

MATRIX FOR COOPERATION IN THE CROSS-BORDER AREAS

Empirical
studies

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Abstract

The cross-border areas have no constitutional competences, therefore most of the times they are not part of the decision making process in the agreements in cross-border relationships. Although the states are the ones to decide the policies and the agreements based on their own legal rules, considering the shape of the new European Union, they should acknowledge the conditionality of a regional overstate structure linked only to some geographical parts of the countries. The present paper proposes an intuitive frame for assessing the cross-border areas based on the factors that are influencing it, starting from a listing of them, secondly grouping them in factors that support and block the cross-border cooperation, then finding the significant differences. The matrix of factors can be used for conflict resolution or for development of cross-border areas as long as it shows the points that will be a potential obstacle or a source for cooperation.

Borders and Cross-Border Cooperation

International borders prove to have changing economic functions from the traditional view to a new approach in the last decades. The traditional view was associating the borders with barriers to trade, quantitative and qualitative ones meaning that the goods and services flows were passing the borders according to the legal regimes from the two countries that included payment of fees, presentation of documentation and compliance with the regulations, all of them formulated within the national interest. Due to the change of the economic, political and social framework, mostly accelerated in the last years, inside the European Union the borders became less significant as economic barriers, mainly due the negotiation linked to the GATT/WTO and the EU enlargement (Clement, 2006). Therefore the traditional functions of the borders will face some changes in the border regions of the countries. First of the changes will be an increase of the cross-border flow of trade including both the traditional export-import and the informal border transactions, in the internal EU cross-border areas will increase the investments and laborflows, this phenomenon being already noticed between some Member States. The second change will concern the structure of the trade, investments, consumption and employment, in relation with the exchange rate between the countries, mainly when we refer to the relations between the Euro countries and others. The third change will affect the 'location' of some economic activities especially as the tendency to move more to the peripheries where some production factors are cheaper (Clement, 2006). In the framework of the agreements signed with some of the partner countries, in this case, Eastern EU border countries, it can be the opportunity to decrease the trade costs in case of moving the operations near to the Eastern border or even in the neighbouring countries. The globalization process can shift the role of

border areas from peripheries of economic activity to attractors of new industries or of expansion of existing ones, leading to economic development of the region (Clement, 2006).

Nevertheless there is a distinction between two main situations: the borders between Member States and the borders between EU and neighbouring countries. In the first case the communities in the border regions can explore together through collaboration the development of policies and possible solutions or scenarios for common challenges. In the second case there is encouraged as well the common exploring and policy shaping but there is a supplementary factor that can affect trade and economic activities, namely the Schengen Treaty provisions that imply the respect of strict rules for the signatory states in what concerns the border inspection and control for goods and people. In this second case, no matter the economic potential of the cross-border region and the will for collaboration, the border ruling will be a brake, though a necessary one (Clement, 2006).

The cross-border cooperation shows good effects for the border regions such as the economy of scale, the negative externalities and the transaction costs. Clement notices that the cross-border partnership mechanisms could be informal or formal and the relationship between the partners can vary from peaceful coexistence to partners in development and even in case of strong cross-border cooperation still there are issues for competition such as attracting tourism and new investments (Clement, 2006).

The cross-border cooperation faces also some challenges that should be taken into consideration (Krämer, 2011). The first ones are the mental challenges such as preconceptions, stereotypes and tensions accumulated during years. The gap is due to the lack of common positive memories or the focus of negative memories. A good starting point to overcome this challenge would be to build common reference

points by common borderland memory, experiences and identity. The second type of challenges is represented by the social and economic differences, meaning the one between the Western part and the Eastern part. What was Eastern at a moment became Western by westernization and the border moves because the gap moves. The distance and periphery is the third challenge to which is added the presence of physical-geographical forms that are usually creating the impression of border as dividing line.

In the exploration of the implications of policies shaping and the decision making process that concerns the border regions and the cross-border collaboration, Wright and Pavlakovich (Wright & Pavlovich-Kochi, 2006) sum up a number of key points that should be included by the partner countries in their partnership. The first and one of the most important ones is the regionalized decision making in order to realize the potential of economy of scale, manage the negative externalities effects and decrease the transportation costs as part of transaction costs in the economic activity. The continuous changes in the economic framework and processes at different levels, national, European and worldwide affect the cross-border regions and as a consequence impose flexibility in the approach of the cross-border partnership. On the other side there is need for understanding the complexities of the border regions and to reflect them in the shaping of the economic development strategies. Another two key points are the incorporation of the local knowledge, the residents and local government experience in dealing with cross-border issues being a consistent one, and the importance of the catalyst, the capacity of local decision-making factors being a good support in the coordination of the economic strategies in the cross-border area. Regional cross-border programs should respect the regional specificities that sometimes

require targeted cooperation interventions and as important as this is the recognition of the historical experience by the higher level decision making bodies, national or European. Not the last as importance, in the policies shaping and cross-border decision making processes it should be considered the building of comprehensive policy frameworks, addressing to the region's structural problems, and the monitoring the context-specific effects, making easier to track the changes in the region structures and to re-shape the policies if needed.

The frame of the matrix

Beside the literature approach we consider at a first stage two levels of cross division of the factors that are influencing the cross-border areas. A first division is in *classic factors* - the number and weight of SME's in the area, GDPs on the different side of the border, unemployment rates, etc., *specific factors* - the border permeability, interculturality degree, number and depth of the historical conflicts, the distance from the main economic centre, etc. and *new factors* - existing cooperation initiatives, euroregion structure, institutional cooperation. The second level of division is in *country factors* - the number and weight of SME's, GDPs, unemployment rates, FDI, the visa regime, and *regional factors* - the border permeability (lengths, no. of crossing points, no. of people crossing/day, etc.), interculturality degree (no. of spoken languages, no. of religions, no. of schools with teaching in minority language, nationalities/citizenship, no. of institutions/NGOs of other culture than the country majority, number and depth of the historical conflicts/main events, the distance between the border and the main economic centre, population density and as possible to access, the regional values of the country factors (except for Republic of Moldova). Some of the factors can be quantified and identified in statistical databases but for some of them there is

need to find a form of scaling or other form of quantification.

In the setting up of the matrix we decided to work on two areas: a theoretical one and a field research one. The first one it means to make an inventory of as largest as possible range of factors that are influencing the cross-border areas, then to proceed to the division as previously described and to find quantifying methods for all of the factors. The second one is based on surveys among experts and stakeholders involved in the cross-border cooperation and it makes different hierarchies of factors that are contributing or blocking the cross-border cooperation.

As a getting together of the results of the work on the two areas we intend to regroup the factors in *bridge-factors* – factors that help connecting and cooperating and there are helpful in developing strategies for the cross-border areas, and *wall-factors* – factors that are difficult to overcome in terms of their effects. Also we want to identify the factors with long/medium/short term hysteresis (Slusarciuc & Prelipcean, 2012) and to define an acceptable gap for each factor.

Only after these steps we will be able to build the matrix of the factors and the matrix of the gaps between the values of the same factor on the countries/regions that share the border. Then we should set up the acceptable value for the gap for each factor and to identify the extreme values for the gaps in the matrix, the sensitive factors being the ones with high gaps. From the same matrix we can identify the *start-factors* (used as flags) – as factors from which the development /the strategy/the negotiation can start as base and *the brick-factors* the ones that could be worked on for the decrease of the gap and on which the actions plan will be built.

In the following section we will present the endeavours we made on the second area – the field research with the mention that the stakeholders' survey is

on-going and the presented findings are preliminary.

Field research

For the field research we decided to focus on Romania-Ukraine-Republic of Moldova cross-border area that consists of the following administrative units: in Romania, the counties of Suceava, Botosani, Iasi, Vaslui, Galati, and Tulcea, in Ukraine, the oblasts of Odessa, and Chernivetska and in Republic of Moldova, the whole country. The first research attempt was a survey addressed to the experts in cross-border cooperation with a good representativeness both geographically and institutionally. The second research attempt is work in progress and it is a survey conducted together with the Regional Office for Cross Border Cooperation Suceava for Romania-Ukraine Border (RO CBC Suceava). The survey addresses to general stakeholders involved more or less in the cross-border cooperation but with potential of future involvement. In case of these we will assure the geographic representativeness and the institutional representativeness it is assured for the administrative units where we already made the survey, namely Botosani and Suceava counties.

Both surveys contain more questions but for the present paper we consider only the pair questions about the factors affecting the cross-border cooperation.

1. Methodology

In the case of these questions we prepared distribution matrixes that can be found in appendices, highlighting gradually the number of answers depending on the intervals. The number and size of the intervals depended on the number of items that should be hierarchized and there were calculated using the following formula:

$$N/i=s$$

where N is the number of questionnaires (31 in case of the experts survey and 77 in case of the on-going survey among the stakeholders), i is the number of items that should be hierarchized and s is the size of the interval, with use of natural values only. For example, in case of the first question about factors, there are nine items to be hierarchized, with two open items, also the number of intervals is ten and the size of the interval is three. For each question the interval is mentioned after the matrix. In some of the cases, because of large spread of answers in the matrix, without clear hierarchy, we considered the application of a supplementary method of ranking, using a total score calculated by the formula:

$$TS_i = \sum_{j=1}^n q_{ij} \times (n - j + 1)$$

where TS_i is the total score for the item i , n – the total number of items that should be hierarchized, except the open items, j – the place in hierarchy (or the rank) and q_{ij} the number of answers that placed the item i on the rank j .

2. Experts survey

In August 2013 we made a first step in order to test the tendencies that consisted in a survey based on a questionnaire applied to 31 experts covering three dimensions: a vertical one, meaning that they work at local, regional and national level, a horizontal one, namely they are experts from all three countries, Romania, Ukraine, Republic of Moldova, and a field coverage, meaning that they are from public administration (ex: county councils, cities administrations, regional development agencies), nongovernmental organizations, research organizations (universities) and business field (chambers of commerce and industry, business support organizations). In our research we decided to have an expert questionnaire based on which we made hierarchies questions, built as for the

Delphi method (Grisham, 2009), being applied just to figure out the central tendencies and to find other contributions that can be useful for the identification of new factors.

The applied questionnaire had a gradual approach, from general cross border issues, going to aspects of previous and actual cross border financial instruments contribution in the research area, then aspects regarding the structure of the actual programme (institutional, documents and process) and finally the partnership issue that is essential for building any cross border instrument. The findings of the entire survey are described in another research paper (Slusarciuc & Prelipcean, 2013). Inside the questionnaire there are two questions that are asking the experts to make hierarchies among factors, a set of building factors and a set of blocking factors.

One error that we had to deal with in case of the answers for these hierarchic questions was that some of the experts did not rank some of the items, possible to consider that the ‘unranked’ item was not relevant for the topic of the question. In this case in the database the answer was counted as ‘0’ value but it was counted in the number of answers.

The first question relevant for the factors that are influencing the cross-border area was to make a hierarchy of the factors that contribute to the development of the cross border cooperation in Romania-Ukraine-Republic of Moldova area, namely the existence of common values (1), identification of common trade and economic issues (2), visa facilitation (3), management of the population migration (4), people to people contacts (5), contacts between institutions and local/regional administrations (6), political cooperation (7), financial cooperation (8), need for investments (9). The number of intervals was ten and the size of the interval was three.

We noticed that the hierarchy of the factors that contribute to the

development of the cross border cooperation in Romania-Ukraine-Republic of Moldova area, starting with the one with the highest importance till the one with lowest importance, is very clear as far as the first two places are concerned, namely the factors that contribute the most to the development of the cross border cooperation in the research area, the existence of common values and contacts between institutions and local/regional administrations. For the rest of the hierarchy we had to apply a supplementary method of differentiation, the one of total score.

The order of items in the experts view was: **the existence of common values, contacts between institutions and local/regional administrations, identification of common trade and economic issues**, people to people contacts, need for investments, political cooperation, visa facilitation, financial cooperation and last, management of the population migration.

For the open items as factors that are contributing to the development of the cross-border cooperation there were four proposals, namely the overcoming of negative stereotypes, the right behaviour at the border crossing point, the harmonization of the legal frame and tourism.

The other question was to make a hierarchy of the factors that block the development of the cross border cooperation in Romania-Ukraine-Republic of Moldova area, namely existence of different legal systems (1), membership to different supranational structures (EU Member State/EU Partner Country) (2), economic gaps (3), historical events (4), language differences (5) and territorial disputes (6). The number of intervals was six and the size of the interval was five.

We noticed that the hierarchy of the factors that block the development of the cross border cooperation in Romania-Ukraine-Republic of Moldova area, starting with the one with the highest

importance till the one with the lowest importance, was very clear, namely the factors that block the most the development of the cross border cooperation in the research area: different legal systems, membership to different supranational structures (EU Member State/EU Partner Country), economic gaps, language differences, territorial disputes and historical events. In case of applying the total score for hierarchy, the ranking was the same.

For the open items as factors that are blocking the cross-border cooperation there were five proposals of factors that block the cooperation, namely the visa issues, the wrong behaviour of the officers at the border crossing point, the lack of common strategies for economic and social cooperation, the lack of short and medium term plans for the implementation of those strategies and the excessive duration of the projects assessment.

3. Preliminary results of the on-going survey

In November 2013, under coordination of RO CBC Suceava, it started the survey of stakeholders, by now being applied 77 valid questionnaires, in Suceava and Botosani counties, covering the dimension of field, meaning that they are from public administration (ex: county councils, cities administrations, county institutions), nongovernmental organizations and business field (chambers of commerce and industry, business support organizations). The main topic of the questionnaire is about the development needs of the cross-border area between Romania and Ukraine and the pair of questions relevant for this paper is focused on the factors that support or block the cross-border cooperation between Romania and Ukraine.

We had to deal with the same error as in the case of experts' survey meaning that some of the stakeholders did not rank some of the items, possible to consider that the 'unranked' item was not relevant for

the topic of the question. In this case in the database the answer was counted as '0' value but it was counted in the number of answers.

The two questions about factors are similar as in the case of experts only that the list of factors registers few differences. The first question about the factors that are influencing the cross-border area was to make a hierarchy of the factors that support the cross border cooperation in Romania-Ukraine area, namely the facilities in getting the visa (1), contacts and partnerships between public institutions and local/regional administrations (2), people to people contacts (3), identification of common economic issues and development of local/regional strategies (4), need of investments in common interest areas (5), common values (6). The number of intervals was seven and the size of the interval was eleven.

We noticed by now from the work on data that the hierarchy of the factors that support the cross border cooperation in Romania-Ukraine area, starting with the one with the highest importance till the one with lowest importance, is not very clear as concerns the distinct differentiation in terms of number of answers that place a factor on a distinct position in hierarchy. Therefore we have to apply a supplementary method of differentiation, the one of total score.

The order of items in the stakeholders view was: **identification of common economic issues and development of local/regional strategies, contacts and partnerships between public institutions and local/regional administrations, need of investments in common interest areas**, people to people contacts, facilities in getting the visa, common values.

The other question is to make a hierarchy of the factors that block the cross border cooperation in Romania-Ukraine area, namely membership to supranational structures (EU Member State/EU Partner

Country) (1), lack of local/regional strategies (2), political instability (3), major economic gaps (4), significant differences between the political and administrative systems of the two countries (5) and communication difficulties (6). The number of intervals was seven and the size of the interval was eleven.

We noticed by now from the work on data that the hierarchy of the factors that block the cross border cooperation in Romania-Ukraine area, starting with the one with the highest importance till the one with the lowest importance, is not very clear, the distribution of answers being no very focused, therefore we had to apply a supplementary method of differentiation, the one of total score. The ranking by now of the factors that block the cross border cooperation in the research area is: lack of local/regional strategies, political instability, membership to supranational structures (EU Member State/EU Partner Country), significant differences between the political and administrative systems of the two countries, major economic gaps, and the last communication difficulties.

Conclusions and future steps

Comparing the results of the experts' survey with partial results of stakeholders we can notice few differences in hierarchy in case of few factors. Still there is too early to have straight conclusions in terms of these differences as long as the stakeholders' survey is still ongoing.

The proposed steps are linked to both areas to set up a matrix model: the theoretical one and the field research one. Therefore it means to make an inventory as largest as possible of range of factors that are influencing the cross-border areas, then to proceed to the division as described in the section *The frame of the matrix* and to find quantifying methods for all of the factors. The field research should be continued and prepare the final analysis

report and then to compare with the findings from the experts answers.

As a fructification of the results of the work on the two areas we will regroup the factors in *bridge-factors* and *wall-factors*, we will identify the factors with long/medium/short term hysteresis because they can have impact on long/medium/short term strategies and we will define an acceptable gap for each factor.

After these steps we will be able to build the matrix of the factors and the matrix of the gaps between the values of the same factor on the countries/regions that share the border. From the matrix we will identify the *start-factors* and the *brick-factors* in order to start the development strategy on which the actions plan will be built.

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Appendices

Appendix A
Experts' survey

Table no 1.

Matrix of answers - hierarchy of the factors that contribute to the development of the crossborder cooperation in Romania-Ukraine-Republic of Moldova area

The place that experts chose for each factor	The factors									
		1	2	3	4	5	6	7	8	9
	1	12	3	3	0	7	3	1	1	4
	2	3	4	3	0	5	13	2	1	3
	3	6	7	3	1	1	5	3	3	2
	4	4	3	0	2	3	5	5	2	7
	5	0	7	2	4	3	0	5	8	3
	6	3	3	5	1	4	1	5	4	3
	7	1	3	6	7	3	1	2	5	3
	8	1	0	4	8	4	2	3	3	2
9	0	1	5	8	1	1	4	3	2	

Source: own work

Example: 12 experts placed the first factor from the list on the first place as importance, 3 experts placed the second factor from the list as first as importance, 6 experts placed the first factor from the list on the third place as importance, etc.

1-3	4-6	7-9	10-12	13-15

The legend of shade depending on scale, where the maximum number of choices given on an item is 13.

The total scoring for clear differentiation is:

Factor	1	2	3	4	5	6	7	8	9
Total score	215	183	133	88	177	208	137	130	158

Table 2.

Matrix of answers - hierarchy of the factors that block the development of the crossborder cooperation in Romania-Ukraine-Republic of Moldova area

The place that experts chose for each factor	The factors					
	1	2	3	4	5	6
1	14	7	2	1	2	6
2	6	12	4	5	0	2
3	5	6	14	1	3	1
4	3	2	6	5	10	4
5	2	2	3	11	9	4
6	0	2	2	6	7	9

Source: own work

Example: 14 experts placed the first factor from the list on the first place as importance, 7 experts placed the second factor from the list as first as importance, 5 experts placed the first factor from the list on the third place as importance, etc.

1-5	6-10	11-15

The legend of shade depending on scale, where the maximum number of choices given on an item is 14.

The total scoring was:

Factor	1	2	3	4	5	6
Total score	147	138	114	78	79	79

Appendix B
Stakeholders survey – partial data

Table no 3.
Matrix of answers - hierarchy of the factors that support the crossborder cooperation in Romania-Ukraine area

The place that stakeholders chose for each factor	The factors					
	1	2	3	4	5	6
1	9	21	5	21	17	4
2	8	15	7	19	17	9
3	7	20	16	15	14	0
4	15	9	21	11	6	8
5	20	6	17	7	12	9
6	13	1	1	0	5	34

Source: own work

Example: 9stakeholders placed the first factor from the list on the first place as importance, 21 experts placed the second factor from the list as first as importance, 7 experts placed the first factor from the list on the third place as importance, etc.

1-11	12-22	23-33	34-44

The legend of shade depending on scale, where the maximum number of choices given on an item is 34.

The total scoring for clear differentiation is:

Factor	1	2	3	4	5	6
Total score	220	321	227	328	290	145

Table 3.

Matrix of answers - hierarchy of the factors that block the crossborder cooperation in Romania-Ukraine area

The place that stakeholders chose for each factor	The factors					
	1	2	3	4	5	6
1	20	21	20	4	5	6
2	9	20	11	7	18	10
3	12	11	15	9	15	9
4	11	9	10	20	10	11
5	6	8	13	18	16	7
6	11	1	2	11	5	22

Source: own work

Example: 20 experts placed the first factor from the list on the first place as importance, 21 experts placed the second factor from the list as first as importance, 12 experts placed the first factor from the list on the third place as importance, etc.

1-11	12-22	23-33	34-44

The legend of shade depending on scale, where the maximum number of choices given on an item is 21.

The total scoring was:

Factor	1	2	3	4	5	6
Total score	269	314	293	202	247	191