# TEN YEARS AFTER THE GLOBAL CRISES - EXPORTS RECOVERY AT REGIONAL LEVEL IN ROMANIA

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#### **Abstract**

After ten years of the global financial crises, which peak in Romania was 2009, the negative impact on exports and imports of Romania are still in place for some Romanian counties. The scale of the impact highlights the strong connections between the national economy and the economy of the other EU countries, which have suffered during the crisis because of falling demand for imports from Romania.

The good export recovery is not a favorable thing for those counties who focused theirs exports on primary products, products based on natural resources and low-technology products. These exports lead to the decrease in foreign exchange earnings and implicitly the potential of endogenous growth at the county level, mainly due to deteriorating terms of trade.

The paper is focused on Romanian exports recovery analysis, taking into account the impact of world financial crisis, which started in Romania in 2009. A special attention is paid to the recovery of exports at the regional level and to the importance of the structural changes of Romanian export, occurred in 2017 compared to 2008. Also, in this article are analyzed the concentration of exports at county level, the main partners on export, the share of the first 10 partners and evolution of export per capita at the counties level. The trade balance is used to classify the counties in: net exporters (export>import) and net importers (import>export).

**Keywords:** county exports, imports and trade balance, exports recovery, export per capita, export partners and top 10 exporting compnies.

**JEL classification:** F10, F31

#### 1. Introduction

The crisis started in 2009 showed that external openness of an economy, which is based on reciprocal earnings from international trade, should have a high level resilience of national economy, necessary and sufficient for resistance against possible strong external shocks. At country level, Romania's exports showed a good resilience, thus, in 2010 (one year after the crisis) exports increased by 10.8% compared to 2008; after ten years, in 2017 the export growth rate was 85.7% compared to 2008.

Analyses of this paper are focused on the period 2008 - 2017 (2008 being the first year before the crisis of 2009 and 2017 is the last year for which data is available at this level of detail) and will be detailed at county level. In order to create a clear picture of international trade in goods of Romania, at the county level, over a ten years period (2008-2017), this article will present and analyzed the following statistical data: growth rates of exports, imports and trade balance FOB / CIF in the period 2009-2017 compared to 2008 at the county level, the main export destinations and structural changes occurring in 2017 compared to 2008, the share of the top 10 exporting companies at county level and the trade balance in 2017 at the county level (counties classification in net importer or net exporter). All these indicators will provide a synthetic image of the profile and orientation of Romania's counties international trade.

#### 2. Brief literature review

Sustainable regional development is closely linked to regional demand (exports) to achieve a high level of competitiveness and specialization. Export is considered a major contributing factor to regional growth but also a source of developing economic and social inequalities in territorial profile.

In Romania there are several reference papers on this topic, but the level of detail of the data at the county level is limited in comparison with the present paper. Among these papers we can mention "Endogenous regional economic development: the case of Romania" - Zaman, Gh. and "Structural developments of Romanian export" - Zaman, Gh., Vasile, V.

Another important article on this topic, published on "Romanian Journal on Economics" in 2015 is "Regional aspects of economic resilience in Romania, during the post-accession period" (Zaman Gheorghe, Georgescu George), which is focused on the issue of regional resilience to the economic crisis impact in the case of Romania, taking the county as territorial unit of observation. Also, the article "A new classification of Romanian counties based on a composite index of economic development" (Zaman Gheorghe, Goschin Zizi) provides a good starting point for this article.

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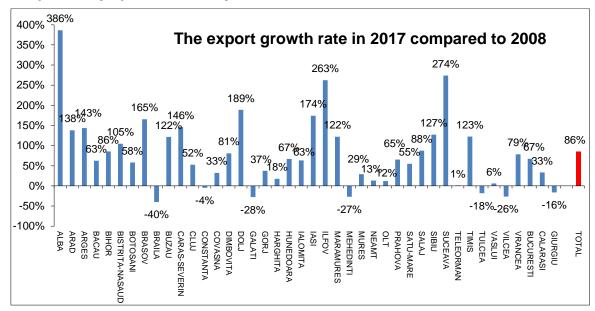
# 3. The evolution of international trade of Romania in the period 2008-2017

# 3.1. The export growth rate in the period 2009-2017 compared to 2008

The export growth rate in the period 2009-2017 compared to 2008, at the county level, had different values from one county to another. Thus, the counties of Arges, Buzau, Calarasi, Gorj, Ilfov, Suceava and Tulcea have shown a strong resilience on export, export

Figure 1- The export growth rate in 2017 compared to 2008

growth continued in the period after the crisis. An atypical county is Cluj, which after the crisis recorded high growth rate on exports (+ 121.7% in 2011 compared to 2008), in 2012 registering a high decrease of export (- 16.7% compared to 2008), mainly because of cessation activity of a major producer and exporter of mobile phones. Another atypical county is Giurgiu, which after the crisis recorded positive rates of exports (+33.2% in 2011 compared to 2008), in 2013 registering a high decrease on exports.



Source: own calculation based on data of Romanian National Institute of Statistics

Counties such as Alba, Arad, Bihor, Bistrita-Nasaud, Botosani, Brasov, Caras-Severin, Dambovita, Ialomita, Iasi, Maramures, Salaj, Satu-Mare, Sibiu, Teleorman and Timis had a relatively good resilience export; thus in 2010 the export exceeded the 2008 level for these counties. Instead, for the counties Bacau, Braila, Bucharest, Constanta, Covasna, Harghita, Hunedoara, Mures, Neamt, Prahova and Vrancea the export exceeded the 2008 level only in 2011. The Dolj county returned to precrisis export value only in 2012, with the launch exports of a large car manufacturer.

Table 1 – Export resilience (Recovery time in years)

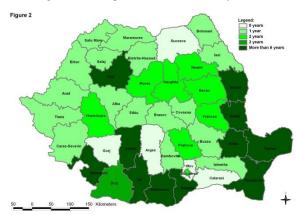
Recovery time	No. of counties	Weights in 2008	Weights in 2017	Counties
0 years	5	10,6	10,6 14,9	
One year	17	35,2	43,5	AB, AR, BH, BN, BT, BV, BZ, CS, CV, DB, IL, IS, MM, SM, SJ, SB and TM

Two years	8	30	26	BC, HR, HD, MS, NT, PH, VN and B
Three years	1	1,3	2	DJ
More than six years	8	18,4	8,8	BR, CT, GL, MH, OT, TL, VL and GR
Inconstant resilience	3	3,8	2,9	CJ, TR and VS

Source: own calculation based on data of Romanian National Institute of Statistics; see annex for counties' codes.

There are still 7 counties for which exports from 2017 are below those recorded in 2008: Braila (2017 compared to 2008 -40.1%), Constanta (2017 compared to 2008 -4.4%), Galati (2017 compared to 2008 -27.8%), Giurgiu (2017 compared to 2008 -16.1%), Mehedinti (2017 compared to 2008 -26.7%), Tulcea (-18.0% in 2017 compared to 2008) and Valcea (-26.5% in 2017 compared to 2008).

Figure 2 – The export resilience at the county level



Source: own calculation based on data of Romanian National Institute of Statistics

Also, there are 3 counties with inconstant resilience: Cluj, Teleorman and Vaslui. The export of these counties exceeded the values registered in 2008, but in the period 2008-2017 they have recorded both increases and decreases from one year to another.

The share of export for top 10 counties in total exports increased in 2017 compared to 2008 from 64.6% in 2008 to 66.6% in 2017. The highest increases in weights (in percentage points pp) had recorded the following counties: Alba +2.4 pp (climbed from position 19 to position 7 in the top) and Arges +2.3 pp (it has kept his 3rd position in the top export). The biggest rise in the top recorded Suceava, which has climbed 11 places from position 37 to position 26 in the top and Alba which has climbed 12 places from position 19 to position 7 in the top. The biggest drop in top was recorded for county Valcea, which lost 10 places, from position 17 in 2008 to position 27 in 2017 (-1.1 pp). The largest decreases of the weights (in percentage points pp) were recorded by the following counties: Constanta -3.0 pp (form position 4 in 2008 to position 10 in 2017), Galati -2.5 pp (form position 6 in 2008 to position 16 in 2017) and Bucharest that registered a large decrease of the weight in total export (-1.9 pp) and, though, it kept its leading position on export.

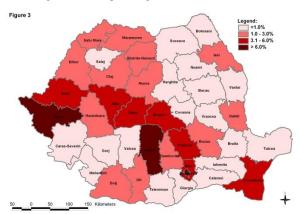
Table 2- Top 10 counties on export in 2008 and 2017

	200	8	2017			
No.	County	Weight	No.	County	Weight	
1	Bucuresti	18.9	1	Bucuresti	17.1	
2	Timis	8.4	2	Timis	10.0	
3	Arges	7.3	3	Arges	9.6	
4	Constanta	6.2	4	Arad	5.5	
5	Arad	4.3	5	Brasov	5.2	
6	Galati	4.1	6	Sibiu	4.7	
7	Prahova	4.1	7	Alba	3.9	
8	Sibiu	3.9	8	Ilfov	3.8	
9	Olt	3.8	9	Prahova	3.6	
10	Brasov	3.6	10	Constanta	3.2	

Source: own calculation based on data of Romanian National Institute of Statistics

Counties like Galati and Olt came out of top 10 in 2017 compared to 2008, giving way to the top 10, in 2017, to Ilfov and Alba counties.

Figure 3- The export weights of the counties in 2017



Source: own calculation based on data of Romanian National Institute of Statistics

The share of top 10 exporting companies at county level in 2017 exceeded, in most cases, 50% of total exports at the county level, which indicates a strong dependency of exports at the county level by a few big exporting companies, the major part of them being foreign direct investment affiliates and subsidiaries of multinational enterprises.

Table 3 – The share of top 10 exporting companies at county level in 2017

The share of top 10 exporting companies at county level between:	No. of counties	Counties
30 – 40 %	1	В
40 – 50 %	5	HR, BH, CJ, MS and IF
50 - 60 %	5	BC, SM, AR, TM and BV
60 – 70 %	7	SB, VN, NT, BZ, MM, BR and PH
70 – 80 %	10	GJ, HD, CV, IS, SV, BN, TL, BT, VS and GR
80 – 90 %	11	VL, AB, IL, SJ, CL, AG, DB, CS, TR, CT and DJ
> 90 %	3	GL, OT and MH

Source: own calculation based on data of Romanian National Institute of Statistics: see annex for counties' codes.

For counties like Galati, Olt and Mehedinti, the share of top 10 exporting companies in 2017 exceeds 90%.

#### 3.2. The export partners

While in 2008 the main export destination was Italy for 21 counties, in 2017 only 15 counties still

had Italy on a first position on export. Instead, Germany exceeded Italy in 2017 compared to 2008 and has become the main destination for 18 counties on exports in 2017, compared to only 12 counties in 2008. This shows an increase of exports dependence, on county level, of demand in the German market. Other partner countries on a first position on county export in 2017 are: Norway (2 counties), France (one county), United Kingdom (one county), Marshall Islands (one county), Netherlands (one county), Poland (one county) and Turkey (one county).

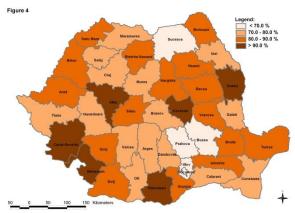
Table 4 — The weights of a top 10 partner countries on export in 2017, at the county level

The weights of a top 10 partner countries on export in 2017, at the county level, between:	Number of counties	Counties
60 – 70 %	5	SV, B, PH, BZ and IF
70 – 80 %	15	DB, MS, CT, VL, AG, CL, OT, SJ, CJ, IS, BV, TM, HD, GL and MM
80 – 90 %	16	NT, VN, HG, GR, AR, IL, BC, BH, SM, BT, DJ, BR, TL, BN, GJ and SB
> 90 %	6	VS, CV, TR, AB, CS and MH

Source: own calculation based on data of Romanian National Institute of Statistics; see annex for counties' codes.

In 2017 Italy and Germany were in the top 10 export destination for 42 counties, France for 39 counties and UK for 37 counties.

Figure 4 – The share of top 10 partner countries on counties exports in 2017



Source: own calculation based on data of Romanian National Institute of Statistics

The top 10 destinations for counties' exports are mainly countries from European Union (87.4% in 2017). There are counties in 2017 that have no extra EU country in the top 10 export partners: Arad,

Bihor, Cluj, Harghita, Maramures, Satu Mare, Timis and Bucuresti. These counties are, with one exception (Bucuresti), in the center and east part of Romania and the exports orientation is explained by the proximity of European Union countries, which offer more opportunities and choices for Romanian exports.

## 3.3. Exports per capita

Depending on the export per capita in 2017 and export dynamics in 2017 compared to 2008, counties are divided into 4 categories (Figure 5):

- Category 1: counties with export per capita higher than the national average and export dynamics in 2017 compared to 2008 higher than the national growth rate;
- Category 2: counties with export per capita higher than the national average and export dynamics in 2017 compared to 2008 less than the national growth rate;
- Category 3: counties with export per capita less than the national average and export dynamics in 2017 compared to 2008 higher than the national growth rate;
- Category 4: counties with export per capita less than the national average and export dynamics in 2017 compared to 2008 less than the national growth rate.

Egend:

Category 1

Category 2

Category 3

Category 3

Category 4

Bistra-Manad

Neant

Neant

Neant

Cluj

Mures

Vances

God

Valces

Country

Category 4

Category 4

Last

Category 4

Category 5

Category 6

Category 7

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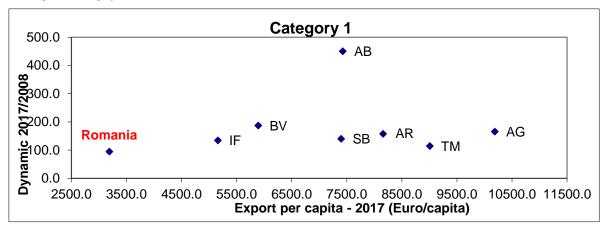
Figure 5 - Counties by categories, previous defined

Source: own calculation based on data of Romanian National Institute of Statistics

Based on these criteria resulted in the following:

- in the first category there are 7 counties, with a total export share increasing from 30.9% in 2008 to 42.8% in 2017; dynamics of export per capita in 2017 compared to 2008 are: Alba 450.5%, Arges 165.7%, Arad 157.8%, Brasov 187.5%, Ilfov 134.6%, Sibiu 140.5% amd Timis 114.7% (Figure 6). This category corresponds to developing counties.

Figure 6 - category 1

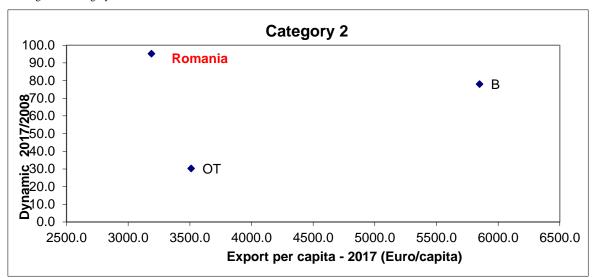


Source: own calculation based on data of Romanian National Institute of Statistics; see annex for counties' codes.

- in the second category there are only 2 counties, with a total export share dropping from 22.7% in 2008 to 19.3% in 2017; dynamics of export per capita in 2017 compared to 2008 are Bucharest +78.0% and Olt

+30.2% (Figure 7). This is an atypical category, which contain 2 counties with an export per capita above the national average in 2017, but with a lower growth rate.

Figure 7 - category 2

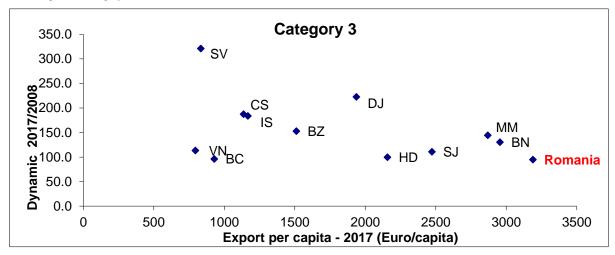


Source: own calculation based on data of Romanian National Institute of Statistics; see annex for counties' codes.

- in the third category there are 11 counties, with a share of total exports slightly up from 10.7% in 2008 to 12.8% in 2017; dynamics of export per capita in 2017 compared to 2008 are: Bacau 96.4%, Bistrita-Nasaud 130.6%, Buzau 153.1%, Caras-Severin 187.5%, Dolj 222.8%, Hunedoara 99.8%, Iasi 184.1%, Maramures

144.7%, Salaj 111.0%, Suceava 321.2% and Vrancea 113.5% (Figure 8). The third category contains counties with export per capita less than the national average and export dynamics in 2017 compared to 2008 higher than the national growth rate.

Figure 8 – category 3

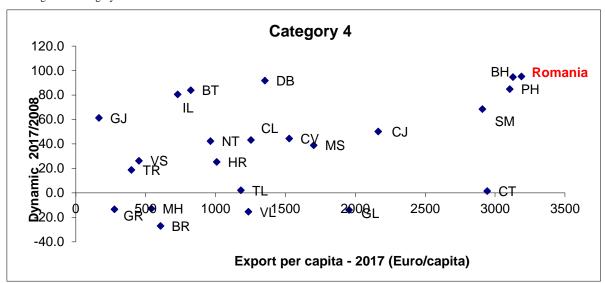


Source: own calculation based on data of Romanian National Institute of Statistics; see annex for counties' codes.

- in the fourth category there are 22 counties, with a share of total exports drastically decreasing from 35.0% in 2008 to 23.2% in 2017; however dynamics of export per capita in 2017 compared to 2008 are increasing in counties such as Bihor 94.5%, Botosani 83.8%, Calarasi 43.2%, Cluj 50.1%, Constanta 1.4%, Covasna 44.3%, Dambovita 91.7%, Gorj 61.3%,

Harghita 25.3%, Ialomita 80.4%, Mures 38.9%, Neamt 42.3%, Prahova 84.8%, Satu Mare 68.4%, Teleorman 18.7%, Tulcea 2.1% and Vaslui 26.2%. The rest of the counties recorded large decreases in 2017 compared to 2008: Braila -27.1%, Galati -13.9%, Giurgiu -13.5%, Mehedinti -12.9% and Valcea -15.4% (Figure 9).

Figure 9 - category 4



Source: own calculation based on data of Romanian National Institute of Statistics; see annex for counties' codes.

These counties had an export per capita less than the national average and export dynamics in 2017 compared to 2008 less than the national growth rate; the common features of these counties are the low level of economic development.

#### 3.4. Import and trade balance

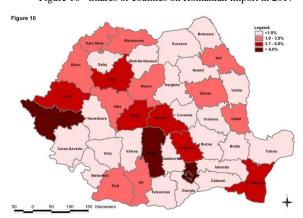
Although exports had a high resilience to the crisis, it had a limited impact on GDP because, in the quantification of contribution to GDP, the net exports are taking into account (difference between exports and imports), but also because they involve usually an

increase in imports (reflected in the import content of exports), which limit the contribution of international trade to economic growth.

The share of the top 10 counties in total Romanian imports slightly decreases in 2017 compared to 2008 from 75.7% in 2008 to 74.5% in 2017. The biggest drop of the share (in percentage points pp) was recorded in Bucharest (-8.0 pp). However, it kept the leading position among the top counties on import with around 30% of total imports of Romania in 2017. Significant increases of share, in 2017 compared to 2008, recorded the following counties:

- Arges +2.4 pp (dynamic 2017/2008 was +117.83%); it climbed three positions in the top, from position 7 to position 4;
- Arad +1.6 pp (dynamic 2017/2008 was +113.0%); it climbed four positions in the top, from position 10 to position 6;
- Timis +1.5 pp (dynamic 2017/2008 was +69.2%); it climbed one position in the top, from position 4 to position 3;
- IIfov +2.4 pp (dynamic 2017/2008 was +82.1%); it kept his second position in the top.

Figure 10 - Shares of counties on Romanian import in 2017



Source: own calculation based on data of Romanian National Institute of Statistics

Besides Bucharest, significant decreases in the share of the total import in 2017 compared to 2008 recorded the following counties:

- Galati with -1.3 pp (dynamic 2017/2008 was -25.9%); it fell six positions in the top, from position 8 to position 14:
- Constanta with -2.0 pp (dynamic 2017/2008 was -15.6%) fell five positions in the top, from position 3 to position 8.

Table 5 -Top 10 counties in total imports of Romania

	200	18	2017			
No.	County	Weight	No.	County	Weight	
1	Bucuresti	37.9	1	Bucuresti	29.9	
2	Ilfov	6.4	2	Ilfov	8.8	
3	Constanta	5.6	3	Timis	7.0	
4	Timis	5.5	4	Arges	6.1	
5	Prahova	4.4	5	Prahova	4.4	
6	Cluj	3.9	6	Arad	4.1	
7	Arges	3.7	7	Brasov	4.0	
8	Galati	2.9	8	Constanta	3.6	
9	Brasov	2.9	9	Cluj	3.4	
10	Arad	2.5	10	Sibiu	3.1	

Source: own calculation based on data of Romanian National Institute of Statistics

In the 2008-2017 period there was a huge drop in the external trade deficit of Romania (dynamic 2017 / 2008 was -44.9%), from -23.5 billion Euro in 2008 to -13.0 billion Euro in 2017.

At county level, the largest contribution to reducing the Romanian external trade deficit had

Bucharest (31.8% of reduction), with a decrease in the external trade deficit from -15.3 billion Euro in 2008 to -11.9 billion 2017 (dynamic 2017/2008 was -21.9%). Another important contribution to decrease the Romanian external trade deficit had county Timis, which passed from trade deficit to surplus (from -0.3 billion in 2008 to positive trade balance of +1.3 billion in 2017).

Some counties had positive external trade balance in 2008 and this increased in 2017, as follows: Arges county from +0.35 billion Euro in 2008 to +1,39 billion Euro in 2017 (dynamic 2017/2008 was +301.0%) and Alba county from 0.12 billion Euro in 2008 to +1.05 billion Euro in 2017 (dynamic 2017/2008 was +753.8%).

Table 6 - Classification of counties based on external trade balance in 2017

No.	Net exporter (export> import)	External trade balance (millions Euro)	No.	Net importer (import> export)	External trade balance (million Euro)
1	Arges	1386.9	1	Vrancea	-15.6
2	Alba	1045.2	2	Satu-Mare	-20.2
3	Timis	965.9	3	Braila	-25.7
4	Olt	630.8	4	Tulcea	-29.5
5	Sibiu	614.8	5	Ialomita	-39.5
6	Maramures	351.0	6	Teleorman	-52.9
7	Arad	335.2	7	Bihor	-59.4
8	Brasov	233.8	8	Giurgiu	-90.0
9	Salaj	216.9	9	Suceava	-105.9
10	Hunedoara	205.6	10	Harghita	-116.1
11	Buzau	192.1	11	Galati	-230.9
12	Bistrita-Nasaud	171.1	12	Bacau	-231.8
13	Vilcea	111.2	13	Mures	-364.8
14	Caras-Severin	88.5	14	Constanta	-691.0
15	Calarasi	79.5	15	Cluj	-1016.6
16	Vaslui	33.3	16	Prahova	-1060.5
17	Botosani	33.1	17	Ilfov	-4313.3
18	Dimbovita	32.8	18	Bucuresti	-11942.6
19	Iasi	30.2			
20	Mehedinti	30.0			
21	Neamt	23.1			
22	Covasna	11.1			
23	Gorj	6.8			
24	Dolj	5.1			

Source: own calculation based on data of Romanian National Institute of Statistics

From classification of counties based on the trade balance in 2017 resulted 24 net exporting counties (with a positive external trade balance of +6.83 billion Euro in 2017 compared to only +0.07 billion in 2008) and 18 net importing counties (with a trade deficit of -20.4 billion Euro in 2017 compared to -23.36 billion Euro in 2008).

#### 4. Conclusions

Although Romania's total exports has shown a pretty good resilience, there are still counties who have not exceeded exports from 2008 nor in 2017. The share of the top 10 exporting companies and top 10 countries of destination for counties export over 50% in 2017, for almost all counties, reveals a strong dependence of counties exports by a few big exporting companies (in

majority with foreign capital) and several destination countries (mostly from European Union). However, the increase in external demand for products of a county, according to the basic Keynesian theory, contributes to its economic growth.

The positive external trade balance at the county level may have a positive impact on the economic development of the county if the exports refer to high technology products. If this positive trade balance is based on exports of raw materials and semi-products, under conditions of low imports, it will have a negative impact on sustainable economic growth of the county in question (immisering exports). The most counties that have kept the positive external trade balance in the 2008 – 2017 periods are in this situation.

Figure 11 - External trade balance in 2017



Source: own calculation based on data of Romanian National Institute of Statistics The counties with negative external trade balance must act to reduce the external trade deficit in the medium and long term. However, a negative trade balance deficit may have a positive impact on sustainable economic development if it is based on the high-tech products imports, local assimilated through technology transfer.

Also, the analyses from this paper revealed that, after ten years of the global financial crises, which peak in Romania was 2009, the negative impact on exports and imports of Romania are still in place for some Romanian counties. The trade concentration on a few countries, mainly from European Union, points out the strong connections between the national economy and the economy of the other EU countries, which have suffered during the crisis because of falling demand for imports from Romania.

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# Annex – export, import and trade balance, by county, in 2008 and 2017

### - Millions Euro -

Co. Alian and an analysis	Counties'	Exp	Export		Import		Trade balance	
Counties' names	codes	2008	2017	2008	2017	2008	2017	
Alba	AB	505.5	2457.9	383.1	1412.7	122.4	1045.2	
Arad	AR	1447.1	3442.4	1458.8	3107.2	-11.7	335.2	
Arges	AG	2470.6	6015.5	2124.8	4628.6	345.8	1386.9	
Bacau	BC	340.5	553.4	371.5	785.3	-31.0	-231.8	
Bihor	ВН	955.0	1771.8	1392.8	1831.2	-437.9	-59.4	

G. d. l.	Counties'	Exp	ort	Imp	ort	Trade balance	
Counties' names	codes	2008	2017	2008	2017	2008	2017
Bistrita-Nasaud	BN	406.0	831.7	370.6	660.6	35.4	171.1
Botosani	BT	203.2	321.2	172.0	288.1	31.2	33.1
Brasov	BV	1222.4	3244.4	1640.9	3010.5	-418.5	233.8
Braila	BR	302.3	181.2	239.3	207.0	63.0	-25.7
Buzau	BZ	290.3	643.4	381.3	451.2	-91.0	192.1
Caras-Severin	CS	128.9	317.1	129.5	228.6	-0.6	88.5
Cluj	CJ	997.5	1521.2	2220.7	2537.8	-1223.1	-1016.6
Constanta	CT	2088.4	1996.7	3184.6	2687.7	-1096.2	-691.0
Covasna	CV	236.2	313.0	338.3	302.0	-102.1	11.1
Dambovita	DB	374.9	677.9	430.0	645.1	-55.0	32.8
Dolj	DJ	426.3	1230.9	543.0	1225.7	-116.7	5.1
Galati	GL	1392.9	1005.6	1667.8	1236.5	-274.9	-230.9
Gorj	GJ	39.0	53.6	64.2	46.8	-25.2	6.8
Harghita	HR	262.1	308.2	423.8	424.2	-161.7	-116.1
Hunedoara	HD	507.5	848.0	471.3	642.4	36.2	205.6
Ialomita	IL	116.9	190.9	144.3	230.4	-27.5	-39.5
Iasi	IS	336.3	921.8	614.5	891.6	-278.1	30.2
Ilfov	IF	655.2	2375.7	3672.5	6689.0	-3017.2	-4313.3
Maramures	MM	600.9	1335.4	561.8	984.4	39.1	351.0
Mehedinti	MH	184.3	135.0	125.3	105.0	59.0	30.0
Mures	MS	712.3	920.4	1142.2	1285.3	-429.9	-364.8
Neamt	NT	383.9	435.3	410.9	412.2	-27.0	23.1
Olt	ОТ	1275.8	1431.8	556.7	800.9	719.1	630.8
Prahova	PH	1377.0	2275.1	2505.4	3335.6	-1128.4	-1060.5
Satu Mare	SM	632.2	979.0	786.0	999.1	-153.7	-20.2
Salaj	SJ	284.6	533.9	368.3	316.9	-83.7	216.9
Sibiu	SB	1301.7	2957.2	1416.6	2342.4	-114.9	614.8
Suceava	SV	140.0	523.6	256.1	629.5	-116.1	-105.9
Teleorman	TR	137.5	139.2	92.9	192.1	44.6	-52.9
Timis	TM	2824.5	6288.6	3144.9	5322.7	-320.4	965.9
Tulcea	TL	289.0	237.1	211.5	266.6	77.5	-29.5
Vaslui	VS	163.1	173.4	124.1	140.1	39.0	33.3
Valcea	VL	599.0	440.3	352.8	329.1	246.2	111.2
Vrancea	VN	146.0	260.7	157.5	276.3	-11.5	-15.6
Bucuresti	В	6389.6	10686.3	21688.6	22629.0	-15299.0	-11942.6
Calarasi	CL	274.9	367.0	232.8	287.5	42.2	79.5
Giurgiu	GR	90.3	75.7	223.1	165.7	-132.8	-90.0
Not allocated Trade		212.7	1223.4	443.2	607.5	-230.5	615.9
Total		33724.6	62641.9	57240.3	75598.4	-23515.7	-12956.5

Source: own calculation based on data of Romanian National Institute of Statistics