# Romania and the Republic of Moldova – a Long-Term Strategic Cooperation

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### **Abstract**

The main objective of this paper is to analyze the cooperation between Romania and the Republic of Moldova. This study is very important in the context of discussions about a possible union of the two states. In the last decade and a half, Romania's role in Moldova's economy has grown steadily. Romania was in 2015 the most important trade partner of Moldova. On the other hand, the role of Moldova in Romania's trade is fairly low, given the relatively small size of the market in the neighboring state. We expect that the bilateral relations between the two countries to continue to develop in the future, especially due to the intensification of the trade relations and due to the investments made by Romania in Moldova. Because in the public debate the idea of reunification of the two states is increasing, it is necessary to analyze the costs and benefits that would result from implementation.

Keywords: economic cooperation; cultural and educational cooperation; foreign investments

JEL Classification: C10; F10; F50.

### Introduction

Romania and Moldova have developed very strong links, resulted, mainly, to a fairly large common history (including common statehood), language and cultural heritage.

There are a number of authors such as A. Moraru, 1995; E. Black, 2003; C. Pantea, 2008; I. Nistor, 1991; I. Fruntasu, 2002; V. Stati, 2002; N. Popescu, O. Sebrerian 2005 or 2004; L. Turcescu and L. Stan, 2003, which examines the history of Bessarabia and the geopolitical relations of the region.

On the other hand, other authors (V. Popa and M. Dinu, 2004; M. Enache and D. Cimpoeşu, 2000; A. Cioroianu, 2012) or national institutions, talk about the cooperation relations between Romania and Moldova, from several perspectives. Also, there is increasing the discussions about the cooperation between Moldova and the European Union and the implications that this move would have on the bilateral relations with Romania (Gudym, 2002; A. Pop, 2003).

In addition to the involvement in the economic field, with numerous benefits at national level, Romania has implemented in Moldova a number of measures in the culture and education field, aimed to support them, especially the young people of the neighboring state.

# The Sectorial Cooperation between Romania and the Republic of Moldova

In the continuation of these studies both the econometric modelling and the descriptive and comparative analysis are used in order to illustrate the cooperation between the two countries.

# **Economic cooperation**

In the past 15 years, Romania has been an important investor and trading partner for Moldova. Romania's role in Moldova's economy has grown steadily in the past decade and a half, except for the period 2008 - 2010, when Moldova's exports to Romania stood on a downward trend (Figure 1). This happened due to the global financial crisis, but since the second half of 2010, the exports began to fall again on an upward trend.

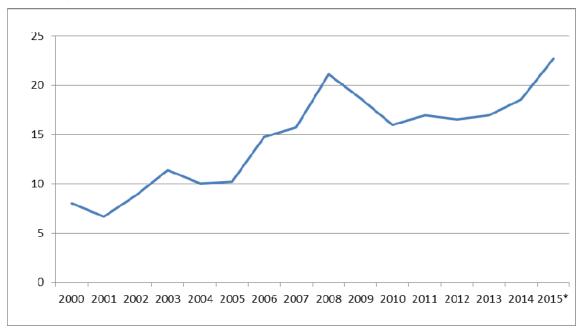


Fig. 1. The exports of Moldova in Romania (percent of total exports)

Source: Authors' calculations based on the Statistical Office of the Republic of Moldova data.

If in 2000 the total value of exports of Moldova in Romania was \$ 37.8 million, in 2015<sup>\*</sup> it reached about \$ 446 million, representing 22.7% of total exports of Moldova.

In the same period, imports from Romania increased from \$ 119.5 million in 2000 to approximately \$ 555 million in 2015, representing about 14% of Moldova's total imports (Figure 2).

The two indicators show that in 2015<sup>†</sup> Romania was the most important trade partner of Moldova.

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<sup>\*</sup> Forcasted data

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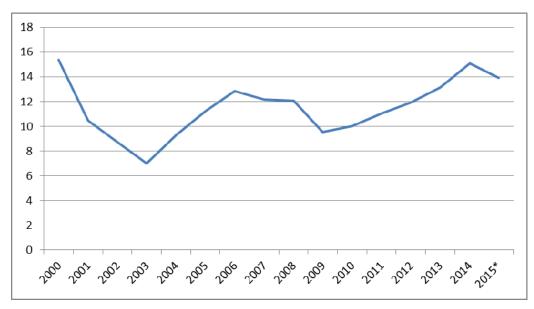


Fig. 2. The evolution of Moldova's imports from Romania (percent of total imports)

Source: Authors' calculations based on the Statistical Office of the Republic of Moldova data

Romania sells in Moldova, mainly fuel, chemicals and metal products. On the other hand, Moldova sells in Romania, mainly, cables and insulated electric conductors and vegetable products. To see what is the influence of the Moldova's net exports (NE) in relation with Romania on the Gross Domestic Product of the country, we analyse further the relationship between two variables through a regression equation:

$$CDP = a + b \times NE \tag{1}$$

The data series include 2000-2015 period.

In order to estimate the regression equation is necessary, first of all, the test the stationarity of the two variables. For this analysis, it is used the Augmented Dickey-Fuller test (ADF).

$$\Delta_{y_{t}} = \beta_{1} + \beta_{2t} + \delta_{y_{t-1}} + \sum_{i=1}^{p} \alpha_{i} \Delta y_{t-1} + \epsilon_{i}$$
 (2)

The ADF test results are shown in Table 1.

**Table 1.** The Augmented Dickey-Fuller test results

EN		t-Statistic	Prob.*
Augmented Dickey-Fuller test			
statistic		-3.659447	0.0199
Test critical values:	1% level	-4.05791	
	5% level	-3.11991	
	10% level	-2.701103	
Variable	Coefficient	t-Statistic	Prob.
D(EN(-1),2)	-1.430042	-3.659447	0.0038

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<sup>\*</sup> Forcasted data

			Table 1 (cont.)
PIB		t-Statistic	Prob.*
Augmented Dickey-Fuller test			
statistic		-3.884836	0.0148
Test critical values:	1% level	-4.12199	
	5% level	-3.14492	
	10% level	-2.713751	
Variable	Coefficient	t-Statistic	Prob.
D(PIB(-1).2)	-2.235194	-3.884836	0.0037

Source: Authors' calculations using Eviews

The ADF test results, shown in Table 1, show that the two variables are stationary in the second difference (for a significance level of 5%).

Based on the relationship between the ADF test and the critical values the null hypothesis (the series have unit roots) is rejected and the alternative hypothesis (the series is stationary) is accepted. The two series have the same degree of stationarity and we can test the long-term correlation between the two variables.

Thereby, in the following, we test the long-term correlation between the variables using the Johansen co-integration test.

$$X_{1,z} = \alpha + \beta_2 X k + \beta_3 X_{3,k} + \dots + \beta_k X_{k,z} + \epsilon_z \tag{3}$$

Table 2	The Johansen	co-integration	test results
I able 2.	THE JUHANSEN	co-micgianon	test results

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.*
None *	0.528814	15.2583	12.3209	0.0156
At most 1 *	0.286359	4.72326	4.129906	0.0353
Trace test indicates 2 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug- Michelis (1999) p-values				

Source: Authors' calculations using Eviews

The "Trace" test shows that the link between the two sets of data can be described by two stationary linear relationships. Analysing the "Trace" test results, we can state that different parts of Moldova's GDP may be influenced by the net exports resulted from the relationship with Romania.

To see if the net export, in relation with Romania, has a long-term influence on the economic growth in Moldova, it is tested the relationship between GDP and net exports, based on Equation 1. Regression test results are shown in Table 3.

<sup>\*</sup> Forcasted data

 Table 3. Regression test results

Dependent variable: PIB				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-7,804.197	158,737.7	-0.04916	0.9615
EN	-5.304708	1.368638	-3.87590	0.0017
R-squared	0.517618	Mean dependent var		- 94,095.84
Adjusted R-squared	0.483162	S.D. dependent var		874,477.6
S.E. of regression	628,674.7	Akaike info criterion		29.65708
Sum squared resid	5.53E+12	Schwarz criterion		29.75366
Log likelihood	-235.2567	F-statistic		15.02263
		Prob(F-statistic)		0.001680

Source: Authors' calculations using Eviews

Based on results shown in Table 3, we can say that the net export in relation to Romania has a negative impact on the GDP of Moldova. This is explained by the fact that the value of imports from Romania is much higher than that of exports in this country. The adjusted R-squared coefficient indicates that 48.31% of GDP is influenced by the net exports resulted from the relationship with Romania.

Currently, Romania is the sixth largest investor in Moldova, the most important Romanian companies present in this country being Petrom, Rompetrol and European Drinks. Romanian investors are attracted mainly by cheap and qualified labour in this country. Another motivation for Romanian companies are tax incentives that Moldova offers to foreign investors and tax rates that are lower than in Romania.

A specific way to invest the Romanian capital in Moldova was the creation of the Romanian-Moldavian companies, a trend that has grown considerably in recent years.

Since 1990, Romania has sought to boost its role of supplier of energy resources in Moldova. According to the National Bureau of Statistics of Moldova, Romania is a major supplier of gasoline and diesel in Moldova (in 2013, Moldova has covered 72.4% and 60.5% of the demand for these fuels by imports from Romania). In August 2014 it was inaugurated an interconnection between Iasi and Ungheni. This connection will eventually allow sending about 1.5 billion cubic meters of gas per year. Currently, the interconnection can only use 5% of bandwidth, because of the lack of connection with Chisinau and because of the Romanian transport infrastructure.

Despite these technical limitations, Moldova signed in December 2014 a contract for gas supplies from Romania. Under this agreement, the gas from this source is about 65 dollars cheaper than Russian gas. The cooperation between the two countries continue with the modernization of the transmission channel of the energy between Moldova and Romania (the relationship Iasi-Ungheni-Straseni and Vulcanesti-Isaccea), whose completion will allow imports of electricity from Romania and diversify the supply sources of Moldova on a larger scale than in present.

Also, there are Romanian companies involved in infrastructure projects in Moldova. VFU Electroputere Company has signed an agreement to modernize the railway company for passenger trains in Moldova.

In 2010, CertSign won the bid in order to introduce tachographs for international road transport system in Moldova, and in 2011, PA & CO International signed a contract with the government to renovate the road section Balti-Sărăteni.

It was discussed the possibility to upgrade or construct new rail lines with EU standards, between Iasi and Ungheni and a highway to link the two countries, but so far there have been no concrete results. It should be noted that, although the economic cooperation at the level of private operators is growing rapidly, large strategic economic projects involving the governments in Bucharest and Chisinau, records, most often, difficulties in implementation. This applies to energy projects, whose implementation has been delayed and for infrastructure projects.

Another form of economic cooperation between the two countries is the development aid donated by Romania in 2007 when the country entry into the European Union.

Moldova was the main beneficiary of this aid, receiving about a third of the total aid provided by Romania to other states. In 2015, Romania was awarded a EUR 100 million grant to Moldova, aimed to modernize the checkpoints at common border, continue the energy interconnection and transport infrastructure, expanding SMURD, fiscal reform and of other institutions.

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## **Cultural and educational cooperation**

Romania has taken various measures to strengthen the cultural and educational cooperation. In the report entitled "Preparatory work. Culture in the EU External Relations", funded by the EU budget, the particular importance of Romania to Moldovian culture was highlighted.

On 30 March 2016, the Moldovan Ministry of Education and the Ministry of National Education and Scientific Research in Romania have decided to initiate negotiations for signing the Protocol of cooperation for the next three years. The Protocol provides a continuity of the cooperation relations between the parties, the establishment of legal norms in the field, training of teachers and the joint implementation of educational and scientific projects.

In particular, the signatories ministries will cooperate in modernizing the national education systems and will organize study visits for professional capacity development of the teachers. The document also stipulates that the Romanian Government will provide annual scholarships for students, master and PhD students who study in Moldova. Previously, scholarships were offered only to those Moldovans students who were studying in Romania. At the same time, a key objective set out in the act aims to increase the Moldova's performance in science and education, and to promote the integration into the European Union.

A key element of the cultural cooperation between the two states is the scholarship program that Bucharest has opened and funded since the early nineties. Therefore, each year, about 2,500 citizens of Moldova had the opportunity to study at universities in Romania. Since 2009 their number has increased, more than 5,000 young Bessarabian benefiting from the opportunity to learn in Romania. For the 2014-2015 school year, Romania offered 6000 scholarships, out of which 2800 for students, 1500 for high school students and 125 scholarships for doctoral students.

Romania also regularly sponsor the purchase of books for libraries, and in October 2014 offered 100 free buses for schools in Moldova. Bucharest also actively supports inter-university cooperation. In 2010, in Chisinau the Romanian Cultural Institute was launched, whose mission is to organize conferences, exhibitions, concerts, language courses, student finance programs in Romania etc. It also helps to promote Moldovan artists and creators in Romania, action seen as a carrier of Romanian culture, Moldovan artists being considered as part of the Romanian cultural space.

Romania's actions in Moldova, regarding culture and education, should be considered relatively effective. Romanian activities in the cultural dimension are basically directed only to the population that speaks Romanian. The exception to this rule, which could be a harbinger of change in Romanian politics, was the launch in June 2015, of the Romanian Information Centre at the University of Comrat, Gagauzia, at the initiative came from Romania and financed by representative bodies of Bucharest.

Wishing to put a brick in building a shared future of citizens on both sides of the Prut, on April 10, 2016 in the Parliament from Bucharest was held a joint conference of mayors from Romania and Moldova, organized by George Simion, the leader of the unionist platform called "Action 2012".

It was established 450 partnerships between local representatives of the two countries (double of the existing cooperation percent by then). The brotherhood between communities, districts and counties will open new perspectives for development in the economic, educational, cultural and sporting fields. It aims at bringing these two states closer, as they are separated only by a river and a pact whose consequences are still in force. The joint projects will be funded by the Government, under national law, OUG 18/2014. The participating partners will join the Congress of Local Authorities in Romania and Moldova, a common structure which has already trained the foundations. This structure will convene in 2017 in Chisinau.

In the coming years, cooperation in the fields of education, scientific research and culture of Romania and Moldova will be supported through three agreements. The first consists of a protocol of collaboration for the period 2015-2018, between the Ministry of Education and Research of Romania and the Ministry of Education in Moldova. The second agreement, signed between the Academy of Sciences of Moldova and the National Authority for Scientific Research and Innovation in Romania involves a program of bilateral cooperation for 5 years, in the following domains: scientific research, innovation and technological development. Third Memorandum envisages facilitating cultural cooperation between Romania and Moldova. At the same time, the document sustains also the collaboration within the EU program "Creative Europe", which runs between the departments of the Ministry of Culture of the two countries. Also, to celebrate 100 years of the Great Union, they want to organize major cultural events.

### Costs of a Possible Reunification between the two Countries

According to a study conducted by the Black Sea University Foundation, "the reintegration of two states has a cost determined by the size of GDP of the most developed state, and by the GDP / capita difference, which must be covered. In 20 years, the ratio of Romania's economic performance and that of Moldova increased from 1.5: 1 to 4: 1".

The same study shows that, "according to forecasts, in 2018 Moldova will have at purchasing power parity (PPP), a GDP of \$ 16 billion, while Romania's GDP will be 360 billion. Hence, it follows a GDP / capita of \$ 18,000 in Romania and one of \$ 4,600 in Moldova. While maintaining the current geostrategic positioning of Romania and Moldova, in 20 years, Moldova will reach a GDP / capita of \$ 5,000, while Romania one \$ 32,000. It follows that the ratio will increase to more than 6".

Also, the analysis indicates that "the difference between the economic performance of Romania and Moldova rise slightly, making it possible the reunification at any time in the next 20 years. If reunification would occur by 2018 (forecast IMF), Romania's GDP would be comparable to that of Switzerland or Austria and would exceed that of the Czech Republic, Greece and Kazakhstan.

If the reunification would realize at present, about 20% of the costs involved would be private investment and a contribution of about \$ 50 billion would come from the European Union.

Romania would have spent about \$ 90 billion in the next 20-25 years, from budgetary resources, resulting in about \$ 4 billion per year. This would reduce the ratio between the economic performance of both countries to the level of 1990, ie 1: 1.5, which may be considered an acceptable uniformity. In other words, for the country's reunification without major imbalances, it requires assuming a cost of \$ 4 billion annually for about 25 years. Continuing the current rate of growth, Romania and Moldova's GDP will double in about 20 years. In the case of reunification, the cumulative GDP will have a growth acceleration coefficient, which can generate an average increase of 5 percent annually, conditions that would double the GDP in just 14 years".

According to the source specified above, "the effects of reunification would be very visible in the corporate sector, the market capitalization and the stock index growth rate will double, increasing their absolute values four times in about 20 years. Also, the turnover of the companies will have a growth outlook to at least \$ 15 billion / year as a result of market growth in Romania. In 2014, Romania allocates about 6% of GDP to investment, ie \$ 11 billion, while the national budget is 32% of GDP. In other words, Romania invests one-fifth of the national budget. Four billion dollars annually allocated for reunification would mean about 36% of Romanian investments. Given that the paradigm of budget allocations remains unchanged, the \$ 4 billion over 12 years will represent about 18% of Romanian investments. If we consider the reunified state budget, the sum would represent only 15% of the investment budget, which is less than one-sixth".

Considering that Moldova represents about a sixth of the current Romania, results that will increase the public spending by about 11.6 billion dollars (relating to 2014). If we reduce the expenditure budget of Moldova in 2014, amounting to 2,150 billion, Romania will incur an additional annual cost amounting to \$ 9.465 billion.

### **Conclusions**

We should expect Romania to continue strongly to support Moldova in the economic, educational, cultural and European integration process, but also to continue to be the main international advocate of Chisinau.

The relations between Romania and the Republic of Moldova have witnessed an upward trend during 2010-2015, through intensified cooperation in various fields and in the spirit of supporting Moldova to advance towards European integration.

In recent years, Romania has supported Moldova both economically, through private investment, loans and aid granted by the Romanian state, and cultural and educational, through the financing of various projects in the education field. It is expected the two countries to develop solid bilateral relations in the future, given the intensity of trade and the investments made by the Romanian state or private entrepreneurs in Moldova. The country's eventual accession to the EU would lead to a significant strengthening of the relationship with Romania. However, it is unlikely the accession of Moldova to the European Union in the near future.

Analysing the idea of reunification between the two countries, we came to the general conclusion that the long term benefits of a reintegrated state are higher than the costs, because there will be a plus for growth, an increased value of GDP / capita, due to expansion of the market size and arising geostrategic importance of the reunified state. Even if the costs are quite high, they are sustainable in the context of a state economy.

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