

**A DISCUSSION ON THE VULNERABILITY
TO CRISIS OF THE ROMANIAN COUNTIES**

Abstract

This paper provides an overall image on the degree of vulnerability to crisis of the Romanian counties using a series of statistical measures such as location quotients, Herfindhal specialisation index, composite territorial development index, the regional distribution of FDI in relation to the development level, etc..

Keywords: economic and financial crisis, vulnerability, Romanian counties

JEL CODES: R11, R12

**VULNERABILITATEA
JUDEȚELOR ROMÂNIEI ÎN
CONTEXTUL ACTUALEI CRIZE
ECONOMICO-FINANCIARE**

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Rezumat

Această lucrare oferă o imagine de ansamblu asupra gradului de vulnerabilitate al județelor din România utilizând o serie de metode bazate pe calculul coeficienților de localizare, al indicelui Herfindahl, al indicelui compozit de dezvoltare teritorială, pe distribuția regională a ISD în legătură cu nivelul de dezvoltare etc.

Cuvinte cheie: criza economico-financiară, județele României, grad de vulnerabilitate

1. INTRODUCTION

Regional disparities in Romania in European context

From a general economic development perspective, Romania is in the last but one place in the EU, its GDP per capita at PPP (8,800 euro at PPP in absolute terms) representing only 37.45% of the EU average in 2006 according to Eurostat recordings. As far as regional disparities are concerned, the distance between the richest and the poorest NUTS2 regions is about a factor of three, more precisely 3.39:1. Thus, in Bucharest-Ilfov region the GDP per capita reached 83.8% of the EU-27 average in 2006, whereas the lowest GDP per capita compared to the EU-27 average was recorded in the North-East region of Romania, namely 24.70%. These figures reflect an increase in regional disparities determined by the rapid development of Bucharest-Ilfov region: its growth rate between 2001-2006 was two times higher than the national average.

Five out of the eight NUTS2 Romanian regions are included in the fifteen lowest EU regions in terms of GDP per capita. Apart from Bucharest, the only region that has succeeded to leave this group since 2004 is the West region. In 2006 the GDP per capita at PPP of the West region was 45.2% of the EU average.

Moreover, the disparities are even higher at the NUTS3 level, between the counties included in each region. For example, in South-Muntenia region there are well developed counties such as Prahova, Arges, Dambovită but also much less developed ones such as Calarasi, Giurgiu, Teleorman.

2. THE DISTRIBUTION OF THE ECONOMIC CRISIS EFFECTS AT REGIONAL SCALE

The current economic and financial crisis displays an uneven distribution of its effects at regional scale, depending on the specific economic and social structures, regional specialisation degree, export orientation of economic activities, etc. A study supported by the Romanian journal "Capital" (Amariei and Hritcu, 2009), estimates that 25 counties out of the total of 42 are in danger of being seriously hit by recession. In these counties industrial production already decreased by 30% to 70% in the first quarter of 2009 compared to the same period of 2008, while the unemployment doubled in many cases in just five months (end of February 2009 compared to end of September 2008). New foreign investors have not been attracted whereas some of the old ones are about to leave.

The worst situation is recorded by cities with a high level of specialisation, where the economy is mostly dependent on only one big employer as, for instance, Galati city in Galati county -dominated by Acelor Mital (steel industry) and Pitesti city in Arges county – highly dependent on Dacia Renault (car industry).

A higher vulnerability to the crisis is expected in the most developed counties, which are much closer to the world economy's evolution and, thus, more exposed to crisis shocks. Within this category the profile of the most crisis-vulnerable counties can be described as follows: a mono-product based industrial development, predominantly export-oriented, industrial firms re-located from Western Europe (e.g. Lohn-type production), big investment projects of multi-national firms, large industrial parks, etc. On the other hand, in our opinion, given the economic potential of the most developed counties, it is likely that they will recover more easily after the highest crisis intensity has passed. In particular, the counties displaying a higher production diversification will be in a better position. Among zones of higher vulnerability are also those characterised by a high degree of indebtedness among agricultural producers, food industry producers and SMEs in general.

The study identified the 3 most vulnerable counties to be:

- Galati (South-East region). Its economy is excessively dependent on the Acelor-Mital steel works, whose production recorded a serious drop in the Autumn 2008 and continues to be confronted with recession-related problems.
- Arges (South region). The whole economy is dependent on Dacia-Renault car company: a serious problem in this company might bankrupt the whole area.
- Arad (West region). The big employers are car component producers, largely dependent on foreign demand.

At the opposite pole are situated the predominantly agricultural counties, with a traditional economy, located in South and East Romania. Experts estimate that these counties, with a high share of rural population will suffer less than the developed ones as a result of their subsistence agriculture, where the crisis influence is very low. In fact, in such counties the current overall economic situation is overlapping on a previously low development level. In counties resistant to crisis stability is also based on the low vulnerability of their most important industrial branches, mainly represented by milk processing, mineral water bottling, wood processing, etc., less sensitive to crisis compared to the car industry or construction, for example.

The top 3 counties most resistant to crisis are:

- Suceava (North-East region). Its big advantage lies in its high tourism potential. Other well developed sectors are milk processing, mineral water bottling and wood processing industries.
- Dambovita (South region). It has a diversified economic structure. The highest share is recorded in agriculture.

- Giurgiu (South region). Food, textile and chemical industries have the highest share, but agriculture is also very well represented in county's economy.

As an overall image, the counties are divided into four categories, as follows: severe vulnerability, high vulnerability, average vulnerability and low vulnerability counties. The methodology employed was based on a series of indicators such as: the evolution of the unemployment rate, the industrial production index, foreign investments per capita, the share of employment in vulnerable sectors, the export dependency ratio, private debt, banking employment level, average salary, economic diversification, vacant jobs, number of construction permits per capita, all of them calculated at county level.

Some relevant examples of counties in each category, with their strengths (S) and weaknesses (W) in terms of resistance to crisis are presented below.

Severe vulnerability

Arad. S: Important investments in infrastructure. Well qualified labour force. W: Big employers are car component producers. Export dependency.

Arges. S: Expected big investments in construction. Low level of indebtedness. W: Major dependency on Dacia-Renault company. Low level of public investments.

Galati. S: Quite low crediting rate. Low level of banking employment. W: Extreme economic dependency on the Acelor-Mital works activity.

High vulnerability

Bucharest. S: High level of foreign investments, high saving ratio and economic diversity based on activities connected to the international economy. At the same time, more opportunities to recover after the trough of the cycle. W: High share of employment in service sector and export dependency.

Cluj. S: Economic diversity based on activities connected to the international economy. High income level. Low unemployment rate. At the same time, more opportunities to recover. W: High level of indebtedness. Export dependency. High banking employment degree.

Average vulnerability

Dolj. S: Ford recent investment. High amount of funds allocated to infrastructure projects. W: High indebtedness degree. Decrease in industrial production. Lack of jobs.

Low vulnerability

Suceava. S: Diversified structure of local economy. Important share of food industry. W: High unemployment rate.

3. THE INFLUENCE OF REGIONAL SPECIALISATION ON CRISIS EFFECTS

Our own calculations regarding the level of specialisation at county level support most of the findings mentioned above (Goschin et al., 2009). Thus, the values recorded by the Herfindahl specialisation index confirm the well-documented positive link between the development level and the degree of diversification of economic activity, with the best developed counties having the most diversified economic structure, while the least developed ones usually display a high degree of specialisation.

Although it is largely accepted that the greater the specialisation level, the higher the economic risks in case of economic shocks, from the perspective of the current economic crisis, territorial specialisation may entail vulnerability only for the regions dominated by economic activities open to the current crisis such as the banking and finance sector, construction, real estate, automobile industry, etc.

On the other hand, there are highly specialised counties, based to a large extent on subsistence agriculture, that are less sensitive to the economic crisis. These are counties with a low development level and a low diversification of economic activities, agriculture having an important share in their economy (the location quotients for agriculture are also above 1) and making their economies more stable and less vulnerable to economic downturn. These counties include Botosani, Vaslui, Calarasi, Giurgiu, Ialomita, Teleorman – all of them concentrated in the two least developed Romanian regions, namely the North-East and South-Muntenia.

The values recorded by the Herfindahl specialisation index indicate an important diversification of activities in the best developed counties like Cluj, Constanta, Brasov or Bucharest Municipality, mainly based on activities connected to the international economy. Such a situation makes these counties more receptive to the economic crisis effects. In this category, besides the counties already mentioned, can be included Iasi, Arges, Prahova, Valcea, Arad, Timis, Bihor, Mures, Sibiu, Ilfov. As highlighted in Appendix 10, the location quotients in these counties are above 1 for activities such as the manufacturing industry, construction, hotels and restaurants, real estate transactions, finance and banking, etc., which are more open to economic crisis effects.

An overall view points out that the most developed regions also present the highest diversification of the economic activity. For example, in the case of the Bucharest-Ilfov region the development index is

0.7208 and the Herfindahl specialisation index is 0.1174, for the Western region the values of these indices are 0.3793 and 0.1560 respectively, and for the Central region – 0.3471 and 0.1598 respectively. These regions also display a high level of foreign direct investments per capita.

4. CONCLUDING REMARKS. POLICY RESPONSE TO THE CRISIS

The Romanian government has adopted fiscal measures aiming to reduce the impact of the crisis and to mobilize an international financial package supplied by the IMF, World Bank and EU.

The response to the adverse effects of crisis in Romania cannot be similar to those formulated by various European countries and the US, considering the particularities of the Romanian economy, especially its large current account deficit, which indicates its dependence on external financing. Consequently, the National Bank Governor considers that strong fiscal and salary policies are necessary, accompanied by significant allocations for investments, which are able to create spillover effects for other economic sectors and induce a further relaxation of the monetary policy (Isarescu, 2009). In other words, an optimal combination of budgetary, salary and monetary policy, with a similar degree of restrictiveness for each of them, which will be able to direct economic activity towards work and productivity.

Moreover, the Government can contribute to the improvement of foreign investors' perception by various measures, such as increasing the absorption capacity of EU funds and thus the replacement – to a certain extent – of private foreign financing by public foreign financing or the creation of new jobs in promising sectors such as infrastructure, tourism, agriculture, food industry, etc., which are seen as sectors able to gradually take over the role of economic growth engine. Also, the agreements with international institutions such as the European Commission, European Investment Bank, International Monetary Fund are welcome, as they can compensate for the significant diminishing of private capital inflows.

Undoubtedly, 2010 is going to be a still difficult year for the Romanian economy. Even with help from the IMF and the World Bank, recovery is very much dependent on the external economic evolution. Although some signs of economic recovery are visible in the advanced economies first hit by the downturn, it is premature to estimate when the economic crisis will come to an end and whether Romania can make a quick recovery.

Romania has its own weaknesses which add to the challenges of the current crisis. A restrictive fiscal policy will be needed in the next period in order to correct the fiscal imbalances of recent years. The IMF has stressed the need to cut public expenditure, demanding tight control of the finances of the

government and local administrations, and careful monitoring of state-owned companies, especially those registering losses.

If properly managed, the government's policies should allow Romania to avoid the worst effects of the crisis and even to emerge with an economy that is both leaner and more competitive.

REFERENCES

- Amariei, R. and Hritcu, M. (2009). The map of vulnerability to crisis indicates "red" in 27 counties, (in Romanian), *Capital*, Retrieved March 25, 2009, from <http://www.capital.ro/articol/capital-117887.html>.
- Goschin, Z., Constantin, D.L., Roman, M. and Ileanu, B. (2009). Regional Specialisation and Geographic Concentration of Industries in Romania, in *South-Eastern Europe Journal of Economics*, Vol.7, No.1/2009, pp. 99-113, University of Macedonia Press, Thessaloniki.
- Isarescu, M. (2009). The International Financial Crisis: Challenges to Romania's Monetary Policy. Retrieved from <http://194.102.208.22/Ro/Prez/R20090226Guv.pdf>.