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Rural areas in transition: an introduction

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Rural areas are often negatively associated with backwardness in terms of income and employment opportunities, a worsening of services of general interest, the migration of young, skilled people, and a low population density. Although rural areas are not homogeneous and their specific characteristics can differ across countries, but also within a country, rural development poses challenges to public and private actors in all countries. Despite heavy public investments to foster rural economies and improve quality of life in some countries, the best suited policy measures are still under debate, as is the role public, private and collective action should play and how the regions affected will develop in the future.

Against this background the IAMO Forum 2013 was entitled "Rural Areas in Transition: Services of General Interest, Entrepreneurship and Quality of Life". This conference was jointly organised by the Leibniz Institute of Agricultural Development in Transition Economies (IAMO, Halle (Saale), Germany) and the Thünen Institute of Rural Studies (Brunswick, Germany) to provide a platform for academic exchange focusing on future risks and opportunities facing rural areas in the transition economies of Eastern Europe, the former Soviet Union, and Asia, as well as to discuss the opportunities for public and private actors to shape living conditions in these areas. The challenges discussed in the conference covered a wide range of issues, from inadequate infrastructure and declining service provision, low employment and income growth, poor education and training, to higher poverty levels compared to urban areas. Given the rural quality of life and economic prospects, these problems lead to high rates of out-migration, especially among the young, working-age population.

This special issue consists of six selected articles covering a variety of challenges facing rural areas in different regions of Eastern Europe, as well as a variety of methodological approaches that authors used in their studies. Whereas the first three papers focus on collective action approaches in rural development, the fourth paper compares two evaluation methods.

The remaining two papers centre on innovative forms of agricultural marketing and migration. By presenting different examples from East Germany, Romania and Ukraine, the authors examine how the involvement of local authorities and private actors, as well as the design of the projects and policies, can contribute to community-led local development.

More specifically, *Pollermann, Raue and Schnaut* explore opportunities for a **participative approach in rural development** against the background of **East German** historical developments. Based on a comparison of LEADER projects across seven German federal states, the authors analyse the implementation of projects in Mecklenburg-West Pomerania. Two criteria, a) participation, indicating the involvement of local actors, and b) innovation, expressing the degree of application of new approaches, form the foundation of the comparison. Data for Mecklenburg-West Pomerania, a region with a comparatively low per capita income and declining population density, are put in relation to four federal states in West Germany. Generally, results do not suggest great differences across the states analysed. However, Pollermann and coauthors point to the fact that in Mecklenburg-West Pomerania local authorities and the public sector play a slightly stronger role. They conclude with a number of recommendations to arrive at broader and more integrative local strategies.

To get a better understanding of the functioning of an innovative alternative approach for filling the gap in local food marketing that emerged after the breakup of collective agriculture, *Möllers and Birhala* analyse **Community Supported Agriculture** (CSA) projects in **Romania** and explore their potential as a pathway for small family farms in Eastern Europe. In CSA projects consumers pay farmers a fixed fee and receive agricultural products on a regular basis. Data from three subscription CSA projects collected in Timisoara form the empirical base. Consumers have been interviewed as well as farmers. Producers name market access and the beneficial effects of organic agriculture as their most important motives. For consumers, the expectation of positive health effects and the desire for organic food rank as most

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important motives. However, the authors clearly indicate that consumers, as well as the three farmers participating in the CSA cases analysed, are not representative for Romania. The farmers interviewed had no traditional farming background and enjoyed above average education. Similarly, among the consumers interviewed the share of household members with higher education lies far above the national average. Möllers and Birhala conclude that CSA might represent a viable strategy for small farm households with sufficient labour force located close to urban centres, especially if organic supply chains are mostly oriented towards export.

In the third paper, *Kvartiuk* looks at the non-profit options for delivering public goods, that were previously the responsibility of ex-Soviet collective farms. In his paper, Kvartiuk investigates the conditions in rural **Ukraine** that would promote the effectiveness and sustainability of **community-based organizations** (CBOs). Based on the qualitative data from semi-structured interviews with development experts and local officials, as well as several community case studies in Kyiv oblast and the Autonomous Republic Crimea, the issues of the relationship between CBOs and local governments and the members' contributions to community development funds are investigated. Particular emphasis of the study is placed on the role of external funding and facilitation of local collective action. The results suggest that the competition among local communities for funding opportunities along with sufficient information flow about grant programs and the implementation of awareness-raising and educational measures about the third sector organizations can contribute to the sustainability of local community-based development.

In their paper, *Meurs and Kochut* investigate the conditions that would contribute to improved outcomes of **local governance performance** under decentralization in rural **Poland**. Using a survey data of rural municipalities in a simple OLS (ordinary least squares) regression the authors examine the relationship between the governance outcomes and the characteristics of rural municipalities such as skills, mechanisms of accountability, and inherited conditions. The study results demonstrate that there is a link between some measures of local government accountability and skill, such as voter turnout, communication with businesses, and securing EU support for projects, although this relationship is not consistent across time and outcomes. The link between government actions and performance is weakened by the strong association with the factors outside the local government control such as location, inherited infrastructure, levels and types of economic activity, and previous performance. Since their findings show that the location and historical conditions can outweigh the government actions, the authors conclude that continued income transfers from central to local governments are needed to mitigate uneven outcomes under decentralization.

Taking a more methodological focus, *Marquardt and Pappalardo* explore strategies to evaluate integrated endogenous **rural development and partnership innovations.** Due to their local specificity and complexity, evaluations of these innovations often rely on qualitative methods and cannot be easily compared across projects. After an extensive review of existing evaluation approaches Marquardt and Pappalardo suggest two approaches based on Multiple Criteria Decision Analysis and Social Network Analysis. The authors present the strengths and weaknesses of both approaches and show that both approaches are preferred to other evaluation methods, as the two methods produce vertically and horizontally comparable quantitative evaluation results. The high demand on data could be mentioned as a drawback.

Török in her paper investigates the changes in **spatial differentiation of migration flows in Romania.** To investigate a spatial pattern of migration flows and to analyse the neighbourhood effects in shaping the migration patterns, the study applies spatial autocorrelation techniques using settlement-level data of net migration. Two migration phenomena are distinguished covering different time periods. The first period, 1990 to 1996, is characterised by rural-urban East-West migration mainly due to the economic restructuring in rural areas. A different migration pattern is observed in the second period investigated, 1997 to 2011, when urban-rural remigration prevailed due to the industrial restructuring leading to urban job losses and a reverse process of the wealthier population moving to suburban places. The analysis shows that the aging population and its low natural increase, along with the underdeveloped economic sectors can enhance the degree of co-influence of neighbouring settlements on their migration rates. In conclusion, the study points out that in addition to infrastructure development, promotion of the tourism sector and attracting foreign direct investments, it is important to take into account the negative spill-over effects resulting from increased out-migration flows.

These six studies present only a few examples of the challenges of rural development in the post-socialist transition countries. Yet, they share the clearly accentuated message that examining the rural quality of life and economic development in the post-socialist regions requires the consideration of a broad range of development goals: from fostering the provision of public goods to rural entrepreneurship, not merely improvement of physical infrastructure or incentives for agricultural producers[1]. Overall, by providing a better understanding of the issues of rural development, the papers in this special issue conclude that the targeted challenges are complex, due, for instance, heterogeneity of rural areas, and further research should take these complexities into account to derive policy options on how to best foster rural economic growth and the quality of life.

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[1]   For a discussion of the role of agriculture for rural development in Central and Eastern Europe see, e.g. the proceedings of the IAMO Forum 2003 (Petrick and Weingarten, 2004) and Wolz et al. (2012).

Opportunities for a participative approach in rural development: Findings from LEADER in Mecklenburg-Vorpommern and the requirements for Community Led Local Development

Kim Pollermann*, Petra Raue* and Gitta Schnaut*

Abstract

The challenges in rural areas in Mecklenburg-Vorpommern raise the question of how to find appropriate policy interventions specifically in transition countries. One approach to move rural development forward is LEADER. LEADER is a bottom-up participatory approach that uses regional budgets to fund projects. There is a long history of LEADER-implementation. Especially in the current funding period a limited bottom-up participation and a lack of innovation are prevalent. To discuss the question of appropriate policy interventions, experiences in Mecklenburg-Vorpommern and a comparison with LEADER-experiences in western Germany will be examined. Therefore, the findings of the evaluation of Rural Development Programs (RDPs) in seven federal states in Germany are used.

Overall, the results show that the LEADER approach is working in Mecklenburg-Vorpommern. Historical patterns are visible in some areas: for example, in differences in participation structures (fewer working groups, but a higher proportion of female LAG-members than in western Germany). However, the problems for funding innovative projects were common, and the shortcomings are clearly not only a problem in Mecklenburg-Vorpommern. To use the original and intended strengths of the LEADER approach, a more flexible funding structure, which is oriented on the region's own goals, is recommended.

Keywords: *LEADER, rural development, participation, Mecklenburg-Vorpommern, Germany*

Zusammenfassung

Möglichkeiten eines partizipativen Ansatzes zur ländlichen Entwicklung: Erkenntnisse aus LEADER in Mecklenburg-Vorpommern und Anforderungen an eine „Gemeinschaftsgeführte Lokale Entwicklung"

Die Herausforderungen in den ländlichen Räumen Mecklenburg-Vorpommerns werfen die Frage nach passenden Politikmaßnahmen für die spezifische Situation der Transformationsländer Mittel- und Osteuropas auf. Ein Ansatz der ländlichen Entwicklung ist LEADER. LEADER ist bottom-up orientiert und verfügt über ein eigenes regionales Budget zur Projektförderung. Es gibt eine lange Geschichte von LEADER, wobei Defizite hinsichtlich einer wirklichen bottom-up Beteiligung und Innovation insbesondere in der aktuellen Förderperiode beschrieben werden. Um die Frage nach passenden Politikmaßnahmen zu diskutieren, werden Erfahrungen aus Mecklenburg-Vorpommern und ein Vergleich mit den LEADER-Erfahrungen westlicher Bundesländer einbezogen. Hierfür werden die Ergebnisse der Evaluierung Ländlicher Entwicklungsprogramme genutzt.

Insgesamt wird deutlich, dass der LEADER-Ansatz auch in Mecklenburg-Vorpommern funktioniert. Historisch bedingte Prägungen zeigen sich zum Beispiel als Unterschiede in der Partizipation (weniger Arbeitsgruppen, aber ein höherer Frauenanteil als in westdeutschen Ländern). Einschränkungen, innovative Projekte fördern zu können, sind eindeutig nicht nur in Mecklenburg-Vorpommern ein Problem. Um die ursprünglichen und beabsichtigten Stärken des LEADER-Ansatzes zu nutzen, wären insbesondere flexiblere Fördermöglichkeiten von Projekten für die Lokalen Aktionsgruppen erforderlich (mit einer Orientierung an den eigenen Zielen der LEADER-Regionen).

Schlüsselwörter: *LEADER, Ländliche Entwicklung, Partizipation, Mecklenburg-Vorpommern, Deutschland*

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1 Introduction

1.1 Challenges in rural areas: the example of Mecklenburg-Vorpommern

Challenges in rural areas differ between countries and regions. Some areas grow while others suffer severe losses of population (Ferry and Vironen, 2011). In rural areas in eastern Germany (parts of the former German Democratic Republic, GDR), there are on-going societal transformations. These are connected to the post-socialist transition and are chiefly demographic changes that pose challenges for the economic development and quality of life in the social, environmental and economic dimensions. Against the background of general structural changes, the diversification of rural employment is a key issue for rural livelihoods in transition (Möllers et al., 2011).

The on-going demographic change is also a key issue for rural development in Eastern Germany. A major challenge, especially in Mecklenburg-Vorpommern, is the population decline and aging population in many rural areas. A further reduction of the population is expected in most regions. For rural counties in Mecklenburg-Vorpommern, this can mean a further loss of between 4 % and 35 % of the population from 2009 to 2030 and in deprived parts of such counties the loss will be even higher (Staatskanzlei Mecklenburg-Vorpommern, 2011). These losses reinforce economic problems and threaten the long-term provision of local services of general interest, which are crucial for the quality of life in rural areas, but are difficult and expensive to maintain in areas with low population density. Mecklenburg-Vorpommern already has the lowest population density of all federal states in Germany. Additionally, the out-migration can devitalise volunteer activity, especially because young and active people are leaving (Wellbrock et al., 2012). Moreover, women are leaving Mecklenburg-Vorpommern in greater numbers than men (Staatskanzlei Mecklenburg-Vorpommern, 2011). Migratory flows and an aging population are producing 'place-based' challenges, which require 'place-based' responses. The challenge is not necessarily the demographic change itself, but rather finding appropriate policy responses to maintain balanced regional development (Ferry and Vironen, 2011: 12). To discuss strategies for the support of rural areas in Mecklenburg-Vorpommern, historical patterns, such as the tradition of top-down provision of services, as well as a top-down tradition of policy-making with few possibilities for political participation before 1989, have to be taken in to account.

1.2 Policy interventions: LEADER and Community-Led Local Development

Long-term strategies are required for adaptations to these present and future challenges. Thus, the commitment and creativity of the local residents are crucial strategic success factors for planning processes (Pollermann, 2007) and play an important role for the development and viability of rural areas. Related policy interventions must be able to address very different problems because the need for support is highly context dependent (Tovey, 2008; Wellbrock et al.,

2012). So finding appropriate policy interventions in transition countries is a major issue. Overall, an integrated approach seems to contribute more to a highly complex tasks, such as influencing rural development, than approaches focused solely on individual sectors (Tomaney, 2010; Terluin, 2003). Rural development policy is related to economic welfare through diversification, the provision of basic services, social infrastructure or the natural and cultural environment (Grieve et al. 2011).

As one axis of the European Agricultural Fund for Rural Development (EAFRD), the LEADER-approach is one possibility to move rural development forward. LEADER is a participatory approach in rural areas. Different stakeholders come together in a Local Action Group (LAG) as a type of a public-private partnership to make decisions about financial support for projects. Those groups collaborate on the basis of an integrated local development strategy. There are 13 LEADER-Regions in Mecklenburg-Vorpommern dealing mainly with tourism, village renewal, basic services and other aspects of quality of life.

One objective of LEADER is to bring public, private and civil organisations together to cooperate. LEADER is also considered from the perspective of assisting the development of regional identities and a common "sense of place" as well as fostering the commitment of local actors (Pollermann et al., 2013). A general assumption of LEADER is that there is added value because of better identification with local needs and solutions and an increased capacity for innovation. Further benefits include the pooling of local resources, networking to allow mutual learning and an integrated approach to address complex economic and social issues (High and Nemes, 2007; for a critical view see ECA, 2010).

In the last few funding periods, there was steady increase in the number of LEADER-regions in Europe, and, at least in Germany, it is evident that this gain will continue. For the 2014 to 2020 funding period there were approximately 300 LAGs expected to form in comparison with only 244 LAGs forming in the last period (Wehmeyer, 2014). In addition, the post-2013 EU Structural Funds setting, including the European Agricultural Fund for Rural Development (EAFRD), introduces a new structure for funding instead of current regulations. The new structure uses a Common Strategic Framework (CSF) to provide EU Funds with a set of basic rules that follow general principles including partnership, multi-level governance, equality and sustainability. Now there are common options for the so-called "Community-Led Local Development" (CLLD). After experience with the LEADER-approach, the Commission believes that the support of integrated local development strategies and local action groups can facilitate the sustainable and synergetic implementation of multi-dimensional and cross-sectoral intervention. Consequently, a coherent set of measures can address all EU areas (rural/urban/coastal, etc.) to foster new opportunities, socio-economic benefits, equality, diversification of activities, networking and innovation (Birolo et al., 2012).

However, there are some aspects that hinder the implementation of a multi-fund CLLD. The most important are that in contrast to EAFRD, there is no obligation in the structural

funds (EFRD and ESF) to offer CLLD in member states pro-grammes, and the implementation rules have not been har-monised between the EAFRD and structural funds. So the CSF might have induced a dialogue that could lead to joint approaches in community based rural development post 2020. In the upcoming funding period, the probability for complete harmonisation is quite low. For example, in Germany, only one of sixteen federal states is using a multi-fund CLLD approach (Spuller, 2014).

1.3 Research question and focus of analysis

The main question for this contribution is: how does a bot-tom-up funding structure such as LEADER perform in the context of the historical patterns in eastern Germany? Thus, the focus will be on implementation (rather than on the socio-economic impacts of projects) with two key aspects: participation and innovation. The spatial focus is the federal state of Mecklenburg-Vorpommern, which has some typical conditions of transition countries (economic challenges, demographic change).

Crucial aspects for analysing LEADER are program set-tings and the LAGs own settings. However, focusing solely on the formal rules and regulations of the LAG's neglects the LAG board's actual behaviour and processes. Therefore, in addition to the formal system, an informal system of charac-teristics related to behaviours and attitudes should also be considered (Volk and Bojnec, 2012). The general conditions of different countries play a role in the way LEADER is imple-mented, but local influences can also change with time and in the stages of power relationships. In the end, researchers must carefully analyse different formal and informal policy frameworks, regional conditions and political traditions.

Incidentally, research about the performance of LEADER becomes more important because there will be more LEADER-like implementations in the future. Not only could new EU-countries participate in the new funding period (for example Bulgaria, see Nedelcheva (2013)), but the LEADER principles, in theory, are now usable for "Community-Led Local Development" in other structural funds. Therefore, research based solely on a few case studies would not produce enough evidence.

1.4 State of knowledge in LEADER literature

1.4.1 Diverse inspections with some commonalities

As there is a long history of LEADER-implementation (LEADER first was launched in 1991, followed by LEADER II and LEADER+ (2000 to 2006)), there is broad research experience.

To name only a few users of the LEADER approach from western and southern Europe: England (Bosworth et al., 2013), the Netherlands (Oostindie and van Broekhuizen, 2010), Germany (Böcher, 2008; Pollermann et al., 2013), Denmark (Thuesen, 2010), Spain (Esparcia Perez, 2000), Italy (Nardone et al., 2010) and Greece (Papadopoulou et al., 2011).

In addition to the EU enlargements for the current fun-ding period, there are also research results from transition countries, such as Poland (Fałkowski, 2013), Hungary (Ruszkai and Kovács, 2013; Fekete, 2014; Katona-Kovács et al., 2011), Romania (Marquardt et al., 2012) and Slovenia (Volk and Bojnec, 2012).

There are also some international LEADER-comparisons: between Italy and Finland (Rizzo, 2013), Austria and Ireland (Dax et al., 2013) or Poland, Spain and Scotland (Mose et al., 2014).

In general, there were positive results regarding oppor-tunities for local actors to support approaches tailored to their local areas (Bosworth et al., 2013) or the creation of social capital (Nardone et al., 2010). In earlier funding-periods, such as LEADER+, possibilities for innovation were judged rather positively (Dargan and Shucksmith, 2008).

Altogether, LEADER effects are very different between regions and countries as well as between funding periods. So generalisations are not possible. In addition to positive esti-mations (see for example Bosworth et al., 2013), the assess-ments for the funding period 2007 to 2013 show some nega-tive aspects, which are named quite often in different research contexts. The following two aspects are the most common (Pollermann et al. 2014):

- **Lack of bottom-up participation:** In principle, two factors that weaken the possibility for participation can be distin-guished: a) local political power coalitions and b) top-down influence from central government institutions (Ruszkai and Kovács, 2013). Another problem could be the loss of interest by civil society actors to participate in decisions about projects because of restricted funding conditions. Thus, participation comes in different forms (in decision-making, in project implementation) and with different groups (stakeholders, local population). A key aspect is the composition of LAG boards (Thuesen, 2010; Oostindie and van Broekhuizen, 2010).
- **Lack of innovation:** the LEADER framework and condi-tions indicate a mismatch between desirable local oppor-tunities on the one hand and pre-defined measures and dealing with bureaucracy throughout the process on the other hand (Bosworth et al., 2013). In general, reduced options for innovation are observed (Dax et al., 2013; Volk and Bojnec, 2012, 11; Schnaut et al., 2012). Here, innova-tion is defined as "new approaches" in general, but not solely in the sense of a technical innovation. A "new approach" can also be imported from another region.

Although some of these problems are similar in the distinct countries, in **transition countries,** typical top-down prob-lems seem to have a stronger impact. For example, Fekete (2014) indicates that the LEADER principles in Hungary have been disobeyed in many respects "excessive central gover-nance, political party influence, excessive bureaucracy, the lack of funds financing operation, low level of innovation and scarce local social capital hinder operation predicated on an area-based approach, decentralisation and subsidiarity, part-nership, innovation, integrated measures and networking (jointly: the LEADER principles). Communities play a less-important-than-expected role in the shaping of such spaces" (Fekete, 2014, 86).

However, in some regions in southern European countries, a weak history of collective action is reported, which also causes problems for the participative approach. For example, in Calabria "most actors still work atomistically rather than collectively because of their lack of trust in collective action" (Dargan and Shucksmith, 2008, 287). An observation in Spain was that LEADER was promoting a new 'project class' of technicians who were able to formulate new innovative projects for developing marginal areas, which challenged pre-existing clientelistic power relations and the local political class. During LEADER II, the LAG-staff had considerable freedom to pursue this new approach, and imported a new vision of the territorial approach to rural development. However, as the regional government realised the importance of LEADER, it re-exerted control with the transition to LEADER+. (Dargan and Shucksmith, 2008, 287).

Problems in enabling participation in a bottom-up approach also exist in **western European countries:** a LAG in the Netherlands was seen to be strongly dominated by representatives of professional rural stakeholder organisations, such as municipalities, nature organisations, water boards, farmers' organisations, and tourism organisations (Oostindie and van Broekhuizen, 2010). A dominance of the agricultural sector, also regarding the type of selected projects, was examined in Austria (Dax et al., 2013). For LEADER in Denmark, examinations show that although there is no domination of representatives of public authorities on the boards, the LAG composition is characterised by a biased representation in relation to gender, age, education, main occupation and native country. The inclusion of only individuals with very similar socioeconomic characteristics can provide effective steering. However, this does not support the creation of new solution strategies, for which heterogeneity would be advantageous. (Thuesen, 2010).

Finally, both areas (lack of participation, lack of innovation) seem to be very relevant for LEADER in transition countries so we will discuss related results from Mecklenburg-Vorpommern. In addition to literature review, we will also suggest that it is useful to look at whether such problems are also relevant in Western Europe.

2 Data and Methods

To examine the performance of the LEADER-approach, the findings of the evaluation of six Rural Development Programs (RDPs) in seven federal states in Germany (Hamburg, Hesse, Mecklenburg-Vorpommern, Lower Saxony together with Bremen, North Rhine-Westphalia and Schleswig-Holstein) were used. The evaluation began in 2007 and accompanied programme implementation during the whole funding period (final report will be in 2016). The seven Länder incorporate 98 LEADER areas (see Map 1).

A mixture of qualitative and quantitative methods was used with the following main instruments (see also Pollermann et al., 2013):

1. More than 100 face-to-face qualitative interviews with project initiators, LAG managers, LAG members, government employees at different levels (using interview guidelines);
2. Four surveys using written questionnaires:
   ◆ (a) + (b) two for members of the LAG's decision-making bodies in all examined Länder in 2009 (a: N = 2310, n = 1430, response rate: 62 per cent) and 2013 (b: N = 2337, n = 1518 response rate: 65 per cent). In the questionnaires the respondents were asked about decision-making processes and the impacts of their work. Usually, a six point Likert scale was used to classify personal estimations of the LAG members (in some cases, when a middle/neutral rating seems likely, a five point Likert scale). Open questions were used to get information without suggested answers. Distinctions were made between different types of actors, such as private/public, and thematic origins to allow a triangulation of different views.
   ◆ (c) for LAG managers of LEADER areas and other areas with local development plans in 2010 (N = 121, n = 114, response rate 94 per cent) a mixture of general questions about the situation in the region, open questions to grasp more detailed assessments about specific problems and further questions again using Likert scales were included;
   ◆ (d) for beneficiaries of different types of projects, especially for village renewal and tourism in 2012 with additions in 2014 (N = 3346, n = 2639; response rate: 79 per cent for all Länder), the respondents were asked for estimations about funding procedures and the results of their project. For some aspects, open questions were asked
3. Standardised annual requests of activities and organisational structures in the areas (prepared as standardised tables, which the LAG managers filled in and returned);
4. Analysis of funding documents, especially the regulations and guidelines from the EU and the Länder and funding data about the projects.

Participation and innovation are complex concepts, which need context-related operationalisation. In the frame of LEADER-evaluation, a set of criteria was developed to assess participation and innovation. For this article, we will only use a small part of this operationalisation to focus on aspects, which are especially relevant to the research question and to the related focus on specific conditions in transition countries. The entire evaluation concept goes into much more detail: for example, participation is considered more in a governance view (Pollermann, 2013) and there is a deeper insight into innovation preconditions und functionality (Schnaut et al., 2012).

Our operationalisation for participation and innovation is shown in Table 1. There the criteria and corresponding data sources are presented.

The findings are also supported by other sources, e.g., case studies. Where appropriate, a comparison of Mecklenburg-Vorpommern with western Länder will be made. In some cases, all four western Länder (marked as A, B, C, D) of

LEADER

West German federal states

Mecklenburg-Vorpommern

federal state

district

Thuenen Institute of Rural Studies
RDP Evaluation 2007 - 2013
Source: own data.
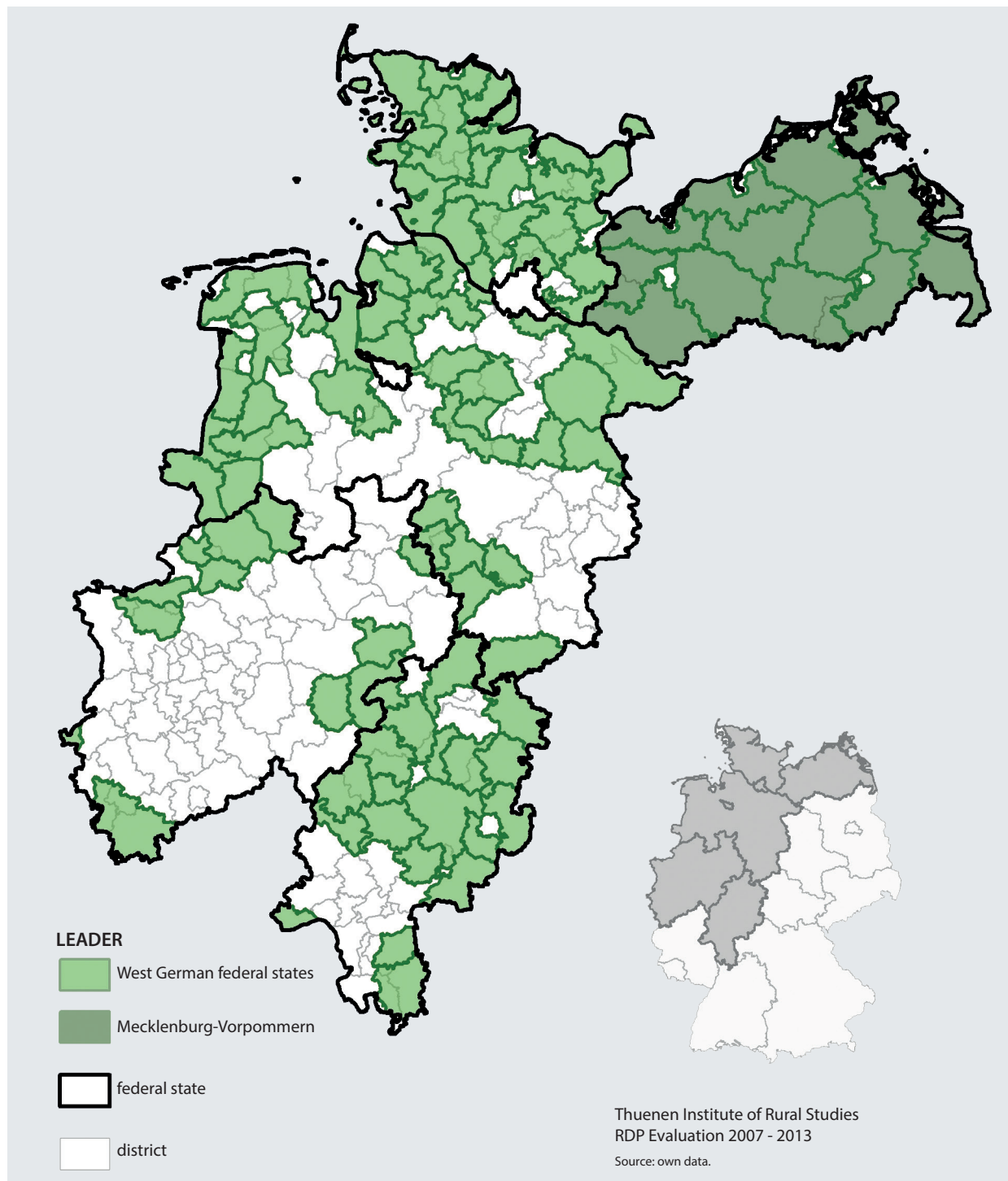
Map 1
Overview: all seven "Länder" (federal states) of the evaluation-project (little map) and all LEADER areas in these federal states (big map)

the evaluation project (the Länder Hamburg and Bremen are not included because there is only one or no LEADER-region, respectively) will be used. In other cases, only selected Länder will be included in the comparison because several aspects of the framework of the different RDPs are not comparable between some of the "Länder".

In addition, aspects that are connected to the assumed added value (like voluntary engagement, innovative projects) of the LEADER approach are elaborated. For certain aspects, there will also be a comparison with non-LEADER approaches to indicate an added value of LEADER.

Table 1

Criteria and main data for the assessment related to participation and innovation in LEADER

Aspect:	Criteria:	Data sources:
Participation (the involvement of local actors)	Preconditions: Suitable **participation structure:** LAG-composition and further participation opportunities	Enumerations: Origin of LAG-members (public sector / non-public sector), size of steering groups, proportion of female LAG-members, number of additional working and project groups
	Implementation of projects (involvement of non-public sector stakeholders as project beneficiaries and volunteer participation in projects implementation as added-value of the LEADER-approach)	Funding data about the proportion of public / non-public project executors and information from project executors (proportion of projects with volunteer participation of all projects)
	Overall contributions for cooperation: regarding cooperation beyond administrative borders and between different groups	Rating by LAG-members (six point Likert scale)
Innovation (as the establishment of new approaches)	Preconditions: Suitable **funding conditions for innovative projects**	Rating by LAG-managers (six point Likert scale) also in comparison with conditions in LEADER+
	Implementation of innovative projects (Added-value from LEADER approach)	Information from project executors (proportion of innovative projects of all projects)
	Overall contribution of (innovative) projects regarding demographic change (as a highly relevant problem field in Mecklenburg-Vorpommern)	Analysis of projects: proportion of projects related to different challenges in demographic change, examples for innovative solutions

3 Main Results

3.1 Participation

3.1.1 Participation structure: LAG-composition and further participation opportunities

Number of participants

The people involved in the LAG participated in periodical strategic meetings or in themed working groups or both. The number of people involved in the working groups per LAG on average in each federal state was between 44 and 108 (Table 2).

Table 2

People involved in working and project groups

	Hesse	Schleswig-Holstein	Mecklenburg-Vorpommern	Lower Saxony	North Rhine-Westphalia
Average Number of people per LAG involved in working and project groups	108	89	44	72	104

(Source: own data, annual requests 2012)

Steering groups, characteristics, differences and similarities

The number of the people in strategic meetings (= decision making bodies) that were eligible to vote was between 7 and 77, with the average meeting size of 21 people (Table 3).

In all the German Länder, the main actors involved in the steering groups were representatives of municipalities and associations (similar to the report from Denmark the typical

Table 3

Members of the steering groups

	Number of members of the steering groups of LAG		
	Maximum	Minimum	Average
Hesse	32	7	13.9
Schleswig-Holstein	27	10	16.7
Mecklenburg-Vorpommern	52	12	21.7
Lower Saxony	53	11	24.1
North Rhine-Westphalia	77	12	26.0
All of the five federal states	77	7	20.5

LAG-member is over 40, male and an academic). In accordance with EU-wide regulation (= maximum of 50 % public actors in the LAG), in the different Länder there were between 52 % and 60 % non-public actors. In fact, Mecklenburg-Vorpommern was one of the Länder with the most non-public-sector actors in the steering group of all the examined Länder (s. Figure 1).

Regarding the size of the LAG-steering groups, there were no distinguishing features between Mecklenburg-Vorpommern and the average western Länder (s. Table 3).

One significant difference between MV and the western German Länder is the level of female participation on the LAG-board. As Table 4 shows, women are more present in eastern than in western LAG-boards. As LAG-members are usually leading representatives of municipalities or associations, it seems that the proportion of women in these positions is higher in MV than in the Western Länder due to a higher integration of females in the working world during GDR times.

(MV = Mecklenburg-Vorpommern; A, B, C, D: western Länder; source: own data 2011).
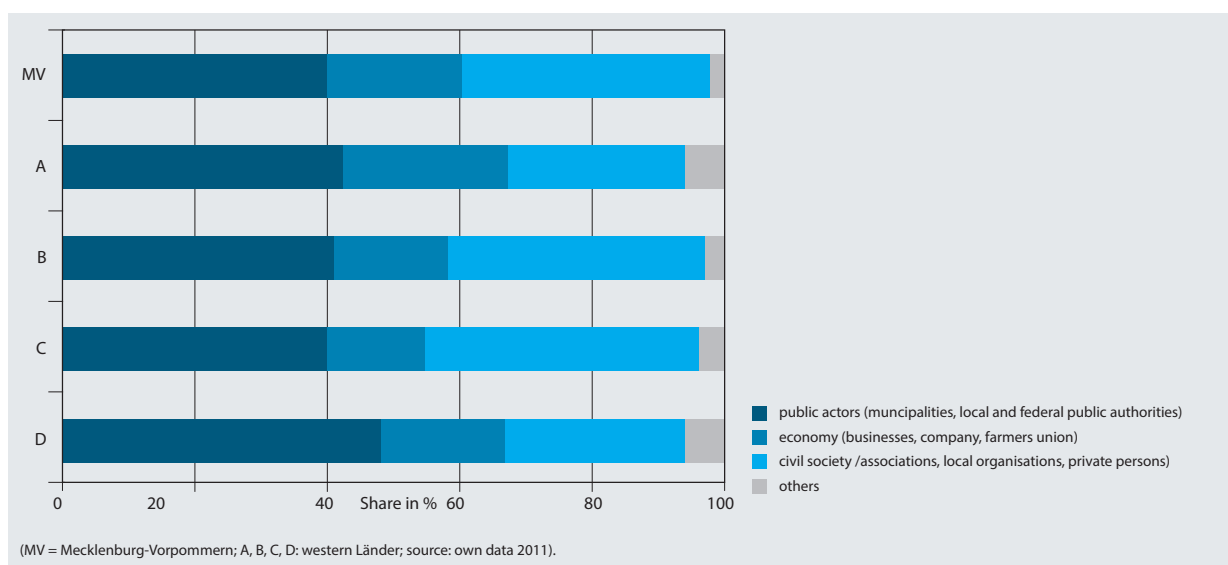
Figure 1
Institutional origin of LAG-members (public sector / non-public sector)

Table 4
Proportion of women of LAG steering groups

	Proportion of women in the steering groups of LAG		
	Maximum	**Minimum**	**Average**
Hesse	50 %	0 %	20.7 %
Schleswig-Holstein	44 %	5 %	20.2 %
Mecklenburg-Vorpommern	78 %	15 %	44.4 %
Lower Saxony	54 %	11 %	29.6 %
North Rhine-Westphalia	33 %	8 %	17.0 %
All of the five federal states	78 %	0 %	26.4 %

In conclusion, by using a participative approach, such as LEADER, many similarities are seen between eastern and western Germany. The most obvious differences are a higher proportion of involved female actors in steering groups and a lower participation in working and projects groups in Mecklenburg-Vorpommern.

3.1.2 Implementation of projects (proportion of non-public sector projects and projects with volunteer participation)

In 2010, there was a predominance of public sector project beneficiaries in not only in MV but also in western German

(Source: funding data 2007 to 2010).
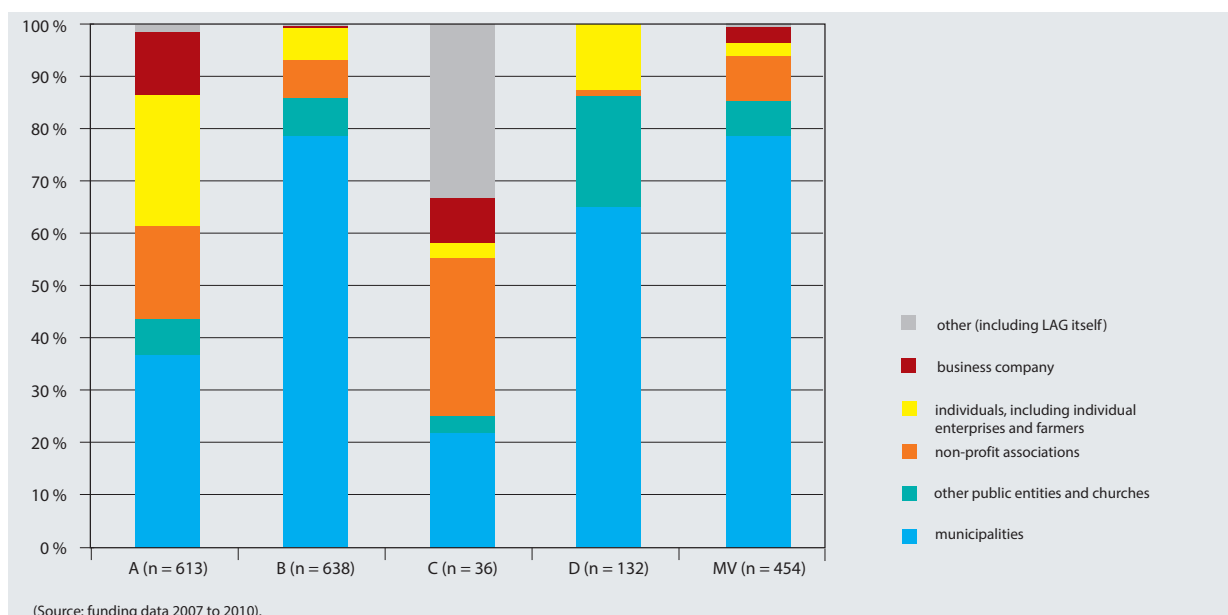
Figure 2
Proportion of different types of beneficiaries

Länder, such as B or D (see Figure 2). The main reason for this was the funding conditions, which included rules for national co-financing (the EU-financial means have to be supplemented by a national co-financing). In the Länder where there was co-financing through local parishes and counties (instead of a co-financing from the Länder) there was a low percentage of non-public beneficiaries.

Problems that arise from the strong influence of agriculture, such as in Austria, do not exist in Mecklenburg-Vorpommern because in all examined Länder, the proportion of agricultural projects is low and usually the LAG decision-making bodies contain no more than one or two actors from agriculture.

(Source: survey of project beneficiaries[1]).
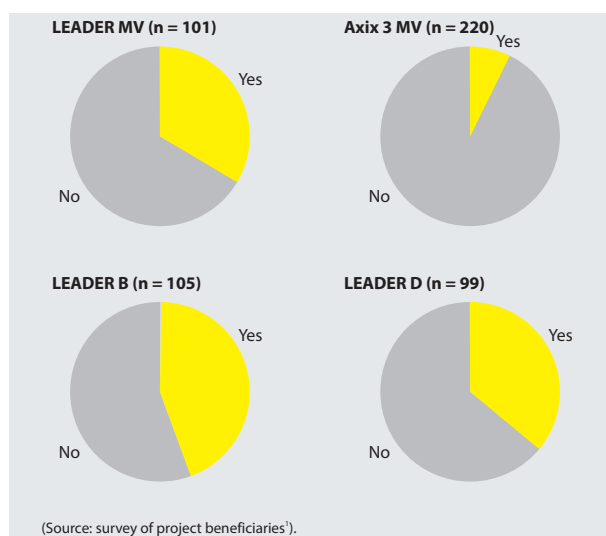
Figure 3

Proportion of projects that include volunteer work (village renewal projects funded via LEADER)

Another aspect of citizen involvement in project implementation is the contribution of volunteer work during the realisation of the project. To discuss the added value of LEADER in the sense of a higher mobilisation of endogenous resources, a comparison of LEADER-projects with similar non-LEADER-projects is useful. In general, the dedication of volunteers in projects for village renewal is clearly higher in LEADER-projects than in non-LEADER projects and the percentages are higher in western Länder (see Figure 3).

Mainly, it was local groups, such as associations or parish groups, that contributed volunteer hours, but individuals did as well. Comparing MV with "Land" B the proportion of projects with individual volunteers was similar while there was a clear difference in the proportion of projects with volunteer contribution from local groups (33 % of the projects in MV versus 45 % in "Land" B.

3.1.3 Overall contribution for cooperation

In general, the survey of LAG-members shows positive results regarding the performance of LEADER (see Figure 4). There are positive reviews: "improvements in the cooperation beyond administrative borders" (respectively narrow village boundaries), in "understanding views from other groups" and in the "cooperation between different groups". Thus, LEADER is an example of how an external programme can connect actors from different interest groups, who, without this programme, would not have otherwise met.

As there are no major differences between Mecklenburg-Vorpommern and western Germany, only the results from Mecklenburg-Vorpommern are shown in Figure 4.

(Source: own data, LAG-member-survey).
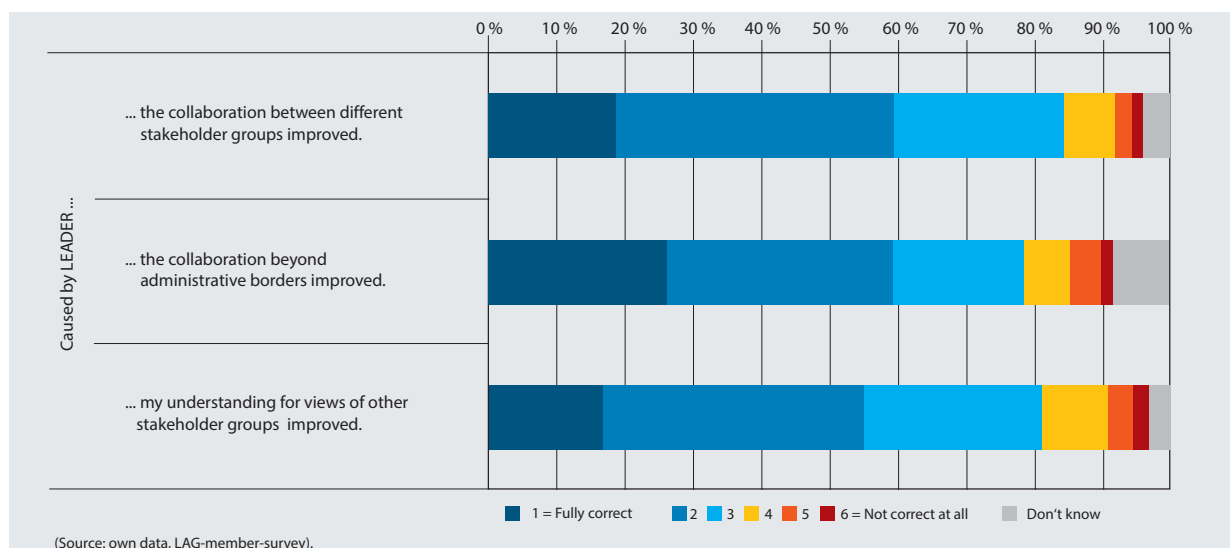
Figure 4

Assessment by LAG-members about a positive impact of LEADER.

[1]   Moser A, Peter H, Pollermann K, Raue P, Schnaut G (2012): Survey of project beneficiaries from measures of integrated rural development and LEADER in Hesse, Mecklenburg-Vorpommern, Lower-Saxony, Northrhine-Westfalia and Schleswig-Holstein.

3.2. Innovation

3.2.1 Suitable funding conditions for innovative projects

The most common understanding of innovation or new approaches in the LEADER context is very broad. It includes products and processes as well as organisational, social, institutional and communication matters Neumeier (2012), OECD (2011), LEADER Guide (2011), Dargan and Shucksmith (2008)). Another aspect to innovation or a new approach is the question "Who must perceive it as new?" Rules are lacking about who decides "newness" at the local level, but it is not enough if it is only new for the one who carries out the innovation. A common understanding is that the "unit of adoption" of the innovation must perceive it as new. The adoption-unit is also vague and varies depending on the innovation itself. In our research, the LAG could be seen as the adoption unit because they either carry out the new approach or they represent the locals in their area.

For the development of creative solutions and new ideas, it is advantageous when no narrow administrative limitations apply to the eligibility of projects. The possibility of funding for experimental or innovative projects via LEADER depends very much on the extent to which the Rural Development Programs are able to give a suitable framework to fund projects outside the standard menu of measures (Schnaut et al., 2012). Though in theory, innovation plays an important part in LEADER, in practice it is limited because there are often restricting conditions. This situation explains the results of the survey of LAG-managers (see Figure 5), who

also noticed diminished innovation in comparison with the previous funding period (LEADER+). Since, in the year 2010, the conditions in Mecklenburg-Vorpommern were not worse than in other federal states, a poor environment for innovation is not a "transition country-specific problem". To address this problem, some federal states in Germany have already made improvements in funding conditions within this funding period (and hopefully more innovation will be possible in the next funding period).

For example the federal state Mecklenburg-Vorpommern now has a measure called LEADERalternativ (Reimann and Kleinfeld, 2012) that provides funding for projects that contribute to the local strategies, without further restrictions concerning the content.

For innovation, after the problems that were experienced at the start of the programme, these improvements are a good sign.

3.2.2 Implementation of innovative projects

As mentioned above, LEADER should offer the possibility of trying out new approaches.

Although funding rules limit the space for innovation, it is still possible. Figure 6 shows the proportion of LEADER-projects regarded as innovative from the point of view of project beneficiaries. For the survey, innovative projects were defined as 'projects bringing new ideas or approaches for the region'. Even if there is some bias, results show that the proportion of innovative projects in Mecklenburg-Vorpommern is lower than the average of the western Länder.

(Source: own data, survey of LAG-managers 2010).
^ Data from two federal states are included in the total but are not shown separately because of the small size of the subgroups / MV = Mecklenburg-Vorpommern;
A, B = western Länder

Figure 5

Distribution of answers (in percentage of total) to the question 'How do you judge the possibilities to fund innovative projects?'

The differences are partly caused by funding conditions and co-financing rules, but as funding conditions in Mecklenburg-Vorpommern are differ very little from some of the western Länder, there have to be other reasons as well. In this regard two correlations were seen: first, a higher percentage of municipal beneficiaries leads to less innovative projects because they implement more standard measures and second, that less participation (see number of participants in working groups) leads to fewer ideas for innovation. However, those correlations must be proved in further analysis.
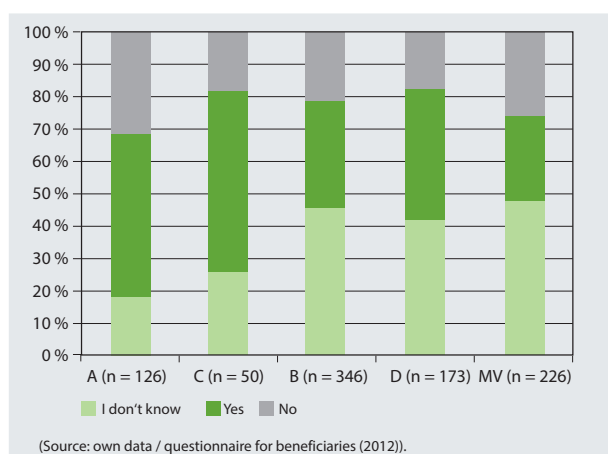
Figure 6
Proportion of innovative Projects in LEADER-Projects
(self-estimation of project beneficiaries)

3.2.3 Overall contribution of innovative projects regarding demographic change

As already explained in the introduction, demographic change is a major challenge for rural development in Mecklenburg-Vorpommern. For both major effects of demographic change (aging and population decline), two types of action can be distinguished: the first is to try to hold up or at least diminish the impact and the second is to adapt to the demographic change.

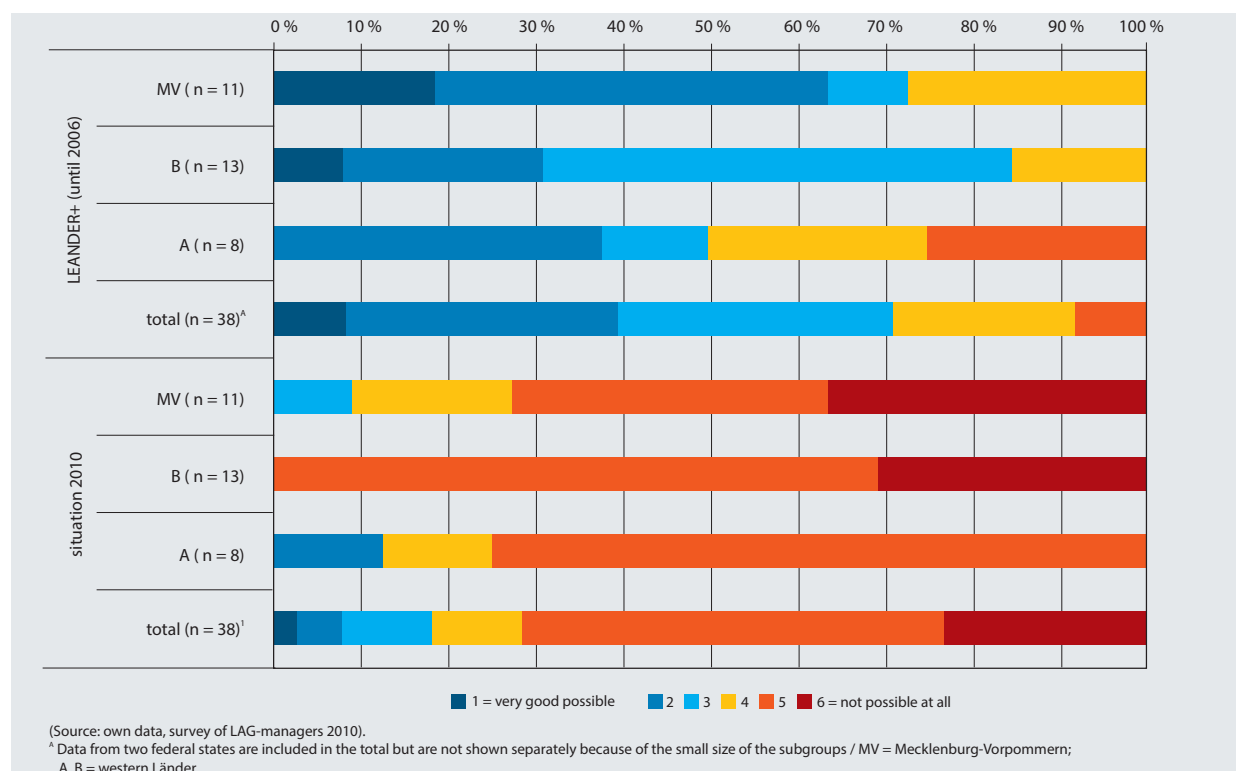In Mecklenburg-Vorpommern, a high percentage of LEADER actions are linked to matters of demographic change. The results of the survey on LEADER projects in village renewal show that 43 % of the respondents indicated that their project contributed to an adaptive reaction to demographic change, which is a higher proportion than in Schleswig-Holstein. This may be because demographic changes there have not led to similar severe problems than in in Mecklenburg-Vorpommern, so a lower proportion could be expected.

By looking at the way these actions addressed the challenges of demographic change, we found that most of these projects were actions to improve the quality of life, for example by creating social infrastructure and adapting existing structures to an aging population such as barrier-free accesses, or special offerings for seniors.

Only few projects addressed adaptation to depopulation. One reason could be that it is not attractive for politicians to take action that includes acceptance (in public) of a further loss of population.

Projects that contain new or creative solutions do exist, but they are rare (and again further analysis is needed to examine conditions for the development of these projects). Examples are flexible concepts for the housing of elderly people with dementia, Internet platforms for educational offerings or the creation of multifunctional shop locations, which change their purpose on different days of the week. Such establishments can serve as a food shop on Monday, as a medical service on Tuesday, as hairdresser on Wednesday and as a leisure room for young people on Sunday.

4 Conclusions and Requirements for Community Led Local Development (CLLD)

4.1 Conclusions

Overall, the results show that the LEADER approach is effective in Mecklenburg-Vorpommern. Historical patterns are visible in some areas, but many key elements, such as the size of LAG and LAG composition, are quite similar between Mecklenburg-Vorpommern and the western Länder. Thus, there is added value through working together in the LAG.

There are mixed results with regard to participation: generally, the concept of participation works and leads to the mobilisation of local actors. The higher percentage of women and the lower number of working groups (per LAG) in MV can be interpreted as a result of historical patterns. Generally, the local authorities and the state sector play a slightly stronger role in Mecklenburg-Vorpommern (for example as project beneficiaries).

With regard to innovation, the shortcomings are clearly not only a problem in Mecklenburg-Vorpommern. They are also present in western Germany as well as in other countries in Western and Southern Europe. The reaction to these problems was suitable in Mecklenburg-Vorpommern. Nevertheless, the observed lower proportion of innovative projects in MV could also be a sign of lack of participation in MV compared to western Länder.

Looking at tasks, such as dealing with demographic change, it is apparent that the LEADER approach could make valuable contributions because of the need for innovative solutions and actions beyond small municipality borders, but there is room for improvement in implementation.

In general, a policy approach, such as LEADER, works in the East and the West, and the influence of historic patterns is limited, also because Eastern Germany has different conditions than other transition countries.

The results also show that research solely based on a few case studies would not produce enough evidence. For example, the comparison between Mecklenburg-Vorpommern and different western Länder was important to show that the lack of innovation was not a result of path dependency in transition countries, but a general problem because of general funding regulations.

4.2. Outlook: more Community-Led Development 2014+

Against the backdrop of a further extension of the principles of the LEADER approach to other funds to facilitate what is termed Community-Led Local Development, some general conclusions can be drawn. In so doing it should be recalled that there is a long history of LEADER programming with different institutional settings and regulations (for example as a type of multi-fund approach in LEADER II, ÖIR, 2003).

The new CLLD framework could, in theory, provide a good opportunity to compile broader and more integrative local strategies by involving all the European structural and investment funds. Therefore, it would be reasonable for the higher political and administrative levels of each fund to shape their funding framework correspondingly. However, in practice, it is obvious that a real appropriate multi-fund framework will not be established.

4.3 Requirements for a CLLD-policy design

To use the original and intended strengths of the LEADER approach for a successful implementation of Community Led Local Development, greater freedom for locally managed, place-based forms of intervention would be required (Copus et al., 2011; ELARD, 2012). To be successful, first, **local actors** have to cooperate in a suitable way to develop effective solutions. An important prerequisite is the participation of different groups of actors with a common vision of their goals (written down in their local development strategy) and a culture of "working together". It would be unfortunate if LEADER is seen only as a funding source for standard measures of single municipalities. Second, the administrative framework should facilitate the implementation. Regulations and **funding conditions** should be clear at an early stage.

An essential improvement in European regulation for 2014+ will be that the criteria for project approvals will change from a schematic measure-orientation to a target-orientation: whether an idea is eligible for funding will depend mainly on whether it fits the targets of the local development strategies designed and compiled by the LEADER-regions themselves.

As some of the reported problems for innovation and participation have their source in power relations on the local level, the upper level of a multi-level governance system, such as LEADER, should set up rules from top-down to **foster bottom-up principles.** To safeguard participation and transparency in decision making, general rules should be set by funding authorities. This must be done in a fair, appropriate and tactful way to avoid developing a general climate of mistrust. Considering the risk of dominance by the public sector, a balanced composition of the members of the decision-making body should be ensured. The implementing guidelines should set at a minimum number (possibly ten persons, which is already set as a limit in Mecklenburg-Vorpommern) for decision-making bodies. If participation on an equal footing is intended, it is essential to maintain a minimum of 50 per cent for non-public sector actors because results from similar processes show that without such a rule

sometimes only public sector members are in the steering-groups. Such a regulation is again part of the new funding regulations (now it is even a "not-more-than-49 %" for the public sector). In addition, the regions should strive for a better integration of different social groups.

There are two suitable ways to avoid bottlenecks for project decisions caused by the need for **public co-financing:** first federal states themselves can give the funding for non-public sector projects or the Länder could support the setup of a local fund managed by the LAG and fed by contributions of the municipalities involved.

The aspect of **capacity building** should be taken into account from the beginning and should therefore be included in Local Development Strategies and reflected in LAG composition and/or management qualification. **Self-evaluation** and organisational learning should be constituent components of the processes that can lead to changes, which should be possible during the funding-period.

Further key requirements are suitable **criteria for the selection of projects.** The project selection criteria must be integrated into the Local Development Strategy. Here, the funding authorities can set up guidelines that ensure that innovation will be an important selection criterion. Such settings are crucial to support the achievement of effective value-added CLLD-approach.

LEADER offers the opportunity to strengthen civil society and improve multi-sectoral cooperation at a local level as well as to improve cooperation and understanding between local and program managing authorities. A multilevel perspective with efforts on different levels is favourable: the program managing authorities have to give freedom to the local level but also have to safeguard real participation opportunities. Then, at the local level there will be a chance for improved cooperation between the state, economy and civil society. In this way, LEADER can contribute to the further development of governance structures in transition countries. At the same time, specially tailored solutions for the needs of transition countries can be developed and spread to mainstream policies.

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Community Supported Agriculture: A promising pathway for small family farms in Eastern Europe? A case study from Romania

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Abstract

In the search for viable rural innovations that serve both the health concerns of consumers and the economic needs of small-scale farms in Eastern Europe, this study deals with Community Supported Agriculture (CSA). In Romania, subsistence based small-scale farming is a persistent phenomenon that goes hand-in-hand with unfavourable income opportunities. Small farms face extreme difficulties in reaching formal market channels and therefore rely on subsistence and informal sales. From the consumers' point of view, this lack of market orientation leads to the need to rely on imports of food products. A market segment that is particularly underdeveloped is the market for organic products. In view of this, we are interested in factors that are important for the formation of a direct, trust-based market relationship in the form of CSA, and whether it leads to a win-win situation for farmers and consumers. The study is embedded theoretically in the concept of the solidarity economy. The analysis is based on three cases of farmers pioneering CSA in Romania by offering organic vegetables under contract to their local consumers in the Western part of the country. Our results reveal certain elements that support involvement in CSA. Consumers follow more value-based considerations; for example, they are convinced of the importance of a healthy diet and of the damaging effects of synthetic agricultural inputs. For farmers, the CSA partnership is attractive so long as it offers a price premium and market access. Both farmers and consumers compensate for market failures when participating in CSA partnerships.

Keywords: *Community Supported Agriculture, organic farming, Romania, solidarity economy, rural development*

Zusammenfassung

Solidarische Landwirtschaft: ein erfolgversprechender Ansatz für Kleinbetriebe in Osteuropa? Eine Fallstudie aus Rumänien

Der Ansatz der Solidarischen Landwirtschaft könnte im Kontext der kleinbetrieblichen Landwirtschaft in vielen osteuropäischen Ländern als mögliche tragfähige Innovation für den ländlichen Raum gesehen werden. In Rumänien ist die Subsistenzlandwirtschaft, die für die Kleinbauern mit sehr geringen Einkommensmöglichkeiten einhergeht, ein persistierendes Phänomen. Grund für den Verbleib in der Subsistenz sind die sehr eingeschränkten Möglichkeiten, formalen Marktzugang zu erlangen. Auch die Konsumenten sind betroffen, da sie auf importierte Nahrungsmittel zurückgreifen müssen. Das Marktsegment für ökologisch produzierte Lebensmittel ist hierbei besonders unterentwickelt. Vor diesem Hintergrund befasst sich dieser Beitrag mit Faktoren, die eine direkte Marktbeziehung in Form der Solidarischen Landwirtschaft begünstigen, und hinterfragt Kosten und Nutzen für die teilnehmenden Landwirte und Konsumenten. Die Analyse basiert auf drei Fällen, in denen in Westrumänien erstmals Solidarische Landwirtschaft umgesetzt wird, indem Landwirte ökologisch produziertes Gemüse direkt an ihre privaten Vertragspartner liefern. Die teilnehmenden Konsumenten zeichnen sich durch ihre wertebasierten Einstellungen aus. So sind sie beispielsweise von der Bedeutung einer gesunden Ernährung und von den schädlichen Effekten synthetischer Spritz- und Düngemittel überzeugt. Für die Landwirte spielen ökonomische Überlegungen eine größere Rolle: Solidarische Landwirtschaft bietet aus ihrer Sicht vor allem Zugang zum Markt per se sowie höhere Preise. Sowohl Landwirte als auch Konsumenten kompensieren durch die Partnerschaft Marktversagen.

Schlüsselwörter: *Solidarische Landwirtschaft, Ökolandbau, Rumänien, Solidarische Ökonomie, ländliche Entwicklung*

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1 Introduction

Small-scale, subsistence based farms are highly vulnerable to the risk of poverty, and are frequently excluded from the modern global-scale trade in food products. Alongside this, consumers are increasingly alienated from the places and methods of their food production, finding themselves dependent on retail mass consumption. Issues such as the huge price volatility of agri-food products and the 'dying out' of small farms have led to significant efforts in terms of food sovereignty worldwide.

With this in mind, we present a case study on Community Supported Agriculture (CSA) as one of the many innovations that may serve bottom-up rural development in an increasingly globalised world. We concentrate on a region in which CSA is still new, Eastern Europe, and where, under certain conditions, such partnerships may offer an interesting alternative way of creating an innovative and economically viable connection between farmers and consumers. This study is motivated by the idea that CSA systems may help semi-subsistence farmers to escape from the trap of market failure and provide them with a fair income. In addition, through CSA, urban dwellers can access the healthy organic vegetables that they demand and at the same time show solidarity with the local rural population.

Our research is embedded in the theory of the solidarity economy. Empirically we base the analysis on three cases of farmers pioneering the CSA concept in Romania. The country has a large rural population with many small and subsistence based farms operating almost uncoupled from the markets. They produce in a traditional way, close to the standards for organic agriculture, but without being officially certified. At the same time, Romanian urban consumers who are interested in healthy and organic fresh food face difficulties in satisfying this demand. Such market failures may create the niche in which CSA can become an economically attractive option.

We aim at identifying factors that facilitate the formation and functioning of CSA partnerships in Romania, and ask whether such partnerships result in win-win situations. We are particularly interested in the specific characteristics of partners, as well as trust and solidarity as important facilitators of CSA. Furthermore, with the aim of assessing the attractiveness of CSA partnerships, we identify relevant costs and benefits for farmers and consumers. The research is based on the following hypotheses:

H1: CSA is attractive for a distinct group of consumers and farmers.

a The targeted consumer partners differ from average citizens in terms of their higher incomes, better educational levels, and particularly positive attitudes towards organic farm production and the rural environment in general. They have a high interest in health and nutrition-related issues.

b Farmers involved in CSA show a high willingness to adopt new knowledge and practices, and to adapt their livelihoods to serve the specific needs of their urban consumers.

H2: The motivations of consumers and producers differ in terms of their economic or value-based origin.

a For consumers, value based considerations and, in particular, the solidarity element in the partnership are the most important drivers for becoming a CSA member.

b The producers in CSA partnerships follow mainly economic considerations. Farmers involving in CSA aim at developing full-time farm employment for themselves and their families.

Overall, we expect that both the consumers and producers should be able to improve their situation in terms of their specific goals in win-win partnerships. Their economic viability and sustainability depends, however, on the persistence of market failures which currently facilitate this niche.

Our paper may be seen to be an explorative study in an under-researched area, in terms of both our geographical focus, Eastern Europe, and the in-depth information on both sides of the partnership. In particular, the producers' side was neglected in previous research (Park et al., 2014). Although it is not simple to generalise from our results, they provide a new, in-depth insight of CSA in the transitional environment of Eastern Europe, and point to important factors that influence the formation and success of CSA partnerships.

2 CSA: a brief introduction and key theoretical concepts

CSA is described in the literature as a partnership between a farmer and his/her consumers, based on a mutual commitment that consists of payments, product delivery and various ways of collaboration. In most cases, the consumers pay in advance so that the initial running costs of production are covered. Thus, the farmer will be supported for an entire season by a group of consumers to whom he/she will deliver fresh products on a weekly basis. In this manner, the risks and benefits of production are shared by both the CSA members and the farmer (Goland, 2002; Friends of the Earth, 2003; Henderson, 2007). CSA is oriented towards local production and consumption with an emphasis on the environment and organic practices (Pole and Gray, 2013). CSA originated in the 1970s in Japan and is now a global movement reaching an estimated number of more than one million consumers worldwide [1].

CSA is often presented as an attempt to resist globalised and industrial agriculture by 're-embedding' people in time and place. The link with a specific piece of land and producer allows for a feeling of community and trust that contrasts with the distant, anonymous production of food (Cone and Myhre, 2000; Bougherara et al., 2009). Henderson (2007) refers to certain values, such as cooperation and fairness, on which this particular alternative food system is based. He further points to the underlying relationship of CSA

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[1] *Urgenci* is the international CSA network established in 2004 as a platform of citizens, producers and 'consom acteurs' (literally consumer-actors) engaged in local solidarity partnerships.

members with nature, and postulates that there should be "an intimate relation with our food and the land on which it is grown", "a sense of reverence for life", "appreciation for the beauty of the cultivated landscape" and "a fitting humility about the place of human beings in the scheme of nature" (Henderson, 2007). Hence it is not surprising that various forms of low-impact agriculture, together with consumers interested in organic and/or biodynamic food production, are central to the CSA concept. Furthermore, CSA implies a strong sense of the concept of 'civic agriculture' meaning "community-based agriculture and food production activities that not only meet consumer demands for fresh, safe and locally produced foods but create jobs, encourage entrepreneurship, and strengthen community identity" (Lyson, 2004).

We look at CSA as an example of the solidarity economy, where economic activity is aimed at expressing reciprocity and practical solidarity [2]. The solidarity economy is embedded in the concept of social economy which spans all levels of economic organisation from the neighbourhood to the global, and manifests itself in various forms of 'community economy' or 'self-help economy' (Pearce, 2003). It is defined as an economy based on new values and concepts that inspire forms of social innovation, self-management and alternative forms of exchange (Auinger, 2009). Social economy has been referred to as the 'third system', a system that strives for reciprocity, as opposed to the 'first system' (private and profit-oriented, aiming at efficiency) and to the 'second system' (public service-planned provision, aiming at equality) (Pearce, 2003; Restakis, 2006).

Unlike the long intellectual history of social economy which goes back to the end of the 18th century in the works of utopian socialists, solidarity economy is a relatively new concept inspired by the practice of local initiatives in Latin America in the mid-1980s (Miller, 2010). There is no easy clear-cut definition of the solidarity economy. It can be defined as a system in opposition to the dominant economic systems which are built only on the market and competition. It does not define itself as anti-market or anti-government, but is rather the result of mutual action among free people in an attempt to build new economic practices centred on human labour, knowledge and creativity, rather than capital (Fisher and Ponniah, 2003). The solidarity economy is based on the idea that human nature is more cooperative than competitive (Bowles and Gintis, 2011). A very important ingredient in the solidarity economy is the networking of initiatives and actors. The values that solidarity networks have in common are cooperation and mutuality (over competition), individual and collective well-being (over profits), economic and social equity (over social oppression), ecological responsibility, democracy and diversity (Miller, 2010).

Within the solidarity economy, CSA can be classified as a 'consumer cooperative' centred on the agricultural labour of farmers. The items of exchange are food products. The exchange between the two parties is direct and does no function according to the classical demand-supply curves, but according to a pre-established system of mutuality and trust. The demand for a certain type of product is combined with the social aim of preserving rural life and organic food production. Although not all aspects of CSA fit easily within the framework of conventional economics, we look at it as an economic arrangement in which certain values play an important role in the utility-maximising decisions of individuals. We see CSA arising as an innovative economic alternative that occupies space that was left empty by the profit oriented capitalist markets. However, our view is a critical one: we ask how far social aims, values and, in particular, the solidarity element contribute to the formation and functioning of CSA partnerships, and which other benefits and costs play a role in practice. We also raise the question of the extent to which CSA is a direct response to existing market failures.

3 Empirical evidence and conceptual framework

This section is based on a topical literature review and summarises the most important benefits and costs of CSA. These benefits and costs may be tangible or intangible, and they may be financial or linked to certain values such as solidarity, community or environment. Our conceptual framework, which is briefly introduced at the end of this section, is centred on the motivations and related benefits and costs arising for partners of CSA in Romania.

3.1 Benefits of CSA for consumers, producers and the society

Consumers are thought to combine the benefits of the desired product (a certain organic quality, health value, taste, freshness, price, etc.) with value related benefits that arise, for example, from their concerns about the environment, or from the wish to buy local or to reconnect to the rural environment (e.g. Perry and Franzblau, 2010). Benefits may arise from a (positive) change in their relationship with farmers, with land and with their communities (Flora and Bregendahl, 2012). Furthermore, health and knowledge are expected to increase (Carolan, 2011). For the US, where most of the available CSA studies were conducted, Cone and Myhre (2000) find that freshness and local and organic production are important attributes of the products that attract consumers; health is only of medium importance. Similarly to many other studies, they confirm that price plays a smaller role for consumers (see also Pole and Gray, 2013). Environmental concerns are of high importance for US consumers (Cone and Myhre, 2000) and the same is true for French CSA consumers (Bougherara et al., 2009). Other values sought by consumers may be community or solidarity (Feagan and Henderson, 2009). Empirical evidence shows that community is not always the top priority for consumers (e.g. Pole and Gray, 2013; Cone and Myhre, 2000). Personal benefits are to be expected from

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[2] There are various other theoretical options for the analysis of CSA. The social capital perspective would have been appealing, but our empirical case does not include sufficient data since the researched CSA initiatives are too new. The methodological apparatus of the network-actor theory seemed too speculative in our case.

the possibility of visiting and working on the farm. Children especially get access to a valuable form of education about the origin of food, and for adults the most important benefit may arise from emotional values such as stress relief or life enrichment (e.g. Chen, 2013 for CSA members in China). Yet, volunteering on the farm and participating in farm events is mostly seen as a less important benefit (e.g. Pole and Gray, 2013; Feagan and Henderson, 2009). Nonetheless, the literature suggests that social capital is one of the factors that attracts and keeps members in CSA partnerships (Flora and Bregendahl, 2012).

In general, producers' behaviour regarding direct marketing strategies is under-researched (Park et al., 2014). By getting involved in CSA, farmers can expect a number of economic benefits including an upfront payment, market access, control over pricing, stable and fair incomes, low production risks and no market competition (Perry and Franzblau, 2010). The survival of the farm may be secured and organic farming comes with the promise of maintaining or improving the soil quality and thus the value of the farm. Social benefits may lie in networking activities and in the CSA solidarity community. Among the rare empirical evidence with regard to the benefits for farmers, a case study by Flora and Bregendahl (2012) finds that the most important motivation of farmers for joining CSA is the financial advantages. Expected benefits related to social capital are the second most important driver of joining CSA, followed by cultural/value conviction reasons, an expected increase in human capital, and – with little importance – environmental and political reasons.

Also, society as a whole benefits from CSA partnerships. Here the environmental effects of organic, local production are particularly relevant. Furthermore, CSA partnerships often support the local identity and rural development. Some CSA partnerships donate excess product to the poor or have measures aiming at social inclusion (Flora and Bregendahl, 2012; Henderson, 2007).

3.2 Costs of CSA for consumers and producers

Expected costs for the producers are mostly connected with adapting their farm activities to the needs of a CSA partnership. For example, initial investment costs relate to the start-up of organic farming, the need for drip irrigation etc. Organic farming practices usually require an intensification of farm work. On the management side, a need for thorough book keeping is a must. The direct marketing comes with extra efforts with regard to packaging and the weekly transportation of the produce to the pick-up point. This, together with the necessity of opening the farm for visitors and frequent customer contacts, might lead to a significant change in the personal life-style of the farm family.

Like all consumers, CSA members are not automatically pleased with what they obtain for their money. By making a commitment for a whole season, consumers not only risk investing in a crop failure, but also (partly) give up the convenience of the wide range of products that conventional food sales channels offer. The limited choice of products is clearly seen as a disadvantage of CSA (Cone and Myhre, 2000). Both

the quality and quantity of vegetables is unpredictable to a certain degree, but, according to Flora and Bregendahl (2012), this is not among the main reasons why consumers stop their membership. Another disadvantage of CSA is inconvenience, in particular the inconvenience of picking up the share on a weekly basis at a certain time and place (Flora and Bregendahl, 2012). Less important but still an issue is the fact of being confronted with a box of vegetables each week, the contents of which are not selected by the consumers themselves. The box may contain unknown types of vegetables, and it may be seen as difficult to store, process and cook the products. Overall, CSA consumers are confronted with a substantial change in their routines (Cone and Myhre, 2000; Flora and Bregendahl, 2012). Almost all available studies confirm that consumers are comparatively well off. Despite this, it seems that financial costs are an important factor in the decision to stop membership (Flora and Bregendahl, 2012).

3.3 Study framework

The costs and benefits of CSA participation form the core of our interest. We link them to value-based motivations stemming from the solidarity economy concept introduced in Section 2. Our approach is a holistic, case study based and explorative one. This is explained by the novelty of the appearance of CSA in Eastern Europe. To the best of our knowledge, our case study CSAs are the first partnerships of this kind in Romania,

The data for our research stem from an empirical study conducted in and around the Romanian city of Timisoara in 2011. The subscription CSA initiatives that are the focus of our study have emerged in an area of Romania that is known to be comparatively well-developed and progressive [3]. The study looks at two distinct sets of actors: the producers and consumers of a CSA scheme. The data refer to three CSA groups founded in 2009 and 2010 with farms located in the villages of Cuvin, Fititeaz and Belint. The consumer partners are from the nearby city of Timisoara. The CSA members were interviewed in 2011. For about half of them, this was their first season, while the rest had joined in 2009 or 2010. The survey tools were designed specifically for the respective target groups. The consumers' survey tool 4 was applied to the

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[3]   The most common way of classifying CSA models is to look at who initiated the project. If farmers propose the partnership, CSA can be classified as 'subscription CSA' because the consumers are the ones responding to the offer and subscribe. If the partnership is sought by a group of consumers, then it falls into the 'shareholder CSA' category: consumers organise themselves, contract a farmer, and attract more members into the scheme. 'Multi-farm CSAs' have been developed to cater for consumers' demands while relieving a single farmer from having to produce a large a variety of crops. (Henderson ,2007).

[4]   The questionnaires related to three topical areas:
   1. the consumer household profile, including gender, age, education, occupation, income of the household members, and respondents' connection to the countryside;
   2. the behaviour in respect of the purchase of foodstuffs; and
   3. the CSA partnership, including issues like the motivation to enter the partnership, the level of satisfaction, and the degree of involvement in the partnership.

entire population of 163 CSA members, leading to 40 completed questionnaires (24.5 % of the consumers). Farmers' interviews were conducted in a semi-structured manner. All interviews were conducted in Romanian and translated into English afterwards. We followed a mixed methods approach. In addition to the survey tools we relied on participatory observation and qualitative insights for example for assessing the interaction between farmers and consumers. In addition, three expert interviews were conducted with:

1. the officer responsible for organic production from the local agricultural administration;
2. the president of the local NGO who initiated the CSA activities, the Centre of Resources for Solidary and Ethical Initiatives (CRIES); and
3. one former consumer member who was much engaged in the early phase of CSA in the region. Data on vegetable prices in various local outlets were gathered.

In our analysis, we assess costs and benefits of CSA for farmers and consumers as null (0), medium (-/+) or large (--/++). Medium and large effects can be either positive (benefits) or negative (costs). Since this assessment is based on rankings, ratings and qualitative statements and observations, a fully harmonised approach is not possible. However, if a variable with a five-scale rating is the basis of assessment, large effects result from the highest category in the rating, medium effects from the second highest category etc. For rankings we used a weighting system in which a first rank receives a weight of ten, followed by second and third ranks both with weights of five. All other ranks are treated equally and are weighted with one. These weights are applied to the individual ranks for the subsequent calculation of aggregated ranks. In addition, qualitative statements are used to support or complement our assessments. Many of the cost and benefit assessments are derived from subjective perceptions of the farmers and consumers. This is justified by the fact that such 'psychological' factors that include personal expectations, experience and values are decisive. Farmers make entrepreneurial decisions that clearly rely on subjective and often biased perceptions (Arenius and Minniti, 2005). With regard to consumers we calculate, for example, price differences between CSA products and local market prices; yet, when consumers are not price sensitive (Pole and Gray, 2013) such 'hard' indicators become meaningless compared to the value system that influences the consumers' perceptions and economic decisions.

4 Romania's Farming Sector: A brief overview of facts related to CSA formation

The Romanian agricultural sector has a strong dualistic farm structure (Alexandri, 2007): in 2011, small farms operating on 1 to 10 hectares represented 93 % of total farms but only 32 % of the agricultural area, while large farms between 10 and 100 hectares represented less than 6 %, but operated around 16 % of the land. The largest part of the arable land (52 %) was used by farms over 100 ha, which represent just 1 % of the total number of farms (AE, 2011). The per capita incomes of the Romanian rural population are very low (3,900 Euros in 2009); they lie around 30 % below average urban incomes in Romania, according to Eurostat. The most important components of the income portfolio in rural areas are earnings from agriculture (21 %) and the value of products for self-consumption (48 %) (Martins and Spendlingwimmer, 2009).

The main categories of crops cultivated in Romania are cereals, oilseed plants, vegetables, potatoes, pulses, and sugar beet. Vegetable and fruit production, the typical products of CSA partnerships, uses about 5.1 % of the arable land (this percentage includes land used for producing potatoes) (Martins and Spendlingwimmer, 2009). Romania is one of the top vegetable producers in the EU [5].

The average yield per hectare of vegetables in Romania is presently only half of that in Western European states (Zahiu and Toma, 2010). There is a general severe lack of modern technological endowment and machinery (Gosa, 2008). Although synthetic inputs have become increasingly accessible to Romanian farmers over the past twenty years, traditional farming that uses natural fertiliser as a main input is still widespread and much of the production is close to organic standards (Simon and Borowski, 2007). Certified organic agriculture represents a relatively new and emerging chapter in Romanian farming. In 2010, 3,155 operators were registered as organic, of whom 2,533 were producers (the rest being processors). The size of arable land cultivated under a certified ecological agriculture regime is growing continuously, although it makes up only a small share (around 2 %) of the total land (Kilcher et al., 2011). Most of the certified Romanian organic farms are large (> 100 ha) and oriented towards export [6].

Small farmers, instead of obtaining official certification, often advertise their products in the local market as 'traditional' or 'natural'. This results from the costs of certification which prevent many Romanian farmers from becoming organic producers. Furthermore, small farmers often do not have the capacity and cannot comply with hygiene regulations (Sachse, 2011).

The typical small semi-subsistence farm in Romania is known to be severely constrained from entering markets due to their high transaction costs, their inability to meet certain standards, and their tendency to consume own-produced food instead of selling it (Davidova et al., 2010). 34 % produce

[5] Romania was the fifth largest vegetable producer in the EU in in 2007. Fruit and vegetables are the second most exported agricultural goods produced in Romania after animals (and animal products).

[6] Romania's exports to other EU member states and non-EU trade partners are consistently increasing. The value of exports of organic produce grew by 150 % in 2011, reaching 250 million Euros. The main export products, usually raw materials, are cereals, vegetables, wine, tea, honey and berries, with the demand from the trade partners higher than Romania can currently supply (Agra Europe, 2011).

mainly for own consumption, and 35 % produce mainly for direct sales (Martins and Spendlingwimmer, 2009). Small stands along the street or in local markets are often the only available marketing option aside from selling to middlemen at low prices. Cooperatives that would seem a reasonable alternative are not favoured by the majority of farmers and not widespread, even more than 20 years since the start of the transition.

Romanian consumers are among the most vulnerable in the EU-27 with a low level of confidence and knowledge as consumers, and feeling insufficiently protected by consumer law (TNS Opinion and Social, 2011). Food items make up the largest share of a household's expenditures (44 % in 2008, EC, 2010). Fruit and vegetables are relatively low priced (65 % of the EU-27 average in 2009), but the availability of organic vegetables is very low. Overall, the Romanian market for organic products represents less than 1 % of the market for consumption goods, and up to 70 to 80 % of the organic goods are imported. This high share of imports is explained by the fact that there is a high demand for organic raw material from processors abroad and thus it does not remain in the country (see Footnote 6). Therefore, the sale of organic products within the organic niche market of Romania relies on imports (and, partly, re-imports) of processed food. Fresh organic produce is hardly found on Romanian shelves (Sachse, 2011). Most organic products are sold in Romania in the general retail trade (80 %) or in the local marketplaces (Kilcher et al., 2011).

5　Results

Whether CSA can be a viable innovation for small farmers in Romania depends first and foremost on the costs and benefits of the partnership. While we assume that for farmers an increase in net incomes is the most important criterion by which to assess benefits, consumers might judge more along certain moral values. Based on our quantitative and qualitative results, i.e. mainly ratings derived from the questionnaires and additional statements of the respondents, we assess costs and benefits as null (0), medium (-/+) or large (--/++).

5.1　The CSA farmers

The three farmers operated in a partnership with urban dwellers (most of whom were from the city of Timisoara). They worked under the umbrella of the *Association for the Support of Traditional Agriculture* (ASAT) which was initiated in 2009 by CRIES, a local NGO with the main aim of promoting social economy in Romania. CRIES was the main promoter of the idea and also took over responsibility for attracting consumers. The ASAT charter formulates basic principles of the CSA according to which the farmers should maintain biodiversity and a healthy environment, guarantee nourishing and healthy products, take care of transparency regarding costs and price, involve no intermediaries, and regularly inform the consumers about the state of crop growing and the problems the farm is facing. The convenience of consu-

mers is not an aim, but their genuine solidarity is sought. The partnership relies on mutual goodwill and trust and has no mechanisms of enforcement.

Prospective consumers have to contact CRIES and sign the ASAT contracts in winter on a first-come-first-served basis. The next step is the financial contribution the consumers make to the partnership in the form of an up-front payment. The annual cost for the entire season for a consumer-partner is calculated to support the costs that the farmer will have at the onset of the season, transport and packaging costs, a fair salary for the farm family, as well as health insurance contributions.

The three farmers, Farmer 1 (ASAT member since 2009, from Belint village), Farmer 2 (ASAT member since 2010, from Cuvin village) and Farmer 3 (ASAT member since 2010, from Firiteaz village) were all full-time vegetable farmers. No absolutely clear pattern of a 'typical ASAT farmer' could be identified. Of the three, two had very small farms of less than two hectares and one had a slightly bigger farm (Farmer 1 with almost six hectares); two were male and one female (Farmer 2); all were in their forties or fifties. Their farm experience was between six and 20 years. Only Farmer 1 had officially registered his farm and was in the process of organic certification. A few common features seem interesting: none of the three had a real rural background, but they came to farming through marriage or the decision to move to the countryside. They were all relatively well-educated with secondary or high school studies, and saw themselves as entrepreneurial farmers, with a desire to go beyond subsistence farming. They were very active in their communities, e.g. as a member of the church congregation, clubs, or even a local political party (but none of them was a member of a farmers' organisation) [7].

The assessment of farmers' benefits confirmed the importance of the economic advantages of CSA. The most important reason for becoming an ASAT producer was **access to a (stable) market (++)** (Figure 1). Small producers in Romania face considerable market barriers. Farmer 2 explained that *"going to the market with the type of vegetables I produce (they looked the same before) I did not have the same success which the merchants with perfect-looking vegetables had."* All three ASAT farmers appeared to be satisfied with the reported increase in incomes (even though they could not describe it in absolute numbers) and were confident to continue as ASAT farmers. Farmer 1 explained that *"this year ASAT brought me higher earnings. It is an issue of perspective and more certainty."* The partnership helped to avoid farm income being subjected to price fluctuations because no middlemen were involved and a fair price was part of the CSA contract. **Lowering the risk of production (++)** was the third most important reason for becoming an ASAT partner (Figure 1). It was ranked as very important by Farmers 2 and 3, but as not so important

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[7]　Cone and Myhre (2000), who researched eight CSA farms in the US, found that none of the CSA farmers in their sample had farmed as adults before starting small scale-production of vegetables. Instead they were all college educated and had experience in non-farm occupations. Further, all farmers wanted the CSA farm to fully support their family's lives.

by Farmer 1. However, even Farmer 1 admitted that *"the market is full of risks, while here [in the partnership] I know from November on how to plan my growing season."* The wish to **increase the production (0)** may be seen in relation to the entrepreneurial spirit and full-time farming orientation of the farmers. It was fifth in the ranking of reasons (Figure 1). In terms of farm size, only Farmer 1 increased his farm by renting in five hectares. Farmer 3 reported having plans to buy in one hectare of land.
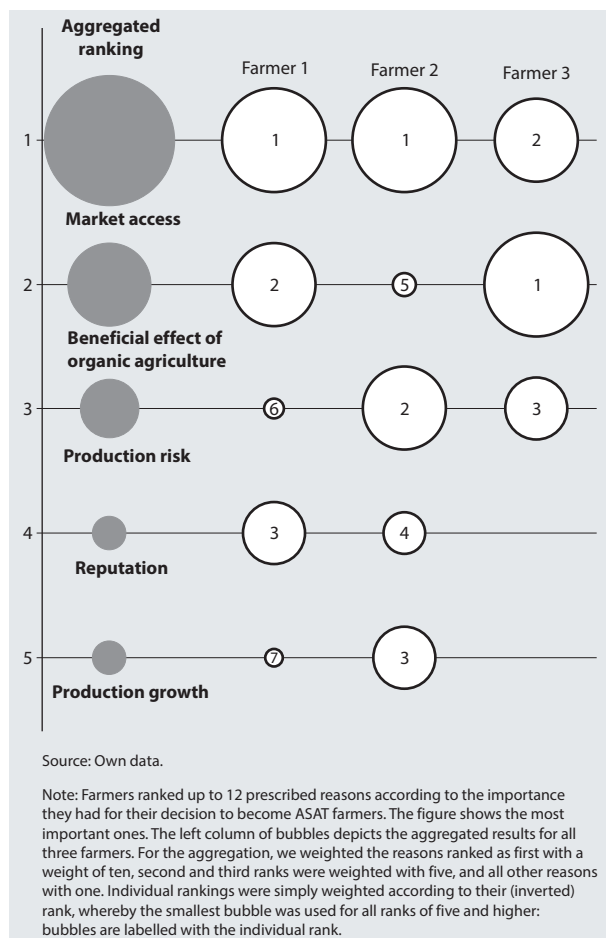

Source: Own data.

Note: Farmers ranked up to 12 prescribed reasons according to the importance they had for their decision to become ASAT farmers. The figure shows the most important ones. The left column of bubbles depicts the aggregated results for all three farmers. For the aggregation, we weighted the reasons ranked as first with a weight of ten, second and third ranks were weighted with five, and all other reasons with one. Individual rankings were simply weighted according to their (inverted) rank, whereby the smallest bubble was used for all ranks of five and higher: bubbles are labelled with the individual rank.

Figure 1

Ranking of important reasons of farmers for starting CSA activities

Another, more implicit economic advantage arising from CSA partnerships is that the farmers receive a price that includes a **premium for organic production**. For this **no costly formal organic certification (+)** is needed. This saves a significant amount of money (and bureaucratic efforts). Farmers ranked these benefits as not highly important in their decision to join ASAT, but Farmer 3 mentioned the avoidance of certification bureaucracy among his top five reasons. With regard to ASAT regulations compared to the general rules for organic farming, two farmers thought they were comparable and only Farmer 1 thought that ASAT rules were clearly less strict. Despite this, since the price premium was indeed significant (see

Footnote 9) and the rules were at least formally less strict, we still assess this benefit's importance as medium.

Besides pure economic reasoning, the motivation to be part of a CSA partnership may also be value-related or linked to desired personal developments. All three ASAT farmers were clearly concerned about soil contamination through the excessive use of synthetic chemicals practised by conventional agriculture. Expected **positive effects of organic or traditional agriculture (++)** were the second most important reasons for becoming ASAT farmers (Figure 1). Only Farmer 2 was not very interested in this aspect.

The expectation of higher **reputation and trust (+)** in their communities was ranked as the fourth most important reason to take on the ASAT system. For Farmers 1 and 2 this reason was among the top five motivations (Figure 1). Although the **improvement of their farming skills (+)** was not a high priority for the ASAT farmers, all three fully agreed that their professional agricultural knowledge expanded, especially through organised visits to other CSA farms (Figure 2). There was no significant indication that the **business skills improved (0)** through the partnership. Farmer 1 admitted *"I cannot keep my own books."*

The benefits that have certainly materialised for the farmers have to be seen in relation to the costs of participating in the CSA partnership. **Investments related to the partnership (-)** were needed to prepare for the organic-type of production. However, two out of the three farmers reported having made no significant investments that were directly related to the partnership. All reported investments were financed with private money and the burden might be assessed as small (though not nil). Another typical change is the **intensification of farm work (--)**. The methods of production employed for complying with the ASAT charter are, in fact, the labour-intensive methods used in organic agriculture (Figure 2). *"The work became much more intensive, for example, we hoe now three to four times a year, and we used to do it just twice per year before."* and *"the workload is maybe 10 times bigger."* (Farmer 1). The **marketing efforts and time that is needed to deal with the consumers** were low (0). One reason was that farmers at that time did not need to invest in attracting ASAT consumers as CRIES was the active promoter of the concept. Overall, the time needed for marketing did not seem to be perceived as a significant burden (Figure 2). All three ASAT farmers declared that they appreciated receiving visits from ASAT consumers and considered the effort of this as insignificant (Figure 2).

In a nutshell, we find that the benefits of the three CSA full-time farmers are mainly rooted in the fact that CSA compensates for the lack of market access of semi-subsistence farms. This clearly supports our hypothesis H2b and also points to the fact that the direct partnership with consumers arises as a response to existing market failures. The benefits (that also include a lowered risk, positive effects on the land and environment, heightened personal reputation of the farmers, and the possibility of receiving a price premium for organic products without certification) outweigh the reported costs. The biggest cost for the farmer has to be seen in the higher input of family farm labour. Regarding the

Do you agree with the following statement?

Rating: 1 = fully disagree, 5 = fully agree

Source: Own data.

Note: Farmers rated different statements related to their participation in the ASAT CSA. The Likert-like rating scale starts at 1 for "fully disagree" and ends at 5 for "fully agree".

GAEC = Good Agricultural and Environmental Conditions
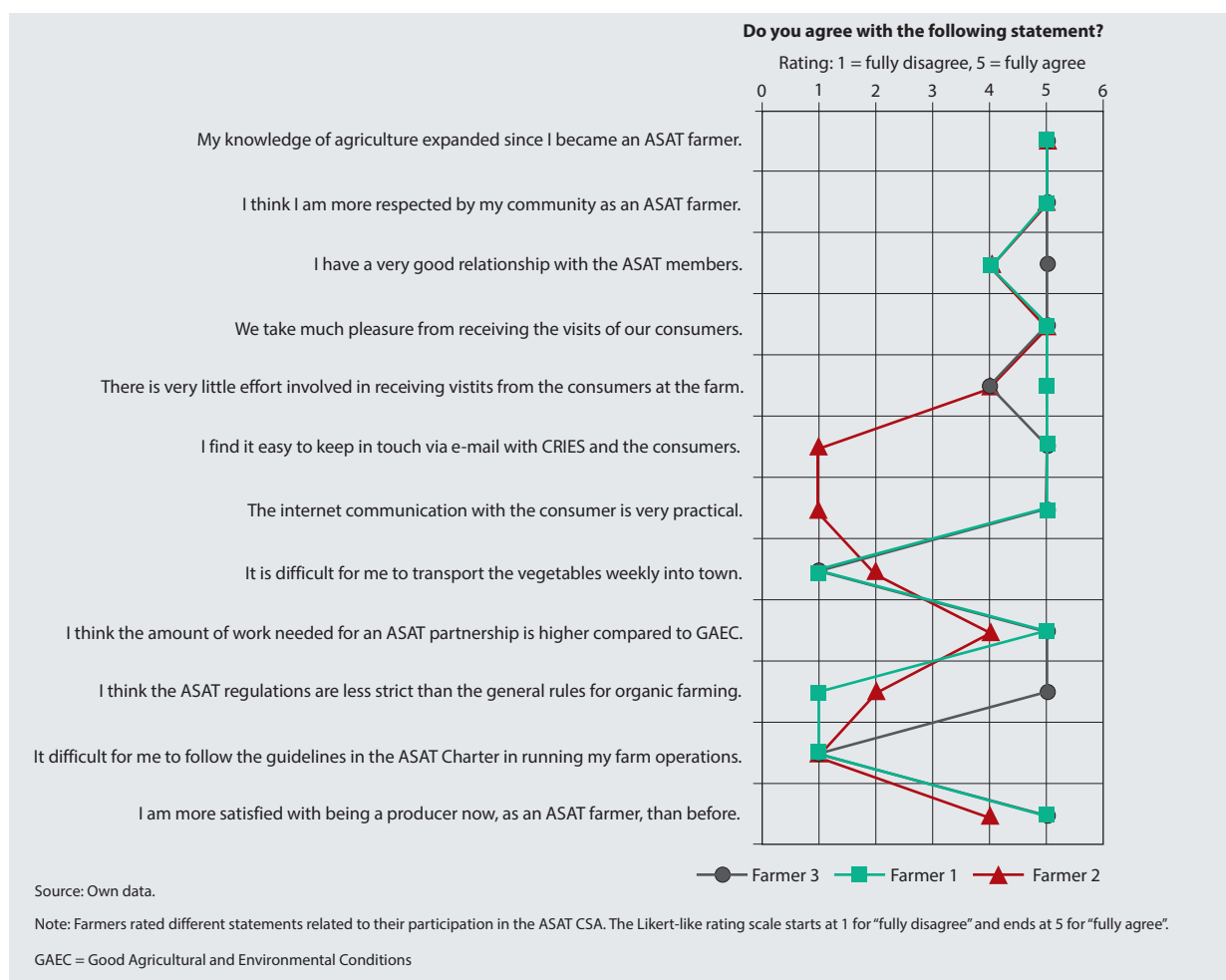
Figure 2
Important benefits and costs of CSA activities

postulated hypotheses H1b, our results confirm that new knowledge and organic production methods were adopted by the farmers, and that farm families were willing to increase the input of family labour to achieve this. Farmers had first-hand knowledge about urban lifestyles and seemed to be very open about welcoming urban visitors on their farm.

5.2 The CSA consumers

The consumer data refer to 40 ASAT partners and their 103 household members. About half of the CSA partners were only in their first season, while the other half were in their second or third season. The average age of the household members was 33 years, ranging between one and 78 years; compared to county averages, this showed a larger young and mature segment and a much lower percentage of population over 65 years (Institutul National de Statistica, 2011). This is also true for a comparison with the urban population of Timisoara (Nadolu et al., 2010). More than half of the households had children under fifteen years old. While at the county level the share of graduate and post-graduate level education is below 20 % (Institutul National de Statistica, 2011), more than 80 % of CSA household members had completed graduate or post-graduate studies. Most of the

consumers (40 %) in employment were working in ser-vices, with another 25 % in management and academia, but only a very small segment of respondents (7 %) was employed in industry, which at 28 % was the second largest employment sector in Timis county. Not all of the employed respondents offered information about their income, but the average obtained was 532 Euros [8] per month, clearly above the county average of 365 Euros, but slightly below the 2007 average income in Timisoara (which was 558 Euros four years before our survey, according to Nadolu et al. (2010). Incomes varied substantially between households, with the lowest income being only 120 Euros and the highest 2,380 Euros.

Cone and Myhre (2000) present results that show that CSA consumers have a special connection to the rural environment: for example, they grew up on farms, visited often, or have a garden at home. Indeed, over a quarter of our respondents spent their childhood in the countryside. On average, they visit the countryside 4.2 times per year, the majority because they have relatives there (64 %).

Consumers' habits when purchasing food are another important aspect with regard to CSA membership. All

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[8]　2,233 RON (Romanian New Leu) converted at the exchange rate of 4.2 RON per Euro, valid when the study was conducted.

consumers were clearly concerned about the origin of the food they purchased, and most of them to a high degree; they also checked the label and the ingredient content of processed food (Figure 3). Consumer behaviour changed after joining the partnership. The number of trips to the usual outlets (marketplaces and supermarkets) reduced. A small proportion of the consumers had never bought vegetables at the supermarket before becoming ASAT members; afterwards, 74 % of respondents said they did not buy vegetables there. There was also an overall decrease in the number of trips to the town market. Outlets specialising in ecological food were not available in Timisoara.

In addition, after joining ASAT the importance of criteria regarding which food was chosen changed. The rating of a number of criteria (from one to five) showed that freshness, health and the ingredients remained almost unchanged in their high (above four) importance. Seasonality, the origin and the organic nature of production received a higher (above four) rating in the 'after ASAT' situation. The importance of the price decreased from 3.24 to 2.97. Health was the most important criterion in both the before and after CSA situation, but its share increased significantly from 28 % to 43 %.
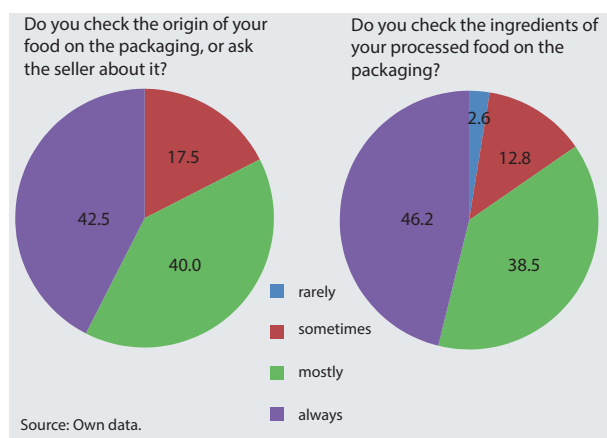
Figure 3
Food purchasing behaviour of CSA consumers (answers in %)

Some of the benefits for the consumers may be economic ones, such as a price that is lower than that for certified organic products but, more than that, CSA is expected to serve certain values that the consumers follow. Among them are a healthy diet, solidarity with the rural people, environmental issues, etc.

Having **access to organic products at a reasonable price** (+) constituted the core economic benefit that consumers could expect. Since the only alternative choices were conventional products, the ASAT price was, however, comparatively high. [9] Hence, the majority of consumers did not see

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[9] A price comparison with conventional products showed that the differences were significant. Single products of Farmer 1, for example, are 100 % more expensive than in the market for conventional vegetables. However, if we looked at the price of the overall shares, meaning the mixed product baskets, consumers paid a maximum 53 % more than conventional market prices.

ASAT membership as an opportunity to save money, some even saw the prices as critical: "*The idea of the partnership is a good one, but (…) for us the contract was not advantageous, we paid too much for what we received.*" Yet, overall the importance of price for food purchases was low in the group of consumers and even decreased after they joined ASAT: while 10 % mentioned price as their most important criterion for food purchases before they entered the partnership, not a single consumer chose price as the most important criterion after becoming a member (Figure 4). Therefore, it might be argued that the benefit for the consumer arose simply from the access to organic vegetables and less from the price. Consumers also benefitted from the fact that the price was fixed throughout the year and price risk was lowered.

Source: Own data.

Note: The figure shows columns for averages of Likert-scale ratings. Each reason was rated alongside its relevance for the consumers where 5 reflects high relevance and 1 no relevance. In addition, consumers stated their most important reason from the prescribed list of reasons. Circles show the percentage share of consumers who rated the reason as most important.

Figure 4
Reasons for CSA consumers to join ASAT

The **concern for healthy and organic produce** (++) was top on the list for consumers giving reasons for joining ASAT. One third of the respondents pointed out that their first reason for joining ASAT was to get healthy products, while another third wanted organic products (Figure 4). Most of the consumers were happy with the quality of products that they received. One consumer commented: "*Now that I ate these products and remembered the taste of my childhood, my body refuses chemically nurtured food …*" More than 70 % believed that their family's health had improved since they became ASAT members. A change towards a more **healthy diet** (+)

cannot be easily judged. Still, a positive effect could be expected, even if only 11.5 % of respondents agreed that they had improved their knowledge about nutrition.

The environmental advantages of organic agriculture and the smaller **environmental footprint (+)** was an issue for a number of consumers. However, although this factor is assessed as only marginally positive, it does not appear to be that relevant since, for example, it was never rated as the most important (Figure 4). This differs from results for Western environments (see Section 3). More important is the fact that through the ASAT partnership a **direct link to the farmer, the farm, and rural areas (+)** was established. Half of the respondents agreed that their relationship with the producer was a personal one. This is important if solidarity and community are important aims, but also if consumers have a strong interest in the origin of their food. Knowing the origin of their food was the most important reason for joining ASAT for 10 % of consumers (Figure 4).

The wish to make a positive impact **on regional development by supporting a local farmer (++)** was of greater importance than might be expected. Seventy-six percent of the respondents thought that they were making a difference by supporting a local small farmer through their consumption. The desire to support small producers was the third most important reason why respondents joined ASAT (Figure 4). Despite this, involvement with the farm was low and direct benefits seemed rather small; nonetheless, a minimum level of involvement was important to keep the system working through the necessary trust-based relationship.

Networking with other CSA members (0) was at a very low level. Within the ASAT group, consumers did not socialise much. Therefore, the benefit from networking was only a theoretical one at this stage. This result is in line with Hayden and Buck (2012) findings in their recent US case study where even after seven years a committed core group was not realised. This also corresponds to the rather low rating given to the benefit of belonging to a community as a reason for joining the CSA in Figure 4.

The initial financial contribution (0) did not present a large cost for the consumers, [10] a fact that is also reflected in the relatively low relevance of price on food purchase habits. The **time invested (0)** in participating in meetings, picking up boxes, and volunteering was also not considered a big cost of the partnership. The majority of consumers (59 %) did not find it inconvenient to pick up their share. However, 80 % of the respondents were not happy about the obligation to pick up a share on a certain day.

The consumers who get involved in CSA face considerable costs and risks. First they are not completely sure about what they receive for their money, either in terms of diversity, quantity or quality. We find that the **limited choice of produce (0)** was not a significant issue for most consumers: 87 % declared themselves satisfied or very satisfied with the variety of products in their weekly share. Farmers reported receiving only occasional and minor complaints. Consumers also

seemed to **accept non-standard products (0)** without many complaints, although single complaints (e.g. about the size of spring carrots and potatoes) were reported.

Summing up, in line with many other studies (e.g. Cone and Myhre, 2000; Chen, 2013; Pole and Gray, 2013), Romanian CSA consumers were educated to a relatively high level; their income was above the county average, but close to the average urban income of Timisoara. However, they were not price sensitive with regard to their food purchases and clearly showed a high interest in health issues and organic production. Thus our postulated H1a was confirmed. The benefits from CSA seem to arise more from the sheer access to products of the desired quality, and much less from the price.

5.3 Trust and solidarity in the CSA partnership

Solidarity was shown to be a relevant element in the relationship. Not only did consumers believe that their support of a local farmer indeed made a difference, but 15 % of the respondents claimed that this was their most important reason for joining ASAT (Figure 4). One consumer explicitly commented about getting involved: "*first of all out of social solidarity. By contributing with my money I wanted the farmer to have a decent salary and social security; we share the risk in the case of calamity.*" But as a former core-group member explained "*The social aspect held a lower level of importance for the majority.*" For the farmers, solidarity was an important element as they needed to rely on the consumers to regularly pick up and pay for their shares. Farmer 3 stated that "*the people who are always late, or forget about picking up their produce, maybe we shouldn't renew the partnership with them. If the share always remains there for a few days, that means they have no respect for my work.*"

The issue of trust is crucial in a solidarity economy partnership where much relies on goodwill and there are no strong enforcement mechanisms. Consumers start with investing in an idea that is new to them. Indeed, some of the benefits that consumers get out of the CSA partnership are to a high degree trust based (e.g. the health value or organic quality of food). A former core-group member explained that: "*it is rather difficult to check on the producer. One has to rely on trust. Of course we could always make an unexpected visit, but I don't think it ever happened.*" Ninety percent of the respondents trusted the farmers they are partners with, and 69 % trusted the umbrella organisation CRIES. Sixty percent admitted that their level of trust in the partnership was higher because CRIES was a well-known organisation. In their turn, the farmers had to trust that, after their initial financial contribution, the consumers would continue to pick up the vegetables and pay the agreed sum per share. In the field, we observed that, during the deliveries of vegetables, farmers had to call consumers who had not appeared to find out the reasons for their absence, but overall reliability was high.

The degree of collaboration, trust and solidarity is a core feature of CSA. It is also used to classify CSA partnerships (Pole and Gray, 2013; Feagan and Henderson, 2009). At one end of the spectrum, the 'ideal', collaborative model involves a spirit of community and solidarity between the partners. At

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[10]   400 RON (93 Euros) per consumer per season for Farmers 2 and 3; 100 RON (23 Euros) for Farmer 1.

the other end, we find economy driven, instrumental models with no community elements and less trust enabling the transactions. Our assessment of the Romanian partnerships shows a partnership that started with high ideals promoted by CRIES, but in reality the actual engagement of consumers remained at a very low level (notwithstanding the fact that solidarity motivated their membership) and the partnerships are 'subscription CSAs' that depend on economic success for the farmer. We conclude that solidarity with rural people and the local CSA farmer is an important aspect in the considerations of consumers; however, it is not the most important one as stated by H2a.

6 Conclusions

Community Supported Agriculture (CSA) may be seen to be a viable rural innovation for Eastern Europe especially in settings in which it addresses situations of persistent market failures. In Romania, there are two essential push factors that pave the way for successful CSA initiatives. First, very low income prospects and missing social safety nets keep up to a million small farms in Romania at the subsistence level. These farms are widely excluded from the markets since large retailers such as supermarket chains rely solely on large producers. Second, the market for organic products (especially fresh organic products) is severely underdeveloped in Romania. The limited organic products on offer are mostly imported and concentrated in large retailers. Organic agriculture in Romania becomes a conundrum of demand and supply: there is not enough demand to encourage local supply and the Romanian production of organic agricultural products is exported directly to foreign consumers who are willing to pay many times its costs of production. In general, Romania exports organic raw materials and imports processed foodstuffs for the few Romanian consumers interested in this niche market.

In ASAT, producers and consumers collaborate in an alternative (i.e. solidarity) economic model. For the farmers, the opportunity of accessing a secure market in which prices are directly linked with their production costs and a fair payment for their labour is very appealing. For consumers, this type of partnership opens the door to fulfilling their demand for healthy, organically produced products. Thus for both, market failures are the main drivers of CSA participation. For the farmers, the CSA allows the restricted market access, which is typical for small farms all over Eastern Europe, to be overcome. Consumers seek to get access to products that they cannot get in the market: healthy and fresh food of organic quality. Our case study shows that such partnerships can represent a win-win situation under given conditions.

The success of CSA partnerships depends on a certain type of consumer selected from the middle and higher income, educated urban population which does not consider price as the main criterion for food purchase. There are also consumers convinced of the value of a healthy diet and of the damaging effects of synthetic agricultural inputs, and who are willing to sacrifice the convenience of supermarkets in order to get fresh food directly from the farm. Clearly, the absolute number of these consumers in a region limits the number of possible partnerships. For small farmers, the CSA partnership is attractive so long as it offers a favourable price and risk reduction compared to other market alternatives. 'Traditional agriculture' practised by many subsistence farms does not allow farmers to access the price premium of the organic products market. The ASAT partnerships, however, reward this type of agriculture without formal certification. Yet, in accordance with the limited number of consumer-partners, CSA is an option for only a few farms. Our case study pointed to certain features that seem to support farmers becoming involved: their entrepreneurial personality; a background which offers insights into the urban environment; and a high degree of commitment and social interaction. The farm size plus the famer's age and gender, or other farm and household related variables, seemed less decisive.

We analysed CSA as one form of the solidarity economy. We could confirm that solidarity is a relevant element of the motivation on the consumers' side. Despite this, the interest in and willingness for personal engagement on the farm is rather low. While the organisation that initiated the partnerships intended to inspire consumers to organise themselves and form 'shareholder CSAs', each around a local farmer, the result was 'subscription CSAs' with a very low involvement of consumers.

Concerning policy recommendations, we see CSA as an interesting solution applicable to other Eastern European regions in which small farms are faced with restricted market access. However, it is only a solution for a few. For the majority of farmers, it is of high importance to find other ways to cooperate in order to overcome market failures and access regular markets.

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What facilitates community-based development in Ukraine?

Vasyl Kvartiuk*

Abstract

Community-based and participatory approaches are being increasingly adopted by development agencies in Post-Soviet countries, thus providing an opportunity for community members to be directly involved in local public policy and development efforts. Despite a number of well-recognized advantages, some challenges may be undermining the sustainability of community-based development efforts. This study attempts to single out some salient issues of the community-based organizations (CBO) and discuss them in light of the local organizations' sustainability. The first issue to be examined is how the relationship between CBOs and local governments may affect CBOs' long-term sustainability. Second, we discuss potential reasons for members' low motivation to contribute resources towards community development funds. And finally, the current design of the community-based interventions by development agencies is challenged by discussing the role of external funding and facilitation for the CBOs. We address these issues empirically, utilizing data from a battery of semi-structured interviews with development experts and Ukrainian officials, along with several community case studies in two target regions in Ukraine. The results suggest that one of the crucial overarching policies related to the three issues under consideration is fostering competition between local communities for grant funding with sufficient information flow among them, along with the implementation of awareness-raising and educational measures.

Keywords: *Community-based development; governance sustainability; local public goods; community-based organizations; Ukraine*

Zusammenfassung

Was unterstützt eine gemeinschaftsbasierte Entwicklung in der Ukraine?

Entwicklungsagenturen in Ländern der ehemaligen Sowjetunion wenden zunehmend gemeinschaftsbasierte und partizipative Ansätze an. Auf diese Weise werden für Mitglieder der lokalen Gemeinschaften Möglichkeiten geschaffen, direkt in die lokale öffentliche Politik und Entwicklungsbemühungen involviert zu sein. Trotz zahlreicher wohlbekannter Vorteile können einige Herausforderungen die Nachhaltigkeit von gemeinschaftsbasierten Entwicklungsbemühungen untergraben. Dieser Artikel arbeitet bedeutsame Probleme von gemeinschaftsbasierten Organisationen (CBO) heraus und diskutiert sie mit Bezug auf die Nachhaltigkeit lokaler Organisationen. Als erstes wird untersucht, wie die Beziehung zwischen CBO und lokalen Regierungen die Nachhaltigkeit der CBO beeinflussen könnte. Als zweites diskutieren wir mögliche Gründe für eine geringe Motivation der Mitglieder, eigene Ressourcen in Gemeinschaftsentwicklungsfonds zu geben. Drittens wird die gegenwärtige Gestaltung der gemeinschaftsbasierten Maßnahmen der Entwicklungsagenturen hinsichtlich der Rolle von externer Finanzierung und Förderung für CBOs hinterfragt. Diese Fragen werden empirisch untersucht. Hierzu nutzen wir Daten aus halbstrukturierten Interviews mit Entwicklungsexperten und ukrainischen Staatsvertretern. Die Ergebnisse weisen darauf hin, dass einer der entscheidenden Ansatzpunkte bezüglich dieser drei Aspekte die Förderung des Wettbewerbs zwischen den lokalen Gemeinschaften um Finanzmittel ist bei gleichzeitigem, ausreichendem Informationsfluss. Zudem ist die Umsetzung von sensibilisierenden und befähigenden Maßnahmen wichtig.

Schlüsselwörter: *Gemeinschaftsbasierte Entwicklung; Nachhaltigkeit der Governance; lokale öffentliche Güter; gemeinschaftsbasierte Organisationen; Ukraine*

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1 Introduction

Local development has been revolutionized by community-based and participatory approaches during the last two decades. The literature predominantly indicates that various forms of community members' engagement in local development processes have significantly improved local governance in numerous institutional contexts across the globe (e.g. Besley et al., 2005; Boulding and Wampler, 2010). Development agencies also use these approaches in the transition context when designing projects dealing with local governance. The paradigm of community-based development (CBD) in the rural context was first pioneered by Coirolo et al. (2001). Issues relating to the poor governance of rural institutions were addressed by community members' involvement in local decision-making processes, thus creating a platform for participatory governance structures, that is, community-based organizations (CBOs). Since then significant amount of literature has examined the benefits of CBD across the world. It has been argued that participatory governance may introduce elements of competition in the provision of local public goods (Besley and Ghatak, 2003; Chavis, 2010), improve local government monitoring (Reinikka and Svensson, 2005), and reduce inequality of access to public services (Bardhan and Mookherjee, 2006). Despite the apparent benefits of this approach, there is a growing body of research outlining its weaknesses and pitfalls (Banerjee et al., 2010; Bernard et al., 2008; Mansuri and Rao, 2004). This motivates the discussion on how effective donor aid and dispensing public funds is for administering state grant programs involving community-based and participatory elements. Moreover, it is not clear to what extent these programs are effective in transition or post-communist countries. Are there certain circumstances when participatory interventions fail in the transitional context? What facilitates these initiatives? Is there a CBD project design that would be particularly suitable for the transition context? How to ensure the sustainability of local participatory initiatives? Answering these questions may help to improve these programs' efficiency and consequently save public and donors' funds.

This paper attempts to identify some of the conditions under which CBOs create a functional local governance arrangement leading to effective public goods provision within a community. The focus is on the Ukrainian context since local institutions still find themselves in transition after the beginning of restructuring the collective farms that were responsible for local public goods delivery. Rural infrastructure has been deteriorating since the collapse of the Soviet Union due to transitional processes (World Bank, 2008). The current public finance system cannot effectively cope with these serious fiscal pressures and calls for private or third-party capital involvement, as suggested by Bennett and Iossa (2010). Rural areas in a transitional context may introduce additional costs in public goods provision due to recipients' geographical dispersion, insufficient demand and higher risks. Because of these circumstances, private firms are reluctant to invest or enter into a concession-type relationship with local governments. As a result, public-private partnerships and the concession-type delivery of local public goods may not be viable at this point in rural Ukraine. Considering this, local development agencies (increasingly central governments as well) see local CBOs as potential partners in public goods delivery. This way, public goods recipients have the possibility to directly participate in the delivery process along the lines of Besley and Ghatak (2003). In general, CBOs are widely considered to have the capacity to contribute to moving local development forward (Hansmann, 1988; Opstal and Gijselinckx, 2008). However, our data indicates that existing local governance arrangements often do not perform well, and a number of factors may determine the success or failure of the CBO effort.

We examine how selected factors embedded in the discussion about CBD sustainability may influence the effectiveness of local participatory governance arrangements. All of the issues considered are at the center of attention of the development agencies implementing CBD initiatives, as well as of scholarly debate (Mansuri and Rao, 2004). We first examine the relationship between the village council and the CBOs. Following Young's (2000) typology, we analyze whether the CBOs "substitute", or "complement" the government, or are in an "adversarial" relationship with it. We look at these relationships in Ukraine and try to understand the dynamics in the community that lead to specific outcomes of public goods provision. Secondly, the study analyzes the willingness of local communities to finance the provision of local public goods. A number of development agencies in Ukraine recommend establishing local community development and maintenance funds based on inhabitants' regular financial contributions. The data indicates that in rare cases when the communities manage to establish the funds, they need a certain push factor to overcome initial frictions. Finally, we look at the moral hazard problems arising within the communities due to "startup" and external funding. It may be that the CBOs have weaker long-term strategic vision of their mission if they were established in response to a call of a donor agency, as suggested by Adhikari and Goldey (2010). Moreover, external donor funding may crowd out internal funding because of elite capture of the external funds (Gugerty and Kremer, 2008). Even though it is very difficult to obtain any conclusive evidence, expert interviews and case studies from Ukraine provide a solid empirical foundation for our arguments.

The rest of the paper is organized in the following fashion. Section 2 sheds light on the institutional context of public goods delivery in Ukraine. Section 3 presents a theoretical framework. Section 4 then briefly describes the data utilized within the study. Section 5 provides a discussion about the results. Finally, Section 6 concludes.

2 Institutional Context

The governance of Ukrainian rural areas finds its roots in the former Soviet Union, when collective and state farms were responsible for providing villages with basic public services (OECD and World Bank, 2004). Village councils played more of a

coordinating role since most of the funding came from the collective farms. After the collapse of the Soviet Union, the responsibility for local public services was shifted to local governments. Healthcare, water supply, education, etc., were then funded out of the budgetary funds via the village councils. Considering the difficulties the country was facing with the budgetary processes at the time, public goods were severely underfunded. Years later, this underfunding has been continuously contributing to the deterioration of rural infrastructure and exacerbating the problem with financing. Many of the inefficiencies in the public infrastructure of the Soviet system have led to the incapacity of the public system to cope with arising needs. World Bank (2008) has estimated that 29 billion USD should be invested in the aging local infrastructure over the next decade in order to avoid further deterioration of rural infrastructure.

The current public finance system cannot cope with the fiscal pressures arising due to these enormous needs on the local level. First, structural challenges call for administrative reforms, for example eliminating existing vast inefficiencies in the public finance sector that were inherited from the Soviet regime. The network of public services and goods is in need of optimization, and incentives for officials to deliver these services and goods need to be aligned with the recipients' interests. Secondly, a long tradition of corruption on all tiers of the government represents another serious inefficiency and requires respective reforms.

The centralization of power and budgetary resources leads to very limited capacities of the local governments in Ukraine. Village councils have an extremely narrow set of instruments (defined by the existing legislature) to move local development forward. Moreover, a large part of the scarce tax revenues from those few enterprises existing within the municipality cannot be retained locally due to existing budget legislation (World Bank, 2008). Thus, village councils are left with very few resources to deal with arising local issues. Despite the fact that international development agencies call for involvement of the private for-profit sector in public services provision (public-private partnerships, concessions, etc.), business is reluctant to work with existing government. Thin markets, high transaction costs in rural areas, along with high risks associated with having government as a partner, hinder the possibility of a for-profit provision. Transaction costs associated with the rural areas call for non-profit delivery of public goods by the third sector organizations (TSOs) – non-profit non-governmental organizations.

The third sector in Ukraine is very young but is developing rapidly. The concept of community participation is getting incorporated into the population's mental models and introduces a new stakeholder on the local level. It is often the case in Ukraine that a community's interests are represented by some sort of informal democratic self-governing institution. However, these informal initiatives are becoming more and more institutionalized in the form of civic or charitable organizations representing community interests. Numerous donor organizations implement projects with the aim of facilitating development of the CBOs. According to Coirolo et al. (2001), a CBO is "normally a membership organization made up of a group of individuals in a self-defined community who have joined together to further common interests". Missions of these organizations could range from a targeted delivery of a concrete public good (e.g. water) to implementation of a local development strategy. Partnership between the CBOs, local government, and the private sector is among the principles of CBD (UNDP, 2007). However, the efforts of development agencies appear to have had limited effect on the rates of CBO establishment, and even if the CBO is established, the success of public goods delivery is not guaranteed (Wong, 2012). Several of the most salient CBD conditions will be further discussed below.

3 Theoretical Framework

3.1 Relationship with local authorities

There is a long history of debate in the literature about the origins of the third sector organizations (Lewis, 1999; Salamon and Anheier, 1998; etc.) that eventually transformed into a more contextual discussion about the role of these organizations locally (Bernard et al., 2008). Understanding the nature of the third sector and incentives of the CBOs' leaders is essential for finding the right local governance structure, thus leading to better public goods outcomes. As a result, this knowledge may give us a better idea about how to improve the sustainability of community-based efforts. It is not clear whether the third sector arises in rural areas as a response to the failures of the local government or as a partner in local development efforts. In order to systematically approach this challenge, we refer to a seminal work of Young (2000), who developed a theoretical framework classifying different types of TSOs based on the nature of their relationship with the government. In particular, Young (2000) identifies three major types of CBOs: 1) working autonomously and supplementing governmental provision of public goods (supplementary relationship); 2) partnering with the government for public goods provision (complementary relationship); and 3) engaging in an adversarial relationship with the government (adversarial relationship). We apply this framework to a relatively narrow class of TSOs – rural CBOs. Categorizing existing relationships between local governments and CBOs will help us understand the incentives of each of the parties in local governance arrangements in rural Ukraine. Whether a relationship is competitive or cooperative may to a great extent determine the effectiveness of local collective action.

Despite all the attempts to explain the origins of the third sector, the literature has been relatively vague in answering this question. Going back to the seminal work of Salamon and Anheier (1998), who attempted to test different theories explaining the third sector, we see some evidence on the international scale about the prevalence of cooperation between the government and the third sector. These authors refer to such cooperation in their "Interdependence Theory", which suggests that nonprofits are largely in cooperative relationships with the government. However, New Institutional Economics follows the line of an argument that the third

sector may be a response to the policy and institutional failures of the government (Young, 2000). Thus, Campos et al. (2004) suggest that the Pakistani Aga Khan Rural Support Program has helped substitute for failed governmental development efforts to disburse credit to small farmers. However, the Aga Khan Foundation is a large player in the non-profit world and it may be difficult to draw parallels with small local CBOs. On the other hand, Besley and Ghatak (2003) argued that TSOs may facilitate competition by matching motivated (mission-oriented) public goods providers (local TSOs) and customers (public goods consumers). Accordingly, the CBD approach may ensure community gains from having alternatives to state approaches to local development, and this in turn may discipline and motivate local authorities to pursue more innovative local policies. Similar to the reasoning of Bennett and Iossa (2010), nonprofits may introduce substantial innovations in local public goods delivery, suggesting a complementary or to some extent adversarial relationship with local authorities. On the other hand, there is a danger that local TSOs weaken local government's willingness and capacity to deliver services (Haque, 2004). It may, however, be context-dependent. In the post-Soviet setting, Frohlich (2012) finds that Russian disability NGOs may be able to implement innovations in local delivery by maintaining a close relationship with the state.

3.2 Community development fund

Most Ukrainian municipalities have challenges with funding local public services (World Bank, 2008). The vast majority of these municipalities rely on equalization transfers from the rayon governments (NUTS 3) that only cover current expenses like salaries for the village council's staff and utility bills. Within the current budgetary system it is very difficult to imagine Ukrainian village councils having available funds for any capital investments (Lukovenko, 2003). This leads to a situation where local public goods (healthcare, schools, water supply systems, etc.) are severely underfunded, and thus suffer from underpovision and insufficient quality. Considering these enormous fiscal pressures, involving local TSOs in fundraising efforts should be very attractive for the municipalities. Numerous development agencies have recommended establishing community development funds, that is, separate funds based on regular membership fees and operated by local TSOs (EU, 2006); there could be several reasons for this. First, a community development fund could serve as a buffer against adverse events affecting local public goods like repairs of a water supply system, etc. Secondly, with a sustainable flow of funds it is possible to save and plan expenditures, and thus deal with capital investments, at least partially.

The literature identifies local CBO's ability to maintain a fund for some purpose as a key to its sustainability and successful development. Ostrom (1990) identifies formal financial management of a TSO, including mobilizing funds from local communities as one of the criteria for its successful development. Furthermore, successful local fund maintenance could be seen as a result of higher levels cooperation and trust within the participating community members (Datta, 2005).

Finally, scholars repeatedly underscore the importance of a sense of ownership of local public goods as a necessary condition for local development. This could be achieved by direct participation with monetary contributions towards common community goals (Marks and Davis, 2012; Whittington et al., 2009). Bardhan and Mookherjee (2006) argue that user-fees are an efficient and non-coercive way of funding local public goods leading to minimal cross-subsidization between community elites and non-elites. Having an option of non-participation for the community members indirectly creates competition in the sense of Besley and Ghatak (2003). These authors argue that matching mission-driven public goods suppliers (CBOs) and customers, which is a competition-based notion that they use, leads to efficiency gains in public goods provision.

Understanding the dynamics among local community members' willingness to contribute financially towards local maintenance funds may shed light on the general sustainability of the CBD development efforts in Ukraine.

3.3 External funding

The literature is not clear about the effect of external funding on the long-term sustainability of local collective action (Banerjee et al., 2010; Gugerty and Kremer, 2008; Mansuri and Rao, 2004). In particular, it is not fully understood to what extent should development interventions facilitate the process of CBO establishment (Adhikari and Goldey, 2010). Arguably, donor agencies may directly facilitate establishing local CBOs, and as a result undermine their sustainability. The availability of initial "startup" funding may introduce a moral hazard for local leaders. For instance, they may establish a short-lived CBO with the aim of obtaining "seed" funding for some specific project, not caring about an organization's longer-term activity. Moreover, a "foreign" agenda introduced by somebody who intervened in the community from the outside may be in dissonance with local priorities and, as a result, undermine CBD's efforts sustainability.

On the more general level, external funding may also adversely affect CBOs' sustainability. We refer to external funding as any resources coming from the government and donor contributions, whereas internal funding is referred to as the resources raised by the members of a CBO. These organizations utilize external funding for implementing medium-sized and large scale local development projects. Often capital investments required for public goods like water supply exceed the capacity of the local population to fund them via membership fees (EU, 2006). On the other hand, external donor funding can deal with larger local needs like a water supply system or school renovations. However, it may be highly contingent on fundraising capabilities of the local leadership and donor availability. As the CBOs have to invest substantial efforts to obtain the funding, it is far from being sustainable as opposed to contributions levied from the organization's members. As a result, a continuous flow of funds into a maintenance fund may reduce communities' planning uncertainties and improve development efforts sustainability.

4 Empirical Strategy and Data

The study utilizes qualitative data from a field trip to Ukraine. The interviews were conducted in the mid-2011 and could be categorized into two types: experts and local stakeholders of interest. Two regions were selected: Kyiv oblast and the Autonomous Republic Crimea [1]. The former region was selected to examine examples of salient local CBOs that have good access to funding and information on management and maintenance of non-profits. Proximity to the capital may provide these opportunities. On the other hand, the latter region was interesting as it generally is ridden with problems of water supply and is rather heterogeneous with respect to its population. Prior expectation was that saliency of these issues in Crimea may have given rise to a respective third sector.

The experts were almost exclusively interviewed in Kyiv and Simferopol, the capitals of both regions. On the other hand, the focus of the local stakeholder interviews was on rural areas. The choice of the local stakeholders was deliberate and guided by consultations with development experts. In particular, six municipalities were selected based on a criterion of being a recipient of the grants from the CBA and DesPro Projects [2]. In the Kyiv region, three rural and one semi-rural municipalities were selected; Crimea was represented by only two rural municipalities. All of these communities could be characterized by a relatively high amount of civic activity by local inhabitants, a similar fiscal situation, and established local third sector organizations that could be classified as CBOs. Apart from these common features of the municipalities, no efforts were invested in achieving representativeness of the cases among Ukrainian rural municipalities. One of the data limitations that should be pointed out is a possible selection bias that limits the number of selected communities with adversarial relationships between local authorities and CBOs. However, it is equally important to point out that this study considers only those organizations that have public goods improvements as statutory aims, and does not account for advocacy-related civic organizations (e.g. lobby or interest groups), which tend to be established in more urbanized areas. Thus, we are interested only in CBOs aiming to improve the local public infrastructure and quality of local life in general. They may in principle be in an adversarial relationship with local authorities and receive grants from the donor agencies.

The respondents were mayors of rural municipalities and chairs of different types of nonprofit organizations. The range of organizations interviewed included all possible legal registration forms: rural civic organizations, charitable foundations, service and agricultural cooperatives, and local self-governance bodies. In total, 18 semi-structured interviews were conducted. All the interviews were recorded,

transcribed and subsequently analyzed. The analysis was guided by a framework-based qualitative data analysis strategy suggested by Richie and Spencer (1994) that stipulates generating a framework to help distill relevant qualitative information via classification and mapping of a raw data. In particular, the process of analysis is divided into five distinctive steps. During the first stage, one becomes familiar with the data with the help of transcripts, along with basic abstraction and conceptualization. Then, a thematic framework embedding the literature review in the existing data is developed. Based on the thematic framework, the data is indexed and subsequently charted (indexed data was rearranged with the framework's guidance). The final stage stipulates data mapping and interpretation.

Interview guides were developed after consultations with the development experts from the CBA and DesPro, and based on the results of the literature review. Experts were interviewed on a broad range of issues related to rural public goods, rural governance arrangements, public finance, and the implementation of participatory approaches in local development strategies. The interview guides for the public officials dealt with the following categories of issues: 1) municipality characteristics including fiscal issues; 2) public goods and services (education, healthcare, infrastructure and entrepreneurship support); and 3) civil society within the municipality. On the other hand, representatives of the CBOs were interviewed about their experiences with establishing and running their organizations. Respective guides dealt with the following categories: 1) vision at the time of CBO's establishment and local needs; 2) management; 3) funding portfolios; and 4) cooperation with other stakeholders. All of the interview guides were personalized for each of the respondents. All the respondents were given enough space to sufficiently elaborate on each of the issues and identify most salient issues that were of concern at the time of the interviews.

The information collected is qualitative. However, it provides a good idea about the selected issues that communities may face in their efforts to move local development forward. The obtained data was also used for preparing a subsequent quantitative survey in Ukraine.

5 Results

5.1 Relationship with local authorities

First, interviews with the development experts reveal that a number of major nongovernmental donor organizations in Ukraine fund local development initiatives. Many of these organizations represent pilot projects attempting to demonstrate to the government certain effective models for development efforts. One can observe emerging state-funded grant programs after the pilot ones have been implemented by the CBOs funded through organizations such as the World Bank or UNDP. For instance, UNDP's program "Community Based Approach to Local Development" (UNDP's CBA Project) directed at improving social infrastructure have "inspired" the government to launch similar

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[1] In early 2014 Crimea was annexed by the Russian Federation in a violation of international law, and has become de facto a territory of Russia that is not recognized internationally.

[2] The former is the project titled "Community-Based Approach to Local Development" implemented by UNDP Ukraine, whereas the latter is conducted by the Swiss Cooperation Office. Both of the initiatives provide funding for eligible rural CBOs for local development projects.

programs, for example on water supply, "Drinking Water", or on school transportation, "School Bus". A community development specialist from a Kyiv-based development agency indicated the following:

> *"Based on our experience, many rayons and oblasts have launched their own grant programs using our approach. They provide UAH 5-10 thousand and support local initiative," (Interviewee No. 1 ³)*

Thus, the government appears to follow recommendations that replicate suggested models of the national and international donor organizations. This means that there may be some degree of supplementary or even adversarial relationship on the initial stage, as the third sector introduces innovative approaches to local development and governance. However, in the long run there may be more features of complementarity in the government's and the third sector's efforts on the larger scale.

All six case studies (representing the cases with most successful CBOs) suggest that the local Ukrainian third sector is still rather underdeveloped. Examined communities appear not to have the necessary levels of human and social capital for an effective collective action. Development experts indicate that most of the communities require extensive facilitation in order to establish a functional CBO. This is reflected in the fact that the initiative to establish a CBO very rarely comes from the community, which undermines the basic bottom-up principle of the CBD. As a consequence, missing stable goal-oriented incentives of the local leadership lead to the outcomes with low sustainability of the CBOs. Many of them stop activities after initially implementing a project, which may be incepted by the development agency. For instance, a quote from a deputy-mayor who is also a chair of a CBO demonstrates a lack of vision for longer-term community development:

> *"We just need a leader for this organization. When everybody wanted, it all worked and now there is some passiveness and it doesn't work somehow. … Well, I can tell you that this civic organization is needed only from time to time. If there is an issue we resolve it," (Interviewee No. 4).*

Four of the communities under examination were exposed to external donor facilitation when establishing their CBOs. This means that representatives of the donor organization (in these cases UNDP's CBA Project) came to the region and promoted the participation of selected communities in an initial project. Interviews with the CBO chairs demonstrate that in such cases the CBOs are usually established by the staff of the village council, and the leadership is usually very close to the village council. Other key informants have testified that a widespread situation in Ukraine is when the village councils create so called "pocket organizations" that they can use to attract external funding into the community. In this case, the relatively flexible legal form of a CBO is utilized by local

governments to receive funding. Although it may provide an additional source of funds for local governments, this undermines to original vision of the CBD development efforts to establish sustainable CBOs.

On the other hand, we examined two case study CBOs ⁴ that were established based on the communities' initiatives and which represent bottom-up initiatives. Structurally and operationally, these CBOs are much more functional than the ones externally induced by the development agencies. They both have a group of highly committed leaders devoting significant time to the organization's management, and both have a clear division of labor and responsibilities. These organizations appear to be much more independent from the local authorities in terms of staff affiliation and decision-making. For instance, CBO leaders organize separate member meetings and all of the decisions on external fundraising were assumed by the CBO's staff. This differs dramatically from the rest of the cases with donor-facilitated CBOs'. In those cases, CBO leaders are very often local government representatives. In such cases, independent decision-making is undermined, making it nearly impossible to implement any innovative approaches to local development processes.

The two cases of internally-induced CBOs demonstrated rather sophisticated fundraising portfolios. Both of the considered organizations devote much more significant resources to fundraising and search for innovative projects and initiatives. Activities appear to be more community-oriented and are based on constant fundraising efforts, unlike the ones externally-induced and implemented by the village councils. CBOs in both of the cases initiated and implemented local infrastructure projects (water supply system, school building renovation and targeted road repairs) in close collaboration with local authorities. One of the key innovative approaches introduced by these CBOs is fundraising techniques: they involve state and entrepreneurial funding, as well as substantial one-time monetary contributions from the local population. In addition, these techniques managed to mobilize local inhabitants for regular monetary contributions in order to create community development funds. As a result, relationships between internally-induced CBOs and local authorities are well-established and could be characterized as supplementary. Both of the latter CBO chairs indicate that good relationships have been built over time by proving that CBOs can move local initiatives forward and achieve positive results by adopting new development approaches. Both of the successful CBOs under consideration could be considered as trendsetters for the local governments that partially adopt their approaches over time.

As a result, local internally-induced CBOs could be seen as organizations supplementing government's public goods provision by introducing innovation in the delivery process. In particular, innovations in this context could be seen as the adoption of new funding schemes (e.g. user-fees, co-funding, etc.) and the instigation of new local governance arrangements involving CBOs and local authorities. However, a supplementary relationship appears to take place

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³   Please see Appendix A for a full list of the interviewees.

⁴   These are cases No. 1 and 4 in the Appendix B.

only in the short run when we can observe innovation-inducing competition between the TSO and the government. In the long run, the relationship between local government and a TSO appears to rather follow Young's (2000) complementary type.

5.2 Community development fund

In principle, the CBOs can obtain funding from three different sources: local governments, donor organizations and enterprises, and membership fees. The first source appears to be irrelevant in the Ukrainian context given the local budgetary situation. The second type of funding usually represents one of the main motivations for Ukrainian communities to establish CBOs. Most of the CBOs among the case studies considered investing significant efforts to obtain donor funding [5]. However, most of them do not have a relevant capacity to establish long-term and strategic relationships with the donors. Bad access to information (printed media, Internet, etc.) along with low human capital contribute to very poor fundraising capacity of the CBOs. One of the practical and functional options is levying membership fees from the community members.

Four communities that considered establishing a community fund reveal that membership fees may be very difficult to collect. In particular, initially persuading community members appears to be extremely problematic. The major challenge appears to be the fact that there is a prevailing mental model among the population that social services in rural areas are supposed to be provided by the government. A development expert in Crimea pointed out:

> "…Mentality is important. Soviet Union has taught people to live today and not think rationally about the future. People still don't have the understanding that they need to plan. We try to change the mentality of the people within our projects," (Interviewee No. 13).

These beliefs stem from the Soviet past when collective farms delivered local public goods. Development experts call this phenomenon a "consumerist mentality", referring to the local population's inertia to engage in public goods delivery, and thoughtless consumption due to a lack of a sense of ownership. These experts argue that community members have grown accustomed over the years to expect local authorities to show all the initiative in the public sphere, whereas community members are not active in the public arena at all. In other words, local inhabitants appear to have a path-dependent belief that only the government should provide local public goods.

However, the interviews suggest that there are few communities that manage to overcome initial difficulties in fighting mental preconceptions of the membership fees and are successful in levying the necessary funds for the organization's activities and operation. So what helps these communities with this task? First of all, the interviews reveal that success

stories motivate communities to a large extent. Local inhabitants often have ex ante negative predisposition towards voluntary monetary contributions because of relatively frequent news about fraud or corruption. However, experts point out that there is very little credibility to these concerns in a community setting due to CBO leaders' proximity to the community members. In other words, the news about CBO-related fraud cases comes from more urbanized settings where CBO leaders are often detached from the members. On the contrary, our data suggests that hearing about other examples of successfully levied membership fees and consequent transparent expenditure fosters trust towards this model of cooperation within the community. All interviewees agree that local success stories are a powerful factor motivating people to cooperate. Secondly, local norms of cooperation may play a decisive role in people's willingness to contribute. Mayors of the communities where establishment was possible describe their communities as more cooperative compared to the neighboring village or the rest in the rayon. However, the causation direction is not clear. We observed two instances (out of all the organizations examined) when development funds were fully established within the community organization. However, according to the development experts, these examples are very rare and are more of an exception. Based on the mayors' and CBO chairs' testimonies, it is clear that people's motivation to contribute improved drastically after the first year of the fund's existence. Community members realized that each of them was able to make a difference through a minimal financial contribution, and they had been able to see the results. All the interviewees indicate that there had to be an initial push or some sort of facilitation (external donor/development organization) to overcome the initial skepticism and non-cooperative behavior. In the first community (case study No. 4 in Appendix B) with an established development fund, a local charismatic farmer started providing waste collection services, initially free of charge. Service fees were then promoted as a long-term funding mechanism for a certain period of time until a critical mass was achieved and user-fees were agreed upon on community-wide. In the second community (case study No. 1 in Appendix B) with the established development fund at the time of the interviews, a critical role was played by the donor agency that firmly conditioned "seed" funding on the establishment of a development fund. According to both the mayor and the CBO's chair, external facilitation played a decisive role. The initial situation with low trust and no cooperation could be seen as a prisoners' dilemma, that is, the optimal strategy is not to participate because of the risk that others will not either. The perceived risk of others' non-participation could be mitigated by greater levels of social trust. If these initial frictions are resolved, further incentives to cooperate are supported by monitoring and sanctioning the deviating behavior. These results are in line with the findings of Banerjee et al. (2010), who suggest that collective action needs to be learned over time.

Finally, the two cases where the communities were able to overcome initial friction and establish community development funds have a much clearer vision about strategic

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[5]   The exceptions are cases No. 3 and 5 in Appendix B.

development and priorities. The fund may create a feeling of responsibility for local public goods among the community members and foster better incentives for involvement into community life. For instance, a head of a rural agricultural cooperative that was trying to collect funds for street lighting (who failed to establish the fund, however) reports that:

> *"There were some people who gave more money and there were also the ones who were not members and still gave the money. However, in general not that many contributed: only 69 persons. But those who did they have a different attitude towards the value created,"* (Interviewee No. 9).

In sum, having a predictable flow of funds may help medium- and long-term planning. Moreover, a feeling of ownership fostered by the user-fees drastically improves communities' attitudes towards public goods (Marks and Davis, 2012). Naturally, better management and maintenance enhance delivery efficiency.

5.3 External funding

Our data suggests that the timing of obtaining external funding is crucial for a CBO's sustainability. Those CBOs that obtained significant "start-up" funding (grants or donations immediately before or at the time of the organization's inception) from external donors are less likely to operate sustainably in the future. Case studies indicate that initial funding, along with the parallel donor's facilitation, may distort the community's incentives by shifting the focus away from the original purpose of the CBO. In particular, the risk is that after initial project implementation the CBO ceases all activities and practically exists only on paper.

> *"There are many organizations that support their activities, but there are also some "one-time" organizations that were created specifically for the project and will be forgotten about after the project's implementation. If the community doesn't get engaged the organization will just fade away,"* (Interviewee No. 1).

As pointed out by Adhikari and Goldey (2010), the transition period after the CBO's inception is the most critical for its further sustainability. Among the cases considered in this study, there is only limited awareness about this among the development agencies in Ukraine. The problem is that "planting" new CBOs from scratch may create a situation of a moral hazard for the local leadership. In this case, local elites signal their compliance with the sustainability requirements of the donor agency to obtain initial funding. However, in the second stage when the CBO is expected to invest efforts into sustaining its activities, the costs of action appear to outweigh inaction. As a result, the funding that is originally intended as "seed funding" (encouraging the organization's

development) achieves precisely the opposite. There are a number of donor organizations working exclusively with well-established CBOs who have proven their functionality. Yet the problem is not in the seed funding itself, but in the design of the donor's start-up facilitation.

As an alternative to the "startup" facilitation on the ground, donor agencies can invest in promoting their programs to create a competition for funding among local communities (Chavis, 2010). This way only those communities with enough capacity will participate in the competition, thus weeding out the communities with lower capacity and giving them incentives to develop. In order to achieve higher capacity, community-wide levels of trust and norms of cooperation should improve, resulting in better collective action outcomes. These community characteristics take time to change (Banerjee et al., 2010) and, as case studies show, "startup" facilitation leads to only slight improvements in cooperation norms, if at all. Development experts suggest that change can be brought about by success stories of other more cooperative communities, existing role models that will motivate launching community-based platforms for those communities which have not yet done so and, finally, strong leadership within a community.

Development interventions with ad-hoc and nontransparent selection of target communities and excessive facilitation of CBO establishment may reduce long-term sustainability of the newly-created organizations. It is necessary that the communities have sufficient levels of norms of cooperation in order to transition to a long-term operation of a CBO. This means that in a community with low levels of trust and a lack of norms for cooperation, "bottom-up" or participatory approaches may not work in the long run. In this case the community will not be able to sustain the initial momentum after a donor's facilitation pulls out. Along these lines, an expert on water supply points out that:

> *"The community needs to be involved in the governance of an object. People need to meet more often and discuss current problems. Those villages where this works the community looks totally different: they don't have any conflicts, they meet more often, they are proud that they managed to do that. The communities become more independent after that and they stop waiting for something from the government. They decide about the following projects and go ahead and do that,"* (Interviewee No. 12).

Donors' resources could be invested more effectively into promoting grant programs that would attract most active communities. These programs should be designed in such a way that all the communities have an equal chance of participating, and an applicant must show a specific set and level of skills to apply for funding. However, in order to foster an adequate level of competition between the communities, donor agencies should ensure that the target communities are well aware of the grant programs.

6 Conclusion

This paper has examined several salient challenges of the CBD in the Ukrainian context. In particular, we have examined the factors that potentially determine the effectiveness and sustainability of local collective action. The literature offers overwhelming evidence about the advantages of community-based development. Numerous development agencies invest significant resources into participatory and community-based local initiatives. However, some studies have shown that there are a number of pitfalls questioning the effectiveness of some of the existing approaches (Banerjee et al., 2010; Mansuri and Rao, 2004). Here we use qualitative data from a field work in Ukraine to generate insights about the sustainability of the CBD approaches. In particular, we examine the role of their relationship with local governments, the establishment of a community development fund, and rural CBOs' reliance on external facilitation. Although the results are based on relatively successful and salient cases, the underlying issues related to CBD design may be applicable and relevant in other transition contexts.

The Ukrainian third sector still appears to be underdeveloped, as there are a number of CBOs that cease all activities after the inception project. A small number of communities that managed to sustain operation of the CBOs have a supplementary or sometimes even adversarial relationship with local governments shortly after establishment. CBOs may need a certain degree of decision-making freedom in order to implement local development initiatives utilizing new approaches. However, in the long run they tend to have a complementary partnership-based relationship. As a result, in a short run CBOs introduce some innovations in public goods provision mechanisms, whereas in a long run via partner relationships they encourage local governments to support and adopt these innovations. Thus, TSOs in the Ukrainian context could be seen as hybrids between complementary and supplementary types of Young's (2000) typology. Long-term oriented fundraising is crucial for the sustainability of a CBO's development efforts. In particular, many development agencies see community development funds as an effective instrument for improving the functionality of newly-created organizations. However, it appears to be very difficult to establish the fund initially due to the static frictions represented by local distrust and prevailing community-wide mental models about the role of the government in public goods provision. Nevertheless, there may be ways to foster the establishment of community development funds. First, higher levels of trust and norms of cooperation appear to be closely related with the probability of a fund's establishment. Secondly, success stories along with strong local leadership may also improve the odds of establishment. Finally, this may be one of the few examples when external facilitation contributes to a CBO's sustainability. Strategies like conditioning grant funding on the fund's establishment along with accompanying awareness-raising activities may increase the likelihood of establishment.

Finally, development interventions with excessive facilitation of CBO establishment may lead to moral hazard problems among local elites, and as a result undermine the long-term sustainability of newly-established organizations. The design of the grant programs should focus on promoting competition among the communities for funding opportunities. Current practices of selecting communities based on the needs principle (or any other criteria) and pushing community leadership to implement development projects (and thus establish CBOs) creates a moral hazard problem. This only reinforces the local population's beliefs about the role of the government in local public goods provision, and does not help to enhance the internal norms of cooperation, as the projects are often implemented on the level of local government without community involvement. Campaigns with extensive usage of media and local information channels help to sort and identify communities with better norms of cooperation. These communities will be more likely to sustain their development efforts after implementing the initial project. Sufficient information flow about the grant programs and accompanying success stories is necessary to foster incentives to improve cooperation within nonparticipating communities, and as a result, to generate competition among them.

The results of this study suggest two policy implications discussed in the literature. First, the debate about external facilitation of CBO establishment (Adhikari and Goldey, 2010; Mansuri and Rao, 2004) should deal with the program design in a specific context. On the one hand, strategies like conditioning "seed" funding on community development fund establishment may give an initial push to overcome a community's cooperation frictions. We presented an example of a community that managed to improve contributions towards the community development fund with the help of external facilitation. On the other hand, donors' grant programs should incorporate basic principles of competition into their initiatives along the lines of Chavis (2010) instead of using other criteria for recipients' selection. As was demonstrated, the nontransparent selection of communities and excessive initial facilitation may generate a moral hazard problem undermining the sustainability of local community-based development efforts. Second, in order for the competition-based design to work, a free flow of information is required, which appears to be a problem in rural Ukraine. Transparency and an information-rich environment are not only important for communities to be aware of fundraising opportunities, but also to enable success stories to be freely shared between nonparticipating communities and those with CBOs. Thus far, substantial donor resources have been invested in local institution building. Even though it may be a legitimate goal, this study suggests that educational and awareness-raising activities are equally important for fostering higher levels of participation within a municipality, and thus to ensure CBOs' sustainability. These measures should also directly target critical beliefs about the role of the communities and the government in the provision of local public goods that seem to prevail among the local population.

Appendix A. List of the interviewees

No.	Position	Organization/Area
1.	Community Development Specialist	Development Agency/Kyiv
2.	Senior Projects Coordinator	Development Agency/Kyiv
3.	Director	Think Tank on Civil Society/Kyiv
4.	Deputy Mayor and Chair of a CBO	Semi-rural municipality/ Kaharlytskyy rayon, Kyiv region
5.	Director	High school/Kaharlytskyy rayon, Kyiv region
6.	Deputy Mayor and Chair of a CBO	Rural municipality/ Ivankivskyy rayon, Kyiv region
7.	Chair	Association of Multi-Flat Building Owners/ Kaharlytskyy rayon, Kyiv Region
8.	Mayor	Rural municipality/ Tetiyivskyy rayon, Kyiv region
9.	Chair	Agricultural Service Cooperative/ Tetiyivskyy rayon, Kyiv region
10.	Deputy Head	Rayon (NUTS3) Administration/ Ivankivskyy rayon, Kyiv region
11.	Mayor	Rural Municipality/ Pereyaslav-Khmelnytskyy rayon, Kyiv region
12.	Expert on Water Supply	Development Agency/Symferopil
13.	Regional Program Coordinator	Development Agency/Symferopil
14.	Regional Program Manager	Development Agency/Symferopil
15.	Senior Official	Crimean Tatar Representative Body/Symferopil
16.	Chair	Agricultural service cooperative/ Sakskyy rayon, Crimea
17.	Expert and Chair	Development agency and rural CBO/ Sakskyy rayon, Crimea
18.	Chair	Rural CBO/ Dzhankoyskyy rayon, Crimea

Appendix B. List of the case studies

No.	Case	Location
1.	Semi-rural municipality with established Union of Multi-Flat Building Owners and a civic organization	Kaharlytskyy rayon, Kyiv region
2.	Rural municipality with an established civic organization	Ivankivskyy rayon, Kyiv region
3.	Rural municipality with an established agricultural service cooperative	Tetiyivskyy rayon, Kyiv region
4.	Rural municipality with an established civic organization	Pereyaslav-Khmelnytskyy rayon, Kyiv region
5.	Rural municipality with an established body of self-governance	Dzhankoyskyy rayon, Crimea
6.	Rural municipality with established agricultural service cooperative	Sakskyy rayon, Crimea

Note: Statutory activities of all the civic organizations and bodies of self-governance interviewed included improvements in provision of local public goods (education, healthcare, water supply, etc.).

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Local government performance in rural Poland: The roles of local government characteristics and inherited conditions

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Abstract

Decentralization of decision-making from central to local government in East-Central Europe aimed at making government more responsive and effective. Outcomes have varied significantly within and across countries. We examine variations in local outcomes in municipalities in Poland in 2003 to 2008. The single-country study holds form of decentralization constant, allowing a focus on the relative importance of local government characteristics versus inherited factors in performance. We analyze the performance of rural governments that, due to limitations on resources and infrastructure, may face the greatest difficulties in improving local conditions.

We find some evidence that more skilled and accountable government is associated with better outcomes. But inherited factors are more strongly related to outcomes. The results suggest that good government may improve outcomes even in poor conditions, the relationship with historical conditions outweighs the relationship to government characteristics. This provides support for the continuation of significant transfers and other support to some local governments.

Keywords: *Local government, rural, decentralization, Poland*

Zusammenfassung

Leistungen von lokalen Verwaltungen im ländlichen Polen: Die Rolle von Charakteristika der lokalen Verwaltungen und historisch bedingten Faktoren

Die Dezentralisierung von Entscheidungsprozessen von zentralen hin zu lokalen Verwaltungen in Mittel- und Osteuropa zielte darauf ab, Verwaltungen reaktionsfähiger und effektiver zu machen. Die Ergebnisse variieren signifikant innerhalb und zwischen Staaten. Wir untersuchen Ergebnisunterschiede auf der Ebene von Gemeinden in Polen zwischen 2003 bis 2008. Die vorliegende Untersuchung innerhalb eines Staates hält die Form der Dezentralisierung konstant und ermöglicht damit, den Fokus auf die lokalen Verwaltungseigenschaften gegenüber historisch bedingten Faktoren zu legen. Wir untersuchen die Leistungen von ländlichen Verwaltungen, die wegen ihrer begrenzten Ressourcen und Infrastruktur bei einer Verbesserung ihrer lokalen Bedingungen mit den größten Schwierigkeiten konfrontiert sein mögen.

Wir finden einige Belege, dass Verwaltungen, welche eine höhere Qualifikation und Verantwortlichkeit haben, bessere Resultate vorweisen. Aber die historisch bedingten Faktoren weisen einen stärkeren Zusammenhang auf. Unsere Ergebnisse weisen darauf hin, dass gute Verwaltung auch unter schlechten Bedingungen Resultate verbessern kann. Die historisch bedingten Faktoren wiegen dabei die Verwaltungscharakteristika auf. Dies liefert Argumente für eine Fortsetzung signifikanter Transfers und anderer Formen der Unterstützung für bestimmte lokale Verwaltungen.

Schlüsselwörter: *Lokale Verwaltung, ländlich, Dezentralisierung, Polen*

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1 Introduction

During the 1990s, countries across the world decentralized government, moving decision-making and control of state revenue from the central to the local level in order to improve public sector performance. In former socialist economies, where governance had been extremely centralized, decentralization had particular resonance (Polishchuk, 2004).

A growing body of empirical work now suggests, however, that decentralization may not provide a simple means of improving government efficiency and service delivery. Outcomes have improved in some localities, while others have fallen further behind. Research points to problems in the design of policies (Rodriguez-Pose and Krøijer, 2009), but performance has also varied significantly among local governments operating within a uniform institutional framework – for example, a single country (Besley and Burgess, 2002).

Bardhan (2002) proposed that differences in performance may be linked to differences in the extent to which mechanisms of accountability and electoral competition can reduce principal agent problems between citizens and local government, ensuring the election of skilled and responsive officials. An alternative explanation (Golley, 2002) is that factors outside the control of local government, including history and geography, may explain differences in outcomes. Empirical studies in Latin America and Asia provide some support for both theories, but the findings are not consistent (Besley and Burgess, 2002; Grindle, 2007). Looking at post-socialist Bulgaria, Meurs (2007) shows that local government performance is related to the characteristics of local governments, but that history and location have a bigger impact.

Understanding the relative impact of local government characteristics, versus history and location, is important. If more skilled, active, and accountable local governments are associated with better local performance, policies to train local government officials and increase their accountability may help localities where local governments have not been able to effectively deliver the goods and services desired by the electorate. If history and geography outweigh the efforts of skilled and accountable local government to improve outcomes, decentralizing decision making from central government to local authorities may not improve outcomes even with skilled and accountable local governments. There will be a rationale for continued transfers to poorly performing localities, even if these negatively impact motivation and accountability of elected officials.

In this paper, we use a unique survey of rural municipalities to examine local government characteristics and performance in post-socialist Poland. Rural municipalities are particularly relevant to the question posed here, as they have greater variance in local government skill, electoral accountability, and inherited infrastructure than urban areas. We examine the skills, mechanisms of accountability, and inherited conditions of local governments, and variation in three measures of performance. Using a simple OLS regression, we analyze the relationship between these.

Poland is an important case for understanding the links between local government conditions and outcomes because it offered strong conditions for success. Decentralization benefited from strong traditions of local government prior to socialism, fairly consistent policy implementation, strong macroeconomic performance (providing resources, so that decentralization did not simply shift central government deficits to localities), and early EU membership (providing technical and financial assistance). This within-country study eliminates variation in the degree of implementation and the mode of local government financing, and allows us to focus instead on the impact of variations in local context.

We find that some measures of local government skill and accountability, particularly voter turnout, are significantly related to outcomes. The relationships, however, are not consistent across time and outcomes. Local historical factors and location, particularly location in the Warsaw region or Western Poland, are more consistently related to outcomes. Overall, our findings support emerging patterns in the literature and have important implications for policies to mitigate uneven outcomes under decentralized government.

2 Explaining varying local outcomes

Decentralization can be defined as "devolution by central… government of specific functions with all the administrative, political and economic attributes that these entail, to regional and local governments that are independent of the center" (Faguet and Sanchez, 2008). Decentralizing decision making is expected to improve outcomes. Citizens face a standard principal-agent problem in assuring the performance of elected representatives. Political participation may be facilitated at the local level, by the smaller scale, allowing populations to hold their representatives more accountable, and there will be better access to relevant information, facilitating monitoring (Alderman, 1998). Decentralization of decision making may thus improve responsiveness to local preferences, raising allocative efficiency, and reduce government waste, raising technical efficiency. Moreover, the efficiency gains should intensify over time (Balaguer-Coll et al., 2010).

However, a number of conditions may affect the potential of decentralization to improve local outcomes. If there is little heterogeneity of preferences across localities, local information may be less useful. Decentralization may yield few allocational benefits, while raising organizational costs. Too little heterogeneity seems an unlikely problem in most developing and transition economies, including Poland, as these are characterized by uneven development. Another factor that may limit the benefits of decentralization is spillover effects from one locality onto another. Where these are important, decentralized decision-making may produce less efficient outcomes, unless other, more aggregated, decision-making units are available to address them (Seabright, 1996).

Variations in the design of fiscal rules and incentives can also explain uneven outcomes of decentralization. Insufficient decentralization of resources and decision-making powers can leave governments unable to respond to local demands. Under these conditions, local governments cannot

be held accountable for outcomes by voters. Dabla-Norris (2006) argues that such design failures are important in many post-socialist cases. Using panel data of 16 Central and East European countries, Rodriguez-Pose and Krøijer (2009) suggest that the design failures are associated with poorer outcomes under decentralization. They find a negative overall relationship between decentralization and economic growth, suggesting that perhaps technical efficiency has not improved, but show that greater decentralization of resources is related to better response to local demands. Zhuravskaya (2000), comparing Chinese and Russian fiscal design, also shows a link between policy design (revenue autonomy) and performance.

Within a single country, municipalities face common policies and laws, and thus a common ability to form aggregate units to address spillovers, and consistent fiscal rules regarding revenue- and cost-sharing with more centralized levels of government. Researchers must look for other explanations for within-country differences in performance under decentralization. Variations in performance under decentralization may be explained by differences in the extent to which mechanisms of accountability and electoral competition are able to reduce principal agent problems between citizens and local government and ensure the election of responsive and skilled officials (Bardhan, 2002; Bardhan and Mookherjee, 2006; Faguet, 2014).

Although decentralization is meant to improve government responsiveness to voters, Bardhan and Mookherjee (2006) argue that local government may be more susceptible to capture than central government, because potential captors are fewer and thus better organized at the local level. Without strong mechanisms of accountability, local governments may be captured by local elites, who then dominate the choices of public goods and services.

The impact of effective monitoring of local government on a variety of local outcomes has been examined in a number of ways. Meurs (2007) found voter turnout rates in Bulgaria to be significantly positively related to levels of net migration into rural localities (but not with improvements in local revenue generation or unemployment). A study of local government in India found voter turnout unrelated to effective local government disaster response, although levels of electoral competition (number of competing candidates) were significantly positively related to response (Besley and Burgess, 2002). In small Mexican municipalities, Grindle (2007) found no relationship between the level of electoral competition and performance, while electoral competition seemed to be important in Bosnia-Herzegovina (Pickering, 2012). The India study also examined the impact of newspaper circulation, as a measure of local voters' information, and found a significant relationship (Besley and Burgess, 2002). Case studies of local rural governance in Poland provide evidence of the ability of local political elites to exert political or financial pressures on local government spending if the proper accountability is not established (Furmankiewicz et al., 2010), while regression analysis shows that electoral conditions do affect policy innovations (Falkowski, 2013).

Citizen monitoring of local government might also be more direct, especially in small and rural municipalities. It might occur in individual meetings with local officials, or through citizen groups. Grindle (2007) found such activity to be unrelated to outcomes in Mexico, however, and argued that meetings are often focused on the extraction of very specific resources by specific groups, and not the meeting of broader needs. This dynamic is also described by Regulski (2009) for Poland. However, Petrick and Gramzow (2012) find, in case studies of local development groups, that citizen efforts to influence the provision of public goods, such as telecommunications infrastructure, could be effective.

Where the supply of skilled officials is limited or there is little competitive pressure, local administrations may lack the skills to generate revenues and respond effectively to local demands (Bardhan, 2002; Bardhan and Mookherjee, 2006). A study of local government and outcomes in Latin American cities found that cities with innovative mayors, skilled at networking, outperformed other cities (Angell et al., 2001). Looking at smaller municipalities in Mexico, Grindle (2007) also found that entrepreneurial skills of local officials were important in outcomes. Studying local government performance in rural Bulgaria, Meurs (2007) found no evidence that mayors' level of education was related to better outcomes, but did confirm that mayoral networking was correlated with greater reductions in the local unemployment rate. Pickering (2012) found that entrepreneurial, consensus-building skills contributed to mayors' success in Bosnia-Herzegovina.

Localities, however, also differ in their infrastructure and resource bases, and this too may affect the performance of local government (mediated by the form of fiscal decentralization). The local resource base, while partly the result of local government decisions, is also affected by a number of factors outside local government control, including history (agglomeration effects), location, and natural resource endowments. Studying regional inequality in China, Golley (2002:786) found a significant impact of agglomeration effects on regional economic outcomes, arguing that "nature" (history) may require as much attention as "nurture" (policy) in explaining outcomes. Angell et al. (2001), studying Latin American cities under decentralization, also find an important role for economic starting pointing in explaining relative performance. Meurs (2007) finds that regional dummies outweigh all other factors in explaining differences in local government performance in Bulgaria. In Mexico, however, Grindle (2007) finds that per capita local government resources are not related to performance, and Besley and Burgess (2002) find no impact of income or central government transfers on local government disaster relief in India.[1]

These studies vary significantly in the outcome measures used, variables controlled for, and measurement techniques, including the degree to which they address the complex (and sometimes endogenous) relationships between local government performance and its determinants. The Latin

[1]   This finding controls for state-level effects, which might be picking up some of the effect of income differences.

American studies (Angell et al., 2001; Grindle, 2007) rely on case studies or simple correlations, while the Bulgarian (Meurs, 2007) and Indian (Besley and Burgess, 2002) studies use multivariate regressions and, for India, panel data. There is not yet a consensus on the impact of local conditions and behavior on local outcomes. Leaders' networking skills and efforts seem to matter consistently, but the effect of electoral conditions and inherited conditions is less clear.

In section 4, we examine the characteristics of rural mayors elected in the 2002 local elections in Poland and interviewed in 2005, and of those elections, as well as a range of local economic factors over which mayors have little immediate control, including inherited infrastructure and inherited patterns of economic development. In section 5, we examine the relationship between these factors and three measures of local government performance. First, we review the framework of Polish decentralization.

3 Polish decentralization

Polish municipalities, rural and urban, are subject to a common administrative and fiscal structure, which we review here for the period covered by our study. Although this structure is common, municipalities bring to this structure varied history and local government characteristics.

Historical precedents provide municipalities with a mix of institutional reference points. From 1569 to 1772, provinces of the Polish Crown were divided into counties, each with its own courts, administration, and elected assembly – an important early form of local autonomy. However, in 1815 to 1918, Poland was partitioned between Russia, Austria and Prussia. Local government continued to function, but different forms of governance were practiced. Many of these regional differences remained in place until 1939 (Kerlin, 2005). After 1950, a uniform system of elected peoples' councils, heavily subordinated to national Communist Party, was established. The practice of local autonomy disappeared.

The return of effective local government began in March 1990, with the policy of decentralization. Initially, decentralization involved moving decisions to two tiers of local administration – regions (*województwo*) and municipalities (*gmina*). Counties (*powiat*), an intermediate level of administration, were established in 1999.[2]

With government responsibilities decentralized, Regional Councils are responsible for regional development policy, but have no supervisory authority over the lower-tier of administration. Country-level governments manage secondary schools, hospitals and inter-municipality roads (Regulski, 2003) as well as other activities that "spill over" from one municipality to another.

Municipal-level government includes municipal councils and a mayor, both directly elected for a term of four years (Levitas, 1999; Swianiewicz, 2006). Municipal governments

have a broad range of responsibilities, including public transport, water and sewer systems, waste management, power and heating, libraries and local cemeteries, and pre- and (since 1996) primary schools on their territory. They also share responsibility (with higher levels of government) for health care, public welfare, public order, environmental protection, and management of other public spaces (Levitas, 1999). In 2005, there were almost 2500 Polish municipalities, of which approximately 1584 are rural. These are the focus of this study.

The structure of fiscal decentralization affects the local government's ability and incentive to fulfill these responsibilities. In Poland, municipalities are able to exercise some autonomy in raising the revenue needed to fulfill their functions. Revenue comes from fees: for services, like water and waste collection, for stamps on official documents, and for real estate transfers. Local revenue also comes from locally set and collected taxes – on property, dogs, and some large vehicles, as well as farms and inheritance. The Ministry of Finance sets limits on the tax rates (with the exception of the dog tax) (Filas et al., 2002), but municipalities may set rates below the limit, and many municipalities, especially smaller municipalities, do. Municipalities may also grant exemptions to local taxes, and do so. Swianiewicz (2006: 316 to 18) found municipal tax revenue to be more than 10 % below the level expected given centrally-set limits, and smaller, rural municipalities to be more likely to grant tax exceptions and exemptions than their larger, more urban counterparts. Municipalities also receive revenue from rental or sale of municipal property. Overall, local revenue accounted for about 38 % of local budgets in 2004, but a significantly lower share in rural municipalities – 27 % (Table 1).

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Table 1
Structure of revenue in different types of municipalities, 2004

Revenue Source (%)	Type of Municipality		
	Cities with County Status	Other Cities	Rural Municipalities
Local Revenue	35.4	38.6	26.6
Shares in Central Taxes	27.5	18.7	9.8
General Grants	23.6	28.1	48.2
Conditional Grants	13.5	14.5	15.4
Total	100	100	100
Source: Swianiewicz, 2006: 315.			

Another revenue source for municipalities is the sharing of national taxes collected on their territory. Local governments can affect these, to a certain extent, through their impact on local economic conditions. The local share of personal income tax has been revised upward repeatedly, from 15 % in 1993 to over 39 % from 2004 to 2006. The share of corporate income tax returned to local governments also rose after 2003, from 5 % to 6.7 % for 2004 to 2006. Despite this in-

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[2]   We will rely on these English language translations throughout the text. Gmina is also translated as "commune," but we use "municipality" as it is more familiar to English-speaking readers.

creased sharing of tax revenue, the importance of shared taxes in the local budget has fallen over time (partly due to rising grant income – see below). In 2004, shared taxes made up about 10 % of revenue of rural municipalities, a lower share than in urban municipalities (Table 1). Rural municipalities also have fewer corporate entities, and less corporate tax revenue, than their urban counterparts (Swianiewicz, 2006: 315 to 323). Perhaps more importantly, farmers pay no personal income tax.[3]

A third source of local revenue is grants from the central budget and, especially after 2006, from the European Union. The 1997 Polish Constitution assures local governments "public funds adequate for the performance of the duties assigned to them" (Kerlin, 2005). Grants help satisfy this requirement, offsetting differences in local revenues. An education grant is calculated separately. It is based on the number of pupils at different types of schools, but rural municipalities get more per pupil than urban municipalities (Swianiewicz, 2006: 315, 327), and lobbying may again have an impact.

Local governments also receive earmarked funds to cover or subsidize costs of specific investments or devolved responsibilities (Levitas, 1999: 15), although this source of funding has become less important over time (Swianiewicz, 2006). These funds are allocated, at least in part, to governments which can effectively show need (Kopanska and Levitas, 2002: 7, 10).

A newer source of investment funds has been European Union pre-accession and then structural and cohesion funds. Local governments can apply for funds for infrastructure improvement (including transportation, social and information infrastructure) as well as environmental protection, tourism and cultural development, for up to 80 % of the value of the project (the municipality must provide at least 20 % of the funds) (Ministry of Regional Development (Warszawa), 2014). The process is competitive, making effective proposals important. In 2004, EU funds made up 20 % of investment in rural municipalities (Swianiewicz, 2006: 334).

Finally, Polish local governments have access to financial markets (although their borrowing is limited to 60 % of their annual revenue, and some other some nationally-set regulations) (Swianiewicz, 2006: 337). Initially, the majority of investment borrowing by municipalities came from the Environmental Fund and Bank for Environmental Protection, especially for water infrastructure (Levitas, 1999: 27). But municipalities rely increasingly on commercial banks and international lending agencies. They may also issue securities (Kopanska and Levitas, 2002). By 1998, municipal bond issues were relatively common, even relatively small municipalities. In 2005, an estimated 20 % of rural municipal debt was issued for matching funds required for EU-funded projects (Danilowska, 2011).

In sum, local governments in Poland have, and exercise, a fair degree of autonomy in raising revenue. Municipalities have even greater freedom to decide how to use their money.

This autonomy is the basis for local government characteristics and behavior (skill, networking and accountability) to affect local outcomes. This ability, in turn, creates the basis for populations to hold them accountable, although this effect will depend on local electoral conditions (including the competitiveness of elections and extent of voter turnout).

However, there are still significant limitations on local autonomy, and these may limit the extent to which local government can influence, and be held accountable for, local outcomes. Statutory limits on local tax rates, and central control over some local policy, including fairly detailed control of education policy, limit the ability of local governments to affect certain outcomes. Further, as many authors have noted, the share of municipal revenue coming from the municipalities themselves has fallen over time (Kerlin, 2005; Swianiewicz, 2006), as education transfers have grown and equalization transfers have been used to protect poorer municipalities from dependence of local budgets on (shared) tax revenue. The transfers are an important way to offset inequality, but at the same time, they reduce the link between local government behavior and local outcomes, and thus limit the ability of the local electorate to hold government accountable. The magnitude of this "wedge" between local government actions and outcomes is likely to vary across municipalities, with a weaker link existing in poorer rural, municipalities, which are more dependent on transfers.

4 Characteristics of governments of rural Polish municipalities

4.1 The data

The majority of the data on local government characteristics and activities comes from a unique survey of 160 rural mayors and municipalities carried out in the spring of 2005. The survey sample is nationally representative, drawn from a list of all rural municipalities. Survey enumerators worked with mayors and specialists in the municipal government offices collect data on mayoral behavior and opinions and the characteristics of the local economy and infrastructure. For data on the skill levels of municipal staff, sewer lines, population, the local budgets, as well as unemployment rates and migration, we use the Local Data Bank of Central Statistical Office in Poland (CSO, 2012). Election data for 2002 come from the National Electoral Commission (http://wybory2002.pkw.gov.pl/index.html).

4.2 Local government skills, networking initiative, and accountability

The skills of local government officials can influence outcomes in many ways, including affecting the efficiency of service delivery and producing changes to the local tax base. The survey data indicates that the majority of rural Polish mayors had significant skills related to their job. Seventy-four

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[3]   They will begin to pay income tax in 2014 (http://www.thenews.pl, August 13, 2012).

percent of rural Polish mayors serving in 2005 had higher education (a completed associate or university degree). Only 3 % of mayors had only a non-specialized secondary education. The majority of mayors also had previous managerial experience – 65 % had worked in white collar, managerial positions, 14 % had owned their own company, and 9 % had been independent professionals. Further, many of the mayors had previous experience as mayor. Only 25 % of respondents were in their first term as mayor. Twenty seven percent were in their second term, 19 % in their third term, 27 % in their fourth term, and two mayors reported being in their 5th and 9th terms.

These mayors were supported by municipal staff with varied levels of skill. On average, 32 % of staff had higher education, but the share varied from 0 % to 92 %. Educated staff did not offset weak educational backgrounds of mayors. Rather, mayors with higher education had more staff with higher education than did less educated mayors.

Mayors tended to be in their middle- to late middle-age (90 % of them were 40 years old or older), but there was a broad range, from 28 to 67 years. Possibly, age reflects the type of skill set which an individual might have – with mayors over 40 having received most of their education in the previous system, and younger mayors possibly having skills more appropriate to the current context. However, very few mayors were young enough to have had a mainly post-socialist education. The vast majority of mayors were male (91 %).

Mayoral networking probably reflects a mix of skill and motivation. There was significant variation in reported networking initiative among mayors, both in the kind of activities and the level of engagement. One common activity was meeting with other levels of government, which might provide services to, or support investments in, localities. Twenty nine percent of mayors reported meeting with national government officials at least monthly, while a slightly smaller share reported never having such meetings. Meetings with regional governments (in charge of regional development planning) were more consistent, with only 3 % of mayors reporting no such meetings and one third reporting meeting least monthly. Most common was meeting with county-level governments, which may serve to coordinate activities between municipal governments or influence direction of country-managed services, including secondary schools and some health care institutions. Almost half of mayors reported having such meetings at least once a month, and most others met every few months.

Networking with the private sector was less frequent, although private sector activity is clearly an important factor in changes to the tax base. The vast majority of mayors met with representatives of private business, but only 60 % reported meeting at least every few months. Most municipalities created an information center or offered some other support for private entrepreneurs. Designating a special municipal agent for supporting private sector entrepreneurs and having a European Union Information Center were common forms of outreach. A few municipalities provided legal or other technical assistance to businesses.

Work with NGOs was another important local government initiative, as found by Regulski (2009) in the late 1990s. NGOs may offer both services and investment support to municipalities. A few mayors (9 %) reported meeting with international NGOs at least every few months, while most met with local NGOs. Only 16 % did not meet with NGOs. The various associations of municipalities were not actively used by most rural mayors, however. For example, only 13 % of mayors reported participating in the National Association of Rural Municipalities. Those mayors who did participate worked actively in this organization, however, attending more than 10 meetings in the past year.

Mayors who met more frequently with one type of NGO often met frequently with other types, and mayors who met with county officials often also met with region officials. But overall, networking activities were not highly correlated.

Mayoral initiative might also be measured by projects implemented (networking outputs rather than inputs). These included both service provision and investments in local economic activity. One type of municipal government project is supporting training courses for the local population. While 28 % of municipalities offered no such courses, 18 % were very active in this area, organizing three or more such courses in 2005. Most common were computer and internet training, offered in more than half of municipalities. Also common were language, entrepreneurship and re-qualification courses.

Nearly all municipalities had infrastructure projects underway in 2005, and most of these had been initiated by the municipality. Many of these were related to water treatment (an EU priority) and transportation, while fewer were for social infrastructure or roads. Half of all projects were funded at least partially out of municipal revenue, but these usually received additional financial support from the national government or foreign (including EU) sources. Three quarters of municipalities had successfully applied for competitive EU funding by 2005. In 2006 to 2008, municipalities received average annual EU project funds (in real 2005 zlotys) of 5835 zlotys per thousand people. A few projects were supported by NGOs.

Mechanisms to hold local officials accountable can also affect local government performance, by providing an external source of motivation to local officials. The accountability mechanisms varied significantly across municipalities. Contact with citizens was generally high, with mayors reporting multiple forms of contact. Almost all mayors held open visiting hours, and over 65 % had regular periodic meetings. Most mayors were also available to be contacted directly by phone and 43 % by email. Half reported receiving people at home. Individual citizens took advantage of these opportunities, as over three-quarters of mayors reported daily meetings with individuals, and 91 % reported meeting individuals at least weekly. Issues raised at meetings with individuals might have involved particularistic lobbying, as described by Grindle (2007). Meetings with citizens' groups were less frequent. Thirty-nine percent of mayors met daily with citizens' groups, while 35 % met weekly.

Local elections provide a more formal means of holding local officials accountable, and some research associates

higher turnout with higher levels of monitoring (Meurs, 2007). In the 2002 local elections (which provided the mandate for interviewed mayors and may have influenced their expectations of monitoring), turnout varied widely, from 30 % to 80 %.

Another common measure of accountability is the level of competition in local elections (Grindle, 2007). In rural Poland, slates often include independent candidates or groupings of small parties. An average of 12 slates competed in rural local elections in 2002, and the number varied little between municipalities. The level of real contestation varied greatly, however. The three slates garnering the most votes captured 91 % of votes in the least contested election, but only 41 % of the votes in the most broadly contested race.

Overall, the data suggests that most mayors were educated and experienced, and in frequent contact with the local population. Local officials varied more in level and type of networking they did, and the apparent level of monitoring by the local population. These variations may be important to local economic and social outcomes.

4.3 Resource constraints

Resources available for local government will be affected by the skills and motivation of local officials, but also by factors exogenous to or predating the local government decisions, which even the most skilled and motivated government cannot change. Such variables include location, the level and type of inherited economic and social development, and other inherited assets. In this section, we examine the budgetary resources of rural municipalities and some developmental differences contributing to variations.

Total per capita budgets varied widely from 1376 zlotys to 4143 zlotys in 2005 (1 Polish zloty equaled about 0.3 USD in June 2005). Revenue generated by the municipality (net of transfers and taxes shared by the central state) varied more widely, with total own revenue varying from 93 to 2159 zlotys, making up 19 % of the budget on average. Shared national taxes generated an additional 13 % of total revenue, with the

vast majority coming from personal, not corporate, taxes. But again there were wide variations, with shared personal income taxes ranging from 27 zlotys per person to 1810 zlotys. Some municipalities enjoyed significant income from property rental or sale or providing services although, on average, these provided only small amounts of income (Table 2).

These highly unequal revenue bases were offset by transfers from the national government. On average, municipalities received 721 zlotys per person in untargeted transfers and 304 zlotys in targeted transfers (to support education and other centrally-mandated services). These were augmented with the funds raised from non-governmental sources (77 zlotys per person). EU funds are reported in municipal budget data starting only in 2006, but in 2005 three quarters of mayors reported some support from EU sources.

Table 2 illustrates the importance of own income and transfers in 2005 municipal budgets, and the difference in their relative weights between richer and poorer rural municipalities (defined as those with own revenue above the 75th percentile or below the 25th percentile). Poorer municipalities have smaller per person budgets overall, reducing the amount of services and activities local government can undertake. Poorer municipalities also relied less own their own resources, potentially undermining accountability.

Local government revenue generation is influenced by local government actions (based on skills and motivation), but also by inherited factors which can be changed only slowly, at best. One such factor is infrastructure, which varied greatly across rural municipalities in 2005. Kilometers of sewer line per square kilometer of territory, for example, ranged from 0 to 0.4, with a mean of 0.035. Officials reported no rail station in 47 % of municipalities, while in 34 % they reported two or more rail stations. Almost one-fifth reported no highway access.

Municipalities also differed in their economic orientation, resulting in differing tax bases and growth potential. Seventy percent of surveyed municipalities listed agriculture as their most important sector in 2005. Thirteen percent listed

Table 2

Per person budget shares of revenues and transfers for three rural municipality types: Average, below 25th percentile own revenue, above 75th percentile own revenue

Budget Category	Average		Municipality below 25th percentile own revenue		Municipality above 75th percentile own revenue	
	Zloty	Percent Budget	Zloty	Percent Budget	Zloty	Percent Budget
Total Budget	1874		1609		1973	
Untargeted Transfers	721	39	863	54	59	30
Targeted Transfers	304	16	279	17	322	16
Local Taxes	358	19	200	12	568	29
Shared National Tax	245	13	111	7	448	23
Non-government source	79	4	31	2	74	4
Property, Service Income	87	5	53	2	177	9
Other	80	4	72	5	211	11

industry, while 7 % listed trade. Most listed more than one important sector. About half of agriculturally-oriented municipalities listed trade as the second important sector, while other municipalities were evenly divided between public sector and industry. Few municipalities reported a change in orientation since 1995. These orientations indeed change slowly, leaving mayors heavily dependent on inherited conditions.

Finally, important locational differences may affect performance. One impact of location may be relative proximity to Germany and the Czech Republic, rather than the less dynamic economies of Ukraine and Belarus. A second influence of location may be the persistence of institutional differences developed during the period of partition of Poland between Austria-Hungary, Prussia and Russia from 1815 to 1918 (Davies, 2005; Grosfeld and Zhuravskaya, 2013). These may impact political behavior and economic development.

4.4 Performance

Measuring the performance of local government is complex. An optimal approach is to evaluate the match between goods and services and citizen desires (Tiebout, 1956). Some researchers have used measures of provision of public goods, like famine relief or school availability (Zhuravskaya, 2000; Besley and Burgess, 2002; Faguet and Sanchez, 2008), however, this is usually in the absence of data on local preferences. (Kimenyi and Meagher (2004) is an exception to this). Polish municipalities vary in demographic make up and development level, which is likely to produce significant differences in preferred goods and services. Municipalities with aging populations may be little interested in schools, for example, while areas with high unemployment may be less interest in libraries or lighting than wealthier localities. Other studies have used measures of inputs into government effectiveness (computerization of records, local official training, transparent budgeting) (Grindle, 2007; Pickering, 2012). There is no assurance, however, that these inputs lead to improved delivery of outcomes desired by the population. For these reasons, some research has focused on more general outcomes like local economic growth (Rodríguez-Pose and Krøijer, 2009), revenue generation at the local level (Zhuravskaya, 2000; Meurs, 2007), firm formation at the local level (Zhuravskaya, 2000), and in-migration (Meurs, 2007). We rely on such general measures of performance in this case: net migration, local revenue generation, and change in the local unemployment rate.

In the presence of varying satisfaction with government performance, theory predicts that populations will "vote with their feet," migrating from localities where governments fail to meet their demands, to localities where their preferences will be better satisfied (Tiebout, 1956). Net out-migration might suggest local government is ineffective or unresponsive in creating outcomes preferred by the population. We calculate average net migration per member of the population over the two periods. There is fairly significant mobility in this period. For 2003 to 2005, net migration ranged from a loss of 1 person per hundred of population to a gain of 6 per

hundred. Fourteen percent of municipalities lost 0.5 people or more per hundred, while 24 % of municipalities gained more than 0.5 people per hundred of population. Twelve percent of municipalities gained more than 1 per hundred. For the period 2006 to 2008, a similar share of municipalities experienced gains, but the share of municipalities losing 0.5 people or more per hundred rose to 21 %.

A second measure of performance of local government is its ability to raise its own revenue. Greater revenue may result from effective local economic development effort and local tax and fee use, and also will provide the resources needed to meet local demands. We use average own municipality revenue per capita, including both local taxes and fees and national income taxes that are collected from the local population and shared with municipalities.[4] As seen in section 4, local governments differ significantly in their ability to raise revenue. Average annual own revenue per capita in 2005 zlotys varied from 189 zlotys to 2730 zlotys for the period 2003 to 2005, and 185 zlotys to 3339 zlotys for 2006 to 2008. Because of the wide dispersion, we use the natural log of revenue in the regressions. Of course, as noted, the variations in revenue may be more influenced by inherited factors than from the actions of local governments.[5] When examining factors related to successful performance in the regression below, we will attempt to account for these external influences by adding a control for own revenue per capita at the time of the 2002 election.

As a third measure of performance, we use percentage improvement in the unemployment rate (a fall in the unemployment rate, rescaled so that a positive number reflects improvement). Bardhan and Mookherjee (2006) argue that, if accountability is weak, decentralization of government may result in the capture of government by powerful local groups and reduced attention to the needs of disadvantaged households, those most likely to suffer from unemployment. By 2003, post-socialist economic restructuring and firm closures had been long concluded. Falling unemployment rates might reflect the ability or willingness of local governments to respond to the needs of the less powerful, promoting job creation through networking and local development efforts. It may also reflect other local government efforts, including service provision to employers and overall economic development efforts. For the period of 2003 to 2005, average unemployment rate varied from 4 % to 35 %, and change in unemployment rates varied wildly, from a 36 % worsening to a 35 % improvement. Rates fell slightly overall by 2006 to 2008, and local performance varied from a worsening by 5 % to a 70 % improvement, with most municipalities experiencing improvement. The best performing municipality saw unemployment fall by 13 points.

[4] A measure of revenue *net* of expenditure might be a proxy for local government efficiency. However, local governments face significant differences in expenditure needs due to factors which they do not control, including demographic factors. Therefore, we focus on government success in generating revenue to meet local demands.

[5] The increased tax sharing will be an exogenous source of variation of local revenue from 2002 levels (not caused by local characteristics), but this should affect all municipalities equally.

We measure average outcomes separately for the periods of 2003 to 2005 and 2006 to 2008. The first period covers the first three years of the mandate of mayors elected in 2002, while the second period allows more time for a mayor's policy to have been felt by the population. The second period also reflects entrance into the EU, which brought significant changes to the economic context, and is the period in which we have data on the weight of EU funding in local budgets.[6]

These three measures of performance are positively correlated, as can be seen in Table 3. While the level of correlation is not high – performance differs across these three measures suggesting that they capture different aspects of local government performance – the measures do become more highly correlated in the second period.

Table 3
Correlation in performance measures

2003 to 2005			
	Unemploy-ment Reduction	(ln)Own Revenue per Capita	Net Migration per Population
Unemployment Reduction	1.00		
Own Revenue	0.04	1.00	
Net Migration	-0.23*	0.13*	1.00

2006 to 2008			
	Unemploy-ment Reduction	(ln)Own Revenue per Capita	Net Migration per Population
Unemployment Reduction	1.00		
Own Revenue	0.10	1.00	
Net Migration	0.31*	0.25*	1.00
*=p < 0.05			

5 Performance and local characteristics

To examine whether the measures of overall performance are related to the differences in local government characteristics, we use OLS regressions on the basic model:

$$W_{it} = f(A_i, S_i, N_i, EU_i, P_i, L)$$

where

W_{it} = a 3-year average outcome measure, for municipality i for the three outcomes (net migration, own revenue per capita, and unemployment rate), separately.

A_i = a vector of measures of accountability of local government in 2005

S_i = a vector of measures of skill of the mayor and municipal Staff in 2005

N_i = a vector of measure of networking by the mayor (with national, regional and county government, local and international NGOs, and business) in 2005

EU_i = total per person revenue from EU 2006 to 2008 (for 2006 to 2008 outcomes only).

P_i = a vector of inherited developmental conditions

L = a locational dummy, 1=Western Poland and the Warsaw region.

The model is run separately for years 2003 to 2005 and 2006 to 2008.

A_i, S_i, N_i and EU_i are included as measures of mayoral effort and accountability. As in previous work on this topic, our ability to determine the direction of influence between mayoral and electoral characteristics and local outcomes is limited by the lack of panel data, the strong impact of previous levels on all three outcome variables, and the varying length of mayors' terms in office.[7] To better evaluate the impact of current mayoral and local characteristics on current performance, we include measures of slower changing local conditions (economic orientation, infrastructure, population density)[8], and performance on the respective outcome measure at the end of the previous mandate (2002) in the vector P_i and include a locational dummy, L.

The possibility of reverse causality between government behavior and outcomes is a greater concern for the period 2003 to 2005. While the government began its mandate in 2003 and its characteristics should change little, these were measured in 2005. Reverse causality is less of a concern when examining outcomes in 2006 to 2008, since the outcomes occur after the measurement of the characteristics but, in this case, some outcomes might already be influenced by a new mayor, taking office in 2007. Neither period provides a perfect measure of performance of mayors elected in the 2002 election. Separating the data into these two periods allows us to distinguish clearly the performance during the mandate on which we have data on government characteristics and the one immediately following, while also allowing us to examine the impact of EU funding after 2005. The two sets of results, taken together, provide a more robust test than either alone. A number of findings are consistent across the two periods, indicating that the results are neither driven purely by reverse causality nor by the actions of mayors elected in 2006.

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[6] While 2008 marks the beginning of a period of economic crisis, the outcome variables used here remain on trend in 2008. Only in 2009 does the economic crisis appear to impact local government performance in Poland.

[7] Previous work has attempted to deal with this problem to varying degrees. Case study approaches and simple correlation analyses have mainly ignored the problem (Angell et al., 2001; Grindel, 2007), while some econometric work controls for historic levels of outcomes (Meurs, 2007). Only Besley and Burgess (2002) use panel data, but they do not address the problem in detail.

[8] Clearly infrastructure, and also to some extent local economic orientation, are things which local governments seek to influence. However, many forms of infrastructure change relatively slowly (projects must be funded, engineered, and then implemented), as can be seen in municipal data on sewer lines per square kilometer, railroad access or roads (Central Statistical Office, 2012). Sectoral orientation of the local economy also changes slowly, as new sectors emerge and then grow.

The characteristics of local governments are measured as follows, accountability is measured in three ways: voter turnout in the 2002 local elections (percent eligible voters), in which the mayor serving in 2005 was elected, electoral concentration (total share of votes received by the three most popular slates) during the 2002 election, and the frequency of mayoral meetings with citizen groups (6 indicates daily meetings and 0 indicates no meetings) in 2005. Higher levels of voter turnout and greater mayoral interaction with citizen groups may positively affect performance. Higher levels of votes obtained by the three largest parties are expected to be negatively correlated with performance.

Government skill is measured by a dummy variable for whether of mayor has higher (post-secondary) education, and by age of the mayor although, as seen above, there is little variation in the first of these measures.[9] The share of municipal staff with higher education provides a third measure. Skill is expected to improve performance.

The mayor's networking is measured by the level of networking with three key groups in 2005 – the business community, local and international NGOs, and representatives of national, regional and county government. Networking with business is measured as a count of all reported forms of formal and informal outreach to business, as well as a dummy variable for whether the municipality has an information center serving the business community. Networking with government and NGOs is measured by frequency of meeting with those organizations, on a scale of 0 to 6 (6 indicates daily meetings and 0 indicates no meetings). For 2006 to 2008, we include EU project funds per capita as an additional measure of government initiative.[10] Networking initiative is expected to improve outcomes.

In addition to local government characteristics, we consider the impact of inherited conditions – factors which change only slowly, if at all, and are less subject to influence by local government: a dummy for agriculture being identified as the main productive sector in 2005, and a dummy for location in a region in the economically more dynamic Western part of Poland or the Warsaw region,[11] compared to one in the Eastern part of the country. Sewer lines per square kilometer (2005) measure availability of infrastructure, and population per square kilometer gives a rough measure of urbanization. Finally, we include the municipality's own revenue per capita for the period 1999 to 2002 (in natural log form), the period prior to the current mayoral mandate, as an

additional control for the impact of inherited conditions. When examining factors related to migration, we control for the level of migration at the start of the mayor's 2002 mandate using mean migration level for the period 1999 to 2002. When examining factors related to change in the unemployment rate, we control for the 2003 unemployment rate – the earliest data we have and the first year of the major's mandate, when his or her policies will have had little time to take effect. Variable means and standard deviations are given in Table 4.

Table 4

Means and standard deviations, local government characteristics and outcomes

	Mean	s.d.
VARIABLES		
Mayor Age	54.7	8.25
Mayor Education	0.72	0.45
Share Staff with Higher Education	5.33	4.77
Meet Citizens Groups	2.90	1.49
Meet Local NGOs	3.03	1.24
Meet International NGO	1.38	0.68
Meet Country Government	3.92	0.95
Meet Region Government	3.83	0.85
Meet National Government	2.06	0.83
Forms Communication Business	2.30	0.91
Information Center Business	0.35	0.48
Share Voter Turnout	0.54	0.11
Share Votes Top 3 Parties	0.71	0.09
Agricultural Municipality	0.72	0.45
Sewer per km^2	0.04	0.05
Warsaw/West	0.55	0.50
EU Funds	0.50	1.31

As can be seen from the regression results presented in Tables 5a and b, characteristics of local government are related to outcomes, but the significant characteristics are not consistent across outcome measures or over time. Only historical factors outside the control of local governments, specifically historical performance and, for the period 2006 to 2008, location in Warsaw or Western Poland, show a consistent relationship with all three performance measures and in both periods, controlling for characteristics of local government and other historical factors.

For the period of 2003 to 2005, active communication with business was positively associated with own revenue per capita and improvement in the unemployment rate, but not with migration outcomes. Networking with local NGOs was also positively associated with improvement in the unemployment rate. The share of voters turning out in local elections was also positively related to own revenue

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[9]   We also examined the impact of mayor experience in managerial or government jobs and previous experience as mayor, both of which were available in the survey. However, neither of these measures was related to performance, and we decided to use the more general measure of skill.

[10] While these transfers occurred in the last year of the mandate for mayors elected in 2002, and the two following years, they likely reflect projects proposed by mayors we interviewed. A project applied for in 2004 by a mayor, who took office in 2003, might be funded starting in 2005 and take a year or more to complete, particularly in the case of the targeting infrastructure projects.

[11] Region 1 includes regions of Pomorskie, Kujawsko-Pomorskie, Wielkopolskie, Slaskie, Dolnoslaskie, Lubuskie, Zachodno-Pomorskie, Opolskie, and Mazowieckie.

Table 5a:

Regression results, local government performance in Poland, 2003 to 2005

	Mean Migration '03 to '05			(ln) Mean Revenue Per Cap '03 to '05			% Improvement Unemployment Rate '03 to '05		
Adjusted R2	n=155 0.81 Coef.	t-stat		n=155 0.28 Coef.	t-stat		n=155 0.08 Coef.	t-stat	
Voter Turnout '02	0.0044	0.99		0.4443	3.17	**	0.1974	2.19	**
Share Top 3 Parties	0.0000	0.81		-0.0017	-1.20		-0.0008	0.01	
Meet Citizens	0.0001	0.47		0.0056	0.61		-0.0068	-1.18	
Mayor Higher Ed	-0.0001	-0.15		-0.0593	-2.04	**	0.0200	1.10	
Higher Ed Staff	-0.0001	-0.79		-0.0014	-0.27		-0.0056	-1.83	*
Age Mayor	-0.0000	-0.38		0.0002	0.10		-0.0014	-1.33	
Meet Country Gov	-0.0009	-1.05		0.0261	0.92		0.0207	1.17	
Meet Region Gov	0.0013	1.28		-0.0389	-1.20		-0.0372	-1.18	*
Meet National Gov	-0.0004	-0.79		0.0210	1.23		0.0039	0.37	
Meet Local NGO	-0.0006	-1.56		-0.0041	-0.35		0.0124	1.68	*
Meet Internatl NGO	-0.0003	-0.48		-0.0086	-0.42		0.0011	0.08	
Communicate Bus	0.0001	0.31		0.0281	2.00	**	0.0105	1.19	
Info Center	0.0006	0.67		-0.0116	-0.44		-0.0166	-0.98	
Agricultural Locality	0.0002	0.18		-0.0457	-1.65	*	-0.0062	-0.35	
Pop per km2	-0.0000	-0.19		-0.0000	-0.13		0.0000	1.43	
Sewer per km2	0.0093	0.65		1.3458	2.94	**	-0.2937	1.03-	
Warsaw/West	-0.0005	-0.59	*	0.0371	1.43		-0.0379	-2.33	**
ln Own Revenue '02	0.0012	1.92		0.1146	5.87	***	0.0045	0.37	
Mean Migration '99 to '02	1.3846	21.26	***						
Unemployment '03							0.0001	0.07	
Constant	-0.1421	-1.52		6.0087	20.06	***	-3.0627	-1.09	

* = p < 0.10, ** = p < 0.05, *** = p < 0.001

generation and improvements in the unemployment situation. Meetings with regional-level government were associated a worsening of the unemployment rate, suggesting reverse causality – poorly performing municipalities met more frequently with these authorities. An unexpected result is that having a mayor with more education was associated with lower own revenue per capita, and having a more educated municipal staff was associated with poor performance on unemployment. Taken together, these findings provide some evidence that more active and better-monitored governments performed better.

Conditions inherited by local governments were more consistently related to outcomes. Performance on outcome measures at the beginning of the mayors' mandates were strongly correlated with migration and revenue outcomes over the period 2003 to 2005. Mean net migration per capita was significantly positively related to mean net migration per capital in the period of 1999 to 2002, while mean own per capita revenue was strongly related to level in this previous 3-year period. Location in Western Poland or Warsaw was negatively associated with improvement in the unemployment rate.

The period 2006 to 2008 provides some additional evidence that variation in the characteristics of local government and elections are related to economic and social outcomes. High voter turnout in the 2002 election continues to be associated with higher per capita local revenue in 2006 to 2008 and, while it is no longer related to performance on unemployment, it is now associated with greater in-migration. Mayoral interaction with business in 2005 continues to be positively associated with local revenue in 2006 to 2008. Meeting with representatives of the county government in 2005 is also positively associated with own revenue generation in 2006 to 2008. Meeting with regional government is no longer negatively associated with migration, reinforcing the idea that causality in the earlier relationship might have been reverse. In this period, we are able to include inflow of EU funds as a measure of mayor initiative and networking, and these have a positive impact on a municipality's generation of own revenue. The funds, mainly used to support infrastructure development, appear to help municipalities to generate revenue of their own. None of the included characteristics of local government is associated to unemployment performance in this period.

Table 5b

Regression results, local government performance in Poland, 2006 to 2008

	Mean Migration '06 to '08			(ln) Mean Revenue Per Cap '06 to '08			% Improvement Unemployment Rate '06 to '08		
Adjusted R2	n=140 0.76 Coef.	t-stat		n=139 0.30 Coef.	t-stat		n=138 0.24 Coef.	t-stat	
Voter Turnout '02	0.0168	2.84	**	0.4223	2.94	**	-0.0965	-0.68	
Share Top 3 Parties	-0.0004	-0.06		-0.0011	-0.73		0.0007	0.47	
Meet Citizens	0.0005	1.19		-0.0000	-0.01		-0.0142	-1.55	
Mayor Higher Ed	-0.0019	-1.48		-0.0443	-1.43		-0.0225	-0.77	
Higher Ed Staff	0.0000	0.34		0.0002	0.05		0.0026	0.56	
Age Mayor	-0.0001	-1.26		-0.0002	-0.05		0.0007	0.46	
Meet County Gov	0.0002	0.21		0.0465	1.66	*	-0.0218	-0.82	
Meet Region Gov	-0.0007	-0.57		-0.0432	-1.36		0.0366	1.21	
Meet National Gov	-0.0004	-0.62		0.0086	0.50		-0.0073	-0.45	
Meet Local NGO	-0.0003	-0.54		-0.0113	-0.95		0.0014	0.13	
Meet Internatl NGO	-0.0004	-0.52		-0.0935	-0.46		-0.0255	-1.32	
Communicate Biz	0.0005	0.82		0.0310	2.23	**	0.0185	1.38	
Info Center	-0.0003	-0.28		-0.0131	-0.50		0.0248	0.97	
Agricultural Locality	-0.0035	2.85	**	-0.0191	-0.62		0.0126	0.42	
Pop per km^2	-0.0000	-0.14		-0.0000	-0.23		-0.0000	-1.09	
Sewer per km^2	0.0050	0.28		1.1154	2.56	**	0.4591	1.11	
		1.99							**
Warsaw/West	0.0021		**	0.0571	2.22	**	0.1264	5.18	*
EU Transfers	0.0000	0.33		0.0007	2.97	***	-0.0000	-0.24	
ln Own Revenue '02	0.0008	1.05		0.1058	5.48	***	0.0358	1.94	**
Mean Migration '99 to '02	1.3142	15.98	***						
Unemployment '03							-0.0075	-3.44	***
Constant	-0.0073	-0.59		6.4098	21.19	***	-0.0328	-0.11	

* = p < 0.10, ** = p < 0.05, *** = p < 0.001

Again, inherited factors are more consistently related to outcomes. Performance on outcome measures in the period prior to, or at the beginning of, the mayoral mandate is strongly correlated with outcomes in 2006 to 2008. Higher levels of 2003 unemployment are associated with greater relative improvements in the unemployment situation, as are higher levels of baseline municipal revenue. Surprisingly, controlling for migration levels in 1999 to 2002, having agriculture as the predominant economic sector in 2005 is positively associated with net per capita migration in the period 2006 to 2008, when controlling for other factors. The significant per capita outmigration from agricultural areas appears to have been reversed. Better infrastructure in 2005 continued to have a positive impact on local revenue. Location in Western Poland or the Warsaw region had a positive impact on all outcome measures in this period.

The marginal effects in these models often appear small. To give a general sense of the relative impact of variations in governance and historical factors, in Tables 6a and 6b we construct representative cases, contrasting a representative municipality with strong (at the 75th percentile) performance on the significant variables reflecting characteristics of local government and poor (at the 25th percentile) (significant) inherited and locational factors, and one with poor local government characteristics but strong exogenous conditions (all other factors are held at mean values.)

For the period 2003 to 2005 (Table 6a), the predicted positive role of an activist local government does not outweigh the poor local conditions. A municipality with poor local conditions but a more activist mayor is predicted to rank at the 47th percentile on unemployment performance and the 28th percentile on revenue performance, while governments with good inherited conditions but a less active mayor are predicted to rank at the 78th and 76th percentiles. No characteristics of local government are significantly associated with migration performance in this period but, as can be seen in the 6a, conditions are predicted to have a significant impact on outcomes. A municipality with poor local and inherited

Table 6a
Predicted outcomes for representative municipalities with strong and weak governance and strong and weak inherited conditions, 2003 to 2005

Variable	Migration		Revenue Per Capita		Improvement Unemployment	
	Good Inherited Conditions	Poor Inherited Conditions	Good Inherited Conditions, Poor Government Characteristics	Poor Inherited Condition, Good Government Characteristics	Good Inherited Conditions, Poor Government Characteristics	Poor Inherited Condition, Good Government Characteristics
Voter Turnout			0.46	0.60	0.46	0.60
Mayor Higher Education			0	1		
Ed Municipal Staff					2	7
Meet Region Gov					2.5	4
Communicate with Business			1.25	2.5		
Agricultual Locality			0	1		
Sewer per km²			0.032	0.012		
Warsaw/West	1	0			0	1
Baseline Revenue			11.50	10.28		
Baseline Migration						
Baseline Unemployment						
Predicted Outcome	0.0042 (74th Percentile)	-0.0032 (31st Percentile)	7.50 (76th Percentile)	7.31 (28th Percentile)	-0.69 (78th Percentile)	-0.14 (47th Percentile)

Table 6b
Predicted outcomes for representative municipalities with strong and weak governance and strong and weak inherited conditions, 2006 to 2008

Variable	Migration		Revenue Per Capita		Improvement Unemployment	
	Good Inherited Conditions, Poor Government Characteristics	Poor Inherited Conditions, Good Government Characteristics	Good Inherited Conditions, Poor Government Characteristics	Poor Inherited Condition, Good Government Characteristics	Good Inherited Conditions	Poor Inherited Conditions
Voter Turnout	0.46	0.60	0.46	0.60		
Meet Citizens Groups						
Meet Country Gov			3	4		
Communicate with Business			1.25	2.5		
Agricultural Locality	0	1				
Sewer per km2			0.032	0.012		
Warsaw/West	1	0	1	0	1	0
Baseline Revenue			16.20	14.04	11.50	10.28
EU Transfer per Capita			0.06	20.15		
Baseline Migration	0.0025	-0.0036				
Baseline Unemployment					10.35	19.75
Predicted Outcome	0.0070 (81st Percentile)	-0.0043 (24th Percentile)	7.76 (53rd Percentile)	7.70 (33rd Percentile)	0.49 (75th Percentile)	0.25 (19th Percentile)

conditions will rank at the 31st percentile, all else equal, while one with good conditions will rank at the 74th.

For 2006 to 2008, migration is again more closely associated with inherited conditions than with local government characteristics. A municipality with poor accountability but good inherited conditions is predicted to rank at the 81st percentile, compared to one with a well-monitored local government but poor inherited conditions, which is predicted to be at the 24th percentile. Performance on own revenue per capita for 2006 to 2008 is similarly more strongly

related to local historical characteristics. A municipality with an activist mayor, networking with local business, applying successfully for EU funding, and expecting high voter turnout, but in a poor location with poor inherited conditions, is predicted to rank lower (33rd percentile) than a municipality with a less activist and less well-monitored mayor, but which is in a good location with good inherited conditions (predicted to fall at the 53rd percentile). For the period 2006 to 2008, no characteristics of local government are significantly associated with unemployment performance, but local conditions are predicted to have a significant impact. A municipality with poor conditions is predicted to rank at the 19th percentile, while one with good conditions is predicted to rank at the 75th.

6 Conclusions

Recent work has shown that decentralization of government does not always provide expected improvements in outcomes at the local level. Research has thus increasingly focused on identifying the conditions necessary for decentralization to contribute to improved outcomes (Loayza, et al., 2011). In this paper, we have examined characteristics of rural local governments and elections in Poland and the relationship of these to outcomes.

We find that some measures of government accountability and skill, particularly voter turnout, communication with businesses, and securing EU support for projects, are related to some outcomes. However, results are not consistent. What "works" depends on which, among many possible, proxies for government performance are chosen, and how local characteristics are measured. Our finding that some measures of networking and accountability are related to outcomes echoes previous work.

An additional important finding is that factors outside the control of local governments, including location, inherited infrastructure, levels and types of economic activity, and previous performance are strongly related to outcomes but, again, the significant variables differ across outcomes. After historical levels of performance, being in the Western, versus Eastern part of Poland, has the most consistent relationship to performance for the period 2006 to 2008, a result which could be driven by difference in the current economic conditions on Poland's Western and Eastern borders.

As seen in the representative cases, municipalities with good inherited conditions but less active and accountable governments are associated with better migration and revenue performance than municipalities with favorable government characteristics but poor historical conditions. The link between government actions and performance is weakened by the strong association with location and history, and this provides the justification for continued significant transfers of income from central to local governments. At the same time, as discussed by Dabla-Norris (2006) and Meurs (2007) this transfer process undermines local accountability, especially in poorer municipalities that, as a result of transfers,

depend less on their own revenue. Decentralization can thus create a complex problem in providing incentives to local governments, and research is needed into how best to offset inherited disadvantages while enhancing accountability.

Finally, it is important to note that, like other studies, this study is unable to completely control for the possible endogeneity of some government characteristics. We have attempted to attenuate this problem by controlling for historical levels of performance, and including lagged outcomes, but this is not a perfect solution. Availability of panel data or carefully constructed instruments would be beneficial for future work in this area.

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Overcoming challenges of evaluating integrated endogenous rural development and partnership interventions – A worthwhile exercise?

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Abstract

Supporting integrated endogenous regional development, community-driven initiatives and establishing partnerships are acknowledged as drivers of rural development. Common to these approaches is their potential for added-value creation, either through strategic planning and cross-sectoral consideration of resources like in the integrated approach and partnerships, and/or by forming social capital through joint actions. Though such interventions have been an inherent part of policy programmes for decades, evaluating the impact and legitimising public spending, as well as bringing systematic evidence for the added value of those interventions compared to conventional interventions still present a challenge. Evaluation methods, which allow one to underline added-value creation, mostly follow qualitative approaches that are not easily transferable and bring about non-comparable and non-summable results. Based on a review of existing evaluation approaches and their advantages, disadvantages and shortcomings, in this paper two novel evaluation approaches based on Multiple Criteria Decision Analysis and Social Network Analysis are introduced as a tool for evaluating endogenous and integrated approaches and partnerships. It is shown that when applied supplementarily within the proposed evaluation framework, both approaches can fruitfully address most of the identified common evaluation challenges, and are preferable to other evaluation methods in many regards, e.g. in making added value quantitatively feasible. The major drawback of the approaches is the high effort required for data collection.

Keywords: *Evaluation, Integrated endogenous regional development, Rural development, Partnerships, LEADER, Multiple Criteria Decision Analysis (MCDA), Social Network Analysis (SNA), Added value creation*

Zusammenfassung

Bewältigung der Herausforderungen der Evaluierung integrierter endogener ländlicher Entwicklung und Partnerschaftsinterventionen – Eine lohnenswerte Aufgabe?

Förderung integrierter endogener Regionalentwicklung, gemeinschaftlicher Initiativen und Partnerschaften sind anerkannte Instrumente zur ländlichen Entwicklung. Gemein ist ihnen das Potential zur Mehrwertschöpfung durch strategische Planung und multi-sektoralen Berücksichtigung von Ressourcen und/oder den Aufbau von Sozialkapital. Obwohl solche Interventionen schon Jahrzehnte Bestandteile von Förderprogrammen bilden, stellt ihre Evaluierung und damit die Legitimierung öffentlicher Ausgaben sowie das Erbringen eines systematischen Nachweises ihres Mehrwerts im Vergleich zu konventionellen Interventionen noch immer eine Herausforderung dar, insbesondere das Hervorbringen quantitativer, vergleichbarer und aggregierbarer Ergebnisse. In diesem Artikel werden Evaluierungsansätze, die auf Multiple Criteria Decision Analysis und Sozialer Netzwerkanalyse aufbauen, vorgestellt. Bei komplementärer Anwendung beider Ansätze können weitverbreitete Herausforderungen, die mit dieser Evaluierungsaufgabe einhergehen, angegangen werden; sie bringen Vorteile gegenüber anderen Evaluierungsmethoden, z. B. bei der Quantifizierung von Mehrwert. Ihr Hauptnachteile ist der hohe Aufwand für die Datenerhebung.

Schlüsselwörter: *Evaluation, Integrierte endogene Regionalentwicklung, Ländliche Entwicklung, Partnerschaften, LEADER, Multiple Criteria Decision Analysis (MCDA)/ Multikriterielle Entscheidungsanalyse, Soziale Netzwerkanalyse/ Social Network Analysis (SNA), Mehrwertschöpfung*

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1 Introduction

Integrated endogenous or community-driven approaches, as well as the formation of partnerships, are acknowledged means of supporting effective rural development in industrialized states, and in the developing world. Common to those approaches is – as revealed in the following section – their potential for stimulating the creation of some kind of added value (Marquardt, 2013). As such, they have become an inherent part of many funding schemes, such as LEADER[1] in the European Union (EU) or RegionActiv in Germany (see also OECD, 2006). Added value creation, though difficult to assess, is required to legitimise public spending and to provide evidence for the effectiveness of policy programmes. This evaluation challenge rose to prominence with the introduction of the EU LEADER programme in the 1990s, and in fact, a common evaluation approach applied across member states had to be developed. In recent decades there have been many ambitions to tackle this evaluation problem [as discussed by, e.g. Margarian (2010) and Midmore (1998)], but satisfactory solutions have so far not been found (cp. ECA, 2010; Grieve and Weinspach, 2010; Metis, 2010). Thus, the starting point for unveiling a novel evaluation framework in this paper is a review of approaches developed for assessing the impacts of integrated endogenous rural development and partnerships with regard to their suitability for evaluating respective (public) interventions and their shortcomings. The proposed concept rests on the application of Multiple Criteria Decision Analysis (MCDA) and Social Network Analysis (SNA). Conclusions on the advantages and disadvantages of the introduced evaluation framework are drawn, and light is shed on the question of the balance between efforts required and the value of knowledge gained through evaluation.

2 Background

2.1 Integrated endogenous development and partnership interventions [2]

Compared to other "conventional interventions" such as investment measures funding individual projects, programmes supporting integrated endogenous development and partnerships are characterised by special interventional features and are expected to stimulate the creation of some kind of added value (Figure 1). Indeed, an integrated

approach, which normally rests on a territorial approach[3] and entails the consideration of social, economic and ecological concerns in the development of a region, is likely to lead to synergies and to cushion reciprocal effects between, e.g. activities initiated in different sectors. In practice, the integrated approach is reflected within a strategy or a Regional Development Concept (RDC)[4] establishing objectives for and priorities in developing a certain region. A further vehicle for translating the integrated approach into interventional designs is the requirement for public-private partnerships (PPPs) to include stakeholders from different sectors. One argument upon which intervening in PPP formation is likely to be based is that imperfect information impedes the functioning and development of markets, particularly where this concerns inter-sectoral linkages and opportunities for positive synergies between actors who would not normally interact in their day-to-day lives (Dwyer, 2008). Moreover, forming a partnership might result in added value in the form of increased efficiency and/or effectiveness through capacity sharing. The idea of the endogenous approach, which is associated with bottom-up development, is that by decisions-making *within* a region the regional potential is exploited and supplementary funds are used very targeted and effectively (and efficiently). In fact, interventions supporting endogenous development follow a "neo-endogenous" (Ray, 2001; Ray, 2006) development approach, as funds are external to the region (Marquardt et al., 2010), and supplement the regional resources.[5] Translating the endogenous approach into practice entails community-driven development and requires participation for sufficiently using the human and social capacities within a region.[6] Participation also furthers effective problem solving and legitimacy. Community- and partnership actions build upon social relationships; they both re-quire and have the potential for social capital creation, which may result from interactions in social

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[3]   Integrated rural development is mostly about a regional approach. The meaning of the term „region" is explained, for instance, in Böcher (2008) and Bruckmeier (2000). The terms "area" and "territory" do not necessarily bring about the idea of the term "region", which implies that a certain area has been demarcated for a specific purpose, which might be expressed through cultural or natural homogeneity, etc. (see Böcher, 2008 and Shucksmith, 2010).

[4]   Within EU funding schemes often the terms "Local Development Plan" or "Local Development Strategy" are used instead of RDC. Without discussing this terminological differences in detail, as one reason for this circumstance can be seen, that the term "region", whose relevance in the context of development approaches has been outlined in Footnote 3, has a specific connotation within the EU legal framework referring to administrative and/or statistical geographical units.

[5]   The neo-endogenous approach rests on the assumption that a development trajectory emerges of an interplay of internal and external forces (Hubbard and Gorton, 2011). Thus, 'neo' identifies the roles played by various manifestations of the extra-local (Ray, 2006) like funds or interregional partnerships.

[6]   In the context of the earlier mentioned LEADER programme, the European Court of Auditors (ECA) understands added value potentially resulting from the application of the LEADER approach as better identification of local needs and local solutions, more engagement on the part of local stakeholders, and greater scope for innovation. The latter, however, which might result from the effect of bringing a heterogeneous group of actors together, as it is the case in e.g. multi-sectoral partnerships, is no explicit subject of this paper.

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[1]   LEADER stands for "Liaison entre actions de développement de l´économie rurale". The English translation is "Links between the rural economy and development actions". In the context of the LEADER programme, the European Court of Auditors (ECA) understands added value potentially resulting from the application of the LEADER approach as

[2]   A more detailed description of the different approaches to rural and/or regional development briefly outlined in this section can be found, e.g. in Bröckling (2004), Grieve and Weinspach (2010), Marquardt (2013), Marquardt et al. (2010), Ray (1999), or Shucksmith (2010).

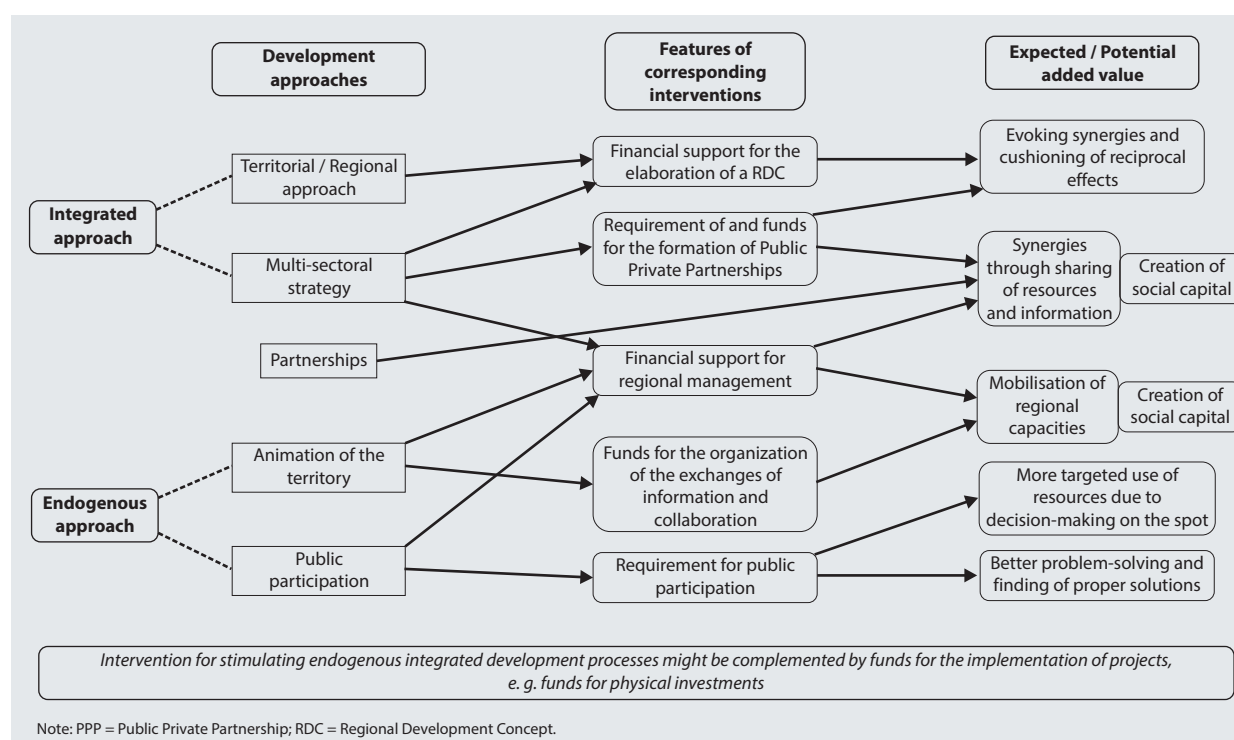Note: PPP = Public Private Partnership; RDC = Regional Development Concept.

Figure 1
Development approaches, their translation into interventions, and the expected added value

networks[7]. Social capital does not refer to individual persons but rather to the relations among them (Bourdieu, 1983). A primary consideration of social capital is that by building upon certain social structures, social capital allows actors a broader range of actions (Adler and Known, 2002; Jansen, 2000; Jansen and Wald, 2007; Sedült, 2005). Social capital might be created through the interrelation of repeated social interactions (Lee et al., 2005; Matějů and Vitásková, 2006), or norms and trust (Coleman, 1988; Farrell and Thirion, 2005; Putnam, 1993).

Support for integrated endogenous development and partnership formation entails process stimulation, which might be achieved through a) the requirement of (public-private) partnerships for receiving funds; b) financial support for regional management and for animating the territory; and c) the requirement for the (financially supported) elaboration of a RDC (Figure 1). Those interventions might be supplemented by support for physical investments. Such interventions, which associate support for integrated endogenous development and partnerships, form a clear difference to conventional interventions, where funded projects are not complemented by means of process stimulation and are not embedded into a strategy, and thus evoke expectations in the creation of added value. Yet despite being widely accepted as fruitful, it is certain that – as probably holds true for all interventions – effectiveness is not guaranteed: distributing funds does not imply that the desired processes are

stimulated. Moreover, there is limited evidence for the added value of supporting integrated endogenous development and partnerships as opposed to conventional interventions (ECA, 2010). Generally, as soon as interventions are a part of policy programmes, evaluating their (added) value is required for transparency and accountability, as well as legitimising public spending. The demand for evaluating interventions that further integrate endogenous development and respective methods has brought about significant challenges to funders/sponsors and scientists over the last decades, which has only been revealed recently in EU-wide LEADER evaluation efforts (ECA, 2010; Metis, 2010). Thus, one must identify particular evaluation challenges and how they might be overcome.

2.2 Demands on evaluation systems

For revealing legitimacy systems for evaluating interventions have to meet certain requirements and ideally, for being an effective instrument, they must also fulfil other functions. For instance, another notion of evaluation is that it offers the opportunity to distance cognition, and might function as a tool for improving the quality, efficiency and effectiveness of the interventions. Table 1 presents carefully selected criteria for judging evaluation methods (cp. e.g. Hockings et al., 2006; Capeling-Alakija et al., 1997; Saraceno, 1999). These criteria are not discrete, but rather overlap and depend on each other; while some of them accompany any research, e.g. the demands for validity and reliability, others, like "Practicability" and "Comparability of evaluation results" are rather related to the evaluation of interventions. A fundamental basis for an

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[7]   Falling back on the words of Johnson (2003: 3) social networks are, "the medium through which social capital is created, maintained, and used".

Table 1

Criteria for judging the suitability of evaluation methods

Criteria	Explanation
Validity	The assessment should measure what is intended to be measured with accuracy and appropriateness of the interpretation.
Reliability	Assessments are to be characterised by precision in measurement, and have to be consistent and reproducible.
Explanation of patterns of causality	Evaluation findings provide information about the reasons and origins for certain effects or missing impact of interventions.
Absence of bias	Evaluation results must be logical and justified by the data without any characteristics associated with an assessment that might distort the results.
Quantifiability of evaluation results	Evaluation results are scalable.
Comparability of evaluation results	Results from evaluating different cases can be compared with each other; cases might be related vertically, i.e. forming time series, or horizontally, i.e. cases funded under the same intervention/ within the same programme.
Objectivity	Objectivity refers to impartiality in the conclusions of an evaluation.
Practicability	Evaluation has to be easily conductible without much effort, and has to be economical.
Relevance for external evaluation	Method can be applied in external evaluation, which is conducted by actors not involved in the implementation of the intervention focussed on (for ensuring legitimacy).
Relevance for internal/ self-evaluation	Method can be applied for internal evaluation, which is conducted by the actors affected by an intervention, e.g. the beneficiaries of funds.
Instrumental side effects, e.g. functioning as management tool	Applying the evaluation method brings about additional positive effects, e.g. furthering the management of regional partnerships.

evaluation system is an analysis of causes and effects (often corresponding to some kind of intervention logic). Following Pearl (2000), several propositions to cause and effect inference can be set; and while probability language helps to convey uncertainty about cause and effect relations, they are according to him insufficient to fully express patterns of causality (similar Neuberg, 2003). In addition to observation and statistical assumptions, cause and effect analysis requires counterfactual reasoning (cp. Neuberg, 2003). Thus, a further requirement for an evaluation system is that it allows counterfactual assessment, i.e. with-without-comparison with regard to the presence and absence of interventions. For the present case, this entails, for instance, evaluators proving that a set of projects which were implemented within an integrated strategy, for whose elaboration extra funds have been provided, actually created added value to a region in comparison to a range of individual projects.

2.3 Evaluation experiences – Examples of matured evaluation approaches and their strengths and weaknesses

Figure 1 forms a sound basis for outlining the evaluation problem in the context of support to integrated endogenous development as it reflects on causal relations between approaches, specific interventional features and expected effects. Evaluation experiences and a range of means applied to assess the impact of related intervention against the criteria listed in Table 1 were reviewed and categorised by common methodological features. These evaluations methods' main advantages and disadvantages are presented in Appendix A and briefly summed up in the following.

Already 15 years ago evaluating LEADER was the subject of methodological discourses (see e.g. Grieve and Weinspach, 2010; Margarian, 2010; Midmore, 1998; Saraceno, 1999), and two streams in the development of evaluation approaches have evolved in concert: 1) the programme's official evaluation, where evaluators are confronted with questions of how to ensure the comparison and aggregation of individual initiatives at the national and European levels, as well as how to produce relevant evaluation information for different stakeholders (Saraceno, 1999); and 2) the development of assessment approaches within the scientific sphere. Still, one finds five major types of problems associated with evaluating interventions in integrated endogenous development:

1. Common technical evaluation problems that apply to all interventions such as the choice of appropriate indicators, how to define the baseline, where to draw boundaries in terms of impact and time, and the effect of additionality and causality (Blandford et al., 2010).
2. Time is needed until the impact of externally stimulated changes in governance structures/processes, such as partnership formation, become measurable (Schuh et al., 2006; see also ÖIR, 2012).
3. Making added value feasible presents a general methodological challenge.
4. Even if methods turn out to be useful for underlining added-value creation, they often go along with the problem of non-transferability and non-comparable and non-summable evaluation results, as they are often of qualitative nature.
5. Evaluation is complicated, as in most programmes interventional components are interwoven (cp. Figure 1), thus making the assessment of various features challenging.

Policy programmes are commonly only associated by an evaluation system quite similar to that of conventional interventions, mostly formed by quantifiable input, output, result

and impact indicators. However, measuring the impact of integrated strategies is difficult as long as monitoring is conducted at the project level. A weakness of many holistic approaches for assessing the impact of interventions supporting integrated endogenous development (i.e. approaches by which a comprehensive view on the development of a region is taken, see Appendix A), is that they must be adapted to the regional context to judge whether the situation in the region has been improved or/and the regional potential has been sufficiently used (OEL, 1999). Furthermore, many such approaches (e.g. Calatrava-Requena and Gonzalez-Roa, 2011) presume that regional strategies are developed in a profound way and the desired instrumental (governance) processes are practiced. While setting up formal multi-sectoral PPPs is provable (as one first indication for the possible application of an integrated approach), broad participation, which is essential for using the regional endogenous potential, is not self-evident. Presuming that programmatic features that encourage practicing an integrated endogenous approach are applied by beneficiaries – which is evidently not always the case (Böcher, 2008; ECA, 2010) – is a severe shortcoming. Additionally, the presumption that applying an integrated approach is underlined through the formation of multi-sectoral PPPs might be one reason that assessing synergies potentially achieved through the application of an integrated approach received little attention by evaluators and scientists.[8] Thus, systematic assessments of this aspect by e.g. transferring structured approaches as applied for environmental and social impact assessments has been hardly practiced in the context of evaluating integrated endogenous rural development. Therefore, one rarely finds evaluations that go beyond surveying local actors about their involvement in the elaboration of a RDC, or about synergies between projects implemented under a RDC.Moreover, evaluation approaches that are practical at the programme level mostly fail to assess (the effect of) stimulated processes and patterns of causality, particularly with regard to the socially-based added value (for discussion, see Marquardt, 2013).[9]

Indeed, ambitions to tackle these problems are ongoing and are also not simply ignored in the context of programme evaluation. Thus, in a very recent guide provided at the European level (EENRD, 2014), an indicator for assessing local empowerment and participation has been proposed, which potentially allows to reveal how far stimulation processes have taken place, but which does not allow the effects of empowerment and participation to be revealed.[10] Approaches that meet the challenge of revealing causality patterns are likely to fail in terms of external accountability, practicability, transferability and comparability of evaluation results, as applied methods for assessing regional governance processes and added-value creation are mostly qualitative in nature (Appendix A).

The results of the review highlight that the choice of an evaluation method primarily depends on the intention of the evaluator, e.g. the sponsors or beneficiaries. Yet a trend can be observed that also sponsors advocating self-evaluation and promoting its application because they become aware of the limitations of the official programme evaluation commonly applied at a larger scale, and at the same time become aware of potential positive side-effects of certain kinds of self-evaluation (Calatrava-Requena and Gonzalez-Roa, 2011), for example social learning.

Based on our review the list of major deficits, remaining challenges and methodological gaps presented above can be supplemented and refined as follows:
• Case study findings on stimulated processes are seldom linked to initiatives' overall effectiveness.[11]
• Counterfactual evaluation for funded partnerships and projects implemented within RDCs is rarely conducted.[12] If counterfactual evaluation approaches are employed, they fail to explain patterns of causality.
• Assessing synergies potentially resulting from the integrated approach has received little attention by evaluators and scientists.

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[8] Another well-known reason for this circumstance, which should not be further discussed at this point, are the general costs of programme evaluation; within programmes supporting integrated endogenous development the supplementary funds for implementing projects amount to much more than the funds for process stimulations and the elaboration of an integrated strategy, whereby evaluation effort for the two latter is much higher.

[9] For instance, limitation of the official evaluation of the EU's LEADER programme become obvious when considering that the Austrian Ministry has tendered a study on the degree and quality of participation within LEADER processes in the funding period 2007-2013, which is no exceptional case. Also common evaluation questions on the impact of interventions of process stimulation are sometimes tried to be addressed with much effort and in close collaboration with scientists. Case studies or surveys as well as analyses of supplementary statistical data are conducted by evaluators. Nevertheless, from the political/ programme-technical perspective, due to the different means used for explaining the results of LEADER in the different regions, the direct comparison of cases and the aggregation of evaluation results are difficult and thus many synthetically LEADER evaluations bring about the identification of individual success stories and good practices.

[10] One of the respective indicators reads for instance *"No and types of events where local actors participate in LAG [Local Action Group] decisions at community, municipality and LAG level per LAG by various target groups (LAG members, non- members, beneficiaries, etc.)"* (EENRD, 2014). It has to be stated, that the fact, that the indicator is propose at European level does not imply that data collection across member states will work: That indicator and/or similar ones have already been applied in some evaluation projects and the collection of the necessary data has turned out effortful and has ideally to be announced before a LAG takes up its work.

[11] In other words, despite most case studies claim to explain patterns of causality in a better way, still the link between effectiveness and the regional partnerships' work is mostly missing.

[12] Generally, counterfactual evaluation appears to have received less attention by evaluators and scientists. In ÖIR (2003) evaluators have compared projects funded under LEADER with projects funded within conventional policy measures with regard to degree of innovation, sustainability and economic effects, whereby the latter was not specified in monetary numbers. In addition to the qualitative effects of LEADER, comparative case studies on cost-effectiveness revealed a number of economic advantages compared to conventional rural development projects (ÖIR, 2003) which accompany the higher costs for technical assistance and capacity building. Revealed economic advantages are, for instance, a leverage effect on private investments (see also Copus, 2010); increased qualification of project owners, and better employment effects.

- Holistic evaluation approaches to regional impact assessment are likely to fail in differentiating between origins of effects, i.e. the impacts of different programmes and/or non-funded activities are not differentiated between.
- Holistic evaluation approaches are likely to neglect the prerequisites of participation and integrated planning.
- If the degree of participation is considered in evaluation exercises, mostly its influence on the final content of a RDC is reflected to a limited extent (cp. ECA, 2010).

3 Research Concept

The principal objective of this research is to contribute to the elaboration of tools for assessing the (added) value achieved by integrated endogenous regional rural development and partnership interventions. Therefore, the following research questions are raised:

> *Which contribution can a Multiple Criteria Decision Analysis (MCDA)- and a Social Network Analysis (SNA)-based evaluation approach make for solving identified challenges when assessing the impact of interventions supporting integrated endogenous rural development?*

Considering the selected criteria (Table 1), the advantages and disadvantages of the approaches reviewed, and the remaining evaluation challenges identified (Section 2.3), two novel evaluation approaches were developed. They will be introduced in Section 4 and are intended to supplement each other in a comprehensive evaluation framework. Both components of the evaluation framework suggested below have been empirically tested in case studies in similar research contexts allowing fair statements on their practicability. Those case studies on the development of PPPs following an integrated approach to regional rural development took place in Romania and Italy in 2008, 2010 and 2012/13. Case study design and results appear in Marquardt et al. (2010), Marquardt et al. (2012) and Pappalardo et al. (2014).

4 Novel Approaches for the Assessment of Effects of Integrated Endogenous Rural Development – A Proposal for an Evaluation Framework

In this section an evaluation framework addressing identified short-comings in methods commonly applied to evaluate interventions supporting integrated endogenous rural development is proposed. The framework consists of two components: the core of the concept is formed by a MCDA-based approach to develop ex-ante conditionality in the elaboration of endogenously grown integrated strategies. Here a holistic view on the region is taken, and it is accounted for regional particularities as well as transferability, aggregatibility, and comparison between regions. The complementary second component of the evaluation framework is based

on applying SNA for assessing the effects of social interaction in a profound way.

4.1 MCDA-based evaluation approach for effective integrated endogenous development

Evaluability of the impact of support to integrated endogenous development strongly depends on targets defined in a RDC, which has been developed endogenously with broad participation representing the population in a region with regard to different groups, age classes, sectors etc., appropriately, and which is based on the situation in the region, and accounts for the multiple dimensions inherent to the integrated approach (at least social, economic and environmental concerns). A RDC is commonly structured around a hierarchy of objectives and measures, under which later projects are selected in the course of implementing the RDC. Though all dimensions of the integrated approach have to be considered, to effectively and efficiently achieve goals, priorities, e.g. regarding the distribution of resources have to be defined within a RDC. Ideally, local actors also elaborate a set of target and impact indicators. The RDC elaboration process can be fruitfully supported by the application of MCDA; as described in Box 1, MCDA is a mostly software-supported approach that considers different dimensions of decision alternatives and varying preferences for criteria.

Box 1
Key features of Multiple Criteria Decision Analysis (MCDA) and its application

Elaborating a RDC and setting priorities usually involves many objectives and several actors with different values and interests (Marquardt et al., 2010). MCDA (Belton and Steward, 2002; Figueira et al., 2005; Munda, 2008) is an approach that considers different dimensions of decision alternatives and varying preferences for criteria. It aims to structure and model the actual choice problem for aiding decision-makers. The approach is based on the explicit documentation of objectives, preferences and rankings of options. This increases transparency in the decision-making process. First experiences with facilitating the formation of EU rural development policies by MCDA are discussed, e.g., in Kirschke et al. (2004, 2007), Prager and Nagel (2008), Schmid et al. (2010) and Wegener (2008). In the case study conducted by Marquardt et al. (2010), MCDA was applied for facilitating local actors' decision-making on their RDC. From the menu of MCDA methods, the Analytical Hierarchy Process (AHP) (Saaty, 1980) and the software Expert Choice were selected. As shown by, e.g. Schmid et al. (2010), the MCDA analyses can be refined by, e.g. the application of parametric linear optimization, in case further framing conditions, such as budgetary ceilings for certain priorities, have to be considered in the decision-making process.

The MCDA approach has to be adapted to the RDC elaboration process as follows: 1. The participatory notion and the perspectives of multiple regional stakeholders have to be explicitly considered; 2. The identification of main and sub-objectives and the selection of measures has to be achieved. Table 2 presents the individual working steps in the MCDA process and how they are linked to the development of an evaluation framework. Public participation forms one basis for the analysis of strengths and weaknesses of the region, the identification of its development potential, and for the setting of development objectives to be achieved in a certain period (Steps b and c in Table 2). Apart from offering a basis for discussion, the qualitative data form the basis for elaborating a hierarchy of objectives (Step d in Table 2), to which all contributions are ideally reflected. The prioritization of main and sub-objectives (Step e in Table 2) rests on the quantitative pairwise comparison of the importance of the individual objectives. Determining the weight of each objective in this way can be performed either solely by the members of the PPP, or by considering the results of a second round of public participation. The same applies to determining the potential contribution of individual measures (which form within the MCDA terminology, a "set of decision alternatives") to achieving each objective at ordinal scales (Step f in Table 2). The objectives' weight and measures' impact values are then combined, resulting in a ranking which forms the basis for the selection of measures. Thus, the choice of measures is based on assessments in which the opinion of the local actors is made more or less explicit, depending on the degree of participation in the different steps in Table 2. Over the implementation period, projects supported under each measure are selected according to a-priori defined criteria linked to the objectives set. Objectives' priority values and measures' ranking values also form an essential foundation for the distribution of resources and an index-based evaluation system with result-, target- and impact indicators being linked to objectives and measures, allowing one to define exante conditionality and benchmarking in comparison to the status-quo as assessed in Step b (Table 2). This will be further described below.

In the context of integrated endogenous development and its evaluation, applying MCDA has some key advantages:

a) MCDA allows one to consider and reflect the multiple standpoints of local actors in a systematic way; compared to verbal-argumentative methods, the development of preferences for objectives is made more transparent.[13]

b) By applying MCDA, measures are selected that promise to best contribute to achieving the set of defined objectives as a whole considering the multiple effects of the measures on the various (sub)objectives in a weighted way. It therefore forms the basis for using regional resources (complemented by external funds) in the most effective (and efficient) way, when following the intended integrated approach as measures' contribution to low prioritised sub-objectives is also considered. In other words, as MCDA works at a high level of analytical detail and considers various objectives in a coherent system, despite prioritization, all objectives are still considered. Thus, MCDA not only contributes to a participatory approach, but also to an integrated approach, as it facilitates a very detailed assessment regarding the number of opinions and variables, as well as a more complex analysis.

c) An MCDA-based RDC allows one to draw a balanced index for measuring goal achievement in the integrated development of a region and the usage of its endogenous potential, and for measuring whether resources have been spent effectively for furthering integrated development. Normally when developing an index the most critical point, aside from the choice of the individual indicators, is the determination of their weight; when applying MCDA the weights can be derived from the calculated priority and ranking values (Table 2). Contrary to other indexes in related fields, e.g. quality of life indexes and socio-economic indexes (ID Coop Project, 2013; OECD, 2012) indicators' weights are determined "within a region", following the idea of an endogenous approach.[14]

Applying the proposed MCDA approach allows one to set the ex-ante conditionality in that sense that with the elaboration of a RDC, the criteria for evaluating an integrated approach, for achieving synergies, and thus for the effective disbursement of funds are defined. Moreover, counterfactual evaluation with regard to the contribution of projects that have not been developed and implemented under a RDC could be assessed by applying a result and impact indicators set. While the compiled performance index is definitely specific for individual regions, it still allows one to compare, in terms of the degree of goal achievement, integrated development and usage of the endogenous potential in the different regions.

Yet applying MCDA as an evaluation tool is also associated with some weaknesses: Despite MCDA being able to trace the impact of participation, and despite its design being likely to almost entirely avoid social pressure, as contributions can be made in writing, the suggested MCDA-based approach cannot measure the impact of informal governance processes in the final decision-making process regarding elements of a RDC which cannot be directly drawn from quantitative MCDA results. This applies e.g. to the definition

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[13] Applying MCDA generally contributes to a structured and transparent decision-making process and can support the feeling of ownership among local actors. Methods for facilitating LEADER-like elaboration of RDCs are described in several guides (e.g. DVS LEADER+, 2002; Farrell and Thirion, 1999). However, tailored methods such as MCDA, despite their unquestioned advantages, are seldom practiced. The main reasons are time-constraints and a lack of knowledge and skills.

[14] Certainly the concept of this evaluation approach presented so far is only valid if certain governance conditions are fulfilled. However – as outlined earlier – contrary to most holistic evaluation approaches, MCDA allows one to trace how public participation has influenced objective- and priority-setting within a RDC.

Table 2

Contiguity of the practical MCDA-based RDC elaboration process with the development of a framework for evaluating integrated endogenous approaches to rural development

Steps in the MCDA-based RDC elaboration process to be performed by local actors	Elements of an MCDA-based approach to evaluate integrated endogenous rural development
a) Defining topics which have as a minimum to be considered in the analysis of the region	I Setting corner stones for ensuring the integrated notion
b) Discovering the regional potential by means of a SWOT-Analysis by local actors and with public participation	II Situation analysis and definition of the scope of the evaluation
c) Collecting objectives and project proposals for the development of the region by local actors, and with public participation / Development of decision alternatives	
d) Elaborating a hierarchy of objectives (including main- and sub-objectives)	
e) Pairwise comparison for assessing the relative importance of objectives (by PPP members individually; broader public participation is possible)	
f) Setting ex-ante conditionality	III Elaborating indicators for measuring the achievement of objectives and estimating the weight of the individual indicators for reflecting on each objective.
- Elaborating framing fields of measures and related criteria for selecting projects in these fields	
- Estimating the potential impact of measures on achieving each objective	IV Identification of indicators' significance/weight within an index.
- Calculation of ranking of measures, under which later projects are supported using AHP.	V Normalization of (two sets of) indicators and consolidation of indicators/ Elaboration of an index
g) Selection and implementation of projects under the chosen and weighted measures.	
	VI Analysis of evaluation results
	- Measuring the overall development of the region toward the defined objectives
	- Measuring the degree of balance in the integrated development of the region
	- Measuring the cumulative contribution of projects funded under the RDC compared to the contribution of conventional interventions.

Note: SWOT = Strengths-Weaknesses-Opportunities-Threats
Source: Own design

of selection criteria and indicators. At this point it has to be stated that measuring actors' power presents one of the greatest challenges for social scientists (Hasanagas, 2004). Furthermore, even if several stakeholders are represented in the RDC elaboration process, it might be necessary to define the minimum topical cornerstones, i.e. socio-economic and environmental concerns, in advance to ensure that an integrated approach is followed (see Step a in Table 2). The reason for this is that local actors might neglect the aspect of sustainability and directly proceed with up-to-date topics and feasible operational objectives, instead of taking a more abstract multi-dimensional and comprehensive view. Another weak point of MCDA as an evaluation tool is that it cannot assess the impact of partnership processes on the implementation of a RDC and cannot provide a basis counterfactual evaluation with regard to effects of non-funded partnerships.

To compensate for two of these shortcomings, MCDA is supplemented by the application of SNA within the proposed evaluation framework.

4.2 Applying SNA for assessing the effects of externally stimulated and non-stimulated social interactions

Marquardt et al. (2012) and Marquardt and Möllers (2010) have shown that with SNA effects of community and partnerships, actions can be made feasible. Using mathematical and statistical figures, SNA can reveal the dynamics of social networks, i.e. the changing network properties over time (Wagner et al., 2005). SNA allows for the systematic assessment of social capital, governance, and the transfer of information (cp. e.g., Jansen, 2000; Sedült, 2005; Wald, 2011). In the following section, suggestions are made for how SNA can be used as an evaluation tool complementing MCDA by analysing relations between actors. For details on its practical application, see Box 2.

Besides its primary focus on relational data, in network analysis the position of single actors, as well as the actor constellation in the overall network context are important. Different actor networks, e.g. the network structures among the members of different PPPs, can be compared, e.g. in terms of

the density of formal relations within an actor network. In Appendix B examples of network properties and their calculation are presented.

Box 2
The practical application of SNA as evaluation tool

> In network theory, a social network "consists of a finite set or sets of actors and the relation or relations defined on them" (Wassermann and Faust, 1994: 20). Contact matrices are used for organising collected relational data (Table 3). A contact matrix reveals whether or not a relation exists between actors in the network. Different types of relations can be analysed individually and together. The SNA software UCINET (Borgatti et al., 2002) facilitates the mathematical calculation of specific network structures (Appendix B) and the position of actors within the network. In the graphical presentation of networks, actors are represented as nodes connected by lines. Actors' attributes might be included in the network analysis.
>
> An SNA-based evaluation system is operational, as most relations proposed for the application of the evaluation concept (Table 3) have been applied in practice for assessing the development of local communities. Yet the manageability of SNA is not completely sound: while the graphical SNA results may be demonstrative, not all mathematical SNA results are easy to interpret, and experts are also needed for elaborating the evaluation design. Moreover, to perform some types of network analyses, it is important to consult all relevant actors, which is sometimes burdensome.

To address the outlined evaluation challenges, network variables have to be identified which reflect the development of local initiatives in terms of participation, a bottom-up approach, and differences between funded and non-funded partnerships. A quite impressive example for the operationalisation of network features has been developed by Hasanagas (2004) for performing a comparative evaluation for a related evaluation problem. This author analysed the power of actors in environmental policy networks, assuming that power is a function of network and organizational characteristics of an actor. Hasanagas' data set allowed regression of e.g. negotiation results and network features. For the present case, indicative network features and actor/ group attributes have also been developed (for details, see Marquardt and Möllers, 2010): Table 3 presents actor relations relevant for assessing networks of local initiatives/regional PPPs when the focus is on integrated endogenous development. For instance, for gaining insight into governance processes, a network of the relations of "formal and informal participation in decision making" can be drawn. Yet, for the approval of participation more information is needed than knowledge, which actors are actually involved in the decision-making network. It is necessary to identify in how far formal and informal participation is offered by a regional

PPP itself.[15] Furthermore, the differentiation on formal and informal contacts between actors prior to and during the work of a PPP allows statements on causality for preconditions for partnership building and – for addressing the concrete evaluation problem – counterfactual evaluation of the effects of funded partnerships and/or externally stimulated partnerships compared to the effects of other formal and informal partnerships (see Section 4.3). Assessing these two kinds of relations also provides a clue on whether it is a "close-knit partnership". Which kinds of relations are finally used in the evaluation depends on the depth of analysis; for instance, drawing up the network on alerting new PPP members (Table 3) provides further information on the openness of a regional partnership and the relevance of pre-existing contacts for the formation of a PPP. It also depends on the indicators used for the evaluation system.

When defining an indicator, not only is the kind of relation relevant, but so too is an indicative network property (Appendix B), and in some cases so are actor attributes. Consequently, it is a complex undertaking which cannot be comprehensively explored here. Nevertheless, some examples can be provided. For some issues like promoting collaboration within a PPP, the operationalisation of network features is straightforward, namely measuring the *network density* (Appendix B) of the respective relation. Furthermore, when assessing information flow, the degree of *centralization* and the *centrality* of actors (Appendix B) by stakeholder group provide information on the openness of a PPP and the nature of regional management. For some indicators, considering two network variables at the same time might be necessary, e.g. the relations' "contact prior the PPP's establishment" and "formal partnership" (Table 3). The collection of attributional data related to the actors under investigation allows SNA results to be refined with regard to heterogeneity analyses, e.g. the distribution of actors by sectors, or the calculation of network properties by attribute, and the importance of certain actors or groups of actors (measured by their degree *centrality*). Thus, by using SNA many facets of the nature of partnerships and their development can be assessed quantitatively.[16]

The experiences gained with SNA and the methodological options outlined suggest that in the context of the evaluation problem addressed in this paper it might be

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[15] Considering that regional partnerships are often organised in a more representative than a participatory manner because a multi-sectoral stakeholder composition is a criterion for their selection, it becomes clear that for proofing a participatory approach, applying SNA is more meaningful than looking at the stakeholders present in a PPP, as the configuration of a PPP can be easily established artificially on paper.

[16] For making the methodological options of SNA and their practical relevance more feasible, one example is provided: By applying SNA, Marquardt et al. (2012) trace the development of two (potential) LAGs and show that the slowly-grown heterogeneous partnership tends to be more open than a close-knit network of public actors, which have both formal and informal relations. For the development of both partnerships they identify the relevance of key actors and the effects of institutionalized management compared to informal organisational structures.

worthwhile to assess social interactions not only in the form of percentages of, e.g. participation as a share of the population in a region, which could also be revealed within the application of MCDA. With the possibility of calculating network properties, not only can more processes be assessed in a more differentiated way, but also some patterns of causality can be revealed. At the same time, SNA results allow quantitative vertical (over time series) and horizontal (between different regions) comparison for many network features, which is important when standardised programme evaluations have to be conceptionalized. Yet, even if the application of SNA brings about quantitative results, it will hardly be possible to relate revealed effects to the level of funding provided for the stimulation of desired processes, e.g. the amount of funds required for animating the territory and/or regional management within the partnership formation process, rather it is about a with- and without comparison.[17]

4.3 Building an evaluation framework

So far the MCDA- and the SNA-based approach have been presented as independent units. As shown in Figure 1, some of the interventional features, whose effects can be assessed by one or the other approach are interlinked. Thus, while in cases in which solely the elaboration of an integrated RDC has been financially supported, applying MCDA in a formal programme evaluation would be theoretically sufficient. As soon as participation, partnerships or animation of the territory formally establish a part of the programme design (which is usually the case), the effects of those externally stimulated processes are to be seen together with the usage of the endogenous regional potential and/ or synergies achieved by applying the integrated approach. Consequently, the degree of goal achievement in the MCDA-based performance-index system has to be correlated with quantitative SNA results. While a share of the knowledge gained through

Table 3

Actor relations analysed with SNA for assessing the effect of regional partnership processes

Kind of relation	Form of data collection	
	Contact matrix	Open question
Communication (before and during the PPP's establishment)	X	
Formal/ Informal contact (before and during the PPP's establishment)	X	
PPP *internal* information flows		Who informs you about the PPP? Whom do you inform about the PPP?
PPP *external* information flows *		Whom do you inform about the PPP? Who informs you about the PPP?
Outreach of the PPP		Who alerted you to the PPP and whom did you solicit to join the PPP?
Formal partnerships	X	
Informal partnerships	X	
Contributing to the PPP's work and projects		What have you contributed to the PPP's work? Who else, aside from the PPP members, contributed to the work of the PPP?
Working relation for PPP purposes	X	
Active/ Passive participation in PPP activities		Who participates in the activities of the PPP in active/ passive way?
Formal/ Informal participation in decision making *		Who formally/ informally participates in decision-making processes concerning the PPP?
Dependency on actors in the realization of PPP activities	X	
Current information		Who gives you current information about processes concerning the PPP/ the policy programme?

Note: * By examining this relation it is particularly important to also consult persons in the region who are not members of the regional PPP.
Source: Adapted from Marquardt and Möllers (2010)

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[17] By applying SNA, Marquardt et al. (2012) found a relation between time actor relations that had to mature, and their sustainability and trust (measured in the willingness to jointly enter into a formal contractual relation). Therefore, while it might not be possible to find direct relations between the level of funding and the intended processes to be stimulated, a relation between intervention type and the desired processes might be revealable.

SNA helps to explain patterns of causality in individual cases, and have importance for self-evaluation or regional management, some theoretically-drawn indicators can also be directly linked to index results. This particularly applies to indicators underlining the openness of a PPP, network activities initiated by PPP members, the degree of networking within a region, and the intensity of collaboration of project holders (see Section 4.2). Indeed, for all of those variables the consideration of further network characteristics, especially with regard to the nature of the partnership, would be ideal; particularly important would be considering the networks' heterogeneity with regard to sectoral composition.

Yet even in such an ideal situation with regard to data being available for the evaluation project, when striving to span a regression model proxies must be introduced. Indeed, even if the MCDA approach allows in opposite to most holistic evaluation approaches (see Appendix A), one to relate achievements of the integrated endogenous development to projects funded under the respective strategy by differing between target- and impact indicators, which can be related to projects funded under the strategy and other projects realized in the respective region, the assumption that solely the externally stimulated processes assessed within this evaluation framework influence the performance of a PPP (and the regional actors as a whole) is not valid. Therefore, the influence of the proxy value, which is likely to vary between cases, i.e. regions, has to be proven in practice.

4.4 Strengths and weaknesses of proposed evaluation concept

Table 4 shows the assessment of the suitability of the proposed MCDA- and SNA-based concept as tool for evaluating integrated endogenous rural development and partnership interventions, compared to other evaluation methods. Despite not fully satisfying all criteria (Table 1), the two novel methods introduced here rank high in overall assessment. They also further the implementation of these development approaches in the regions, and make a contribution to informed policy-making.

Following a holistic approach, MCDA – by setting ex-ante conditionality for the maximisation of the effectiveness of the integrated approach when realizing RDCs and enhancing the possibility for using synergies between actions – allows one to assess the degree of usage of endogenous regional potential in an integrated way, quantitatively in interim stages, and ex-post. While applying MCDA ex-ante conditionalities for the application of the integrated approach are set, thus allowing an assessment of achievements in practicing that approach, individual synergies resulting, e.g. between specific projects, cannot be quantified. Counterfactual evaluation in the sense of comparison with conventional interventions is possible. As a means of evaluating endogenous development, a strength of MCDA is the possibility of tracing participation and its impact; yet MCDA fails to assess effects of informal governance processes counterfactually. Within

Table 4

Judgment on the proposed MCDA- and SNA-based concept for evaluating interventions in integrated endogenous rural development

	MCDA		SNA	
Scope of evaluation approach				
Integrated notion				
Endogenous notion			X	
Integrated endogenous regional rural development initiatives	X			
Partnership formation			X	
Criteria for judging evaluation methods	**Fulfilled?**	**Comparative performance**	**Fulfilled?**	**Comparative performance**
Quantifiability of evaluation results	√	+	√	+
Comparability of evaluation results	√	+	√	+
Validity	(√)	+	(√)	+
Explanation of patterns of causality	(√)	(+)	√	+
Practicability	√	+/-	(√)	+/-
Absence of bias	√	+/-	(√)	+/-
Reliability	√	+	√	+/-
Objectivity	√	+	(√)	+
Relevance for external evaluation	√	+	√	+
Relevance for internal/ self-evaluation	√	+	√	+
Instrumental side effects/Function as management tool	√	+	√	+/-

Note: √ = Criterion fulfilled   (√) = Criterion partly fulfilled

\+   = The performance in that respective criteria forms a particular strength of the evaluation approach.

+/- = Performance equals that of other evaluation method/ is worse than that of most other evaluation methods.

the proposed evaluation framework, these limitations are compensated for by the supplementary application of SNA. Moreover, SNA not only reveals the "end-product" of an intervention, but helps make the underlying social interactions feasible, and consequently has compare to other evaluation methods high relevance in explaining patterns of causality in externally stimulated development processes. A clear strength of the evaluation framework is that its concept allows one to link quantitatively measurable effects of externally stimulated processes, e.g. partnership formation and participation, to performance in integrated endogenous development.

Compared to other evaluation methods the framework suggested here scores high for *external legitimacy* as well as for the criteria *transparency*, *quantifiability* and *transferability of approaches* (Table 4). Both methods allow vertical (in time-series) and horizontal (cross-regional) comparison of quantitative results. The MCDA- and SNA-based approaches are valuable means for external and internal evaluation and social learning, as they provide a basis for participatory evaluation. To make these strengths feasible for the seemingly rather abstract SNA approach, it comprises the aspect of accountability normally resulting from external evaluation (Marquardt and Möllers, 2010). Unlike many other methods used for evaluating community development, when applying SNA through the more distant assessment of actor relations governance processes are likely to be reflected in a more objective way; multiple evidence sources impart both internal and external validity to the quantitative SNA results, which are calculated by independent third parties. Then again, SNA also allows self-reflection within a PPP. Thus, it also provides the educational effects of self-evaluation (Marquardt and Möllers, 2010). Within the evaluation process, learning effects might arise by rethinking the work of local actors and by discussing the evaluation results within the concerned group, led by an independent actor.

The proposed evaluation framework can be extended to function as a management tool. MCDA's support in strategically steering the development of the region,[18] as well as benchmarking, is especially noteworthy. So too is the possibility, by means of SNA, to reveal PPP-internal collaboration patterns and the effectiveness of regional management, e.g. with regard to circulating information. All these instrumental features are backed by vivid examples (see Marquardt, 2013).

A small weakness of the evaluation framework is the need for advance planning. As the recommendation of using it as a management tool already suggests, and it is selfevident for the application of MCDA, also the SNA-based evaluation approach is ideally done prior to implementing the respective intervention for establishing a solid baseline because collecting relational data retrospectively is challenging.

5 Conclusions

Applied supplementary within the evaluation framework proposed here, the MCDA- and the SNA-based approach are likely to allow one to overcome most problems common to the assessment of effects of integrated endogenous rural development, which are primarily related to underlining added value creation potentially resulting from strategic planning and joint action. The review of evaluation methods revealed that assessing the effects of practicing an integrated approach has received little attention from evaluators. Thus, solely proposing the MCDA-based evaluation approach makes a significant contribution to the existing evaluation repertoire. Furthermore, unlike other methods that strive to assess (the effects of) stimulated processes (social interaction in particular) both approaches produce vertically and horizontally comparable quantitative evaluation results.

Both approaches, MCDA and SNA, by themselves reveal theoretically-drawn patterns of causality leading to the creation of added value quantitatively, and the idea and the benefits of their supplementary application have become obvious. Nevertheless, interlinking the two approaches in an evaluation system, which allows going beyond descriptive results, and allows for a standardised assessment of interventions supporting integrated endogenous development by correlating SNA- and MCDA- results, still needs to be proven.

Raising the question, when which kind of evaluation being a worthwhile exercise, and weighing costs and benefits of the proposed evaluation framework, the effort involved with data collection might catch the eye at first glance. Yet compared to other case studies striving to assess the effects of integrated endogenous rural development, the effort of using SNA to assess the effects of social interaction, particularly of partnerships, is not noticeable. The effort might, however, still be too high for employing SNA in standardised programme evaluations. Applying SNA is particularly valuable for regional initiatives with a high number of actors or with a newly-composed membership, as social structures then cannot be easily assessed by means of assumption or participatory observation. Considering that local actors have to elaborate a kind of RDC in any case, the effort of applying MCDA, which is linked to the RDC elaboration process, is negligible. Moreover, the pragmatic ex-ante conditionality approach furthers effective spending of funds in advance. Since both methods allow self- and external evaluation, might function as management tools, and may also provide systematic evidence for policy discussions, the possibly – compared to common standardized programme evaluations higher level of effort is relativised.

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[18] In addition to prioritising objectives and ranking measures, using MCDA software facilitates strategic planning, because it allows e.g. linking weights of the objectives to stakeholder groups and thus to diminish effects of under-representation.

Appendix A

Categories of reviewed evaluation approaches and their advantages and disadvantages for evaluating interventions

Category of evaluation approaches	Description/ Advantages/ Disadvantages
1) Internal/Self-evaluation or mixed approaches: Focus groups	The idea of the internal self-evaluation, e.g. practices within focus groups (Grieve and Weinspach, 2010), is that local actors have a "view in the own region", that stimulates self-reflection and provides a basis for future decisions to be made by the local actors. Ideally, self-evaluation leads to the effect of social learning (High and Nemes, 2007). Internal evaluation fails in terms of accountability; results are primarily qualitative, whereas actors can tell many things, and particularly statements on governance are likely to be affected by social control present in focus groups.
2) Action research and participatory observation	Midmore (1998) stresses the importance of observation, as it provides the opportunity to determine whether claims made in interviews and written declarations of intent are realized in practice, or whether they merely conceal the continued dominance of local elites. Thus, compared to internal evaluation (see above), the level of accountability increases, but results are still strongly subjective and of a qualitative nature.
3) Multi-stakeholder/Multi-site-/Multi-perspective evaluation	In its general application, multi-perspective evaluation, as e.g. suggested by Grieve and Weinspach (2010) or Birolo et al. (2012), helps to alleviate the deficits of internal evaluation in terms of subjectivity, effects of social control, and accountability. Depending on the approach, views of the different stakeholders are more or less easily brought together. Yet individual aspects such as assessing participation or the impact of regional management are assessed in a merely qualitative way.
4) Case studies on governance processes and social capital creation based on several theories – qualitative results	There are uncountable case study approaches, backed with theories on governance processes and social capital creation leading to qualitative results, which do not allow the aggregation of evaluation results from different cases, i.e. in the context of this paper regions. Case studies might include elements of evaluation approaches, e.g. participatory observation. In one example, Go et al. (2013) use the concept of embedded governance complemented by behavioural theories to examine rural development processes.
5) Case studies on governance processes and social capital creation with quantitative descriptive results and (often) non-comparable results	To make governance processes and social capital creation quantitatively descriptively feasible, and to allow a comparison between assessments of different points of times in one region or between regions, indexes and models have been developed. For social capital creation within local development processes, Nardone et al. (2010) offer an insightful approach. A deficit common to many of these models – in addition to the mostly high effort of data collection – is that they rest on proxies, which do not reflect the interaction between actors, but reflect relational and process aspects too comprehensively, such as the presence of organisations. This kind of study mostly does not account for inter-actor relations that can affect participation, partnership formation and social capital creation.
6) Contingent valuation	An interesting approach for assessing LEADER has been applied by Calatrava-Requena and Gonzalez-Roa (2011), who point out that valuation does not equal evaluation. Though, as most evaluation approaches fail to measure the impact of LEADER in monetary units, contigent valuation (CV), a special kind of external evaluation, appears to be a meaningful tool supplementing general project evaluation fed into the political debate. CV is a good method to validate public choices, especially when public money is used. The technique of CV has been widely used to perform cost-benefit analysis of projects. A major problem with this approach is that activities and effects on e.g. regional development can often not be linked to specific support programmes. Moreover, as CV is a „stated preferences method", it can generate various biases like „hypothetical market bias" (there is not a real market), „strategic bias" (from respondents), „design bias" (the way in which information are presented can affect the answer).
7) Holistic approaches: Welfare/ Wellbeing approaches, Indexes for increased regional competitiveness	Instead of measuring the impact of individual projects realized within a RDC e.g. by number of created jobs, some evaluators and/or scientists follow a more holistic approach, mostly by means of indexes, for assessing changes in regional competitiveness, wellbeing or welfare (see, e.g. Baranauskiene, 2012; Calatrava-Requena and Gonzalez-Roa, 2011; Midmore, 1998). Indeed, applying an integrated endogenous approach to regional development can be assumed to strive for increasing the quality of life in one way or another. However, the development of the quality of life within a region can be affected by many issues and cannot necessarily be linked to the impact of one policy programme. Furthermore, collecting statistical index data at the local level is mostly a challenging exercise. Therefore, such holistic approaches are likely to be weak as evaluation tools regarding their validity and reliability.

Note: The division of evaluation approaches into the seven categories presented in this table was done by the authors; one evaluation approach can belong to two or more categories.

Appendix B

Examples for SNA network properties

Network property	Description and calculation
Network size	Number of actors in a network.
Network density	Number of ties in a network, expressed as a proportion of the maximum possible number of ties, which is: $\frac{n \times (n-1)}{2}$, if n = number of actors.
Degree (centrality) (of an actor)	Total number of actors to which the examined actor is connected. This measure is standardised by expressing it as a percentage of the maximum possible connections.
- Out-degree	Relations to which the focused actor is connected by outgoing arrows.
- In-degree	Relations which have arrowheads directed towards the focused actor.
Network centralisation	Measurement of how tightly the graph is organised around its most central point(s). The differences between the centrality scores (e.g. the degree-centrality) of the most central point and those of all other points are measured. Centralisation, then, is the ratio of the actual sum of differences to the maximum sum of differences (Scott 2001, 90).
Isolator	Actor with a degree of 0% – i.e. with no in- and no out-degree.
Betweenness (of an actor)	For each actor, the proportion of times that they are 'between' other actors, e.g. for sending information, is measured. This measure is standardised by expressing it as a percentage of the maximum possible betweenness that an actor could have had.

Note: The network properties described in this table are calculated for a set of actors and a certain kind of relation, whereby for determining the size of a network it is not important that the actors belonging to the network under investigation are interlinked (see network property "Isolator" in this table). Box 2 explains how the relational data used for calculating the network properties is collected.

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From growth to shrinkage: The effects of economic change on the migration processes in rural Romania

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Abstract

Romania's current territorial development, the new spatial structure of the economy and the population are mostly determined – besides the process of path dependency – by new political, social and economic circumstances. With the transition from a planned to a market economy, the post-communist socio-economic changes have left their mark on the evolution of the rural population not just in terms of structure and quality, but also in terms of numbers. Deindustrialization and the restructuring processes that occurred in the late 1990s have had a negative effect that manifested itself not only in the rise of unemployment, but also in the directional change of the internal migration. The main objective of the paper is to show how the spatial pattern of migration flows has changed during two time periods: between 1990 to 1996, when the internal movement of people was characterized by rural-urban migration and 1997 to 2011, when – due to the economic restructuring processes – urban-rural migration has prevailed. To interpret this, the paper focuses on assessing the current state and the spatial differentiation of migration in Romania – based on settlement level data, regardless of the spatial conditionality of the phenomenon - using the technique of spatial autocorrelation. The aim is to establish and interpret the different clusters resulting from the similarities in the intensity of the net migration rate, as well as to compare the outputs of these two results. The analysis mostly focuses on the effects of economic change on the internal migration, regardless of aspects related to the emigration of the Romanian population.

Keywords: *Internal migration, ruralisation, disparities, spatial autocorrelation, Romania*

Zusammenfassung

Vom Wachstum zur Schrumpfung: Die Auswirkungen des ökonomischen Wandels auf Migrationsprozesse im ländlichen Raum Rumäniens

Rumäniens gegenwärtige territoriale Entwicklung sowie die neue räumliche Struktur der Wirtschaft und der Bevölkerung sind – jenseits von Pfadabhängigkeiten – vor allem durch neue politische, soziale und ökonomische Rahmenbedingungen bestimmt. Die Transformation von einer Plan- zu einer Marktwirtschaft und die damit verbundenen post-kommunistischen sozioökonomischen Wandlungen beeinflussen die Entwicklung der ländlichen Bevölkerung sowohl im Sinne von Strukturen und Qualitäten als auch deren Anzahl. Die Deindustrialisierung und die Umstrukturierungsprozesse, die seit den späten 1990er Jahren stattfanden, hatten einen negativen Effekt, der sich nicht nur in einem Anstieg der Arbeitslosigkeit, sondern auch in einem Richtungswechsel in der Binnenmigration zeigte. Das Hauptziel dieses Artikels ist zu zeigen, wie sich die räumlichen Muster der Migrationsströme geändert haben, und zwar in zwei Zeitperioden: zwischen 1990 und 1996, als die Binnenmigration durch Land-Stadt-Migration charakterisiert war, und zwischen 1997 und 2011 als – aufgrund des ökonomischen Restrukturierungsprozesses – Stadt-Land-Migration überwog. Um dies zu interpretieren, fokussiert dieser Artikel auf eine Abschätzung des gegenwärtigen Zustands und die räumliche Differenzierung der Migration in Rumänien, basierend auf Daten auf Siedlungsebene und einer Analyse der räumlichen Autokorrelation. Das Ziel ist es, die verschiedenen Cluster zu interpretieren, die sich aus Ähnlichkeiten der Intensität der Wanderungssalden ergeben. Die Analyse fokussiert vor allem auf Effekte der ökonomischen Änderungen auf die Binnenmigration, die Auswanderung aus Rumänien wird nicht untersucht.

Schlüsselwörter: *Binnenmigration, Verländlichung, Disparitäten, räumliche Autokorrelation, Rumänien*

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1 Introduction

The migration phenomenon in Romania goes back quite a long way – being a fairly permanent process – although its intensity has changed a lot over the last two decades. Following a short wave of rural-urban exodus in the 1950s, spatial mobility has been moderate. Moreover, it has been completely restricted in some large urban centres, while international migration was strictly controlled by governments.

The political and economic changes occurring at the beginning of the 1990s have brought about considerable changes in the territorial structure and migration behaviour of Romanian counties, along with a severe economic decline and deepening of the development discrepancies between the Eastern and Western parts. The restructuring of state-owned enterprises and privatization of economic structures were not done easily, influenced also by the difficulties that occurred in the country's external balance of payments and the deficit of the central budget. The inflation has risen to an alarmingly high rate, while, at the same time, closing down the industrial plants has boosted unemployment. All these had a negative effect on the entire economy of the country. One of the most important effects of the economic processes taking place in the 1990s was the change in the direction of internal migration as a reaction to deindustrialization. Beginning with 1997, for the first time in the last four decades, the urban-rural migration started to prevail. The trend of international migration has also escalated, starting with emigration motivated by ethnic and religious aspects, closely followed by permanent emigration and emigration based on economic reasons (Ilovan and Sochirca, 2011).

The aim of the paper is to use spatial autocorrelation techniques in order to present the current trends and spatial differentiation of migration in Romania in the light of socio-economic transition, based on data available for the smallest possible territorial units: communes. To view migration as a broader process of social and economic development and to identify spatial units consisting of communes with similar migration indicators we will make use of the net migration rate, comparing it between two periods: 1990 to 1996 and 1997 to 2011. The main question is whether we will be able to detect a spatial pattern in the relations of internal migration and analyze the main features of the neighbourhood effect.

One should mention that over the last few decades, the issue of spatial autocorrelation has received considerable attention not only among geographers but also among economists, biologists, urban planners and sociologists.

Spatial autocorrelation can be used as a very effective technique in analyzing spatial distribution of objects, assessing at the same time the degree of influence of neighbouring entities upon each other (Borruso and Murgante, 2012). This concept is very well synthesized in the first law of geography defined by Waldo Tobler: "All things are related, but nearby things are more related than distant things" (Tobler, 1970: 236). Spatial autocorrelation tests whether the value of an observed variable is independent of values of the same variable in neighbouring localities (Cliff and Ord, 1973). The most prominent authors in exploring and using spatial autocorrelation were Cliff and Ord (1969, 1973, 1981) who have developed Moran's I statistics for measuring (global) spatial autocorrelation (author is Moran 1950). In the nineties, the focus shifted towards local patterns of association as a more appropriate perspective (Getis and Ord, 1992; Openshaw, 1993; Anselin, 1993; 1995). The Local Indicators of Spatial Association (LISA) was proposed by Anselin (1995) and has been used to identify possible centres of statistically significant clusters. In this paper the author will use both statistics of spatial autocorrelation mentioned above.

The paper has been divided into three parts. The first one includes an introduction to the dataset, describing the core-hypothesis of the analyses as well as the methodological approach regarding the spatial autocorrelation techniques. The second part will broadly analyze the migration trends in Romania over the last two decades, as well as the consequences and challenges provided by migration, resulting in a comprehensive overview on the current patterns of migratory flows. The final part the paper will focus on the significance of spatial autocorrelation analyses and the effect of neighbourhoods in shaping migration patterns in the case of internal migration flows. The findings of the analysis on the spatial differentiation of migration at communal level and the identified spatial clusters will help bring a new perspective on the understanding of the continuous changes taking place in core and periphery areas in the context of internal migration serving as a basis for drafting local development policies.

2 Data and Methods

The analysis on the spatial differentiation of migration was based on existing territorial statistical data obtained from the National Institute of Statistics (2014a-c), including the 1992 Census, the Tempo Online website and the 1990 to 2011 Statistical Yearbook. These databases enable us to use data at communal level corresponding to the EU NUTS[1] 5 level, in

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[1]   The Nomenclature of territorial units for statistics, abbreviated as NUTS (from the French *Nomenclature des Unités territoriales statistiques*) is a geographical nomenclature subdividing the territory of the European Union (EU) into regions at three different levels (NUTS 1, 2 and 3, respectively, moving from larger to smaller territorial units). Above NUTS 1 is the 'national' level of the Member State.

our case the level of the 2,861 communes[2].
The analysis was based on three core hypotheses:

- H1. The variations of the net migration rate are spatially auto-correlated.
- H2. The neighbourhood effects of the net migration rate in the Romanian communes can be proven with the help of ESDA (Exploratory Spatial Data Analysis) techniques.
- H3. There is a strong distinction in the spatial patterns of migration between 1990 to 1996 (in the case of rural-urban migration) and 1997 to 2011 (urban-rural migration).

The identification of representative groups of the territorial concentration of migration was based on the use of spatial analysis techniques, on the use of spatial autocorrelation. The most interesting feature of spatial autocorrelation is its ability to analyze location and attribute information at the same time (Goodchild, 1986). The analysis of spatial autocorrelation is based on the calculation of a global and a local Moran's I criteria. To measure spatial autocorrelation, first we use the global Moran's I statistic (Moran 1948, Anselin, 1996; Griffith, 2003; Pinkse, 2003). This is calculated as:

$$ I = \frac{\sum_{i=1}^{n}\sum_{j=1}^{n} w_{ij}\left(x_i - \overline{x}\right)\left(x_j - \overline{x}\right)}{\sum_{i=1}^{n}\sum_{j=1}^{n} w_{ij} \sum_{i=1}^{n}\left(x_i - \overline{x}\right)} \qquad (1) $$

where

I is the global Moran's I,
x_i is the value of the monitored variable in unit i,
x_j is the value of the monitored variable in unit j,
x with stripe is the arithmetic average of the monitored variable,
w_{ij} is the generic element of contiguity matrix.

Since the expression of spatial dependence refers to the connection between the nearest units, it is important to express

the degree of proximity of the areas by defining the concept of spatial contiguity (O'Sullivan and Unwin, 2003). The concept of contiguity can be defined as a generalized matrix of W weight, usually symmetrical, representing the pattern of connections or ties and their intensity (Badaloni and Vinci, 1988), where w_i weights$_j$ denote the effect of the territorial unit on unit i. In this study, a dichotomy matrix of contiguity was used where $w_{ij} = 1$ if the i area touches the boundary of j area, otherwise $w_{ij} = 0$. This definition of neighboring areas is based on rook contiguity. In this study, the weighting matrix is row standardized, and the weights are defined as: $w_{ij}^s = \frac{w_{ij}}{\sum_j w_{ij}}$, such that $\sum_j w_{ij}^s = 1$ [3]
The row standardization has two important implications:

- it implies equal weights across neighbors of the same settlement;
- it implies that the sum over all elements of the row-standardized weight matrix (w_i^s) is equal to the total number of observations (N).

Therefore, the equation can be rewritten as:

$$ I^s = \frac{\sum_{i,j} w_{ij}^s\left(x_i - \overline{x}\right)\left(x_j - \overline{x}\right)}{\sum_i\left(x_i - \overline{x}\right)^2} \qquad (2) $$

With row standardization, the sum of weights in each row becomes 1. Since there is one row for each commune in the sample, there are N rows. Therefore, the sum over all weights in the matrix $\sum_{i,j} w_{ij}$, is N (Torres et al., 2011).

Moran's I reaches values from -1 to +1. The negative Moran's I value indicates negative spatial autocorrelation, the positive value of Moran's I indicates positive spatial autocorrelation. The closer the value of Moran's I to -1 or +1, the stronger the spatial autocorrelation. This index represents the global indicator of spatial autocorrelation, giving an indication about the presence of autocorrelation. The exact location of the values of autocorrelation is provided by the local spatial autocorrelation statistics. One of the most frequently used indices of local autocorrelation is the Local Indicator of Spatial Association (LISA) developed by Anselin (1988, 1995), being considered as a Local Moran's Index. This index is calculated as follows:

$$ I_i = \frac{(x_i - \overline{x}) \sum_{j=1}^{n} w_{ij}(x_j - \overline{x})}{\sum_{i=1}^{n}(x_i - \overline{x})^2} \qquad (3) $$

The sum of all local indices is equal to the global Moran's I (Krejníková, 2013). Therefore, $I = \sum_i^n \frac{I_i}{n}$, which allows, for each

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[2]   Romania is organized in the following territorial-administrative units: counties (județe), cities (municipii), towns (orașe), communes (comune) and villages (sate). According to Law regulating the National Development Plan–Section IV: Settlements Network, cities are defined as territorial administrative units where most of the labour is employed in non-agricultural activities with a diversified level of equipment, exerting a constant and significant socio-economic impact on the surrounding area. Communes are defined as territorial administrative units comprising rural population characterized by common interests and traditions consisting of one or more villages, depending on the economic, social, cultural, geographic and demographic functions. In this paper the analysis refers to the existing cities and towns (320) representing Romania's urban area and to the 2,861 communes which encompass 12,957 villages representing the rural area. It must be mentioned that the number of cities (towns) and communes (villages) has changed considerably during the analyzed period: if at the beginning of 1990 there were 260 urban settlements and 2,688 communes (including 13,088 villages) until 2011 their number has increased up to 320 cities and towns and 2,861 communes (encompassing 12,957 villages). In order to increase the reliability of the analyses all the datasets were reconstructed in accordance with the latest administrative organization units.

[3]   For example, if a territorial unit has 4 neighbours, $w_i^s = 1/4$ (Torres et al., 2011)

location, to determine the similarity of each observation with its surrounding elements. Thus, five scenarios occur (Borruso and Murgante, 2012):

- locations with a strong presence of the phenomenon and high level of similarity with their surroundings (high-high H-H), defined as **hot spots**;
- locations with low values of the phenomenon and low level of similarity with their surroundings (low-low L-L), defined as **cold spots**;
- locations with high values of the phenomenon and low level of similarity with their surroundings (high-low H-L), defined as potentially **spatial outliers**;
- locations with low values of the phenomenon and high level of similarity with their surroundings (low-high L-H), defined as potentially **spatial outliers**;
- locations completely lacking a significant autocorrelation.

It is worth mentioning that high-high and low-low types of spatial associations indicate positive spatial autocorrelation and vice-versa, high-low and low-high types denote negative spatial autocorrelation (Anselin, 1995). The Local Indicator of Spatial Association (LISA) can effectively bind a measure of the degree of spatial association relative to its surroundings to each territorial unit, enabling the highlight of the type of spatial concentration for the detection of spatial clusters (Scardaccione et al., 2010).

The values resulted from the spatial autocorrelation analyses have been calculated and illustrated with the help of the GeoDa Software version[4] 1.6.2 and are explained in more detail in chapter 3.2.

3 Results

3.1 Understanding the pattern of internal migration over the last decades: challenges and consequences

The main aim of this subsection is to present the economic transformation of the country during the last few decades which have had a significant effect on the evolution of the internal migration process and on the deepening territorial disparities within the country. Romania's internal migration processes, its spatiality cannot be correctly understood without mentioning briefly its political, social and economic history over the last 50 years. During 1948 to 1989 Romania was a totalitarian state, with a centralised socialist economy. At the same time, the structure of the economy has been characterized as mainly agrarian, with a predominantly rural population. The process of industrialisation during the socialist regime was based mostly on the transfer of capital and labour from agriculture (Kupiszewski et al., 1997).

The first part of this period (1948 to 1956) was characterized by deep political, social and economic changes in Romania:

the nationalisation of the industry has taken place followed by the collectivisation of agriculture, which generated a massive population movement from rural to urban areas. The towns in Southern Transylvania and the industrial areas of Braşov and Hunedoara, in particular, and some developed urban centres (Cluj, Constanţa, Iaşi, Bucharest) represented the main attraction for the rural population from the surroundings, as well as the Eastern part of the country (Measnicov, 1969).

During the next period (1956 to 1966), the rural population has continued to be the most mobile, contributing to a migration from villages to towns twice as high as migration between urban settlements (Cândea and Baranovsky, 1985). The main feature of this pattern was the long-distance migration of the young, working-age population from the Eastern and South-Eastern rural areas towards the more developed Western urban settlements. As early as 1967, a decree has been adopted against migration into the largest towns of Romania, although these attempts have not proven successful as the urban population continued to increase due to migration but independent of their natural increase (Kupiszewski et al., 1997).

Following the year 1967, the highest level of migration has occurred from 1971 to 1974 and then between 1976 to 1978 when the pattern has remained the same as in the aforementioned period: from the undeveloped Eastern to the more developed Western areas. Figure 1 illustrates the intensity of rural-urban migration based on county-level migration data and the counties' urbanization rate.

In 1990, after repealing some of the restrictive aspects of the legislation referring to establishment of residence in urban areas, the rate of internal migration reached its highest level ever recorded (45.1 ‰). In fact, the majority of the registered migrants in 1990 were *de facto* already settled in these towns, and after the change of circumstances they have just officially legalized their residence (Kupiszewski et al., 1997). Since 1990, the territorial mobility was characterized by a series of particularities determined by major transformations in the political, economic and social life. The economic disparities already existing between the prosperous and the lagging regions have increased during the transition years, influenced to a great extent by institutional renewal, economic restructuring and privatization over the last two decades. Thus, the least developed regions have been represented by the North-Eastern and South-Western parts, showing a great lag as compared to Bucharest-Ilfov, West and Centre Regions (Table 1).

The declining economic situation, the high level of urban unemployment and the industrial restructuring have all induced important changes in the internal migration. Starting with 1992, the number of those moving from rural areas (villages) to urban centers (cities) started to decrease, conversely the mobility in the opposite direction (from urban to rural) increased, being mainly attributed to the economic transition and decreasing employment opportunities in cities. Urban-rural migration has become prevalent since 1997 (Alexe et al., 2012). We must also keep in mind the fact that the change in direction of internal migration in the case

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[4]   This software was developed by the Center for Spatially Integrated Social Science (CSISS) at the University of Illinois, Urbana-Champaign, Urbana, IL, USA.
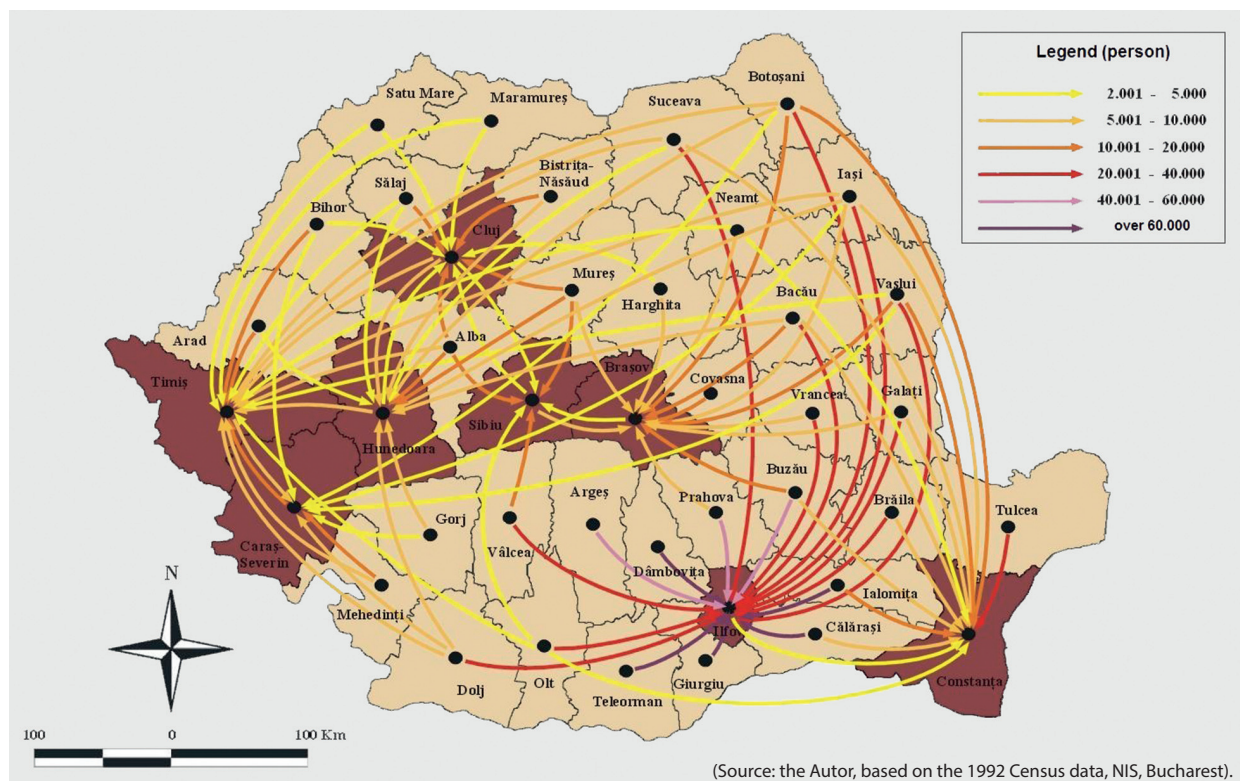
(Source: the Autor, based on the 1992 Census data, NIS, Bucharest).

Figure 1

Number of individuals changing their country of residence based on data regarding county of birth and current county of residence

The colors of arrows represent the intensity of migration: the darker the color, the more people have migrated. The selection of counties was based on two criteria: they had the highest urbanization rate and the highest share of people changing their residence.

Table 1

The macro-economic indicators of development

Development regions	GDP/capita (country average=100)		Unemployment rate		SMEs/capita*		FDI/capita*	
	1998	2003	1998	2003	1998	2003	1998	2003
North-East	74.1	68.5	47.7	8.4	68.7	68.3	15.3	14.9
South-East	97.6	82.2	37.3	7.4	102.5	101.5	42.7	74.6
South-East	83.7	76.6	26.1	7.6	78.1	74.4	65.5	69.9
South-West	87.3	76.5	36.4	8.6	92.3	105.0	11.9	34.1
West	101.9	103.7	28.5	6.6	86.7	95.9	99.1	98.6
North-West	92.1	90.0	26.2	5.2	107.1	107.8	5.8	55.6
Centre	104.7	103.4	23.1	8.0	99.2	102.7	87.7	57.8
Bucharest-Ilfov	158.6	199.2	8.9	3.0	195.3	197.1	598.3	503.5

Source: Romanian Statistical Yearbook, NIS, Bucharest, 1998, 2003 (National Institute of Statistics, 2014a-c)

*Small and Medium-sized Enterprises

*Foreign Direct Investments

of a certain group with a relatively higher income did not represent a constrained migration, but rather – similarly to Western countries – a post-socialist sub-urbanization process, which has reached its peak in the last years of the 20th century. The main features of this migration are that it took place close to the large urban centres where the territorial and social infrastructure has been much better developed (Benedek, 2006). In this case, the internal migration has

represented two main trends: people with a better economic situation belonged to the group of welfare migrants, while those who have lost their job and had a worsening financial situation have represented the group of constrained migrants. Thus, while at the beginning of the transition period, urban-rural migration represented only 2.5 ‰, at the end of the 1990s, migration to rural areas almost quadrupled, reaching values of up to 9.8 ‰, maintaining this ration up until our days (10.1 ‰) (Figure 2).
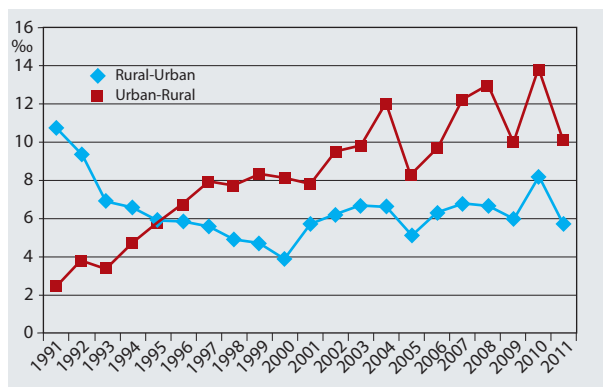

Figure 2

Evolution of the internal migration between 1991 to 2011 (Source: the author, based on data collected from the Romanian Statistical Yearbooks, 1991 to 2011, NIS, Bucharest (National Institute of Statistics, 2014a-c)).

Table 2 shows that most of the people migrating to rural areas generally belong to the age groups between 45 to 49 and 50 to 54 years. A relatively low or sometimes inexistent migratory movement can be noticed in the case of the young population (20 to 29 years), maintaining negative values throughout the examined period, letting us conclude that during the analyzed period the rural environment has failed to retain the most important population group capable of ensuring its reinvigoration and slowing down the advanced demographic aging process.

Migration to rural areas is closely connected with the process of industrial restructuring, which has lead to the decline of economic activities in certain urban centres and, consequently, to mass lay-offs. The return to villages has also been encouraged by the Law governing Agricultural land ownership (Law no. 18 / 1991) according to which agricultural land and forests have been restored to their former landlords, although these were not capable of providing a minimum standard of living due to lack of machinery and equipment (Kurkó, 2011). In addition, we should also mention the fragmentation of agricultural land which rendered it impossible to establish market-oriented production farms, hindering the competitiveness of agricultural products at international level. Therefore, one of the most important effects of economic change on rural population was the increase in the rate of people working in agriculture from 28.6 % (1990) to 41.4 % (2000). Naturally, the consequences of recession consist of a decrease of the number of people employed in industry and services, but this situation should not have led necessarily to the increase of the population working in agriculture. The rise and high share of the active

Table 2

Results of migration towards rural areas by age groups, period 1997 to 2011

Age brackets	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	1997-2011
						In percent of total (%)										Average value
0-15	12.7	68.8	48.5	31.2	3.5	10.5	0.6	7.8	6.6	5.5	6.7	8.4	14.1	15.4	17.9	
15-19	12.9	12.5	11.4	7.6	16.8	8.8	8.1	4.7	5.0	-0.1	1.8	1.6	-0.1	-0.8	0.1	
20-24	-65.4	-34.3	-15.0	-4.0	-34.4	-3.5	-3.9	1.3	-3.1	-14.6	-3.6	-2.5	-8.5	-6.7	-5.4	
25-29	-76.3	-43.7	-25.1	-11.4	-70.0	-18.7	-16.9	-4.0	-8.7	-16.1	-2.7	0.7	-0.8	1.5	2.1	3.7
30-34	-1.0	-3.3	-1.4	2.0	-28.4	-3.6	-9.5	-1.1	-6.5	-7.3	0.2	6.1	6.8	7.0	8.7	
35-39	25.3	17.0	13.2	9.6	19.0	9.9	8.3	8.6	8.2	8.0	6.4	7.4	8.9	9.5	9.4	
40-44	33.1	25.7	21.2	17.9	52.3	22.8	22.5	14.4	14.9	15.1	9.8	9.7	12.5	12.8	12.0	
45-49	24.8	21.8	18.6	16.8	54.7	28.0	32.0	21.6	25.3	28.3	16.3	12.5	13.3	12.1	10.2	
50-54	15.3	14.3	13.1	13.1	45.0	23.7	30.0	21.3	26.9	33.6	21.9	18.9	20.6	17.8	14.6	18.6
55-59	12.5	10.6	7.6	7.6	22.0	11.4	15.3	12.3	15.9	24.7	19.1	17.1	16.8	16.3	15.3	
over 60	8.0	10.5	7.9	9.7	19.5	10.7	13.6	13.2	15.5	22.9	24.1	20.1	16.5	15.1	15.2	

Source: the author, based on data collected from the Romanian Statistical Yearbooks, 1997 to 2011, NSI, Bucharest

population working in agriculture are unique for a European country. One should mention that not all movements are related to a change from town to village. Massive lay-offs of rural-urban commuters working in urban industries who temporarily and involuntarily returned to agriculture may later return to towns to work in non-agricultural activities (Ronnas, 1996). But, as the analyses highlighted, the high share of older people returning to rural areas (usually from the Western part of the country to the less developed Eastern and Southern parts) parallel to the emigration of the young people to urban centres (and also to other foreign or European countries) will force demographic aging even more on the long term and will contribute to the reduction of rural population, leading to the disappearance of some rural communities and also to the deepening of the existing disparities (Kurkó, 2010).

After 1997, the increase of the migration balance in some rural settlements has constantly intensified until the point where it became a real trend. This process can be illustrated very well by the fact that due to a demographic aging and a negative migration balance affecting the majority of the rural population, the size of the rural population should have decreased. But population in rural areas has witnessed a slight increase over the last years as well, from 2000 until 2011, by 318,626 individuals. This relatively small number partly counterbalances the drop in population size resulting from negative natural increase, although it does not trigger the effect necessary to bring about spectacular changes in the evolution of the population. This entire evolution could be underlined by the value of the correlation coefficient ($r = 0.89$), meaning that the high share of the net migration rate in the 1990 to 1996 period is associated with the high value from 1997 to 2011 resulting from the remigration process. The most

significant losses in population size during the last period can mainly be noticed in the case of some large cities where the effects of de-industrialization and implicitly mass lay-offs have urged certain population groups to move to rural areas. Here we could find two of the large urban centres with more than 300,000 inhabitants: Braşov (-23.7 %) and Galaţi (-10.9), while in the case of Constanţa (-15 %), Timişoara (-11.2 %), Iaşi (-8.9 %), Bucharest (-8.6 %) and Cluj-Napoca (-7.1) the decrease of their population and the increase of the inhabitants in their agglomeration clearly suggest a strong suburbanization process. The evolution of the net migration rate in rural settlements shows that Ilfov, Timiş, Cluj, Constanţa and Iaşi counties rank first among the winners of the transition period as their rural population has increased by more than 20,000 inhabitants during that time. The rest of the territories located outside of the polarizing urban areas underwent significant demographic losses determined either by negative natural increase, or by migration towards other regions or countries. Thus, from an initial population growth status, some cities entered a decrease process, while increase was noticed only in the case of some rural settlements.

3.2 Modelling migration with micro data

3.2.1 Application I.
Analyzing the Spatial Autocorrelation of Internal Migration in Romania – The Moran Scatter Plot
The main question addressed in this section is whether the observed pattern of internal migration in Romania is similar to other spatial patterns or not. If there is a tendency, for example, that communes with low (high) migration rate tend to be surrounded by communes with low (high) migration
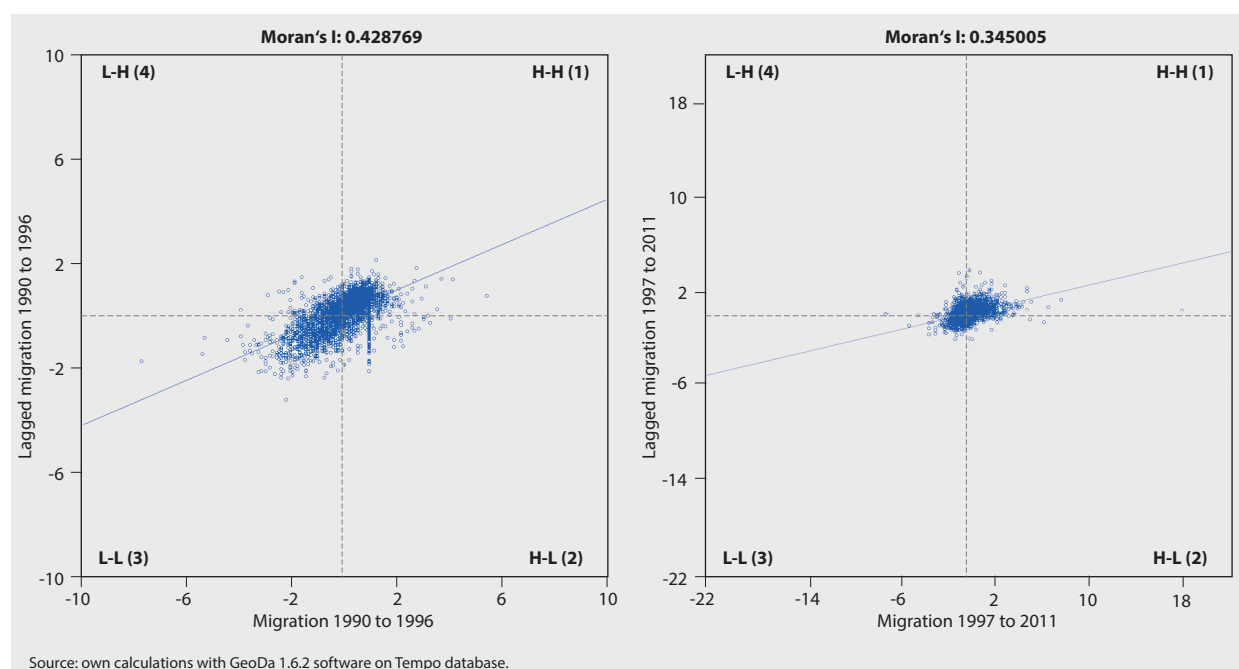

Source: own calculations with GeoDa 1.6.2 software on Tempo database.

Figure 3

Moran Scatter Plot for measuring the balance of internal migration (left 1990 to 1996, right 1997 to 2011)

rate, or vice-versa, this would indicate a positive spatial auto-correlation among the settlements. If, on the other hand, we find that communes with low (high) migration rate tend to be surrounded by communes with high (low) migration rate, we would then say there was negative spatial autocorrelation among settlements (Torres et al., 2011). In order to get a more comprehensive picture about the migration pattern in the database, we have included even the urban area (those 320 urban communes), as they have a significant role in shaping internal migration, although the main focus is still on the differentiation of the types of rural migration (i.e. welfare vs. constraint migration). The GeoDa software allows us to build a Moran Scatter plot with the calculation of Moran's I (Anselin, 1995). The graph represents the distribution of the statistical units of the analysis (Figure 3).

In this representation, the first and third quadrants represent areas with positive correlation (high-high, low-low) while the second and fourth quadrants are areas with negative correlation. In particular, if statistical units are distributed in the fourth quadrant, the relationship is of low-elevation and vice-versa, when they fall in the third quadrant

(high-low) (Scardaccione et al., 2010). As Figure 3 shows, the value of Moran's I calculated for the net migration rate during the 1990 to 1996 period is equal to 0.42, while for the period 1997 to 2011 it is equal to 0.34. Since the value is higher than zero, it suggests a positive spatial autocorrelation for the analyzed variables. Thus, we could reject the null hypothesis as the p value is statistically significant ($p = 0.0001$ in both cases) and the z-core is positive (41.4 for the first- and 22.8 for the last period). These results suggest that the first hypothesis was clearly proven, stating that the spatial distribution of high values and/or low values in the dataset is spatially more clustered than it would be expected if underlying spatial processes were random.

One should mention that global Moran's I statistic does not exactly show us the communes characterized with a high (low) migration rate, but rather suggests that the spatial pattern of the analyzed index we observe is not random – there is more similarity by location than would be expected if the pattern was random (Torres et al., 2011). On the other hand, the Local Indicator of Spatial Association (LISA) allows us to consider local effects related to the phenomenon. In order to
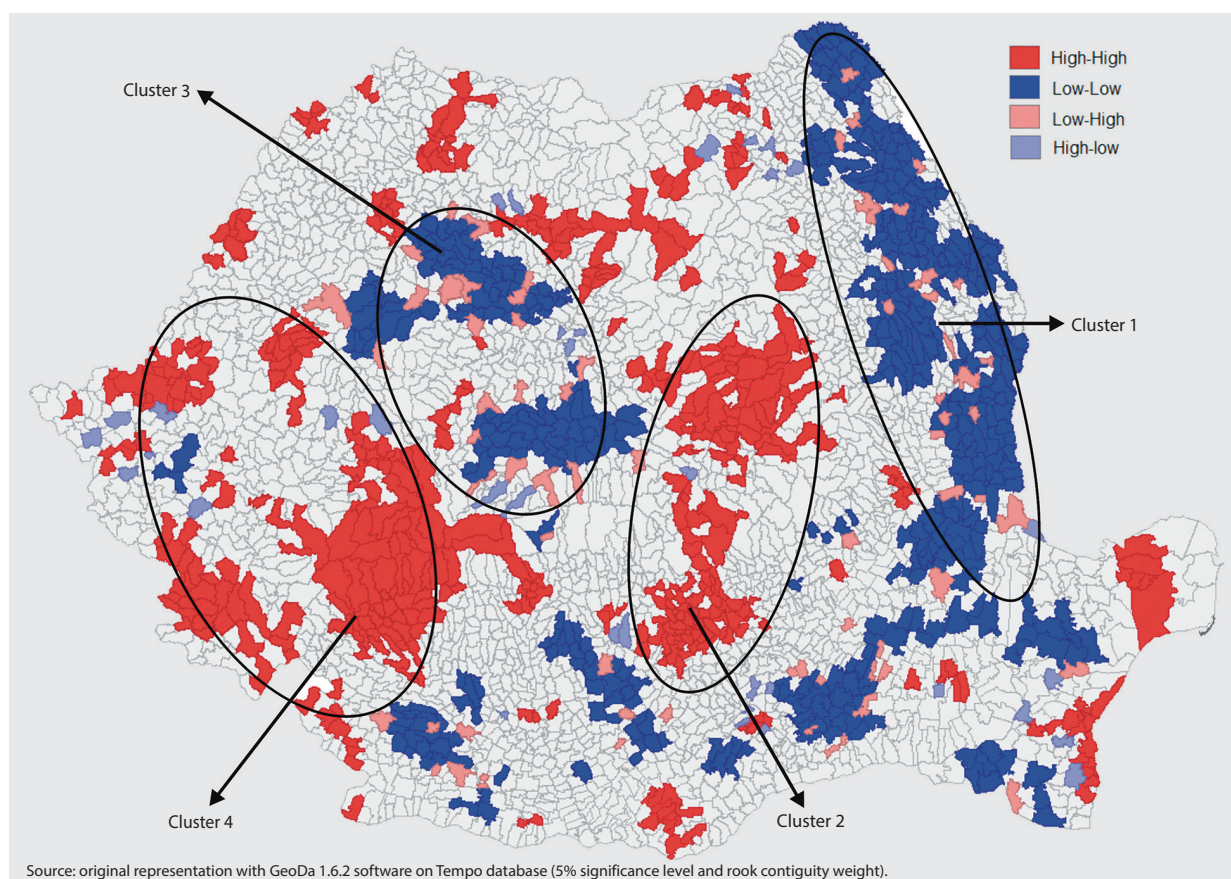

Source: original representation with GeoDa 1.6.2 software on Tempo database (5% significance level and rook contiguity weight).

Figure 4

Cartogram of clusters representing the net migration rate, period 1990 to 1996

High-high represents a high migration rate both in the communes, as well as in their neighbourhood. Low-high represents those communes with low migration rate, but with a high value in the neighbourhood.
Low-low represents areas with low migration rate both in the commune, as well as in surrounding areas. High-low shows the communes with high migration rate, but with a low value in their neighbouring areas.

calculate LISA we used the same matrix weights we used to build the Moran scatter plot. In the significance filter, the value of *p* was determined as 0.05 and the software was using the permutation test in order to delimit the significant spatial units. Thus, the number of permutations was set at 999.

3.2.2 Application II.
Analysis of the Local Indicators of Spatial Association in the case of Internal Migration in Romania – The Local Moran's I

After determining the local Moran's I statistics for each of the communes, there is a possibility to classify them in homogenous groups, in clusters. During clusters identification, the most important decision criterion is to track down how it relates to the migration rate of a settlement in the neighbouring areas. The analysis was carried out for both the 1990 to 1996 period, when rural-urban migration was the dominant form of mobility, as well as for the 1997 to 2011 period, when the direction of migration has changed. After conducting the computations and the graphic representations of the results, we could identify 4 main clusters for the 1990 to 1996 periods. Cluster 1 and 3 are the net migration rate "cold-spots" and correspond to a positive but low-low spatial autocorrelation, indicating spatial clusters of communes with below-average migration rates. Clusters 2 and 4 are "hot-spots" and correspond to a positive, high-high spatial autocorrelation indicating spatial clusters of communes with above-average migration rates (Figure 4).

First of all, it can be concluded that the already mentioned East-West migration is very well represented. The communes belonging to the negative net migration rate can mainly be found in the Eastern parts of the country, especially Botoşani, Iaşi, Vaslui, Galaţi and Brăila counties (Cluster 1) which stood up as the most important sending counties and – in many cases – have formed the basis for long-distance rural-urban migration mainly in the socialist era and at the beginning of the 1990s. These people have usually migrated to the proximity counties, but as the 1992 census showed, sometimes even further, to the counties located in the Western and South-Western parts of Romania (Kurkó, 2010; see Figure 1). The only exceptions to the rule are the medium and large cities (marked with pink, which in the case of spatial autocorrelation analyses show the high outliers among low neighbours) where job opportunities, quality of life and the infrastructure were much more developed. In the Eastern parts, a positive net migration rate can only be found in Constanţa, which is mainly due to the advantageous geographical location and the favourable economic context (Constanţa hosts the largest commercial harbour of the country). The rises of exports during the communist period, the development of the port infrastructure, as well as the impressive investments have made the city a target for migrants. The second largest area characterized by a high out-migration rate (Cluster 3) is the Central-Western part of the country dominated by large mountainous area where the isolation of the population and the lack of infrastructural development contributed to an intense outflow of the young population.

Cluster 2, which indicates positive migration rates, characterizes territories where the extractive and heavy industries have at one time attracted thousands of workers from all over the country. The most eloquent example is Argeş county, which, during the communist period has benefited from a series of investments in innovative sectors (the automobile industry – "Dacia" at Piteşti, "Aro" at Câmpulung) and the small distance from the capital agglomeration economy, which also provided a wide range of job opportunities for migrants usually coming from rural areas (Benedek, 2004). The highest number of communes with a positive migration rate could be found in the Western parts of the country (Cluster 4), with Gorj county being the largest homogenous territory. Gorj has managed to develop a dynamic economy after 1945 due to the change of the economic profile (mining, energy sector), attracting a great number of workers even from a larger distance. If we consider the territorial dispersion of the results of spatial autocorrelation, 14 % of the communes belong to the group characterized by migration agglomeration (high-high groups), 14.6 % of the communes could be defined as peripheral areas from the migration point of view (low-low groups), 1.2 % are those where migration is high in the core area, but is low in the neighbouring areas. And finally, 2.2 % represent those suburban areas where the migration is low in the core area, but high in the neighbouring areas. In the case of 68.1 %, the results of spatial autocorrelation are not significant.

After 1997, when the direction of migration has changed, the territorial distribution of communes shows a totally different spatiality compared to the previous period. The number of communes characterized by a negative net migration rate from the Eastern part of the country has been significantly reduced as a consequence of the change in the direction of the internal migration, while the remigration process has not yet managed to counterbalance the rural-urban migration of the last decades. In this case we could identify three main clusters, but these could also be hiding some smaller clusters: the first two correspond to positive, but low-low spatial autocorrelation, while the third cluster illustrates the high-high spatial autocorrelation (Figure 5).

In Cluster 1 we could identify communes with a high negative migration rate from the Eastern part of the country. However, the number of communes belonging to this group has constantly decreased in comparison to the previous period. Similarly, a significant negative net migration rate could be observed in the North-Western part (Cluster 2) which coincides with large areas of the Apuseni Mountains characterized by an advanced demographic aging of the population, low birth rates and low level of development. What is particular interesting is that the suburbanisation process is very well outlined around large urban centres. Cluster 3 shows that the largest coherent territories belonging to this group could be found in the Western part of the country, namely around Timisoara, Arad and Oradea cities. This could also be proven statistically as the population of the settlements surrounded by the above-mentioned cities has increased on average by 10 to 20 % (Kurkó, 2010). The suburbanisation process has also had a great intensity in Romania's largest
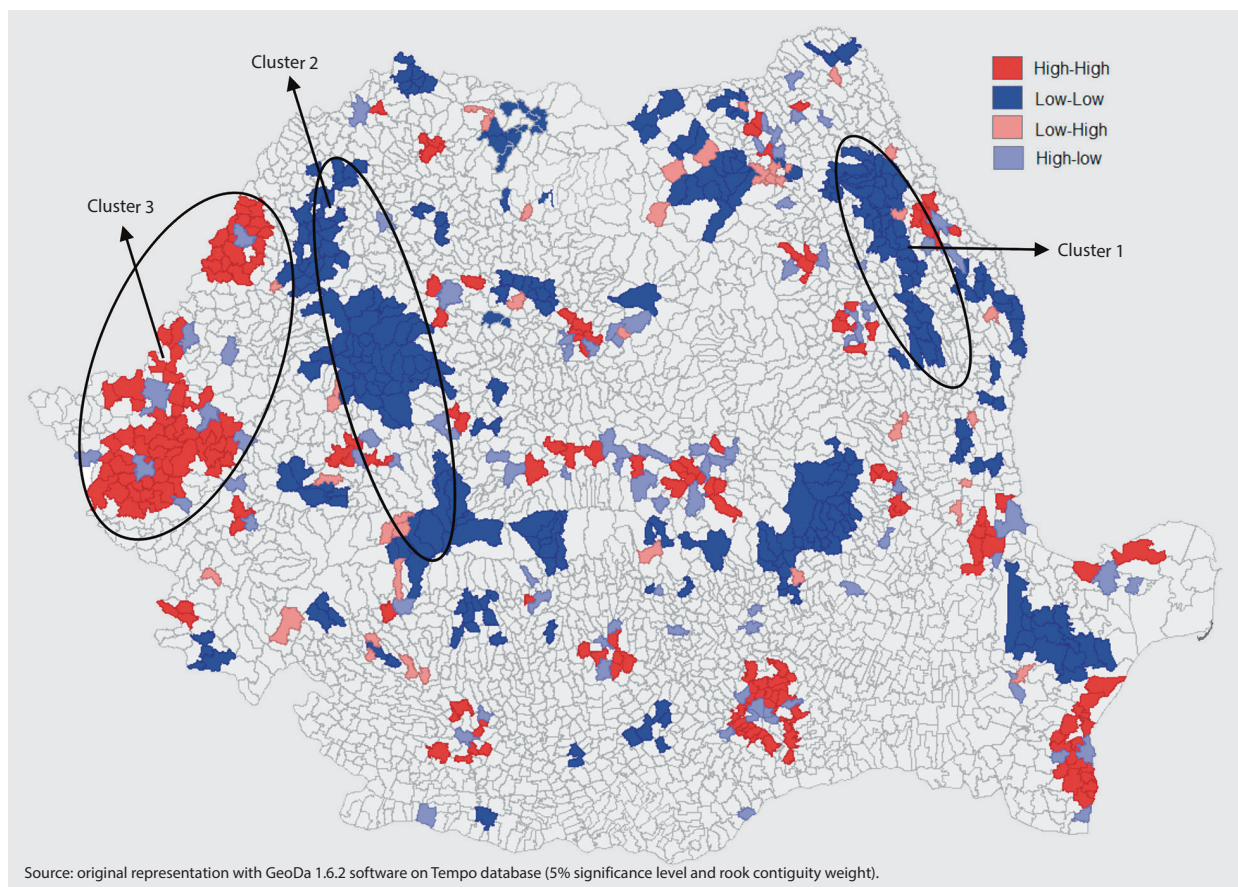
Source: original representation with GeoDa 1.6.2 software on Tempo database (5% significance level and rook contiguity weight).

Figure 5
Cartogram of clusters representing the net migration rate, period 1997 to 2011

> *High-high represents a high migration rate both in the communes, as well as in their neighbourhood. Low-high represents those communes with low migration rate, but with a high value in their neighbourhood.*
> *Low-low represents areas with low migration rate both in the commune, as well as in surrounding areas. High-low shows the communes with high migration rate, but with a low value in their neighbouring areas.*

urban agglomeration, Bucharest (the population from the nearest rural areas has increased by 15 to 17 %). Along with the decline of its industrial function, the commuting level in Bucharest has been reduced, although new functions have gained ground, like the residential and commercial functions: for example new shopping centres have emerged in the nearby settlements, as well as new commercial units and residential parks (Benedek, 2006). In the Eastern parts also, the localities surrounding Iaşi, Galaţi and Constanţa cities underwent a slight increase, followed by Piteşti and Craiova cities, while in the centre, Cluj-Napoca and Târgu-Mureş cities belong to this group. As mentioned earlier, with the exception of Galaţi city where the de-industrialization process has contributed to the increase of the population in the nearest settlements, in the rest of the group the high increase of the rural population in areas surrounding large cities could be attributed to the suburbanisation process[5]. Figure 5 shows

that these "little" clusters are the "hot-spots" of rural migration flows and correspond to a positive high-high spatial autocorrelation, indicating spatial clusters of settlements with above-average migration rates. Overall, the territorial dispersion of the results of spatial autocorrelation show that 6.4 % of the communes belong to the group characterized by a positive net migration rate (high-high groups), 10.5 % are characterized by a negative net migration rate (low-low groups), 2.9 % are those where the migration is high in the core area, but in the neighbouring areas it is low and 1.1 % are settlements with low migration rate surrounded by areas with a high migration rate. The results of spatial autocorrelation are not significant for 79 % of the settlements.

This finding allows to assume that the second and third hypotheses have also been proven: ESDA techniques have demonstrated that the neighbourhood effects of net migration rates in the case of Romanian communes have outlined both the "hot-spots" and "cold-spots" clusters very well. At the same time, we have found a strong differentiation in the spatial patterns of migration during the 1990 to 1996 and 1997 to 2011 periods.

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[5]   The most eloquent example for suburbanization process is Floreşti commune located near Cluj-Napoca city, as its population increased from only 5,868 in 1990 to 17,195 in 2011.

4 Conclusions

Over the last decade, a major concern has been centred on the phenomenon of international migration, both from the ethnic, as well as the demographic point of view, although very few studies have shown interest in the dynamics of internal migration, despite its obvious and serious consequences. The change of direction in the case of internal migration has lead to a polarization of the country's territory, emphasizing two types of areas. The first is represented by those with a much more diversified economy, a more developed territorial infrastructure, as well as a more favourable geographic position, being located around large and medium-sized cities, capable of attracting highly skilled workforce. The second type includes mainly peripheral areas (both rural and urban mono-industrial areas), which have entered a slow decline without any sign of revival (Suditu et al., 2013).

The research conducted in this paper was based on the application of spatial autocorrelation techniques for measuring the spatial differentiation of migration, focusing on the settlements of Romania. In particular, we have applied both the Global Moran's I statistics, as well as the LISA algorithms. Running the LISA method on net migration rates, we were able to identify some homogenous groups, some well defined clusters according to the spatial distribution of migration. Specifically, we have managed to point out some of the major features and migration trends between 1990 to 1996 and 1997 to 2011. During the first period, the East-West migration stands out underlying the fact that the Western and partially the central regions were the most active in terms of migration. The analysis of the net migration rate easily reveals that these regions are characterized by a positive spatial autocorrelation. In this sense, the most passive regions are located in the Eastern and South-Eastern parts (Moldova and partially Muntenia region). A different trend could be observed after 1997, when the direction of internal migration has significantly changed: the mass out-migration has slowed down in the Eastern part. This process has been replaced by the remigration (in the case of constrained migration) and suburbanisation processes (in the case of welfare migration). The latter could be observed very well around the large urban centres. Considering the outcomes of the analysis, it seems that the methods applied here were quite accurate in highlighting some of the characteristics of the migration phenomenon that could only be hypothesized by means of other, more traditional methods.

Looking more deeply into the local patterns of the spatial distribution of migration, we discovered that negative migration rate in one settlement is very much influenced by the negative migration rate in the neighbouring settlements. This is mainly due to the advanced state of demographic aging of the population and the low natural increase. The lack of companies and employment opportunities, as well as the low income in the agricultural sector make these territories much less attractive. It is therefore more and more difficult to get out of this vicious circle. The issue arises even more in counties where negative migration rate is accompanied by a negative natural growth. In these cases the negative spill-over effects resulting from increased out-migration flows, as it is highly important to identify strength points and the opportunities which might bring about further development should also be considered like the development of territorial infrastructure, identification of existing tourism objectives and development of a highly attractive business environment for direct foreign investments and for the best operation of the foreign capital. Thus the promotion of rural development based on the existing natural resources could represent one of the most important opportunities, as it has already been successfully proven in some cases.

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