



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

The influence of migration processes on rural development: a case study from Scotland

Holger Bergmann¹ and Kenneth J. Thomson[†]

¹Lecturer, Georg-August-University of Göttingen,
Department of Agricultural Economics and Rural Development
Platz der Göttinger Sieben 5
37073 Göttingen, Germany

Hbergma1@gwdg.de

[†] Professor Emeritus, University of Aberdeen,
Department of Geography & Environment, St. Marys, Elphinstone Road,
Aberdeen AB24 5UA, Scotland, UK;
k.j.thomson@abdn.ac.uk



*Paper prepared for presentation at the 118th seminar of the EAAE
(European Association of Agricultural Economists),
'Rural development: governance, policy design and delivery'
Ljubljana, Slovenia, August 25-27, 2010*

Copyright 2010 by the authors. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

The influence of migration processes on rural development: a case study from Scotland

118th EAAE Seminar, Ljubljana, 25-27 August 2010

Holger Bergmann, Ken Thomson

Abstract

In the past, much rural development planning has relied on the concept of growth poles. With the “new rural paradigm”, we find that place-specific development and bottom-up approaches have become more popular than ever. Such place-based development often envisages the use of social capital. However, insofar as social capital is a local asset that is incorporated in individuals, it can easily be destroyed but not easily rebuilt. Continued out-migration and low in-migration into rural areas can have detrimental effects on social capital, and subsequently weaken bottom-up processes in the short and medium term.

This paper - based on a survey of 1412 persons in northern Scotland - suggests that intensified migratory processes destroy social capital in rural remote as well as in urban areas. The results show that not only does actual out-migration decrease the available stock of social capital but also that mere intentions to out-migrate do so as well. Insofar as social capital can be built or re-built only in the long term, policies are therefore needed that offer potential out-migrants place-specific opportunities and increase the rate of integration of in-migrants.

JEL Classification: R23, R58, Z13, D71

Key words: migration, social capital, rural Scotland, new rural paradigm, trust

1 Introduction

In economic terms, migration describes a shift of labour (as a factor of production) from one geographical place to another, usually in response to inefficient use or (in the case of e.g. retirees) in search of improved welfare. In a simple model, such migration contributes to economic welfare at all locations as the ‘invisible hand’ of factor market supply and demands leads towards a Pareto optimum.

Until recently, the UK, including Scotland, has seen several years of economic boom and income-driven migration. Figures for 2007/8 show that the UK as a whole gained about 150,000 persons from net migration, and Scotland about 26,000 persons (of whom roughly two-thirds were under 45). Although Scotland has a rough UK population share of 8%, it accounted for about one sixth of all net migrants coming to the UK in 2008/9 (GROS 2010 and ONS 2010).

However, in-migration may also be considered detrimental to and by the receiving communities, through its effects on different issues, ranging from fertility rates, housing markets and enterprise. This paper concentrates on the effects of intended migration on social capital and its effects on rural development processes.

2 Social Capital and Migration

According to Putnam (2007), “One of the most important challenges facing modern societies,

and at the same time one of our most significant opportunities, is the increase in ethnic and social heterogeneity in virtually all advanced countries.” He argues that migration into the United States has led in the short term to significant reductions of social networks and social capital. However, in the long term, successful integration of in-migrants leads to new forms of social solidarity across social barriers and more encompassing identities. Furthermore diversity and heterogeneity are very welcome and lead (compared to homogeneous and often autarkic and static societies) to higher welfare, better social cohesion, greater human capital and other desirable things that are a sign of liberal societies (Putnam 2000; see also Florida 2003).

Social capital as a concept has been around, according to Osgood & Ong 2001, since the first descriptions of it in Marx, Weber and Dürkheimer. It came to prominence as a term in the early 1970s with works by Bourdieu 1983 and others, and was developed along three different approaches. The most prominent authors (and schools of thought) can be identified as Coleman 1988, Rose 2000, and Putnam 1993, whose works, although working on similar lines, have some differences in the scale of analysis and the approach.

Following Osgood and Ong 2001, the most popular approach to social capital considers it as a set of horizontal associations between individuals (Putnam 1993), and can be considered as a westernized or Anglo-Saxon model. In other cultural contexts, such as China culture with the *guanxi* concept, social relations are more vertically organized (cf. Fan 2002, Dunning and Kim 2007, Weber 2010).

In contrast, Bourdieu 1983 not only considers social capital to be dependent on both vertical and horizontal links and networks but also puts it into its historical, social and political context. Such an approach is more concerned with the national scale in which a society exists. Such approaches have been the basis for analysis by e.g. Olson 1982, North 1990 and Portes & Landolt 2000, who extend the effects of social capital to interactions with families, communities, businesses, to international arenas and to formal institutional relationships within civic society.

2.1 Social capital as a concept

Social capital can be weakened in a number of ways, including dictatorships (Fidrmuc & Gerxhani 2008), media (e.g. television and radio; Olken 2009), developers from outside (Brondizio *et al.* 2009), or even social and economic inequality (Wollebæk and Selle 2007). Destruction of social capital can be related to economic, ecological or social pressures and changes influencing networks.

Recent years have shown that social capital is increasingly important in explaining differences between regions as well as nations (Batt 2008, Woolcock 1998, Woolcock 2010). Woolcock 1998 stresses the importance of social capital for economic development. If social capital is incorporated into rural development processes in the right way, “...the relations within and between social groups at different levels of society shape the prospects for sustainable, equitable growth and just, participatory governance” (Woolcock 1998, 188) and can contribute to a large extent to the success of development strategies.

Regarding the link between social capital and immigration (as well as social cohesion), Cheong *et al.* 2007 show that, while social capital seems to be an objective measure of community involvements and strength of interpersonal networks, the notion of social cohesion is a political concept that has no obvious positive or negative effects. Furthermore, these authors stress the inclusive as well as exclusive effect of social capital. They find that,

for the building of social capital, the type of relations between persons matters, rather than the number of relations.

Woolcock 2010 shows that social capital theory has become widespread and is especially useful as a term in community-driven development. According to him, harnessing and enhancing social capital should be one of the key objectives, rather than only investing in human capital or infrastructure. However, this enhancement of social capital in community-driven or other rural development processes requires a basis for the participation and involvement of inhabitants. This condition is strengthened by the fact that in holistic bottom-up processes those people are involved who seem to have a strong link to the area, have strong bonding within the community and have seemingly decided to stay in the area for the rest of their lives. Thus one would expect that only a part of society is really involved and can articulate their needs and wants. Others that are not involved will either remain inactive or leave as soon as possible.

These “involved” locals have often been overlooked and taken for granted. In times of increased mobility and demographic change, their role needs to be re-analyzed and surely needs more observation, especially we can no longer assume that a majority of people remain at their birthplace for all or most of their lives. This dependency on “natives” becomes crucial in rural remote areas where populations are decreasing considerably due to out-migration as well as low fertility.

2.2 Reasons for migration

Not only in recent years, but also across the last two centuries, at least in the UK, migration has been one of the most influential factors that shape social networks and social structures. In the UK (across the country) a group of different factors have led to increased migration and population turnover.

One of the long-term results of depopulation for British and other rural areas is that some rural remote areas are becoming a rest or retirement home. Naturally, this offers new job opportunities for younger people as caring, medical and other service jobs but it provides an additional migration push factor for those whose qualifications or preferences do not fit the new job requirements needed for these new residents.

Such depopulation trends have two sides. On the one hand, economic development has been supported by in-migrants, as these tend to occupy low-paid and low-skilled jobs (Reed & Latorre 2009). On the other hand, such movements, especially if large numbers of foreigners or outsiders of a certain age group or at a certain stage of life, arrive in one place, may stress the traditional social system and its networks. To assess the effect of migration on social capital a survey was executed.

2.3 State of the art – rural development approaches

A monolithic regional or rural economic development theory does not exist. However, as Johnson (1993) remarks, there are at least two different schools concentrating either on growth models and development models (Kindelberger and Herrick (1982) and Parr 1999).

With the “new rural paradigm”, the increasing importance of well-being and social capital is realised in the design of policy for rural development to include well-being and quality of life into the economy centred historic approaches in rural development (OECD 2006).

The main themes of this new policy design can be summarized as universality (holistic), more subsidiarity and more local cooperation and partnerships. While the first two can be influenced by the political will of national and regional governments to introduce appropriate

measures and instruments, the last is based on the assumption that cooperation based on available social capital, and specifically trust, in a local community can contribute to the achievement of local higher well being.

Trust is of inherent importance in economic, private, social or political terms, as it underwrites all types of formal transactions and informal cooperation. Firms benefit from cooperative norms as an aspect of trust by facilitating and lowering transaction costs arising negotiations and enforcement, imperfect information and layers of unnecessary bureaucracy. Humphrey and Schmitz (1998) highlight how trust-based relations between economic agents have been seen as part of the competitive advantage of manufacturing enterprises in Germany, Japan and parts of Italy. Suppliers and buyers sustain long-term relations of cooperation and mutual obligations through repeated transactions forged on trust and networking. Business networks covering marketing, training or research generate long-term benefits by reducing overhead costs, sharing information and imposing sanctions on opportunistic behaviour. Even in some markets such as special software development or the fermenting industry, entrepreneurs can take advantage of economies of times, by sharing information and adapting quickly to changing demands of customers (Uzzi 1996 and 1997).

Between the 1970s and 1990s, top-down approaches were pursued by the foundation of new colleges and universities in rural remote areas (e.g. University of the Highlands and Islands) as well as by the implementation of new industrial zones (especially in the Highlands of Scotland a number of such zones were built).

As the increasing importance of bottom-up approaches and locally determined development over the last two decades shows, people decided to start processes that included as a first step (in bottom-up approaches) the interests (wants and needs) of the locals (see OECD, 2006)

The most successful and important of these local bottom-up approaches (building on locally available social capital and networks) have been mainstreamed into European policy as the LEADER approach and projects.

3 Survey and questionnaire development

A questionnaire was developed based on the TOP-MARD project (Bryden *et al.* 2010) that primarily was focused on analysing multiple functions of agriculture in relation to rural development. The used questionnaire in this research included several question blocks specifically developed for migration, along with others related to rural development, farming, social capital, and socio-demographics. These questions were designed to explore how people who have actually not moved so far would behave in their social network and what effect this has on social capital. A core version of the questionnaire was specially adapted to Caithness, Sutherland, Aberdeen and Aberdeenshire so to reflect the locality of the area.

The questionnaire started with the key question “Are you a I)stayer, II) in-migrant or III) potential out-migrant”.

The second question block was aimed at revealing the main reasons for migrating to and from the area. There were 17 options that could be answered via a 5-point Likert scale ranging from “very important” to “very unimportant”. A range of individual, economic, ecological and social reasons were offered: e.g. to move closer to relatives, availability of relevant employment, market opportunity (for entrepreneurship), to bring up family in a urban environment, cheaper housing, better access to markets (food, clothes and other goods), improved children’s education, improved health care, better facilities for old folk, better cultural facilities, better outdoor/ recreational activities, less crime, to be part of a local community, better landscapes and natural environment, more farmers and crofters, better climate, more forests.

The next block of questions concerned the importance of multiple functions of farming as well as forestry for the respondent's local area. In this, the importance of a number of agriculture's functions for society had to be valued with the help of a Likert scale. The responses offered were the following: "Which of the following possible functions of farms and forestry in (County Name) is important to you? production of food and fibre, production of raw materials for the industry, securing food supply from national sources, protection and conservation of diverse landscapes, protection and conservation of basic society needs, conservation of rural settlements, conservation of local cultural traditions, protection of local biodiversity, supply of recreation areas, production of renewable energies based on biomass, farmers are the guardians of our landscape.

This was then supplemented by a number of questions about the impact of local farming on environmental assets such as drinking water, air, beaches, rivers, lochs and lakes, landscapes, wildlife (deer, geese, etc.), biodiversity, quietness, the natural environment overall.

In addition, 18 reasons for the economic performance of the area were offered in the next question: Have the following factors influenced the economic performance of [name of county] in a negative or positive way? and were assessed from very positive to very negative on a 5-point Likert scale:

Agricultural production and structures, agricultural landscapes, biodiversity and other aspects of agriculture, forests, minerals, wind and water, recreational facilities and space, Cultural and historical resources and performance including archaeological sites, the arts, ancient buildings, and local values and beliefs, etc., Human Resources like the state of education of the population, etc., Transport Infrastructure, e.g. roads, railways, public transport, etc., communications infrastructure, internet access, telephone access, etc. , research and development facilities including links with universities and research institutes (UHI, UNIABDN, SAC, etc.), More widespread land or business ownership, or other aspects of economic structure, local public institutions and agencies, local civil society institutions, the character of local networks and interpersonal relations, sense of community and Identity in Name-of-the-county¹, local quality of life of Name-of-the-county, market performance of different businesses in Name-of-the-county .

The interviewees were also invited to write down the most important local problems they perceived.

The next four questions were designed to capture the extent(s) of individual (vertical) social capital

- "social engagement in the community (membership in different organisations)",
- "inner cohesion of the community" by asking "Suppose that your neighbour would suffer an economic loss like "crop failure" (if you are a farmer) or "job loss". In that situation, who would you think would assist him or her financially? and offering a specified number of different options.
- "self perception of the neighbourhood" by asking what do you think about your neighbourhood in Name-of-the-county"?
- "involvement in the community" with options including having voted in the last election, actively taken part in a protest march, and volunteered to work for a charitable organisation.

¹ Name-of-the-county is the placeholder for Sutherland, Caithness, Aberdeenshire or Aberdeen.

These questions were based on those used in surveys by Putnam and his followers but specifically adapted to the local conditions.

Four different areas were chosen for survey: the City of Aberdeen (2006 population 206,700; urban; employment dominated by industrial and service), and the counties of Aberdeenshire (236,300; peri-urban and rural; commuters), Sutherland (9,000; rural remote, fishing, farming and tourism) and Caithness (29,000; rural remote; a large industrial site).

Gross Value Added per head as a measure of economic welfare in 2004 was about £21,000 in Aberdeen and Aberdeenshire and £11,000 in Caithness and Sutherland. Compared to UK average of £17,000 per head, Aberdeen and Aberdeenshire GVA per head is 23% higher while Caithness and Sutherland GVA per head is 36% lower. (Office of National Statistics 2007).

In the urban environment of Aberdeen, migration-led turnover of population is more likely than in remote or rural areas, as statistical information shows (see SCROL ONLINE 2010).

The method of choice to survey was the poll survey. This method had already been used by Bergmann (2003) and is a cheap alternative approach between face-to-face interviews and mail interviews. The survey took place at 17 different poll stations the 7th of May 2007 and was organised in cooperation with the electoral authorities. The poll stations were in Aberdeen-Centre, Aberdeen-Dyce, and Aberdeen-Kingswells; in Aberdeenshire Huntly, Kintore and Inverurie; in Sutherland, Durness, Lairg and Lochinver; and in Caithness Dunnet, Lybster, Thurso and Wick.

Except for Lochinver, interviews took place between 3 and 10 pm, not only to catch retirees and house makers but also to catch employed people coming to vote after work. Interviewees leaving the poll station were randomly chosen by the interviewers until 9.30 pm or until they ran out of questionnaires.

4 Results and Discussion

The following presentation of results will differentiate between the four areas although in one case (Sutherland) the sample size with 157 collected questionnaires is rather small. However, this constitutes 1.5% of the total population (in Caithness the sample's share of total population was 2%), and it was decided to include this sample into the analysis.

4.1 Frequency Analysis

Overall, 1412 questionnaires were collected: 332 in Aberdeen, 345 in Aberdeenshire, 587 in Caithness and 157 in Sutherland. The average age of the interviews ranged between 45 years (Aberdeen) and 52 years (Sutherland). The average household income was lowest in Sutherland (between £1600 and £2000 a month), highest in Aberdeen (with between £2800 and £3200), and almost equal in Aberdeenshire and Caithness (nearly £2000). The sex of the interviewees was equally distributed in all cases, with a slightly higher number of women (women 52%, men 48%). Unemployment (whether actively looking for a job or not) was highest in Caithness (9%), 7% in Sutherland, and lowest at about 5% in Aberdeen and Aberdeenshire. Retirement was more widespread in the two rural counties than it was in urban and peri-urban areas; the sample in Aberdeen contained 8% of retirees, in Aberdeenshire 12% and in Caithness as well as in Sutherland some 16%. In terms of formal education, rather more people in Aberdeen and Aberdeenshire had a university degree while people in Caithness and Sutherland normally had a craftsmanship or a certificate of apprenticeship. Average household size in all counties was between 2 and 2.3 persons apart from Caithness where it was 2.75. In Caithness, and especially in Wick, a number of single mothers (with 2 children) were surveyed.

The self-declarations in the questionnaire as a stayer, in-migrant or potential out-migrant revealed that Sutherland had the lowest proportion of stayers (35%), the highest rate of in-migrants (51%) and the lowest number of potential out-migrants (14%). On the other hand, Caithness had the highest number of stayers with 59%, a low number of potential out-migrants with 15%, and an average number of in-migrants with 27%). Rural Aberdeenshire had the highest number of stayers with nearly 59% and a nearly equal distribution between in-migrants with 23% and potential out-migrants with 21%. Aberdeen had a number of 43% of stayers, 29% of in-migrants and 23% of potential out-migrants. Overall, in connection with the average age of the sample, one can conclude that the perception to migrate is higher in urban areas than in rural and peri-urban areas.

In all three counties, potential out-migrants had higher incomes, had higher formal qualifications and were younger (32 years in Caithness, 47 in Sutherland, and 37 in Aberdeen and Aberdeenshire) than the in-migrants and the stayers. Potential out-migrants had a smaller household size than the other two groups, apart from those in Caithness (with an average household size of 3.11). Again with Caithness as the exception, the typical out-migrant was male and had a small household (the potential out-migrants in Caithness were mostly single mothers).

Such potential out-migrants are a “hidden” part of society. While being physically present, they actually tend to think and prepare their life for the next place to go. This could have repercussions also on their social capital (being understood as a vertical concept). While stayers present the highest level of social capital, a significant difference to both in-migrants as they try to build up their social capital and potential out-migrants as they abolish their social networks in order to be prepared for out-migration would be expected. A method of choice to test this hypothesis was the principal component analysis that follows here.

4.2 Factor analysis

The following analysis concentrates on the questions on social engagement in the community and reasons for migration.

A factor analysis (Principal Component Analysis with a KMO of 0.839) was done to analyse if there are communalities and differences between the responses given. In accordance to the four hypothesised items social engagement, inner cohesion, self-perception and involvement into the community, we found five different interpretations for the rectified answers.

The first item, called “activism”, is a measure of active involvement in the community. This involvement can range from conversations with influential persons to taking part in protests or sit-ins.

The second item is called Trust, and measures how trustworthy people perceived their surroundings.

The third item is called Mistrust, and measures how mistrustful people were of their surroundings .

The fourth Item donation was used as a variable of its own.

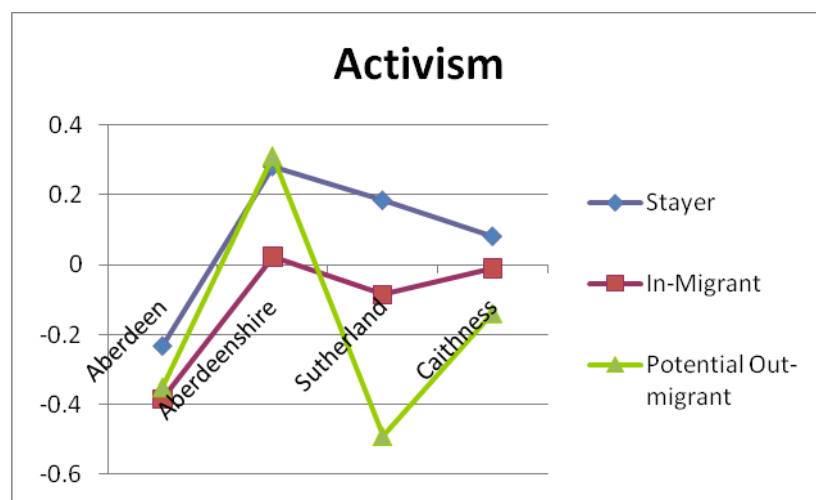
The last item was called “duties and social networks” and measures community involvement

Based on the factor analysis, the following four items have been recalculated. This produced the following results (see graphs).

“Activism”, understood as engagement with local and regional issues (social engagement), was significantly different between the three groups, and found to be smallest in urban areas, higher in peri-urban areas and lower with rurality. Figure 1 shows that stayers in rural areas showed the highest involvement in social engagement, in-migrants were in second place and

potential out-migrants showed a level of engagement that was nearly the same as for the average urban dweller. Depending on the characteristics of the county, the perception to migrate seems to lead to a process of dissolving social engagement and activity for the community and the greater good. On the other hand, this shows that, even when in-migrants have lived in a region for a long time, they do not reveal “activism” as much as stayers do. It seems that “activism” is related to the time that somebody has lived in a community and in relations that have been built up since birth. Stayers in all areas show the highest level of activism. This can be related to their position as an integral part of the local area, and to their greater knowledge about how to relate to their local councillor, provost or MP and MSP. The exception was the county of Aberdeenshire, where even the potential out-migrants show an activism that is as high as that of the stayers. This can be explained by the peri-urban location, as these people might migrate but the pull factors to go are much less pressing than they are in rural remote areas, and therefore the potential out-migrants seem not to migrate in the foreseeable future.

Figure 1 Activism by county and subgroup

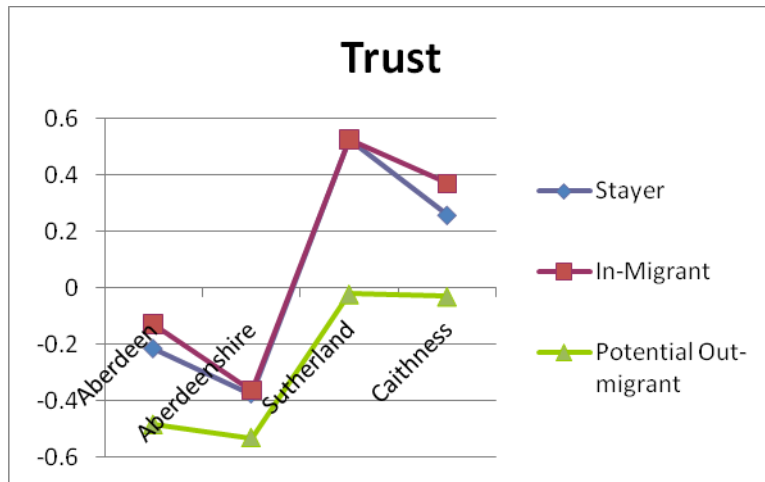


Across all regions, the measured level of trust amongst potential out-migrants was considerably lower than that of the other groups. Indeed, as we found that the level of trust in Aberdeenshire was much lower than one would expect for such a rural place and was even lower than in Aberdeen. This can be explained by the ongoing transitional process in which uncertainty what will happen in future has already happened in urban areas (that are used to new initiatives, new people coming around, etc.) while in such peri-urban areas this adaptation is taking place at the time of survey. The decision to live in a particular place suggests that in-migrants have trust in the neighbourhood and the community they live in². They therefore have a certain level of trust that in most places is slightly higher than that of the stayers. The explanation for this is that, after having taken a decision to come to a place, people will rarely consider it a bad decision. The stayers have a slightly lower trust because they seem to see more clearly the existing society and who is trustworthy (and who is not). It could therefore be that in-migrants have some kind of a romantic vision of the place they newly live in.

Overall: Even thinking or planning to out-migrate lowers trust in a society.

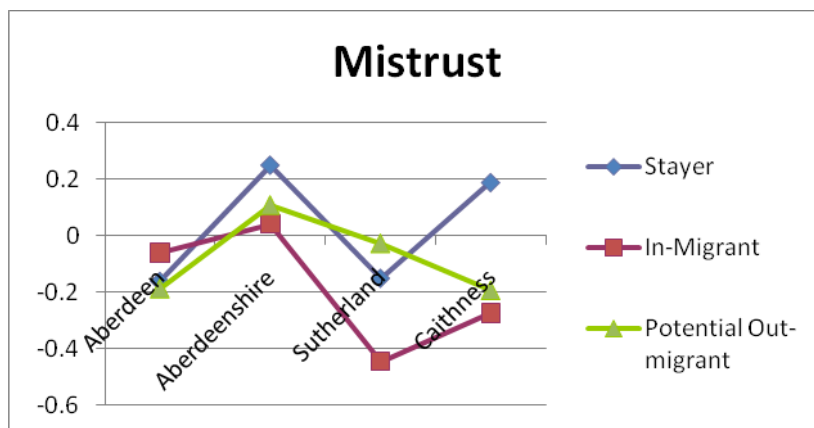
² A separate analysis of time having lived at the place and trust level showed a linear relation.

Figure 2 Trust by county and subgroup



“Mistrust” shows a slightly confusing picture. The main point is that “mistrust” is lowest for in-migrants in all cases (apart from Aberdeen). This supports the point that in-migrants seem to have romantic illusions about the place they newly live in. The fact that “mistrust” in Aberdeen is higher for potential in-migrants than for stayers can be traced back to the fact that a majority come from peri-urban and rural areas, and they have some fear of crime and other disadvantages of urban life. Furthermore, the level of “mistrust” in general is higher for stayers in all areas (again, apart from Aberdeen). This can be said to be an effect of lifelong familiarity with the local society and what one appreciates and what one hates in rural areas. So they come to a specifically different opinion of their community. Their behaviour can best be described as: Trusting in their community, but being aware of the different groups and different opinions that are present. Surprisingly the level of “mistrust” of potential out-migrants in Sutherland is higher than that of stayers. This can be explained by the unequal age distribution in the sample as well as the unequal age distribution in that area overall: Sutherland has seen a period of influx of retired persons and newcomers that have disturbed social structures.

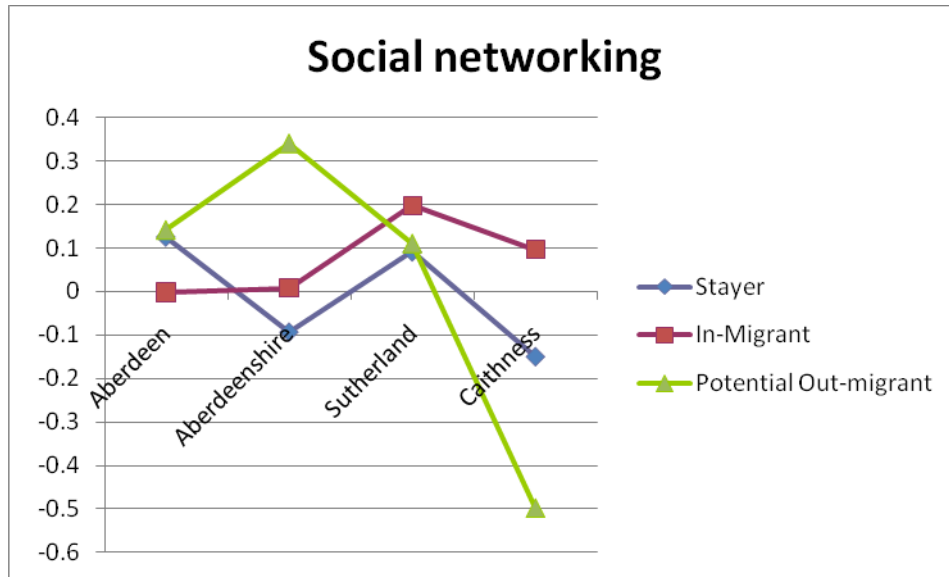
Figure 3 Mistrust by county and subgroup



Finally the item “social networking” shows that in formal social behaviour (e.g. membership of clubs, voting) in-migrants show in general higher levels of engagement than the other two groups. Especially in rural communities with large and heavy social pressure on correct behaviour they try to fit in. This leads to the common finding that clubs and charities are often

run by in-migrants who initially lack a peer group and want to show that they fit in. Furthermore, potential out-migrants depending on the region have a higher involvement in “social formal networking” in urban and peri-urban areas than in rural areas. This indeed is lowest in rural remote Caithness where the large number of potential out-migrants has cut their relations with clubs and other activities that make a community work. They seem to rely solely on their friends and family to be active.

Figure 4 Social networking by county and subgroup



In terms of intended active involvement of citizens into rural development processes, these findings are worrying.

Especially in Caithness and Sutherland, potential out-migrants have already cut back their relations to the institutions of the civil society. However, these people constitute the better educated, better paid and normally also more active citizens in a civil society. Even more worrying is that their share of the sample in these regions is about 15% or more than half of the people in the age cohort that is employed, has children and is under 45. These people are being replaced by in-migrants, who are normally highly educated but are retired. Due to their retirement, their primary focus in rural development processes is not to economically develop a region but on the contrary they have moved there because of the “quality of life”.

In all areas, however, the stayers (also slightly older than the potential out-migrants) present a solid block of people who are involved into the social life of their community and who are interested in the development of their region. The newcomers (in-migrants) try to be a part of the informal society by being active in formal institutions and seem to present behaviour intended to impress the surrounding society. This is on the one hand understandable as they try to be part of their living place by being active, but on the other hand they seem to concentrate on these formal institutions while the active engagement into civil society that goes beyond clubs is much lower than that of the stayers. This can be related back to the lack of knowledge of informal institutions and powerful people in the region, which hinders in-migrants in becoming more active.

Overall, the main question is how can one make the potential out-migrants stay as they could contribute to a large extent to rural development processes? Having a closer look at the main reasons to migrate, we find that the usual threefold is the most important in the frequency analysis of question 2: Jobs, family and better social life (entertainment and cultural life).

5 Discussion and conclusions

The results of the survey data analysed in this paper suggest that migration has a negative impact on social capital in rural remote areas. While in urban and peri-urban areas, the effect is negligible, it is important in rural remote areas. Furthermore, there is some sort of relation between employment and perception to out-migrate: the higher people are educated and the more likely they have a well-paid job, the more likely they are to look out for out-migration.

Potential out-migrants in all the surveyed areas in Northern Scotland have been found to have a proportionally lower level of trust compared to “stayers”, especially if they have been born in the area. A consistent difference over all areas suggests that, during the process of considering out-migration, an amount of trust is lost. Comparing these losses with the trust expressed by in-migrants, it can be assumed that lost trust can be restored upon arrival to the destination area only to a certain extent. For the new rural paradigm, the most important implication of this research is: How can high levels of trust and local co-operation be ensured and translated into successful regional partnership approaches that attract younger people to stay or even in-migrate?

The obvious answer to decreasing trust in rural remote areas seems to be trying to ensure that the propensity of young families to out-migrate from rural remote areas as well as the steady inflow of retiree in-migrants is decreased. In a house-owning society like the UK, one of the most important reasons for migration - after job availability - is availability of housing. From a local policy maker's point of view, a “locals-only” policy favouring those with higher levels of trust (“home-grown trust”) might be a short- and medium-term answer while a long-term answer would be to attract businesses offering high-paid jobs to such areas. While “growth centre” approaches (Parr 1999) to ensure that such jobs are offered are outdated, and partnership as well as new rural paradigm approaches seem to be much more popular, future research should be redirected to analyse how a mixture of growth centre and partnership approaches would work.

Overall, following Putnam (1996), this research ends with the last refuge of a social-scientific scoundrel: we call for more research on specific conditions on how to increase social capital while not destroying the likelihood for economic and social development of rural remote regions.

Acknowledgements

This research profited to a large extent from the help that was provided by officials from the Highland Council (Scotland) as well as Prof. John Bryden, Prof. Sophia Efstratoglou, Prof. Demetrios Psaltopoulos, Dr. Andrew Copus and other partners in the TOP-MARD project. Part of the research was financed and supported by the European Commission (RTD) (contract 501749).

References

- Batt, P.J., 2008. Building social capital in networks. *Industrial Marketing Management*, 375, 487-491. Available at: <http://www.sciencedirect.com/science/article/B6V69-4SHFSPX-1/2/6b0d594aa5ab6debfdbbbee2592549c6>.
- Bergmann, H., 2003. Der Einfluss von Informationen in Kontingenten Bewertungsstudien Nutzen-Kosten-Überlegungen anhand der Agrarumweltprogramme, Hohengandern: Michael Wright.
- Besser, T.L., 2009. Changes in small town social capital and civic engagement. *Journal of*

- Rural Studies, 252, 185-193. Available at:
<http://www.sciencedirect.com/science/article/B6VD9-4V34RGJ-2/2/3e8623ebb624253e3290c62f546a1d24>.
- Bourdieu, P., 1983. Ökonomisches Kapital, kulturelles Kapital, soziales Kapital. In Göttingen: Otto Schartz & Co.
- Brondizio, E.S., Ostrom, E. & Young, O.R., 2009. Connectivity and the Governance of Multilevel Social-Ecological Systems: The Role of Social Capital. *Annual Review of Environment and Resources*, 341, 253-278. Available at:
<http://dx.doi.org/10.1146/annurev.envIRON.020708.100707>.
- Brune, N.E. & Bossert, T., 2009. Building social capital in post-conflict communities: Evidence from Nicaragua. *Social Science & Medicine*, 685, 885-893. Available at:
<http://www.sciencedirect.com/science/article/B6VBF-4VDFR1J-3/2/007fb831463d4aaf05e08cdf53e8c927>.
- Bryden, J. et al., 2010. *Towards Sustainable Rural Regions in Europe Exploring Inter-relationships between Rural Policies, Farming, Environment, Demographics, Regional Economies and Quality of Life using System Dynamics*, London: Routledge.
- Cheong, P.H., Edwards, R., Goulbourne, H. & Solomos, J., 2007. Immigration, social cohesion and social capital: A critical review. *Critical Social Policy*, 271, 24-49. Available at: <http://csp.sagepub.com/cgi/content/abstract/27/1/24>.
- Coleman, J.S., 1988. Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94s1, S95. Available at:
<http://www.journals.uchicago.edu/doi/abs/10.1086/228943>.
- Dorigo, G. & Tobler, W., 1983. Push-Pull Migration Laws. *Annals of the Association of American Geographers*, 731, 1-17. Available at: <http://www.jstor.org/stable/2569342>.
- Dowla, A., 2006. In credit we trust: Building social capital by Grameen Bank in Bangladesh. *Journal of Socio-Economics*, 351, 102-122. Available at:
<http://www.sciencedirect.com/science/article/B6W5H-4J2W0GM-1/2/203cd28d3ea4be53514aef7bf70f1d09>.
- Dunning, J.H. & Kim, C., 2007. The Cultural Roots of Guanxi: An Exploratory Study. *World Economy*, 302, 329-341. Available at: <http://dx.doi.org/10.1111/j.1467-9701.2007.00885.x>.
- Evans, M. & Syrett, S., 2007. Generating Social Capital?: The Social Economy and Local Economic Development. *European Urban and Regional Studies*, 141, 55-74. Available at: <http://eur.sagepub.com/cgi/content/abstract/14/1/55>.
- Fan, Y., 2002. Ganxi's Consequences: Personal Gains at Social Cost. *Journal of Business Ethics*, 384, 371-380. Available at: <http://dx.doi.org/10.1023/A:1016021706308>.
- Fidrmuc, J. & Gerxhani, K., 2008. Mind the gap! Social capital, East and West. *Journal of Comparative Economics*, 362, 264-286. Available at:
<http://www.sciencedirect.com/science/article/B6WHV-4S1C2NW-1/2/18a013a80d90df5c2dc46a479c9992e1>.
- Florida, R., 2003. *The rise of the creative class: and how It's transforming work, leisure, Community and Everday Life*, New York: Basic Books.
- GROS, G.R.O.S., 2010. Migration between Scotland and Overseas. Available at:
<http://www.gro-scotland.gov.uk/statistics/migration/> [Accessed February 20, 2010].
- Hays, R.A. & Kogl, A.M., 2007. Neighborhood attachment, social capital building and political participation: A case study of low- and moderate-income residents of Waterloo, Iowa. *Journal of Urban Affairs*, 292, 181-205. Available at: <http://dx.doi.org/10.1111/j.1467->

9906.2007.00333.x.

- Hofmeyer, A. & Marck, P.B., 2008. Building social capital in healthcare organizations: Thinking ecologically for safer care. *Nursing Outlook*, 564, 145.e1-145.e9. Available at: <http://www.sciencedirect.com/science/article/B6WNY-4T40TW7-B/2/776fd0519f4652f06265f9e542371a17>.
- Johnson, T. (1993) The dimensions of regional economy – Development theory, Presidential address, 3rd april 1993,
- Kindleberger, C. P., and B. Herrick. *Economic Development*. New York: McGraw-Hill, 1982.
- Krishna, A., 2007. How Does Social Capital Grow? A Seven-Year Study of Villages in India. *The Journal of Politics*, 69, 941-956.
- Lee, J., Arnason, A., Nightingale, A. & Shucksmith, M., 2005. Networking: Social Capital and Identities in European Rural Development. *Sociologia Ruralis*, 454, 269-283. Available at: <http://dx.doi.org/10.1111/j.1467-9523.2005.00305.x>.
- Levie, J. (2006) Immigration, In-migration, Ethnicity and Entrepreneurship in the United Kingdom, *Small Business Economics*, 28, p. 143-169
- North, D., 1990. *Institutions, institutional change and economic performance.*, New York: Cambridge University Press.
- OECD, O.O.E.C.A.D., 2006. *The new rural paradigm: Policies and Governance*. Paris.
- Olken, B., 2009. Do Television and Radio Destroy Social Capital? Evidence from Indonesian Villages. *American Economic Journal: Applied Economics*, 14, 1-33.
- Olson, M., 1982. *The rise and decline of nations: Economic growth, stagnation and social rigidities.*, New Haven CT: Yale University Press.
- ONS, O.O.N.S., 2010. *Migration statistics 2008 Annual Report*. Available at: <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15314> [Accessed February 20, 2010].
- Osgood, M. & Ong, B.N., 2001. Social capital formation and development in marginal communities, with reference to post-Soviet societies. *Progress in Development Studies*, 13, 205-219. Available at: <http://pdj.sagepub.com/cgi/content/abstract/1/3/205>.
- Parr, J.B., 1999. Growth-pole Strategies in Regional Economic Planning: A Retrospective View. *Urban Studies*, 367, 1195-1215. Available at: <http://usj.sagepub.com/content/36/7/1195.abstract>.
- Portes, A. & Landolt, P., 2000. Social Capital: Promise and Pitfalls of Its Role in Development. *Journal of Latin American Studies*, 322, 529-547. Available at: <http://www.jstor.org/stable/158574>.
- Pronyk, P.M. et al., 2008. Can social capital be intentionally generated? A randomized trial from rural South Africa. *Social Science & Medicine*, 6710, 1559-1570. Available at: <http://www.sciencedirect.com/science/article/B6VBF-4TC5H71-2/2/a5f13aa94ee8627f32a0c3bde054e85f>.
- Putnam, R., 1993. *Making Democracy Work*. Civic traditions in modern Italy, Princeton, NJ: Princeton University Press.
- Putnam, R., 2000. *Bowling Alone: The Collapse and Revival of American Community.*, New York: Simon & Schuster.
- Putnam, R., 2007. E Pluribus Unum: Diversity and Community in the Twenty-first Century The 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies*, 302, 137 -174.

- Rose, R., 2000. How much does social capital add to individual health? A survey study of Russians. *Social Science & Medicine*, 519, 1421-1435. Available at: <http://www.sciencedirect.com/science/article/B6VBF-40NG2XR-C/2/985c1f5080650be331ed1413dca8a22f>.
- Schumpeter, J., 1942. *Capitalism, Socialism and Democracy*, New York: Harper.
- Scotlands Census Results Online (SCROL Online) (2010)
<http://www.scrol.gov.uk/scrol/common/home.jsp>
- Uzzi, B. (1996) "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect", *American Sociological Review*, 61(4), pp. 674-698.
- Uzzi, B. (1997) "Social Structure and Competition in Inter-firm Networks: The Paradox of Embeddedness", *Administrative Science Quarterly*, 42(1), pp. 35-67.
- Wang, H., Schlesinger, M., Wang, H. & Hsiao, W.C., 2009. The flip-side of social capital: The distinctive influences of trust and mistrust on health in rural China. *Social Science & Medicine*, 681, 133-142. Available at: <http://www.sciencedirect.com/science/article/B6VBF-4TV7YNT-3/2/b99c2bccefea86c86a160adc3433f8c4>.
- Weber, D., 2010. *Agri-Environmental Decision Making of Chinese Farmers - The impact of Guanxi and Basic Values*. Discussion Paper of the Department for Agricultural Economics and Rural Development, Georg August University of Göttingen, unpublished, Göttingen, 33.
- Wollebæk, D. & Selle, P., 2007. *Origins of Social Capital: Socialization and Institutionalization Approaches Compared*. *Journal of Civil Society*, 31, 1-24. Available at: <http://www.informaworld.com/10.1080/17448680701390638>.
- Woolcock, M., 1998. Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society*, 27, 151-208.
- Woolcock, M., 2010. The Rise and Routinization of Social Capital, 1988-2008. *Annual Review of Political Science*, corrected proof.