Twenty Years of Rural Entrepreneurship:
A Bibliometric Survey

Maria Lúcia Pato¹
Aurora A. C. Teixeira¹,²,³

¹ FEP-UP, School of Economics and Management, University of Porto
² CEF.UP, Research Center in Economics and Finance, University of Porto
³ INESC Porto and OBEGEF
Twenty years of rural entrepreneurship: a bibliometric survey

Maria Lúcia Pato
Faculdade de Economia, Universidade do Porto

Aurora A. C. Teixeira*
CEF.UP, Faculdade de Economia, Universidade do Porto; INESC Porto; OBEGEF

Abstract
Entrepreneurship, in general, and rural entrepreneurship, in particular, has become a dynamic field of research in the last two decades. It seems therefore timely to present a quantitative survey of the literature in this area, aimed at identifying the most important sub-topics, contributors and their geographical distribution, major outlets, main empirical methodologies employed, as well as the most frequently studied countries.

Based on 181 articles published in journals indexed in Scopus (until March 2013), we found that within the entrepreneurship literature, ‘rural entrepreneurship’ has been largely overlooked and has gradually lost momentum. Rural entrepreneurship is an essentially ‘European’ concern, whose most prolific authors are affiliated in institutions located in the UK and Spain. The most important outlets for this topic are *Entrepreneurship and Regional Development*, *International Journal of Entrepreneurship and Small Businesses*, and *Journal of Rural Studies*. The average quality of the research on rural entrepreneurship has risen, as reflected by the journals’ impact factor, implying that it has gained a measure of scientific visibility. More research on rural entrepreneurship is being published in economics and business-related journals, losing to some extent its initial multidisciplinary scope. In the field of rural entrepreneurship, ‘Organization-related characteristics’, ‘Policy measures’ and ‘Institutional frameworks and Governance’ have attracted considerable attention in recent years, being considered as ‘emergent’ topics of research. In contrast, ‘Theory building’ has not attracted much research over the period in analysis, which suggests that the theoretical body of rural entrepreneurship is still incipient, hindering the establishment of its boundaries and of a suitable research agenda. The absence of an axiomatic and theoretical corpus prevents the full use of causality and hypotheses testing methodologies and explains to some extent the predominance of more qualitative types of research. Empirical literature on rural entrepreneurship has mainly analyzed developed countries, most notably, the UK, USA, Spain, Finland and Greece. Given the potential rural entrepreneurship represents for less developed and underdeveloped countries, more research on the topic is an imperative.

Keywords: entrepreneurship, rural, bibliometric analysis

JEL-Codes: L26; R58; R11; C89

* Author for correspondence: ateixeira@fep.up.pt; Address: R. Dr. Roberto Frias, 4200-464 Porto, PORTUGAL; Tel. +351225571100; Fax +351225505050.
1. Introduction

In general, rural regions represent about 75% of the land and almost a quarter of the population in OECD countries (OECD, 2006). Considering the European Union (EU), rural regions cover 57% of the territory and 24% of the population (EC, 2012). Rural regions face significant challenges in comparison to other regions (Brown & Schafft, 2011), which are even more critical in the so-called peripheral or mountain regions (Lópes-i-Gelats et al., 2009). Regarding the latter, the problems generally stem from a rapid decline in employment in a supposedly dominant agricultural sector (Terluin, 2003), a poor socioeconomic environment, a low density, ageing population and also from distance to markets and services (OECD, 2006). Such characteristics, among others, have substantial influence on entrepreneurial dynamics and job creation (Dinis, 2006a), on the quality of educational and other public service resources, and on the existence and quality of certain types of infrastructure (OECD, 2006). Problems are particularly evident in terms of employment opportunities (Bosworth, 2012) and access to public services, such as education and health services (Lehmann et al., 2008). Indeed this type of vicious cycle (cf. Figure 1), in which unemployment and lack of services lead to depopulation and population ageing has been well-documented by several authors (e.g., Paniagua, 2013; Walsh et al., 2012).

Figure 1: Cycle in declining rural regions

Source: OECD (2006)

The issue of rural development is on the agenda of several governments and institutions (e.g., (EC, OECD, FAO, UN), where entrepreneurship in general, and rural entrepreneurship in particular, has emerged as a key enhancing factor (Ferrão & Lopes, 2003).
In this perspective, the rural world has to re-invent itself (CE, 2003). Some authors contend that it is possible to promote better economic and social conditions through entrepreneurial actions, which benefit both the individuals engaged and the community as a whole (Duarte & Diniz, 2011). In fact, institutions and individuals seem to agree on the urgency of developing enterprises located in rural areas (Petrin & Gannon, 1997): politicians see it as a key strategy to prevent rural depopulation; farmers see it as an instrument to increase farm earnings; women see it as an employment possibility near their homes which provides some autonomy and independence; and young people see it as a job opportunity in their region.

Despite the interest in rural entrepreneurship, little research is available on the extent to which local initiatives contribute to rural development (Meccheri & Pelloni, 2006). In many cases local initiatives seek to encourage synergies among diverse sectors and local amenities, but the empirical findings are scarce and mixed, raising a number of important questions, namely the need for appropriate policy measures to take full account of women’s potential and to provide economic incentives to young people to stay in rural areas (CE, 2012). As argued by North and Smallbone (2006), there is a need for more strategic and coordinated approaches to building the entrepreneurial capacity of peripheral rural areas, based on a clear vision of the role that entrepreneurship can play in rural development.

Existing studies on entrepreneurship and innovation mainly focus on urban regions, neglecting the rural ones (Akgün et al., 2010). The few studies that have focused on the rural setting reveal that the success of policy actions depends on cooperation and adjustment of action among the different actors (individual and organizations) located in a territory (Dinis, 2006a). Trettin and Welter (2011) suggest the need for research to increase its focus on the socio-spatial context that influences the type and the extent of entrepreneurial activities in localities, i.e., the relationship between entrepreneurship and localities.

Therefore, in this paper, a bibliometric analysis of this particular field is performed, aimed at analyzing quantitatively the trends in rural entrepreneurship research over the last twenty years. The study aims to discuss the evolution of rural entrepreneurship research in this time period, by identifying the most important contributors and their geographical distribution, the major outlets, the evolution on the main subject areas, main topics, main empirical methodologies and the main countries analyzed.

The paper consists of five parts. After the introduction (Section 1), Section 2 contains a conceptual review of the concept of rural entrepreneurship as a means of development for
these areas, particularly the so-called ‘peripheral’ regions. The study design is explained in Section 3, while Section 4 presents and discusses the results of the quantitative review. Finally, the main conclusions of the study are presented in Section 5.

2. Conceptualizing entrepreneurship in rural areas

2.1. On the concepts of entrepreneurship and rural entrepreneurship

The origin of the word ‘entrepreneur’ comes from the French verb ‘entreprendre’, which means ‘to undertake’ (Landström, 2005). Joseph Schumpeter contributed significantly to the theory of entrepreneurship through his seminal book ‘The Theory of Economic Development’ (published originally in 1934), where entrepreneurship is viewed as the primary engine of economic development with innovation as a central element (Lordkipanidze et al., 2005).

According to Schumpeter (1934), an entrepreneur is an individual who innovates and creates new combinations, thus becoming a dynamic agent of change for the economy. Such combinations can take various forms, such as (Brockhaus, 1987; Bull et al., 1995): developing new products; developing new methods of production; identifying new markets; developing new sources of supply; and implementing some new organizational forms of the industry. In this sense, entrepreneurship is a multifaceted phenomenon with diverse definitions and meanings. In fact, almost 80 years since the publication of Schumpeter’s pioneering work (1934), there is still little agreement among scholars regarding the concept. Entrepreneurship has distinct meanings for a diverse range of authors, namely: innovation (Dinis, 2006a), risk-taking (Hawley & Fujii, 1993), establishment of a market (Polo-Peña et al., 2013), and the creation and management of a (small) business (Bryden & Keith, 2004).

With regard to rural areas, which encompass territories with specific physical, social and economic characteristics (Stathopoulou et al., 2004), there is increasing demand and interest in proposing entrepreneurship as a new form of business and therefore as a key element in the process of rural development, especially of more laggard areas (LaFuente et al., 2007). Indeed, entrepreneurship viewed as the creation of businesses or the modernization and expansion of existing ones have become key topics in rural development (Baumgartner et al., 2013).

However, it is important to note that even when business creation is the focus, creating a new business is not the sole condition for rural development (Hernández-Maestro et al., 2009). Businesses must be innovative in some way (Bhattacharyya, 2006). According to Bhattacharyya (2006), businesses need to create something different that would change the rules of the game and add value. This is often achieved by extracting new value from the
traditional and by linking the uniqueness of the local to emergent global values (Anderson, 2000). In fact, as in other businesses in urban areas, the ability to recognize unexploited market opportunities is also important in rural entrepreneurship (North & Smallbone, 2000a).

2.2. Main sub-topics explored in the literature on rural entrepreneurship

Although there is a long history of entrepreneurship studies, rural entrepreneurship only came to feature more prominently in the literature in the 1980s (Wortman Jr, 1990). A greater awareness that entrepreneurship could contribute to rural development may explain this rise in interest (Fuller-Love et al., 2006; Kulawczuk, 1998; Vaillant & Lafuente, 2007). Indeed, it was found that entrepreneurship, viewed as the establishment of new business, generally had a positive influence on employment (Labrianidis, 2006) and welfare in rural areas (Chun & Watanabe, 2012). On the other hand, several opportunities emerged in rural areas, including an increased demand for recreational and rural amenities and the quality of rural products and services, such as tourism (Stathopoulou et al., 2004).

Although rural entrepreneurship research has traditionally focused on the farmer (Moyes, 2010), the notion of ‘rural entrepreneurship’ is not limited to agriculture and related activities such as food processing, covering a myriad of other activities (namely industrial activities) (Miljkovic et al., 2010). In addition, despite being largely associated with the creation of firms, entrepreneurship has been studied from different approaches.

In recent literature on rural entrepreneurship, the apparent differences between the context of rural and urban areas - and the specific effects of these contexts on economic life – has led to the need for specific research on rural entrepreneurship. Existing studies have focused on quite distinct yet interrelated topics, highlighting a noticeable multidisciplinary trend in the approaches (ranging from demographic to health-related issues). Thus, it is possible to identify several main topics, which beside the theory building category (1), can be organized from the micro to macro perspectives (cf. Table 1): demographic traits; entrepreneurial psychological traits; economic growth; regional development; policy measures; and institutional frameworks.
Table 1: Rural entrepreneurship topics identified in the literature

<table>
<thead>
<tr>
<th>Topic</th>
<th>Sub-topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>History and roots of the concept</td>
<td>Rural entrepreneurship theory building</td>
</tr>
<tr>
<td></td>
<td>Entrepreneur demographic traits</td>
</tr>
<tr>
<td></td>
<td>Age; Origin; Gender</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurial psychological issues</td>
</tr>
<tr>
<td></td>
<td>Motivations; Individual skills; Human Capital</td>
</tr>
<tr>
<td>Microeconomic approach</td>
<td>Organizations’ related characteristics</td>
</tr>
<tr>
<td></td>
<td>Innovation; Size; Internationalization; Sector; Product/service Innovation; Marketing Methods; Process Technology; Use/Adoption of ICTs</td>
</tr>
<tr>
<td>Micro-macro approach</td>
<td>Embeddedness</td>
</tr>
<tr>
<td></td>
<td>Networks; Social Ties; Collaboration</td>
</tr>
<tr>
<td>Macroeconomic approach</td>
<td>Rurality</td>
</tr>
<tr>
<td></td>
<td>Physical, Social, Economic characteristics</td>
</tr>
<tr>
<td></td>
<td>Growth &amp; Development</td>
</tr>
<tr>
<td></td>
<td>Economic Growth and Development</td>
</tr>
<tr>
<td></td>
<td>Policy measures</td>
</tr>
<tr>
<td></td>
<td>Supporting; Financing; Funding</td>
</tr>
<tr>
<td></td>
<td>Institutional frameworks and Governance</td>
</tr>
<tr>
<td></td>
<td>Socio-cultural Factors; Social Traits Self-governance; Institutional Capacity</td>
</tr>
</tbody>
</table>

‘Entrepreneurs’ demographic traits’ includes aspects such as age, gender or origin of the entrepreneur. Although placing particular emphasis on the role of variables reflecting the human capital of entrepreneurs, Meccheri and Pelloni (2006) analyze the effects produced by a number of other factors, namely the entrepreneur’s age. They note that younger entrepreneurs are generally more dynamic and more likely to adopt riskier business development strategies, which may suggest a greater need for financial resources. On the other hand, Akgün et al. (2010) stress the importance of the entrepreneurs’ origin and conclude that newcomer entrepreneurs are relatively older, better educated, and develop non-agricultural businesses. They also found that newcomer entrepreneurs are not directly the instigators of rural economic development, but their contribution to physical capital formation is greater than that of locals.

A reasonable number of studies, such as the one by Rijkers and Costa (2012), stresses gender traits in rural entrepreneurship. In particular, these authors conclude that in the countries they investigated (Bangladesh, Indonesia and Sri Lanka), women are less likely to be non-farm entrepreneurs that men. Moreover, they find that women’s non-farm entrepreneurship is neither strongly correlated with household composition nor with educational attainment and that firms by female entrepreneurs are, in general (with the exception of those in Indonesia), smaller and less productive. Additionally, Pagán (2002) notes that in rural Guatemala there are substantial differences in the labor force participation rates for man and women and in self-employment – men have higher rates of labor force participation and also in self-employment. Focusing exclusively on female entrepreneurship, Frear’s (2007) findings are very similar to those of Hisrich and Brush (1984), i.e., the majority of female entrepreneurs is
married with children, tends to start new business around the age of 40, and has some college education.

‘Entrepreneurial psychological traits’ have also been widely studied, particularly the sub-topic of entrepreneurial motivations. Gladwin et al. (1989) point out motivations related to the desire for autonomy, a new challenge or adventure, more money or income, the sudden appearance of a good opportunity, and even the loss of a previous job/farm. More recently, some authors (e.g., Ateljevic & Doorne, 2000; Hollick & Braun, 2005) emphasize the concept of lifestyle entrepreneurship. For instance, in the rural tourism sector, findings by McGehee and Kim (2004) coincide with Getz and Carlsen’s (2000) idea of entrepreneurship as a lifestyle. It can be said that the motivations of these ‘new entrepreneurs’ are quite different, since they are individuals who own and operate a business without focusing mainly on profits, i.e., the way they run their business is closely aligned with their personal values, interests and passions (Marcketti et al., 2006). Another sub-topic that has drawn attention in recent studies is individual skills. Indeed, Pyysiäinen et al. (2006) show how it is possible to develop a fuller understanding of the skills rural farmers require in order to become entrepreneurs. These authors conclude that the contexts of conventional farming and business diversification call for different entrepreneurial skills, some of which are more amenable to training than others. In this sense, McElwee (2006) also suggests that a major challenge for the agricultural sector is enabling farmers to develop their entrepreneurial skills. As Skuras et al. (2005) find, human capital accumulation processes related to education and training or managerial experience still play a prime role in predicting successful businesses in rural areas.

In terms of ‘organization-related characteristics’, some authors (e.g., Dinis, 2006a, 2006b; North & Smallbone, 2000a, 2000b), have emphasized the topic of ‘innovation’, i.e., the attempt to create competitive advantage by perceiving new and better ways of trading and competing in an industry and bringing them to market (Porter, 1998). North and Smallbone (2000a) for instance, inspired by a broad, evolutionary view of the innovation process of firms in rural areas of England, identify and measure innovative behavior in five dimensions, namely: product and service innovation, market development, marketing methods, process technology and innovation and use of computers/Information Technology (IT) in administration. Based on an index (ranging from 1 to 10 points) of total innovative activity, these authors found that there was a small, but nevertheless significant, number of highly innovative rural firms. Indeed, 25 of the firms studied (7.5% of the total) achieved scores of 7 or more, showing that they were innovative across the five dimensions, and approximately 50
(15.0%) achieved a score of 6 indicating that they were innovative in most aspects of the business.

Polo-Peña et al. (2012), in their turn, emphasize the importance of marketing in rural enterprises. These authors argue that the use of marketing adapted to the aims, capacities and resources of such enterprises is a mechanism for improving their performance.

Aware that research should not consider the rural entrepreneur in isolation but also investigate the social context in which the entrepreneurial process takes place, a large number of authors (Kalantaridis & Bika, 2006a, 2006b) also have been emphasized the topic of ‘embeddedness’.

The concept has been used recently in social science (Wang & Altinay, 2012) research and arose from Granovetter’s (1985) study. It refers to a conceptual and operational approach to identify the nature, depth, and extent of entrepreneurs’ ties to a (rural) location. According to Granovetter (1985), economic activities need social relations, which have an important and significant role in terms of generating trust for economic activities to happen. Thus, embeddedness is also related with networks (cf. Akgun, Nijkamp et al., 2010), a prominent sub-topic studied in rural entrepreneurship. Other authors, such as Barkham (1994) and Portes (1998), highlight the importance of entrepreneurs’ social capital, i.e., the ability of actors to take advantage of their social structures, networks, collaborations and ties (Woolcock & Narayan, 2000).

More recently, Fløysand and Sjoholt (2007) define network as local, informally organized links among actors which generally promotes endogenous development. On this matter, Atterton (2007) notes that networks help to overcome some of the disadvantages of a peripheral location by often serving as a means to achieve economies of scale (for instance, in accessing distant markets) or as a source of support, information and knowledge, especially given the absence of more formal information in many sparsely populated areas. Besides the attention paid to networks, some authors also stress the importance of collaborations in rural entrepreneurship. Young (2010), for example, explores the kind of partnership or links of a firm with any other business(es) and notes some interesting collaborations. These collaborations involve not only inter-firm support, but also the coordinated provision of services to clientele. Gerasymchuk (2009) also underlines collaborations among small agricultural and agro-tourist enterprises. According to this author, the model of such cooperation should allow enterprises to make use of its advantages so as to overcome the
seasonality in their activity. Taking rural entrepreneurship into consideration, Meccheri and Pelloni (2006) also introduce the concept of social/local ties. These authors conclude that entrepreneurs with strong social ties within rural communities are more involved with networks of local assistance and less inclined to exploit institutional assistance.

From a more global or macro perspective, some authors (e.g., Stathopoulou et al., 2004) emphasize the topic of ‘rurality’. Rurality is defined in traditional descriptive terms, including the level of population density, the rate of population loss or gain, settlement size, local economic structure and landscape (Skuras, 1998). As Avramenko and Silver (2010) claim, rurality offers a different entrepreneurial milieu in which enterprises may flourish and prosper (Stathopoulou et al., 2004). Additionally, the shift in society and the opportunities offered by Information and Communication Technologies (ICTs) can gradually eliminate the boundaries of local markets, expose economic activity to greater competition from the outside (Grimes, 2003), and enhance the learning capacities of rural areas by improving access to relevant information (Grimes, 2000). Nevertheless, the milieu of rural areas also presents strong constraints in relation to entrepreneurship. For instance, as noted by Stathopoulou et al. (2004), distance to urban centers affects the transport costs of inputs and outputs and still has implications on information dissemination.

Other topic found in the macro approaches employed is ‘economic growth and development’. For instance, Fuller-Love et al. (2006) advocate the use of scenario analysis to develop foresight for the improvement of policies to support rural entrepreneurship and then economic development. Their findings reveal that the scenario analysis exercise enables key stakeholders to confront and deal with considerable uncertainties by developing a shared understanding of the obstacles facing small firm growth and rural economic development. On the other hand, Goetz et al. (2010) explore the role of entrepreneurship in economic growth and development, paying particular attention to types of entrepreneurship (such as necessity versus opportunity) and the various ways in which entrepreneurship can be modeled to improve rural economy. The need to promote entrepreneurship to accelerate economic development is also explored by Rena (2009), who focuses on the rural areas of Eritrea. The author contends that entrepreneurial orientation in rural areas is based on stimulating local entrepreneurial talent and subsequent growth of indigenous companies in the country.

The fact that rural firms tend to differ from urban firms and business support services are delivered in different ways, should be taken into consideration in any attempt to provide an integrated entrepreneurial policy for such areas (Lowe & Talbot, 2000). Indeed, a substantial
number of studies (e.g., Drabenstott et al., 2003; North & Smallbone, 2006) emphasize the issue of ‘policy measures’. Many are concerned with the various policies that encourage rural entrepreneurship and further support rural firms. According to Drabenstott et al. (2003, p. 75), the role of entrepreneurship policy is to help regions create an “entrepreneurial ecosystem”. Currently, there is a diverse range of policies, programs and measures which are concerned with stimulating and supporting various kinds of rural entrepreneurship. However, much of the evidence shows that the existing rural entrepreneurship policy is often unable to leverage the growth and development of rural entrepreneurship (Pezzini, 2001). In this sense, Smallbone and Welter (2006) conclude that, due to the often complex structure of these policies, a more strategic and coordinated approach is necessary, directed at building the entrepreneurial capacity of rural areas, based on a clear view of the mission that enterprises can have in future rural development.

As noted by Avramenko and Silver (2010), effective policies to encourage and support rural entrepreneurship are likely to be influenced by the regions’ governance bodies. Indeed, evidence indicates that many regions are entrepreneurially laggard, not only because of their physical disadvantages, but because of inadequate governance bodies and the sociocultural traits of their institutional framework, which make them non-conducive to effective entrepreneurial activity (Fornahl, 2003). Given its importance within rural entrepreneurship, the topic of ‘Institutional frameworks and governance’ has attracted the attention of several researchers.

Avramenko and Silver (2010) call for the need to improve the effectiveness of rural governance by shifting the emphasis from localized changes in the existing and sometimes inadequate policies of rural entrepreneurship towards fostering rural entrepreneurship on a wider scale, by building and developing the indicators for inclusion in rural governance policies. Rural governance draws attention to the ways in which governmental and non-governmental organizations work together (Goodwin, 1998). However, the meaning of governance transcends what happens to organizations and businesses in a region. It addresses issues related to the capacity to represent regions, organizations and businesses outside the region. It develops more coordinated strategies and organizes collective action towards specific goals (Stathopoulou et al., 2004).

Weak governance, allied to sociocultural barriers and the lack of previous entrepreneurial role models, are some of the most important ‘institutional’ barriers that hinder (rural) entrepreneurship (Lafuente et al., 2007; OECD, 2003; Vaillant & Lafuente, 2007).
3. Methodological approach

In order to select the set of relevant studies, in terms of journal articles, that could reflect the field of rural entrepreneurship, we performed a search in the Scopus bibliographic database.\(^1\)

Relevant articles for our inventory follow the methodological guidelines of Trettin and Welter (2011). We used a list of keywords related to entrepreneurship (most notably, ‘entrepreneur*’ and then ‘young firm’, ‘spinoff’, ‘firm births’, ‘new firms’, ‘new businesses’, ‘new ventures’, ‘business creation’ and ‘self-employment’). The search was conducted (in March 2013) considering all years up to the moment of the search, selecting only articles or reviews indexed in Scopus. We subsequently limited the outcome of the search to articles related to ‘regional’ and then to ‘rural’.

Although bibliometric exercises have a limitation with regard to the chosen keywords, as it is virtually impossible with only some keywords to embrace the entire reality under analysis (in this case, rural entrepreneurship), these exercises serve to capture the core journal articles published in a given area of study (Santos & Teixeira, 2009).

This procedure yielded 671 articles. We exported all these articles to an Excel spreadsheet and created a new database with the following relevant fields: authors’ name, title of the article, year of publication, source and abstract. In a first stage of the process (Figure 1), we read the abstracts and selected only those that effectively referred to matters related to ‘rural entrepreneurship’. Of the 671 articles, 181 addressed the general theme of ‘rural entrepreneurship’.

In a second stage, we downloaded the 181 relevant articles, read and classified each of them according to several dimensions: main topic, type of article, empirical methodologies, unit of analysis, and countries of analysis.

Regarding the main topics, and following the previous section, articles were classified into 10 topics (cf. Section 2): (1) rural entrepreneurship theory building, (2) entrepreneurs’ demographic traits, (3) entrepreneurial psychological traits, (4) organization-related characteristics, (5) embeddedness, (6) rurality, (7) growth and development, (8) policy measures, (9) institutional frameworks and governance, and (10) other.

\(^1\) Scopus, officially named SciVerse Scopus, is a bibliographic database of peer-reviewed literature and quality web sources with tools to track, analyze and visualize research. Scopus is considered today one of the best tool for bibliometric studies and evaluations of scientific production (Pinto et al., 2013).
In order to identify the type of article according to the main method of research, and following Nelson and Winter’s (1982) original proposal, as well as the contributions of Yadav (2010) and Silva and Teixeira (2011), the articles were divided into four categories: (1) conceptual; (2) appreciative/discursive; (3) empirical; and (4) formal. The articles classified as ‘conceptual’ focus primarily on theory development and do not present data and/or analyses for purposes of theory testing. The articles classified as ‘appreciative/discursive’ include mainly appreciations, critical papers, and judgments. Articles characterized as ‘empirical’ are exclusively concerned with testing of data, namely using econometric or statistical analyses. Papers characterized as ‘formal’ devise mathematical and/or analytical/logical frameworks.

In the case of empirical articles, we then classified them, adapting the proposals of Malhotra et al. (2013) and Silva & Teixeira (2011), by main empirical methodologies used: (1) descriptive and exploratory analysis; (2) multivariate models; (3) qualitative analysis; and (4) survey. ‘Exploratory and descriptive statistics’ provides numerical and graphic procedures to summarize a collection of data in a clear and understandable manner. It can include not only distribution, central tendency or dispersion of variables but also ANOVA and correlation tests and cross-tabulation measures. ‘Multivariate models’ are more sophisticated in terms of analysis. They are concerned with the understanding of the different aims and background of each of the different forms of multivariate analysis, and how they relate to each other. They include regression analysis, factor analysis, cluster analysis and so forth. ‘Qualitative analysis’ employ a qualitative approach (instead of quantitative) and often include case studies, ethnographic or narrative studies. The articles involving a comprehensive review of
published and unpublished works from secondary source data in the areas of a specific interest are classified as ‘survey’.

We also classified the empirical articles according to their unit of analysis, which could range from micro to macro: (1) individuals, (2) firms, (3) other organization/firms, and (4) regions and countries. Regarding to this latter category – countries – our database includes reference to the countries analyzed as well as they income group (according to the World Bank categorization: Low, Lower and Upper Middle, and High income).

In order to identify which were the main subject areas that have published research related with rural entrepreneurship, in a third stage, we resorted to the ISI Web of Knowledge classification to identify the journals’ main subject areas as well as their impact factor, which is often considered a proxy for the journals’ scientific ‘quality’ (Vieira & Teixeira, 2010). For those journals not listed in ISI, we attributed the subject area by reading the information found on the journals’ web site and/or in Scopus SciVerse.

In a fourth stage, we performed the bibliometric analysis, based on simple, exploratory statistics (cf. next section).

4. Bibliometric analysis of rural entrepreneurship research

4.1. The evolution of studies on rural entrepreneurship

Rural entrepreneurship began to have a place in the literature (although still small) in the 1980s. As shown in Figure 3, before 2000, the number of rural entrepreneurship related papers was rather negligible. In fact, approximately from this year, similarly to general entrepreneurship articles, the number of rural entrepreneurship papers increased gradually, and more specifically, in the last few (six) years. This can be explained not only because the literature on entrepreneurship is growing, but also because problems (such as depopulation, unemployment and lack of opportunities) in rural areas (particularly in laggard ones) are increasing and are often dramatic, which in our opinion, has drawn the attention of an increasing number of researchers.

Nonetheless, it is evident that the study of rural entrepreneurship is still quite low within the literature on entrepreneurship (representing less than 30% in the period considered). This difference is still more noticeable since 2010, where we have more than one hundred articles per year on entrepreneurship, and just over 25 on rural entrepreneurship.

2 It is important to note that the Scopus database is not very representative of publications before 1995, which in part may explain the negligible figures we found in the earlier periods.
The evolution and weight of rural entrepreneurship related articles is lower than that of general entrepreneurship related articles, reflected by the (slightly) negative trend shown in Figure 3.

Summing up, in addition to being residual, literature on rural entrepreneurship has been losing momentum within (general) entrepreneurship literature.

4.2. Main contributors

It is interesting to note that seven of the thirteen authors present in the Top-10 most prolific authors on rural entrepreneurship belong to universities or schools from the United Kingdom (UK). There are no authors affiliated to organizations in the United States (US) in this ranking. Given the hegemony of US authors in entrepreneurship literature (Teixeira, 2011), it is apparent that rural entrepreneurship is a ‘European’ concern, most notably in the UK and Spain. The vast majority of authors within this ranking present research interests around rural entrepreneurship. The exceptions are Peter Nijkamp (Vrije University, The Netherlands) and Colin Williams (University of Sheffield, UK), whose research interests are related, respectively, to regional studies and informal entrepreneurship. These two authors have a remarkable number of publications indexed in Scopus and also a large number of citations and a high h-index, which reflects their scientific visibility and influence.
Table 2: Main contributors in rural entrepreneurship

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Name of the author</th>
<th>Affiliation (country)</th>
<th>Total nº publications in Scopus (Citations) [h index]</th>
<th>Main research interests</th>
<th>Nº of articles published on ‘rural entrepreneurship’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kalantaridis C.</td>
<td>Bradford University, Enterprise and Innovation Lab, Bradford (UK)</td>
<td>29 (199) [8]</td>
<td>Rural entrepreneurship</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>McElwee G.</td>
<td>Sheffield Business School, Sheffield (UK)</td>
<td>20 (92) [6]</td>
<td>Rural entrepreneurship (with a focus on farmers)</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Baycan-Levent T.</td>
<td>Istanbul Technical University, Department of Urban and Regional Planning (Turkey)</td>
<td>17 (64) [4]</td>
<td>Ethnic entrepreneurship</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Bosworth G.</td>
<td>University of Lincoln, College of Social Science, Lincoln (UK)</td>
<td>10 (24) [3]</td>
<td>Rural tourism entrepreneurs</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Lafuente E.</td>
<td>Universitat Politècnica de Catalunya, Barcelona Tech, Barcelona(Spain)</td>
<td>9 (55) [3]</td>
<td>Entrepreneurship; Technology transfer</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Nijkamp P.</td>
<td>Vrije University Amsterdam, Department of Spatial Economics (The Netherlands)</td>
<td>597 (4132) [30]</td>
<td>Regional studies</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Smith R.</td>
<td>Robert Gordon University, Aberdeen (UK)</td>
<td>14 (34) [2]</td>
<td>Entrepreneurship</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Vaillant Y.</td>
<td>Universidad Autónoma de Barcelona, Department of Business Economics, Barcelona (Spain)</td>
<td>7 (83) [4]</td>
<td>Entrepreneurship</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Williams C.C.</td>
<td>University of Sheffield, Management School (UK)</td>
<td>186 (1092) [16]</td>
<td>Informal entrepreneurship</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Akgun A.A.</td>
<td>Istanbul Technical University, Department of Urban and Regional Planning (Turkey)</td>
<td>8 (3) [1]</td>
<td>Rural entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Bika Z.</td>
<td>University of East Anglia, Norwich Business School (UK)</td>
<td>7 (50) [3]</td>
<td>Rural entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Galloway L.</td>
<td>Heriot-Watt University, School of Management and Languages (UK)</td>
<td>12 (63) [4]</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Koutsou S.</td>
<td>Aristotle University of Thessaloniki, Department of Agricultural Economics (Greece)</td>
<td>9 (6) [1]</td>
<td>Women entrepreneurship; Rural tourism</td>
<td>3</td>
</tr>
</tbody>
</table>

*Source: Own computation based on data gathered from Scopus SciVerse.*

4.3. Main outlets and their scientific visibility

The outlets recording the highest number of articles published on rural entrepreneurship are *Entrepreneurship and Regional Development* (with 16 articles), *International Journal of Entrepreneurship and Small Businesses* and *Journal of Rural Studies* (both with 10 articles).
The latter and the first journal are top journals, as reflected by their high impact factors (1.786 and 1.333, respectively). Table 3 further shows that about two thirds of the journals that have the highest rate of articles on rural entrepreneurship are scientifically quite visible and influential (being indexed in ISI), including high-ranking journals such as *Annals of Tourism Research* or *Technovation*.

Table 3: Main journals in rural entrepreneurship

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Journal</th>
<th>Subject area</th>
<th>Impact factor 2012</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Entrepreneurship and Regional Development</td>
<td>Business; Planning &amp; Development</td>
<td>1.333</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>International Journal of Entrepreneurship and Small Business</td>
<td>Business; Economics; Management</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Journal of Rural Studies</td>
<td>Planning &amp; Development</td>
<td>1.786</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>International Journal of Entrepreneurial Behaviour and Research</td>
<td>Business; Economics; Management</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>European Planning Studies</td>
<td>Geography; Planning &amp; Development; Urban Studies</td>
<td>0.562</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Environment and Planning A</td>
<td>Environmental Studies; Geography</td>
<td>1.630</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Journal of Development Entrepreneurship</td>
<td>Business; Economics; Management</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Journal of Enterprising Communities</td>
<td>Business; Planning &amp; Development</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Journal of Rural Development</td>
<td>Planning &amp; Development</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Local Economy</td>
<td>Economics</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Tijdschrift voor Economische en Sociale Geografie</td>
<td>Economics; Geography</td>
<td>0.753</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Agricultural Economics</td>
<td>Economics</td>
<td>1.030</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Annals of Tourism Research</td>
<td>Hospitality, Leisure, Sport &amp; Tourism</td>
<td>3.683</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Economic Development Quarterly</td>
<td>Economics; Planning &amp; Development; Urban Studies</td>
<td>0.618</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Forest Policy and Economics</td>
<td>Forestry</td>
<td>1.638</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>International Journal of Business Innovation and Research</td>
<td>Business; Planning &amp; Development</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Journal of Contemporary African Studies</td>
<td>Area Studies; Economics; Planning &amp; Development</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Journal of Development Studies</td>
<td>Economics; Planning &amp; Development</td>
<td>0.872</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Journal of Small Business and Enterprise Development</td>
<td>Business; Planning &amp; Development</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Papers in Regional Science</td>
<td>Economics; Environmental Studies; Geography</td>
<td>1.541</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Rural Sociology</td>
<td>Sociology</td>
<td>1.585</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Service Industries Journal</td>
<td>Management</td>
<td>1.017</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Sociologia Ruralis</td>
<td>Sociology</td>
<td>1.022</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Technovation</td>
<td>Management</td>
<td>3.177</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Tourism Management</td>
<td>Environmental studies; Hospitality, Leisure, sport &amp; Tourism; Management</td>
<td>2.571</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>World Development</td>
<td>Economics; Planning &amp; Development</td>
<td>1.527</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note:* The 26 journals considered represent 50% of the total number of articles published on rural entrepreneurship.
*Source:* Own computation based on data gathered from Scopus SciVerse.
Concerning the journals’ impact factor (IF), we found (cf. Figure 4) that, although the proportion of articles published in journals whose impact factor has been decreasing, the average impact factor of the ISI-indexed journals that publish research on rural entrepreneurship has increased, which may indicate that the average quality of the research indexed in ISI published on rural entrepreneurship has risen, becoming scientifically more visible.

![Figure 4: Average IF of articles published in journals indexed in ISI and proportion of articles published in journals indexed in ISI](image)

**Source:** Own computation based on data gathered from Scopus SciVerse.

Therefore, a higher number of articles with less perceived scientific ‘quality’ has been published on rural entrepreneurship, albeit the articles that managed to be published in high quality, ISI-indexed journals succeeded in increasing their average scientific ‘quality’.

### 4.4. Main subject areas

It is worth noting that articles on rural entrepreneurship have been mainly (45% of the total published articles) and increasingly published in journals whose subject areas include Economics, Business, Management and Hospitality, Leisure, Sport & Tourism. Subject areas related to space (e.g., Planning & Development, Geography, Urban Studies) emerge predominant, as expected, although showing a slight decrease in their relative importance over time. Less represented subject areas (namely, Sociology, Social Science, Area Studies) have lost importance over time. Such trends seem to indicate that rural entrepreneurship
research has become a less multidisciplinary field, focusing more on economics and business-related issues.

Figure 5: Evolution of the relative importance of the main subject areas in rural entrepreneurship, 1996-2013

Source: Own computation based on data gathered from Scopus SciVerse.

4.5. Main topics

Concerning the dominant research topics in rural entrepreneurship literature, our bibliometric exercise allow us to identify possible literature gaps or less explored subjects and (at the same time) new emergent fields of research.

Analyzing the distribution of rural entrepreneurship research by main topic over time (Figure 6), we can see that macro related topics, most notably, ‘Growth & Development’ and ‘Rurality’, lost importance in favor of more micro related topics, namely ‘Entrepreneurial psychological traits’ and ‘Organization-related characteristics’. The latter, together with ‘Policy measures’ and ‘Institutional frameworks and Governance’, may be considered as ‘emergent’ topics at the beginning of the 2000s, since their weights were quite small or negligible (0% in the case of ‘Organization-related characteristics’ and ‘Policy measures’), reaching in the more recent period (2010-2013) a quite expressive proportion of the articles published: 13% in case of ‘Institutional frameworks and Governance’, 6% for ‘Organization-related characteristics’, and 3% for ‘Policy measures’. This confirms that, within rural entrepreneurship, issues such as enterprise strategies (cf. Battisti et al., 2012), the use of ICT
(cf. Galloway et al., 2011) and institutional and policy frameworks (cf. Vaillant & Lafuente, 2007) are drawing increasing attention.

‘Entrepreneurial psychological traits’ and ‘Embeddedness’ are nevertheless the most researched topics, representing, for the entire period, an average weight of 18% each. They present however distinct dynamics over the period in analysis. Whereas ‘Entrepreneurial psychological traits’ saw its weight increase 11 percentage points since the early 2000s, ‘Embeddedness’ slightly decreased its relative importance, losing 3 percentage points, despite its recognized importance for the entrepreneurial process (Jack & Anderson, 2002). Since entrepreneurs’ psychological traits are a main driver of the birth, survival and growth of rural enterprises (Meccheri & Pelloni, 2006), it is justifiable that it has been an increasingly researched topic.

![Figure 6: Evolution of the relative importance of the distinct topics on rural entrepreneurship, 2000-2013](source: Own computation based on data gathered from Scopus SciVerse)

The ‘Rural entrepreneurship theory building’ topic did not attract much research over the period in analysis, which suggests that the theoretical body of rural entrepreneurship is still incipient (Santos & Teixeira, 2009). Among the few authors concerned with the building blocks of rural entrepreneurship, there is Max S. Wortman Jr., who first suggested a framework and a set of typologies for integrating rural entrepreneurship and then, based on this framework, argued that high priority should be given to the conceptualization of rural
entrepreneurship and its components (Wortman, 1990). Unfortunately, this issue has been rather overlooked within rural entrepreneurship which hinders the establishment of its boundaries and of an adequate research agenda. As Shane and Venkataraman (2000) once argued with regard to the field of (general) entrepreneurship, and to a much larger extent, to rural entrepreneurship, this phenomenon lacks a conceptual framework. Rather than explaining and predicting a unique set of empirical phenomena, entrepreneurship (and by the same token, rural entrepreneurship) has become a broad umbrella under which a wide diversity of research is housed (Shane & Venkataraman, 2000).

4.6. Main empirical methodologies used

Regarding the empirical methodologies used in entrepreneurship-related papers, it is apparent that over the period in analysis, qualitative methods are favored, accounting for 51% of the total published articles (cf. Figure 7).

In dynamic terms, since the early 2000s, descriptive and exploratory analysis lost importance in favor of more causality testing methods, which may in part be explained by the availability of (large) databases. The absence of an axiomatic and theoretical corpus prevents researchers from making full use of causality and hypotheses testing methodologies.

As a recent field of research with a weak theoretical basis (recall the negligible amount of research devoted to theory building within rural entrepreneurship), qualitative analyses tend to be the ‘natural’ way of producing science which may then lead to ‘generalized theorization’ through ‘appreciative theorizing’ (Castellacci, 2006).

![Figure 7: Evolution of the empirical methodologies used, 1996-2013](Source: Own computation based on data gathered from Scopus SciVerse.)
4.7. Main countries under analysis

The bulk of the empirical research on rural entrepreneurship focuses on high (74%) or upper middle (13%) income countries. The lower income countries are seldom studied in the period in analysis (Figure 8). Indeed, there is even a decrease in their already negligible share.

Figure 8: Countries of analysis, 1996-2013

Note: World Bank country classifications gathered from WB (2013)
Source: Own computation based on data gathered from Scopus SciVerse.

Thus, research on rural entrepreneurship has addressed mainly developed countries. This may be explained by the fact that these countries are increasingly adopting specific macroeconomic policies, seeking to strengthen more open institutions, actively engaging in education, skill development and technology, not only in urban areas but increasingly targeting rural, laggard regions by fostering industrial policy and the promotion of entrepreneurship (UNDP, 2013).

Within the high income countries, the UK, Spain, Finland and Greece, together with the USA, are the most frequently studied countries (Figure 8). At least in the case of the European countries in question, such a trend may be explained by fact that, in recent years, significant changes have occurred in the rural areas of the EU. These changes have mostly taken place with regard to agricultural policy reforms and EU Structural Funds, the strengthening of rural development policies, international trade liberalization, and (more generally) the processes of globalization, technological change and localization (Stathopoulou et al., 2004). In the context of these developments, entrepreneurship emerged as a way of mobilizing the endogenous potential of rural territories (Baumgartner et al., 2013). In fact, the importance of small and medium enterprises (SMEs) to the economies of EU member states, most notably the UK, in terms of employment is today widely acknowledged (McElwee & Smith, 2012).
In the case of less developed countries, only China and India reveal a noteworthy increase in the number of empirical papers on rural entrepreneurship.

![Figure 9: Main countries of analysis, 1996-2013](Image)

*Note:* In relation to countries with High (Upper Middle)/Lower Middle] income, we consider the countries that appear in the analysis at least 10 (4) (1) times. No Low income country was analyzed in the set of articles considered.

*Source:* Own computation based on data gathered from Scopus SciVerse.

In relation to China, the government’s program of economic reforms had several implications for rural areas (Liu, 2011). Because these reforms, rural non-farm sectors were almost non-existent and began to develop gradually in the early 1980s (Mukherjee & Zhang, 2007). On the other hand, growing migration to rural areas has contributed to the development of rural entrepreneurship alongside agrarian activities (Murphy, 1999). This shift has prompted the study of the matter (cf. Hu & Wu, 2012; Xiaobing et al., 2011) and related topics such as social capital and social networks (cf. Zhao et al., 2010).

Likewise, the rural economy of developing countries has been a crucial subject of discussion in the development literature (Folmer et al., 2010), as in the case of India, which has a rural-based economy (Khanduja & Kaushik, 2008). In this context, the promotion of entrepreneurship and self-employment for poor people living in rural areas is vital (Monsen et al., 2012) and deserves more attention from researchers.

### 5. Conclusions

Rural entrepreneurship has drawn increasing attention from researchers in the last twenty years. Nevertheless, the evolution of the relative weight of articles on rural entrepreneurship has lagged behind that of articles on (general) entrepreneurship. This finding leads us to
suggest that rural entrepreneurship literature has been losing momentum. Seeing as rural entrepreneurship is often viewed as a strategy of development, this trend can be detrimental for the future of rural areas.

On the other hand, contrary to entrepreneurship in general, where most of the authors are affiliated to schools or universities in the USA (Teixeira, 2011), it is apparent from our bibliometric analysis that rural entrepreneurship is a ‘European concern’. Thus, it is not surprising that European countries are among the most studied. In fact, although the USA also figures at the top in the ranking of the most studied countries in rural entrepreneurship, the UK, Spain, Finland and Greece, all high-income countries, are the most frequently studied economies. The focus on these European countries may be explained by the fact that rural entrepreneurship has been considered in such economies as a path for endogenous development (CE, 2012; Dinis, 2006a). Portugal, however, sharing similar characteristics, concerns and constraints at this level, it has been somewhat overlooked in the analyses on rural entrepreneurship.

The studies on rural entrepreneurship are published in a wide range of journals. However, there are only three which have published ten or more articles on this subject: *Entrepreneurship and Regional Development, International Journal of Entrepreneurship and Small Business* and *Journal of Rural Studies*. About two thirds of the journals that have published the highest number of articles on rural entrepreneurship (26 journals representing 50% of the total number of articles published on rural entrepreneurship) can be considered scientifically prestigious as they are indexed in ISI. Indeed, although the proportion of articles published in the total number of journals with an impact factor has been decreasing, the average impact factor of those ISI-indexed journals has increased. This trend presumably indicates the increasing quality of the studies published in journals indexed in ISI.

In terms of the journals’ subject areas, 45% of the articles were mainly and increasingly published in journals whose subject areas are related to Management and Business, and 40% of the articles were published in journals related to Space (which showed a slight decrease in its relative importance over time). ‘Sociology’ and ‘Policies’ are areas that have lost weight over time or are actually negligible in studies on rural entrepreneurship. Such evidence indicates that rural entrepreneurship research has gradually shifted its focus to economics and business, losing to some extent its initial multidisciplinary scope.
This last finding is (at least partly) in line with the evolution of the topics on rural entrepreneurship literature. Indeed, with the notable exception of ‘Institutional frameworks and Governance’, macro-related topics, more precisely, ‘Growth & Development’ and ‘Rurality’, lost importance in favor of more micro-related topics, namely ‘Entrepreneurial psychological traits’ and ‘Organization-related characteristics’. The latter, together with ‘Policy measures’ and ‘Institutional frameworks and Governance’, can be considered as ‘emergent’ topics in the early 2000s as their weights were quite small or negligible, reaching in the more recent period (2010-2013), more expressive proportions in rural entrepreneurship literature. ‘Entrepreneurial psychological traits’ and ‘Embeddedness’ are nevertheless the most studied topics, representing each an average weight of 18% for the entire period. However, they present distinct dynamics, where ‘Entrepreneurial psychological traits’ increases in relative weight and ‘Embeddedness’ loses some importance, despite its recognized importance for entrepreneurial activity in rural areas (cf. Floysand & Sjoholt, 2007; Wang & Altinay, 2012).

Only one article addressed the topic of ‘History and roots of the concept of rural entrepreneurship’, which reveals that more research is needed on the foundations of rural entrepreneurship, namely its definition and the clarification of its theoretical boundaries. As a young field of research, the lack of a theoretical foundation justifies at least in part that a substantial number of authors have employed qualitative methods of analysis, encompassing 50% of the total papers published. Notwithstanding, a trend favoring causality methods at the expense of descriptive and exploratory analyses was found, which may be related to the increasing availability of (large) databases.

Summing up, more research is required to address issues related to ‘Organization-related characteristics’, ‘Policy Measures’ and ‘Institutional frameworks and Governance’, involving empirical analysis based on causality testing methods, and focused on lower income regions and/or countries. These seem to constitute interesting and challenging paths for future research.

References


CE. (2003). The future of Europe’s rural periphery, the role of entrepreneurship in responding to employment problems and social marginalization. Bruxelles: CE.


Editorial Board \{wps@fep.up.pt\}

Download available at: \url{http://wps.fep.up.pt/wplist.php}
also in \url{http://ideas.repec.org/PaperSeries.html}