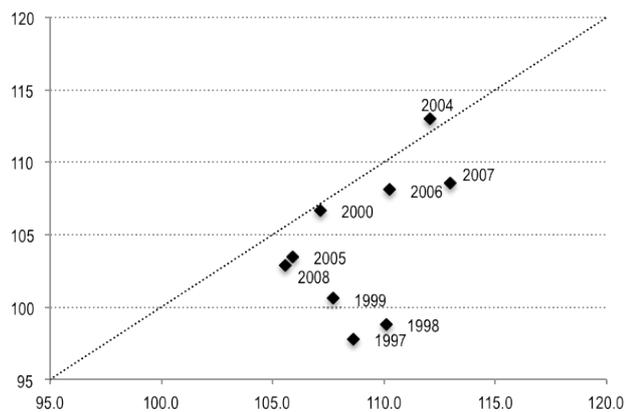


Fig. 6. Matching rates of regional disparities growth and economic development

### 3. Conclusion

1. The range of the regional problems related to continuously deepening inequalities of socio-economic development across the states actualize scientific researches in the regional economics and demands for implementation of appropriate regional policies.

2. Unwanted dynamics of the regional disparities in Ukraine towards deepening are confirmed by empirical data on GRP and personal income distribution.

3. Regional disparities in Ukraine are exhibited in intergroup manner and are primarily caused by

structural disproportions of economy, hampering interregional linkages and territorial integrity of national economy.

4. Territorial distribution of the foreign investments can be mentioned among other causes of deepening regional disparities in Ukraine.

5. The range of the factors of the regional development, causes and impacts of the regional disparities and policy implications directed against divergence of the regions in Ukraine should be considered in the further researches.

### REFERENCES

- [1] Banerjee A. V. and Duflo E. 2000. Inequality and Growth: What can the Data Say? NBER Working Paper Series.
- [2] Barro R. 1999. Determinants of Economic Growth: a Cross-country Empirical Study. MIT Press.
- [3] Benini R. 1999. Regional Development and Industrial Conversion Policy: Lessons from Western European Experience. World Bank.
- [4] Partridge M. 1997. Is Inequality Harmful for Growth? Comment. American Economic Review, vol. 87, pp. 1019-1032.
- [5] Persson T. 1994. Is Inequality Harmful for Growth? American Economic Review, vol. 84, issue 3, pp. 600-621.
- [6] Ravallion M. 2000. Inequality Convergence. World Bank.

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**Коло наукових інтересів:** регіональна нерівномірність, економічне зростання, регіональна політика.