BAE
Bio-based and Applied Economics

AIEAA
ASSOCIAZIONE ITALIANA DI ECONOMIA AGRARIA E APPLICATA

OPEN ACCESS

Citation: Meloni, C., Rocchi, B., Severini, S. (2023). A systematic literature review on the rural-urban economic well-being gap in Europe. *Bio-based and Applied Economics* 12(4): 305-321. doi: 10.36253/bae-13178

Received: May 27, 2022
Accepted: September 04, 2023
Published: December 31, 2023

Data Availability Statement: All relevant data are within the paper and its Supporting Information files.

Competing Interests: The Author(s) declare(s) no conflict of interest.

Editor: Fabio Bartolini

ORCID
CM: 0000-0003-0140-988X
BR: 0000-0002-7545-3093
SS: 0000-0001-5501-3552

A systematic literature review on the rural-urban economic well-being gap in Europe

Cesare Meloni[1,*], Benedetto Rocchi[2], Simone Severini[1]

[1] *University of Tuscia*
[2] *University of Florence*
*Corresponding authors. E-mail: melonicesare94@gmail.com

Abstract. A large amount of policy support is spent to foster the development of rural areas in Europe. However, empirical evidence on the well-being differential between rural and urban areas in Europe is scant and incomplete. The present study develops a systematic literature review on this topic, bridging a gap in research as a systematic analysis on the subject has not been developed as far as we know. It uses the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method. The review focuses on definitions of rural-urban most used in the literature, main dimensions of well-being that are analyzed, nature of the data and, finally, evidence that emerged regarding the differences in the various dimensions of well-being between rural and urban populations. The analysis confirms that available evidence is controversial and provides advice on how to develop new and better empirical analyses on this topic.

Keywords: well-being, rural areas, PRISMA, income gap, Europe.
JEL Codes: I31, I32, O18.

1. INTRODUCTION

European countries use large amounts of public resources to support the development of rural areas, particularly through the European Union (EU) rural development policy. The reasons for supporting rural areas, which tend to be in disadvantaged conditions (Shucksmith et al., 2006), are many and vary from improving their competitiveness, creating jobs outside the agriculture industry (new businesses, development of tourism related activities etc.), development of access and connections between cities and rural areas, development of basic infrastructure in villages, particularly in new EU member states.

Our analysis refers to the issue of the economic disadvantage of households living in rural areas. Very often, rural areas are less developed and characterized by smaller incomes and greater employment, educational and administrative problems than non-rural ones (Bock et al., 2015; Shucksmith et al., 2006, 2009; Sørensen, 2014). Furthermore, rural areas and small towns are more Eurosceptic than larger cities (Dijkstra et al., 2020). All these aspects make the gap between rural and non-rural areas very important for policy makers.

This paper investigates on this topic by means of a systematic literature review (SLR) focusing on Europe, filling a gap, as no similar analyses have been developed to the best of our knowledge. The study first aims at answering whether a well-being gap exists between rural and urban areas in Europe, focusing on the economic aspect of well-being. This also calls for answering the following additional questions: is there sufficiently robust and comparable empirical evidence to answer the research question? Are there any spaces to improve the analyses on this issue especially in terms of data and methodologies?

The results of this analysis allow to explore the complexity of the topic at stake, the large array of data, dimensions and methodologies used, and to provide a synthesis of the main empirical results.

As a consequence, the analysis paves the way for future research activities that could be developed on this relevant but somehow neglected issue.

The paper is structured as it follows. Next session describes the key concepts used in the analysis while section 3 describes the data and research methodology. Session 4 presents the results of the analysis while session 5 the discussion of them. Finally, session 6 concludes by providing a general judgment on what emerged from this analysis, its limits, and possible future developments.

2. KEY CONCEPTS USED IN THE ANALYSIS

2.1 Well-being definition

The concept of well-being is used very often, but there is no commonly agreed definition of what it is. In fact, the terms "well-being", "welfare", "quality of life", "happiness" and "life satisfaction" are often used interchangeably (OECD, 2013; Schnorr-Baecker, 2021). The OECD (2011a) argues that it concerns the satisfaction of various human needs, some of which are essential, and the ability to pursue one's goals, thrive and feel satisfied with one's own life. For this reason, well-being is a complex phenomenon and requires a multidimensional analysis approach (OECD, 2011a, 2020a; Schnorr-Baecker, 2021).

OECD (2011a, 2011b, 2020b) identifies three pillars and eleven dimensions to describe and measure the various components of people's well-being:

- Material living conditions (or economic well-being), which determine people's possibilities of consumption and their control over resources;
- Quality of life, which is defined as the set of non-monetary attributes of individuals that determines their life opportunities, and has a specific value in different cultures and contexts;
- The sustainability of the socio-economic and natural systems in which people live and work, essential for well-being to last over time.

The eleven dimensions are defined, as follows (OECD, 2011a, 2011b, 2020a):

- Material living conditions: i) Income and Wealth; ii) Jobs and Earnings; and iii) Housing;
- Quality of life: i) Health Status; ii) Work and Life Balance; iii) Education and Skills; iv) Civic Engagement and Governance; v) Social Connections; vi) Environmental Quality; vii) Personal Security; and viii) Subjective Well-Being.

This review focuses on papers including the economic dimension of well-being. Economic well-being refers to the material living conditions that determine people's consumption possibilities and their command over resources. This includes the ability of individuals to be able to consistently meet basic needs, such as food, housing, healthcare, transportation, education as well as the ability to make choices that contribute to security, satisfaction and personal fulfilment (OECD, 2011a, 2013, 2020a). Income and wealth enable individuals to meet their basic needs and thus help achieve overall economic well-being (OECD, 2011a, 2011b, 2013, 2020c).

Both the availability of jobs and the resulting earnings are relevant to an individual's well-being. Indeed, they offer people the opportunity to fulfill their ambitions, develop their skills and feel useful in the society in which they live (OECD, 2011). Societies with high levels of employment are also more politically stable, and healthier. Finally, having a home is at the apex of human material needs. Housing is the most important component of the expenses of many families and is fundamental for people's ability to meet some basic needs. Furthermore, any poor housing conditions can affect people's health, both mental and physical (OECD, 2011).

Very often looking at national averages can lead to wrong or distorted conclusions because they often mask large differences in how different parts of the population are doing. For this reason, the distribution of current well-being should be analyzed into three different types of gap (OECD, 2020b):

- Gaps between population groups;
- Gaps between those who are at very distant points of the distribution in each dimension;
- Deprivation (i.e., the share of the population that falls below a certain threshold, such as a minimum level of income, education or health).

Among possible comparisons between different population groups, the one based on the distinction between urban and rural areas can lead to interesting results. In fact, there are various aspects of well-being which are

evaluated considering the rural-urban dichotomy and which provide different results. Obviously, analyses of this kind require an objective and consistent definitions of "urban" and "rural", usually in terms of settlement size or population density. There are different definitions in each country, reflecting different social constructions of what is rural and urban in that country or geographic area (Shucksmith et al., 2009).

The empirical evidence available on this issue is controversial also because different definitions of urban-rural, dimensions of well-being, evaluation methods and data sets have been used. Indeed, recent analyses in Europe show very different results for alternative European countries because of the different social and economic conditions existing in member states. For instance, rural areas are significantly poorer in some countries while in others the situation is balanced, or poverty is mainly a non-rural problem (Bernard, 2019; Shucksmith et al., 2009).

2.2 History of the European Urban-Rural issue

The distinction between city and countryside, urban and rural, has long been rooted in European civilization. The etymological roots of the terms "urban" and "rural" extend at least as far as the classical Latin words urbs (city) and rus (open space) (Woods & Heley, 2017). Usually, the city or urbs has always been the object, with the rural always being the "other", the non-urban, the open space beyond the city and the precise boundary between rural and urban, therefore, has always been open to interpretation and controversy (Woods & Heley, 2017).

The history of the concept of urban-rural relations is one in which theoretical research and practical policy development are closely intertwined and difficult to separate. Following Copus (2011) it is convenient to divide it into two main phases. The first started in the mid-1950s and died out in the 1980s (Phase 1: Growth Poles, Cumulative Causation and National Policies). The second one started in the late 90s and still continues (Phase 2: The ESDP, SPESP, ESPON, INTEREG, the Territorial Agenda, RURBAN and City Regions). For a detailed explanation of the two historical phases, see Copus (2011).

In recent years the relationship between urban and rural areas has become a recurring theme in discussions on European rural policy. In very general terms it is seen as a promising component of a more territorial approach to meeting the development needs of lagging rural areas. This, of course, is not a new idea, but dates back to the 1950s and 1960s. However, in recent decades the reality and the connections between these two areas have become much more complex (Copus, 2011).

Rural areas have undergone profound economic and social changes since the first agricultural policies aimed at modernization and land management. As a result, rurality can no longer be defined solely in terms of agricultural activities and associated lifestyles. Indeed, since the publication of the key document on L'avenir du monde rural ("The future of rural society") in 1988, the European Commission has clearly identified, for the first time, the need for a territorial rural policy that goes beyond the agriculture and included local development and environmental concerns as key elements (European Commission, 1988).

The determination of rurality, being at the core of a relevant policy debate for almost 60 years (Mantino, 2021), depends on several factors (Féret et al., 2020): 1) the global contexts (i.e. the characteristics of the socio-economic systems of which rurality is a part); 2) the discourse and the political objectives pursued; 3) the social representations of the different categories of stakeholders. In Europe, each country has developed its own definition of rurality, often as a response to a particular political, administrative and wider territorial context, and in some cases as a result of national classifications of other factors (such as population, accessibility). Approaches and definitions are rarely similar between countries (Bontron, 1996; Depraz, 2007; Shucksmith et al., 2009).

Given the complexity of the topic, six approaches can be found in the literature to define the criteria of rural: the administrative approach, the morphological approach (population density), the locational approach, the functional approach, the landscape approach, and the combined approach (combination of at least two of the other approaches) (Féret et al., 2020; Mantino, 2021). Furthermore, it is important to realize that the rural areas can be located inside a functional urban area (FUA), outside but close to a FUA or in a remote area (OECD, 2020c). For all these reasons, the debates on "rural" and "rurality" definition are an issue that still needs attention in both research programs and policies.

3. DATA AND RESEARCH METHODOLOGY

This paper uses the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), which is characterized by a rigorous and objective selection procedure that allows to increase the reliability of the final output. The approach is based on a statement that helps authors to improve reporting of the systematic review and meta-analysis (Liberati et al., 2009). The PRISMA statement consists of a checklist of 27 items divided into 7 sections / topics and a four-step flow chart.

The review uses the three most important platforms for researching scientific literature database: Scopus; Web of Science core collections (WoS); Science Direct (SD). These are easily accessible and have easy-to-use search tools (Gebre et al., 2021; Li et al., 2018). More research databases and additional methods were used to be able to adequately identify all the literature related to the topic of interest (Bramer et al., 2016). Indeed, a single database is not considered sufficient to retrieve all references for a systematic review (Bramer et al., 2017).

To try to intercept most of the existing works on the research topic, the PRISMA prospectus allows authors the possibility of adding papers from sources other than the identified databases. Therefore, we have added 15 additional articles that are considered important to address the research questions.

After identifying the goal of the search, keyword detection and eligibility criteria setting follows. The keywords chosen were: ((“income” OR “well-being” OR “welfare”) AND (“urban” OR “non-rural”) AND (“rural” OR “non-urban”) AND (“difference*” OR “gap*” OR “inequalit*”) AND (“europe” OR “eu”)). These keywords allowed for a thorough investigation and, at the same time, were relevant to the research question. Regarding the eligibility criteria only publications in English were considered and editorials and letters were excluded. Also, some sub-categories were excluded because they were deemed inconsistent in principle with the topic of our interest (i.e., medical analysis).

Studies were selected from the three databases by searching for keywords in abstracts, keywords, and titles of the research articles. After eliminating the duplicate articles, the studies were first selected by analyzing the title and abstract and subsequently reading the entire text of the remaining articles.

The search yielded a total of 158 articles, of which 143 from the three electronic databases used in this SLR and 15 added by the authors because considered important and particularly focused on the research topic, but they were not intercepted in the three databases used. By eliminating duplicates, the number of articles was reduced to 147. We then went through the articles, analysing their titles and abstracts, and excluded further 86 records, reducing the total of articles to 60.

Subsequently, after reading each single article, the eligibility criteria were applied, and another 20 studies were eliminated. Therefore, 40 articles were included in the review and formed the basis for the remaining of the analysis. In this phase, as suggested by the PRISMA guidelines, the description of the study selection process was reported (Figure 1).

The quality assessment procedure is one of the steps in this SLR process differentiating it from other types of reviews (Bimbo et al., 2017; Littell, 2006; Ma & Chen, 2020). Quality assessment of papers included in a SLR is necessary to assess the relevance of the studies to answer the research question and therefore to establish the strength and credibility of the SLR’s findings and conclusions (Yang et al., 2021). Quality assessment consists in assigning a score to each paper included in the SLR, based on pre-defined criteria. The literature quality assessment was not easy to perform given the high heterogeneity of the methodological approaches, and the lack of standardized quality assessment tools for studies belonging to the social science field. Therefore, conventional measures of study quality were not appropriate in our case.

So, similarly to Bimbo et al. (2017), Cox et al. (2015), Mirra et al., (2021) and Sulaiman et al. (2021) an ad hoc quality assessment tool was developed using the Instrument Critical Appraisal Checklist provided by Joanna Briggs Institute (2017) as a reference document. Additionally, based on the authors’ expertise, some studies characteristics considered important were included in the assessment of study quality. Eventually six criteria were identified (Table A1 in the Appendix).

The first criterion considered whether the analysis performed was qualitative or quantitative in nature. The adequacy of the sample size used was the second criterion considered. The third criterion was if there was a well-defined research question. The remaining three criteria were whether the outcomes were measured in a valid and reliable way, whether there was a clear definition of the rural-urban concept and whether well-being differences between rural and urban areas were addressed directly or just mentioned.

The studies identified were rated as low, medium, or high quality, based upon a combination of the scores assigned to each of the six criteria (Bimbo et al., 2017; Cox et al., 2015; Mirra et al., 2021). The more papers classified as “high quality” are present, the stronger and more robust the results and conclusions of the SLR will be.

A study was considered as “high quality” when showing “high” rating on four or more criteria; “medium quality,” with three “high” or two “high” and two “medium”. Finally, we classified the study as “low quality” in case of zero, one or two high rating (excluded the case of two high and two medium). Equal weighting was given to each criterion (Bimbo et al., 2017; Cox et al., 2015). The results of the quality assessment are reported in Table 1.

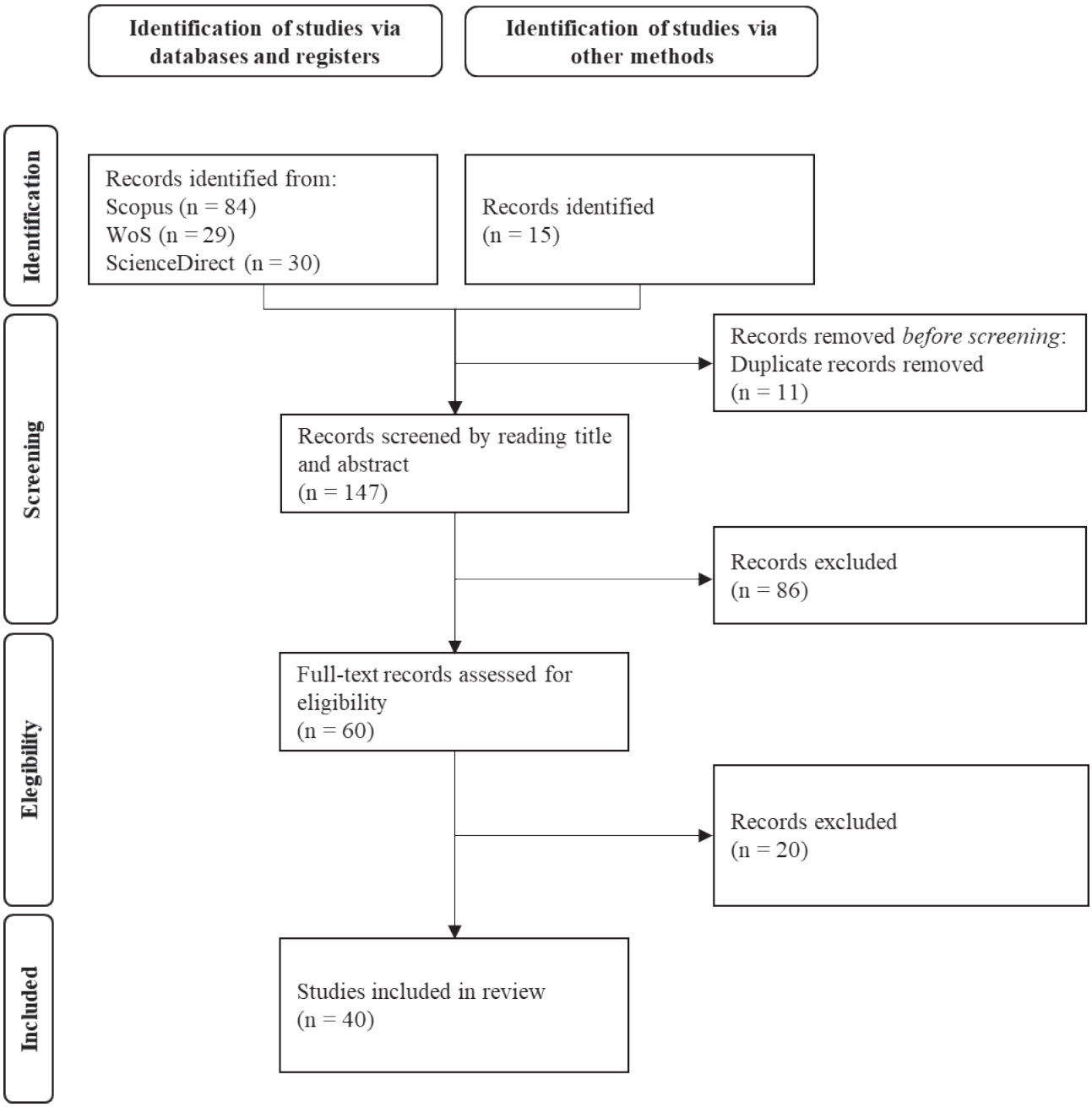

Figure 1. Articles selection process. Source: Own elaborations.

4. RESULTS OF THE ANALYSIS

The 40 publications are distributed over time as represented in the figure below. There is a growing trend from 2000 to today (Figure 2). First, the definitions of rural-urban used in the articles were identified and classified. The next step was to frame which dimensions of well-being were analyzed in the selected studies.

This means evaluating how many articles study income, education, subjective well-being, etc., following the eleven economic dimensions presented by the OECD (2011c). All the research objectives pursued in the selected literature were also analyzed, as well as the nature of the data (macro or micro approach, cross-sectional, panel, time series) and the methodologies adopted to achieve the expected results.

Table 1. Quality assessment.

Author and year	What it was the methodology researchers used in this study?	Was Sample size adequate?	Was there a well-defined question?	Were the outcomes measured in a valid and reliable way?	Was there a clear definition of rural and urban?	Well-being differences between rural and urban areas addressed directly or just mentioned?	Overall rating
Schnorr-Baecker S. (2021)	Quantitative	yes	yes	Yes	yes	yes	High
Slettebak M.H. (2021)	Quantitative	yes	yes	Yes	yes	yes	High
Ayala et al. (2021)	Quantitative	yes	yes	Yes	yes	yes	High
Novák et al. (2020)	Qualitative	yes	yes	No	yes	no	Medium
Piras S. (2020)	Quantitative	no	yes	Yes	no	no	Medium
Cipane K. and Sloka B. (2020)	Quantitative	yes	yes	Yes	no	yes	High
Wochner T. and Holzhausen A. (2019)	Quantitative	yes	yes	Yes	yes	yes	High
Viganóa et al. (2019)	Quantitative	yes	yes	Yes	yes	yes	High
Bernard J. (2019)	Quantitative	yes	yes	Yes	yes	yes	High
Grzega U. (2019)	Quantitative	yes	yes	No	no	no	Medium
Sloka et al. (2019)	Quantitative	yes	yes	Yes	no	no	High
Tobiasz-Adamczyk B. and Zawisza K. (2017)	Quantitative	yes	yes	Yes	yes	yes	High
Bruder E. and Unal H. (2017)	Quantitative	yes	yes	No	yes	yes	High
Mattioli G. (2017)	Quantitative	yes	yes	Yes	yes	no	High
Zarnekow N. and Henning C.H.C.A. (2016)	Quantitative	yes	yes	Yes	yes	yes	High
Binelli C. and Loveless M. (2016)	Quantitative	yes	yes	Yes	yes	yes	High
Bock et al. (2015)	Qualitative	yes	yes	No	no	yes	High
Alexandri et al. (2015)	Quantitative	n/a	yes	No	no	yes	Medium
Chivu et al. (2015)	Quantitative	yes	yes	No	no	no	Medium
Zwiers M. and Koster F. (2015)	Quantitative	yes	yes	Yes	yes	yes	High
Weziak-Bialowolska D. (2014)	Quantitative	yes	yes	Yes	yes	no	High
Sørensen J.F.L. (2014)	Quantitative	yes	yes	Yes	yes	yes	High
Marcotullio et al. (2014)	Quantitative	yes	yes	Yes	yes	no	High
Stanef M.R. (2012)	Qualitative	yes	yes	No	yes	yes	High
Sørensen J.F.L. (2012)	Quantitative	yes	yes	Yes	yes	yes	High
Lengsfeld J.H.B. (2011)	Quantitative	yes	yes	Yes	yes	no	High
Vicente M.R. and López A.J. (2011)	Quantitative	yes	yes	Yes	yes	no	High
Rodríguez-Pose A. and Tselios V. (2010)	Quantitative	yes	yes	Yes	yes	no	High
Shucksmith et al. (2009)	Quantitative	yes	yes	Yes	yes	yes	High
Rodríguez-Pose A. and Tselios V. (2009)	Quantitative	yes	yes	Yes	no	no	High
Macours K. And Swinnen J. F. M. (2008)	Qualitative	yes	yes	Yes	no	yes	High
Bertolini et al. (2008)	Qualitative	yes	no	No	yes	no	Low
Havard et al. (2008)	Quantitative	yes	yes	Yes	yes	no	High
Nummela et al. (2008)	Quantitative	yes	yes	Yes	yes	yes	High
Van Hooijdonk et al. (2007)	Quantitative	yes	yes	Yes	yes	no	High
Shucksmith et al. (2006)	Quantitative	yes	yes	Yes	yes	yes	High
Hoggart K. andCheng S. (2006)	Quantitative	yes	yes	Yes	yes	no	High
O'Brien E. (2005)	Qualitative	no	yes	No	no	no	Low
Gerdtham U. and Johannesson M. (2001)	Quantitative	yes	yes	Yes	yes	no	High
Rietveld P. and Ouwersloot H. (1989)	Quantitative	yes	yes	Yes	yes	yes	High

Source: Own elaborations.

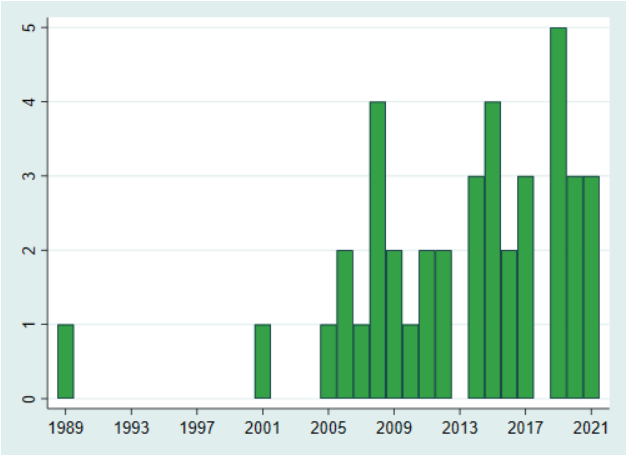

Figure 2. Number of publications per year. Source: Own elaborations.

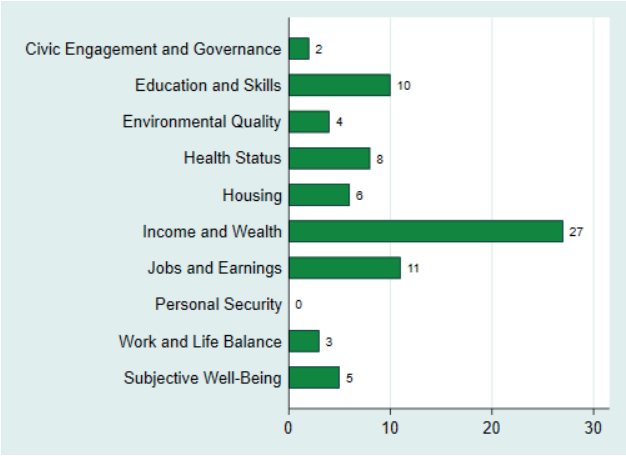

Figure 3. Number of publications per topic. Source: Own elaborations.

Finally, for each dimension of well-being, the main results in terms of differences in well-being (or individual dimensions of it) between rural and urban areas were summarized and compared.

To resume the structure of the results of our work, for each study included in the review, the dimensions that were analyzed, classified, and compared are the following:

- Definition of the rural/urban concept;
- Main dimensions of well-being observed (i.e. income, education, work-life balance, etc.);
- Aims of the research;
- Nature of the data (macro/micro, cross-sectional, panel or time series) and applied methodologies;
- Main findings related to differences in the various dimensions of rural and urban areas well-being.

As regards the definition of rural and urban, the most widespread typology in the works examined is based on the concept of population density. In fact, 22 out of 40 studies use definitions of rural and urban based on population density, 8 use other definitions and 10 do not provide any definition at all.

In 5 of the 8 studies that use other ways of defining rural and urban, the population density represents only one dimension of the definition, while in 3 studies the interviewee subjectively indicates and classifies the area in which he/she lives as rural or urban. It should be noted that of the 30 studies that provide a definition of rural and urban, 12 use simple rural-urban dummies while 18 use categorical variables, which can range from 3 to 8 categories (i.e. rural, sub-rural, sub-urban, urban, etc).

As for the dimensions of well-being (Figure 3), the most studied are income and wealth (27), job and earnings (11), education and skills (10), health status (8) and housing (6). 27 papers analyse income, of which only 8 study the job and employment as well as income, with only 5 publications dealing also with housing.

Civic Engagement and Governance and Social Connections are discussed jointly. Aims of the studies are very different both for the dimension of well-being investigated and for the centrality and importance of differences between rural and urban. Some studies investigate the relationship between a dimension of well-being and its determinants, including the rural or urban residence, or how one dimension of well-being affects the total. In these studies, the dimension of well-being is central, while the variable defining the rural-urban areas is only one of the determinants.

Therefore, the real main objective of these works is not so much to observe a difference in well-being, or in its dimensions, between rural and urban areas. Obviously, there are also studies in which the difference between rural and urban is the central aim.

Regarding the characteristics and nature of the data used, of the 40 studies reviewed in this SLR, 63% use microdata. Indeed, 26 studies use micro data, 4 macro data, 5 both micro and macro data and 5 do not use quantitative analyses. Regarding the temporal nature of the data, of the 35 quantitative studies, 27 studies use cross-sectional data, 6 use panel data and 2 use time series.

The review showed that there are both studies based on individual data (individual households) and on regional data. Obviously, this difference must be taken into account when comparing the results of the different types of analyses. In 23 papers the level of analysis is NUTS0 (Country or group of countries), in two papers is NUTS1 and NUTS2 together, in 15 papers NUTS3 or more detailed territorial levels. In studies with less spa-

tial detail, the tendency is to perform analyses on individual/household data and compare rural and non-rural individuals/households within the country. As the territorial detail of the analysis tends to increase, the greater the tendency to compare rural areas with non-rural ones (regions, provinces, etc.) without using individual/household data.

From a methodological point of view, it emerged that among the studies mainly focusing on the gap between rural and urban, the comparison of the averages between the two groups through descriptive statistics and / or hypothesis tests (e.g., t-test, χ^2-test) are the most popular methods (14 papers).

Only few studies combine the comparison of the means with the comparison of the medians. In papers where the rural-urban differential is not the central topic, but only one of the many determinants of well-being or of a specific dimension, linear and more frequently non-linear regression models are used, such as logit, ordered logit or probit. Pearson's correlation is frequently used as a preliminary analysis (11 papers).

Regarding methodologies, it is important to underline that in various works the authors calculate and use indices and coefficients of various kinds, in relation to the objective pursued. These include the Gini Coefficients, the Lorenz Curve, the General Psychological Wellbeing Index, the Multidimensional Poverty Index and the Theil Index. Next section reports and summarises the main results of the different studies divided by dimension of well-being.

5. DISCUSSION

This section discusses the main results looking at the eleven[1] dimensions of well-being already described in sections 2 and 4. In this approach, rural and non-rural areas have been treated as homogeneous withnin each of the two. However, this is an obvious oversimplification, as there are significant differences within these areas given that the degree of rurality of the different geographical realities also varies. This has been decided based on a compromise between the complexity of the classification of rural/non-rural areas and the aggregation of the results of 40 papers. In the following subsections we try to contextualize the results considering the geographical context in which the analysed works were carried out. Even knowing that the comparison between different geographical areas, in different periods, has its limits, an attempt has been made to create a synthetic discussion of the 40 papers that is as homogeneous and coherent as possible.

5.1 Income and wealth

In general, in Europe, the analyzed studies have highlighted a lower income situation in rural areas than in urban areas (Alexandri et al., 2015; Bock et al., 2015; Chivu et al., 2015; Grzega, 2019; Rodríguez-Pose & Tselios, 2009; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009; Sloka et al., 2019; Stanef, 2012). What has been observed in recent years in Europe is a convergence between the two groups, characterized by a notable growth in rural areas and a less sudden growth in urban areas (Grzega, 2019; Wochner & Holzhausen, 2019). Furthermore, income differences between urban and rural areas change according to the wealth of the country of reference. In fact, urban-rural income differences are mild in the richest countries and most progressively marked in countries with a lower average income (Alexandri et al., 2015; Bock et al., 2015; Chivu et al., 2015; Grzega, 2019; Rodríguez-Pose & Tselios, 2009; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009; Sloka et al., 2019; Stanef, 2012). Therefore, there is evidence that the income gap of rural areas compared to urban ones decreases as the country's average income increases.

Income differences between urban and rural areas in poorer countries may be less extreme than expected when considering domestic self-supply of food. Indeed, growing food and raising animals is a very common activity in rural areas of low-income countries, which helps to mitigate the existing income gap. Therefore, urban-rural differences in the poorest countries are lower than what one would expect observing the only monetary income differences (Alexandri et al., 2015; Bock et al., 2015; Chivu et al., 2015; Grzega, 2019; Rodríguez-Pose & Tselios, 2009; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009; Sloka et al., 2019; Stanef, 2012). Furthermore, as reported by Stanef (2012), the growing importance of extra-agricultural revenue in rural families is reducing the income gap between rural and urban areas. The income differences between the two groups concern and reflect the structure of consumer expenses. Indeed, rural families spend relatively more on goods and services that satisfy their primary needs and less on those that satisfy secondary needs (Alexandri et al., 2015; Grzega, 2019).

Obviously, there are several exceptions to this rule. Indeed, in some studies lower income levels characterise urban areas while higher income levels are found in the rural areas (Rietveld & Ouwersloot, 1989; Zwiers & Koster, 2015). These results seem to indicate that high-

[1] Civic Engagement and Governance and Social Connections are discussed jointly.

income individuals, considering rural areas as places characterized by a better quality of life, leave urban areas and settle in more rural areas (Viganó et al., 2019; Zwiers & Koster, 2015). Sørensen (2014) found a positive correlation between income and satisfaction with life and that the inhabitants of rural areas have greater satisfaction with life than the inhabitants of the cities. As regards rural-urban perceived income differences, it was found that high-income urban residents are less likely to perceive large income differences than high-income rural residents, while there is no urban / rural difference for individuals with low income (Binelli & Loveless, 2016).

The concept of ownership also falls within the definition of Income and Wealth provided by the OECD (2011c). In Germany, car ownership is greater in rural areas, where it is essential for travel as the access to public transport services is lower (Mattioli, 2017; Schnorr-Baecker, 2021).

Regarding poverty, similar poverty reduction is occurring over time in Europe in rural and urban areas. However, there continues to be more poverty in rural areas (Macours & Swinnen, 2008; Piras, 2020). The concept of poverty seems to partly follow the logic of income analysed above. In fact, in countries with the lowest average income, the worst situation regarding poverty is observed in sparsely populated areas, while a better situation occurs in densely populated areas. In richer countries, on the other hand, poverty is relatively higher in densely populated areas than in rural areas (Weziak-Bialowolska, 2014).

Regarding poverty in Europe, the theme of the universal increase in poverty and deprivation levels as a problem of rural areas alone has been defined as wrong (Bernard, 2019). Indeed, as noted, rural-urban poverty disparities not only vary in magnitude, but, in some countries, disparities are completely reversed in favor of rural areas. According to Bernard (2019), the increase in poverty in rural areas can be observed in countries with a lower population density in rural areas (reduced accessibility to opportunities for local people), in countries with a higher percentage of farmers (especially those who work on very small farms), in post-socialist transition countries and in countries with generally lower levels of economic development and reduced living standards. As mentioned above, poverty tends in some cases to become more and more an urban phenomenon. Between 1996 and 2002 the poverty rate increased in large cities and decreased in small towns and rural areas (Bertolini et al., 2008).

However, in a cross-section perspective, rural districts still have the highest percentage of poor people. Furthermore, according to Bertolini et al. (2008), poverty rates drop further and significantly in rural areas when corrected for the fact that many rural families dwell in property homes and do not pay rents. Further work that goes in the same direction is that proposed by Rietveld & Ouwersloot (1989) in the Netherlands, according to which urban poverty has become a more serious and more widespread phenomenon than rural poverty.

According to Bruder & Unal, 2017, deprivation rates are related to the average equivalent income of the country. Thus, deprivation is not only an indicator of ownership of goods and equipment but also of the level of income and poverty of households. As for the works on deprivation in Europe, some evidence suggests a lower level in rural than in urban areas (Ayala et al., 2021). In the paper of Havard et al. (2008), relating to the metropolitan area of Strasbourg in France, the peripheral and sparsely populated areas (rural municipalities) that create a peri-urban ring around Strasbourg are characterized by low deprivation. On the contrary, socio-economic deprivation is accentuated as we approach Strasbourg and reaches its maximum in the center of the metropolitan area.

5.2 Housing

Housing is one of the key dimensions of an individual's material location and quality of life, in both rural and urban Europe (Alexandri et al., 2015; Bock et al., 2015; Chivu et al., 2015; Grzega, 2019; Rodríguez-Pose & Tselios, 2009; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009; Sloka et al., 2019; Stanef, 2012). Housing problems are more severe in poorer European countries, in the sense that dwelling sizes, housing conditions and facilities are much worse, although levels of housing satisfaction do not differ significantly. The lack of space, the size of dwellings and the scarcity of affordable housing, including the high cost of renting or owning, are more common in urban areas, especially in richer countries (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009). In contrast, poor physical condition and lack of amenities (e.g., damp, rot and lack of indoor sanitation) are more common problems in rural areas, especially in poorer countries (Bertolini et al., 2008; Bock et al., 2015; Shucksmith et al., 2006, 2009). Overall, there is almost no difference between urban and rural areas in housing satisfaction levels (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009). Regarding the financial burden of housing costs, it seems to be no significant difference between urban and rural areas (Cipane & Sloka, 2020).

5.3 Jobs and earnings

In richer countries, unemployment in urban areas is higher than in rural areas, while in lower-income countries, where unemployment is higher, it is more of a rural phenomenon (Alexandri et al., 2015; Bock et al., 2015; Chivu et al., 2015; Grzega, 2019; Rodríguez-Pose & Tselios, 2009; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009; Sloka et al., 2019; Stanef, 2012). The contention that rural areas have shared the shift to a service-based economy is not confirmed across enlarged Europe, except in the richest countries where most rural respondents work in white-collar and managerial occupations. Indeed, even if agriculture plays a declining role, it still has a significant weight in rural employment in Europe (Bertolini et al., 2008; Stanef, 2012). In EU countries with medium / low GDP, the rural employment structure has a high level of blue-collar workers, presumably in industrial employment, which is substantially higher than in the urban areas of these countries (Alexandri et al., 2015; Bock et al., 2015; Chivu et al., 2015; Grzega, 2019; Rodríguez-Pose & Tselios, 2009; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009; Sloka et al., 2019; Stanef, 2012). It may be that the rural context of unemployment in these countries is more of deindustrialization than of peasant transition. Interestingly, women in rural areas feel less stressed at work than men, while the opposite is true in urban areas (Alexandri et al., 2015; Bock et al., 2015; Chivu et al., 2015; Grzega, 2019; Rodríguez-Pose & Tselios, 2009; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009; Sloka et al., 2019; Stanef, 2012). Viganó et al. (2019), reported that being a worker in rural areas has a negative impact on well-being, while positive in urban areas; on the contrary, being office worker in rural areas has a positive impact on well-being and a negative impact in urban areas. This could be explained by considering the corresponding type of tasks for blue-collar and white-collar workers in the two areas. A worker in a rural area gets a low wage compared to hard work, while a worker in the city gets a higher wage. On the other hand, being a white-collar employee in a rural setting could mean running a business in the agricultural sector, while a white-collar employee in the city could be someone with a high corporate position, a high level of stress and a low level of well-being. Sørensen (2014) found a negative correlation between unemployment and life satisfaction and that rural dwellers have higher life satisfaction than urban dwellers. Also in this case, there are several works with different results. For example, according to the paper by Zarnekow & Henning (2016), the determinants of quality of life, including employment, do not differ according to the degree of urbanisation of the respondent's home region, or unemployment is lower in urban areas than in rural areas. (Schnorr-Baecker, 2021).

The subject less studied in the literature is labor market. The results of Slettebak (2021) show that the effect of EU11 migrant workers on natives' income inequality is significant in rural municipalities, but weaker and not statistically significant in urban areas. This, according to the author, could be due to small and less diverse labor markets in rural areas. While natives in urban areas may have different ways of adapting to changes in competition, such as changing jobs or employment, their rural counterparts may have fewer opportunities.

Finally, as regards rural-urban differences in women's wages, it appears that wage payments for similar jobs, for people with equivalent human capital endowments, differ very little between rural and urban areas (Hoggart & Cheng, 2006).

5.4 Health status

With regard to health status, it is useful to distinguish between access to health services and the actual state of health (self-assessed health, incidence of morbidity and/or mortality, etc.). Regarding the former, urban areas generally have more infrastructure and access to health services tends to be easier for urban dwellers. However, Viganó et al. (2019) claim that in Italy there are no differences for Health Indicator in any of the 4 areas (rural, semi-rural, semi-urban, urban), probably because the Italian national health system is quite widespread in the country. Comparing these results with those of Weziak-Bialowolska (2014) at the European aggregate level, this absence of differences between the two groups is probably due to the fact that the richer a country is in terms of health, the smaller the differences between rural and urban areas; the poorer a country is in terms of health, the greater the differences between areas with different levels of degree of urbanisation.

According to the work of Sørensen (2014), both at the aggregate level of European Union and at the level of three macro groups according to the GDP of the countries, self-reported health is positively and strongly correlated with life satisfaction. Also, rural dwellers have higher life satisfaction than urban dwellers. Indeed, the countryside landscape in rural areas plays an important role in promoting health because it has been affirmed that the great advantages of the rural context is the direct link with nature (Novak et al., 2020). According to Novak et al. (2020) the countryside can serve mental well-being by restoring attention, inducing positive

thoughts and emotions, and reducing people's stress levels. The countryside responds to the needs of promoting physical health by being a perfect place for outdoor activities. Sport as a direct influencer of physical and mental health promotion is strongly linked to local communities and rural citizens who are attentive to their physical and mental health. Finally, the countryside can foster the induction of social well-being when it promotes social integration, when it provides support and social security, and when it strengthens social engagement and participation (Novak et al., 2020). These results can be read in the light of another aspect that reinforces the idea that health in rural areas is better than in urban areas: the risk of morbidity and mortality is higher among urban dwellers compared to rural dwellers. According to van Hooijdonk et al. (2007), urban and highly industrialized areas tend to be characterized by a worse natural environment, which could have direct and indirect effects on human health. Greater air or noise pollution can have a direct effect on respiratory and hearing diseases, just as the absence of green areas could cause a drastic reduction in outdoor physical activities. These features of densely populated areas can indirectly generate higher mortality and hospitalization rates in urban areas (van Hooijdonk et al., 2007).

Other aspects, related to the age of individuals, can influence the self-reported state of health. Indeed, in the work of Tobiasz-Adamczyk & Zawisza (2017) on a sample of elderly Polish people, several predictors of self-rated health in urban and rural residents were found, such as loneliness and networking and social participation. A relationship between loneliness and poor health self-assessment was observed only in rural residents. In urban residents, social networking and social participation significantly predicted positive self-reported health.

Another study that confirms the positive and significant relationship between social capital, self-assessed health and urban area is that of Nummela et al. (2008). According to the authors, in fact, only in the urban area with high social capital a good health self-assessment was found. As with the other dimensions of well-being observed so far, there is no lack of contradictory results for health status. Indeed, the determinants of quality of life, including health status, proposed by Zarnekow & Henning (2016) do not differ with respect to the region of origin of the respondents.

5.5 Work and life balance

In recent years, the issue of work-life balance has emerged as a prominent topic in sociology. The ability to reconcile work and family life, working hours and other time constraints are the most studied issues in this area. The results show that average weekly working hours are increasing for clusters in poorer countries but are also consistently higher in rural areas than in cities. (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009).

Problems of reconciliation between work and private life are, however, widespread both in urban and rural areas and in rich and poor countries (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009). In relation to pressures at work, however, being too tired from housework is the most surprising aspect cited by respondents, regardless of where they live (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009).

Some gender differences emerge in work-life balance in rural but not urban areas (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009). More clearly, women with partners and children in rural areas of richer countries have fewer problems than men in achieving a satisfactory work-life balance. Moreover, work-life balance problems are widespread in both urban and rural areas, and no support was found for the idea that work-life balance is more satisfactory in rural areas (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009).

5.6 Education and Skills

Access to education improves people's employment prospects, as well as developing their skills in many other ways, and its inherent benefits (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009). Indeed, satisfaction with life increases with education (Sørensen, 2014). There are notable differences both between groups of countries and between rural and urban regions across Europe. Education levels of people living in urban areas are higher across Europe than in rural areas (Bock et al., 2015; Rodríguez-Pose & Tselios, 2011; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009; Weziak-Bialowolska, 2014). Indeed, in rural areas more people have only primary education and fewer have a university degree (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009). This could be related to the nature of jobs and labor markets in urban areas, which attract more skilled and educated people. Consistent with this, Slettebak (2021), argues that labor migrants have a greater impact on the employment status of locals and lead to greater competition in rural areas than in urban ones, since the level of general education is much lower in rural areas.

The issue linked to distance from schools is also interesting. In France, for example, the distance from primary

schools for rural municipalities increased from 1980 to 1998, due to a strategy of grouping schools when the number of pupils became too small, while the average distance from secondary schools decreased (Bertolini et al., 2008). At the gender level, the differences are small, although in rural areas of the poorest countries, education levels are generally lower among women (Bock et al., 2015; Schnorr-Baecker, 2021; Shucksmith et al., 2006, 2009).

The use of the Internet, a potential indicator of a more general computer literacy, is higher in urban areas. This is true across the EU, although urban-rural differences are greater in poorer countries (Schnorr-Baecker, 2021; Shucksmith et al., 2006). Regarding the digital divide, there does not seem to be a rural-urban divide (Vicente & López, 2011) given that the degree of urbanization is clearly not one of the main criteria that determines the digital divide (understood by the authors as digital inequality and it is defined as disparity in the quantity of Internet usage), but education, age, and main vocational activity do indeed mark digital boundaries in many of the observed countries (Lengsfeld, 2011).

In summary, education levels are generally higher in richer European countries and in urban areas. Of course, there are exceptions. Indeed, according to the results obtained by Weziak-Bialowolska (2014) in Luxembourg and the United Kingdom, the least educated are people from densely populated areas, while in Malta and Germany there is hardly any difference. Moreover, and surprisingly, education levels in middle-income countries are lower than in low-income countries, mostly former Soviet countries, in both urban and rural areas. This may reflect a greater emphasis on secondary education in these countries in the past in order to reduce inequality (Bock et al., 2015; Shucksmith et al., 2009).

Furthermore, in the study by Viganó et al. (2019), education does not reach statistically significant levels in any of the 4 areas (rural, semi-rural, semi-urban, urban) as a determinant of individual well-being.

5.7 Civic engagement and governance and social connections

The human being is a social creature, therefore the frequency with contacts with others and the quality of their personal relationships are crucial determinants of well-being (OECD, 2011c). Activities are more satisfying when shared with others. Additionally, social networks can provide material and emotional support in times of need, as well as provide access to jobs and other opportunities. The nature of social interactions also has broader implications beyond the immediate social circle, affecting levels of trust within the community, which is an important driver of other outcomes, including democratic participation, crime, and health (OECD, 2011c). Participation in society and community life, for example through the expression of the political voice, is essential for individual well-being and allows people to develop a sense of belonging and trust in others (OECD, 2011c).

Considering the foregoing, the development of social capital is considered primarily significant where inadequate financial means are available for further economic and labor market growth. However, if social capital is exploited to pursue the objectives of small groups, it can also weaken social harmony and compromise economic performance. Social capital seems to be more prevalent in rural areas than in urban areas (Stanef, 2012): emotional networks (i.e., the commonality of mutual trust) are in many cases anchored to local social life, which also influences the interaction between businesses and / or the labor market.

Furthermore, the social network seems to positively affect the subjective well-being of rural elderly people, as opposed to loneliness which instead negatively impacts both rural and urban elderly (Tobiasz-Adamczyk & Zawisza, 2017). Other works in this topic present different results. Indeed, according to Sørensen (2012), no evidence of increased social and institutional trust has been found in rural areas of Denmark. The data did not confirm the provisional hypothesis of greater institutional trust in rural areas. At the same time, unpaid voluntary work in associations was found to be higher in rural areas.

5.8 Environmental quality

Contact with nature has benefits for people, often related to health. While the urban population has to look for pieces of nature in their neighborhood, the rural population lives their life in a much more direct contact with nature (Maller et al., 2005). Rural areas appear to enjoy better environmental quality than cities, positively affecting the mental and physical health of those who live there (Novak et al., 2020). As for other environmental aspects, such as land use, obviously this is a problem mainly related to urban areas (Schnorr-Baecker, 2021). Regarding waste management in Germany, (Schnorr-Baecker, 2021) does not obtain an obvious difference related to the degree of urbanization of the area. The following is an intriguing and somewhat unexpected result discovered by Marcotullio et al. (2014): European cities produce less CO2-equivalent emissions per capita than non-urban areas. Direct CO2-eq emissions per capita are lower in urban areas than in non-urban areas in all sub-regions analyzed (Eastern, Western, Northern, Southern, and entire Europe), most likely because urban

areas are more carbon-efficient than non-urban areas. Eastern Europe is an outlier, with fairly similar values. This could be due to increased greenhouse gas emissions from heavy industries and/or energy production.

5.9 Personal security

No studies relating to personal security in Europe have emerged from this SLR.

5.10 Subjective well-being

The last key component of quality of life examined from an urban-rural perspective is people's level of subjective well-being, optimism, and happiness. The findings in the literature on subjective well-being in Europe do not seem to support the assertion that quality of life, indicated by the degree of life satisfaction and happiness, is higher in rural areas (Bock et al., 2015; Shucksmith et al., 2006, 2009). Life satisfaction and happiness are higher in richer countries, as expected, but urban-rural differences are modest or zero, and while the EU-12 significantly favours rural areas, the balance is marginally in favor of urban areas elsewhere (Bock et al., 2015; Shucksmith et al., 2006, 2009). Indeed, levels of optimism and happiness, in both rich and poor countries, are significantly higher in urban areas (Bock et al., 2015; Gerdtham & Johannesson, 2001; Shucksmith et al., 2006, 2009). Most interestingly, subjective measures of happiness and life satisfaction do not seem to reflect urban-rural differences in the objective quality of life in poorer countries. Such differences in subjective well-being appear to be quite small compared to large differences in some of the objective material indicators. The study conducted in Poland on the elderly component of the population by Tobiasz-Adamczyk & Zawisza (2017) is very interesting. Indeed, the social network influences subjective well-being in rural dwellers. Furthermore, poor appraisal of subjective well-being in old age increases with larger levels of loneliness and a rising number of chronic diseases in both urban and rural settings.

In conclusion, living in rural or urban areas does not appear to have statistically significant effects on subjective quality of life (Bock et al., 2015; Shucksmith et al., 2006, 2009).

6. CONCLUSIONS

The literature does not provide precise and robust answers on the existence of a well-being differential between rural and urban areas. Very often the results achieved by different studies do not agree with each other even referring to the same geographical area. Moreover, the definition of what can be called rural (and also which are the differences within the rural category) and what is urban varies between different studies.

However, what emerges from this analysis is that, considering various dimensions of well-being, a gap between rural and urban in Europe seems to exist in favor of the urban one. However, this difference tends to be minimal or even to some extent reversed in those countries with high income, while the rural-urban gap tends to widen as the country's income decreases. However, it should be noted that a growing gap exists between rural and urban areas in terms of provision of services of general interest and infrastructure (schools, mobility, health services, broadband connections) and that this is also present in countries with high income levels (European Commission, 2022). For example, the rationale behind the Italian Strategy for Inner Areas is based on findings that rural areas in Italy have greater difficulties in accessing services (including health services) than urban areas (DPCoe, 2020; UVAL, 2014). An example of a more articulated analysis is provided by Viganó et al. (2019) paper included in this SLR. Unfortunately, part of the studies reviewed in this SLR do not adequately capture the multidimensional nature of the gaps. This is mainly due to the different definitions of rurality used in the surveyed literature. For this reason, this SLR may not provide a complete picture of the real well-being gaps between rural and urban areas, suggesting that further research is still needed looking at well-being from a multi-dimensional perspective.

Despite this, the conducted SLR has provided some useful results. First, it identified the most widespread rural-urban definitions. The important finding in this regard is that the non-homogeneous definition of rural and urban in this SLR makes it difficult to compare the results of the analyses considered in this SLR. However, most of them use population density to differentiate between rural and urban areas. Second, it also explored the databases that were used to run well-being analyses by identifying the pros and cons of each. Some of the dimensions of well-being referring to quality of life are still not sufficiently considered in literature, such as Personal Security, Work-Life Balance, Civic Engagement and Governance & Social Connections. This constrains the possibility to expand the analysis to all dimensions of well-being.

At a methodological level, some of these studies seem more appropriate than others to formally verify the existence of the gap considered. However, all the methodologies require an appropriate database, based mainly

on individual-household data due to the need to verify the existing heterogeneity of the conditions existing within the two samples. This issue has been addressed with not too sophisticated methodologies, probably due to the lack of data or expertise. Furthermore, many studies investigate the impact of the rural-urban component on one or more dimensions of well-being and do not explicitly assess the existence of a difference in well-being between the two groups.

Microeconomic and cross-sectional data were used in most of the studies. We believe that panel analyses would be more appropriate for analyzing the existence of differences in well-being between rural and urban, also allowing to observe how they change over time.

Finally, most of the studies refer to one or a limited number of countries, thus not providing complete results at European level on the rural-urban well-being gap. This limitation affects the possibility of drawing more general conclusions on well-being differences.

The study is not without limitations. Indeed, our SLR focuses on Europe alone. Furthermore, from a methodological point of view, the evaluation of the quality of the studies included in this work used an ad hoc protocol based on the Instrument Critical Appraisal Checklist provided by Joanna Briggs Institute (2017) due to the lack of standardized quality assessment tools for social science studies. We are aware that such limitations could affect the replicability of this SLR and make it difficult to update the study.

The limited number of analyses on the subject developed in Europe and the heterogeneity observed between Member States suggest the need to develop additional and methodologically sound empirical assessments on the issue at the whole European level.

In the end, the results of this SLR provide a useful basis in terms of the type and nature of databases to be used, methodologies and definition of rural and urban that can be used as a starting point for the development of new empirical analyses at the European level.

REFERENCES

Alexandri, C., Păuna, B., & Luca, L. (2015). An Estimation of Food Demand System in Romania – Implications for Population's Food Security. *Procedia Economics and Finance*, *22*(November 2014), 577–586. https://doi.org/10.1016/s2212-5671(15)00263-4

Ayala, L., Jurado, A., & Pérez-Mayo, J. (2021). Multidimensional deprivation in heterogeneous rural areas: Spain after the economic crisis. *Regional Studies*, *55*(5), 883–893. https://doi.org/10.1080/00343404.2020.1813880

Bernard, J. (2019). Where Have All the Rural Poor Gone? Explaining the Rural–Urban Poverty Gap in European Countries. *Sociologia Ruralis*, *59*(3), 369–392. https://doi.org/10.1111/soru.12235

Bertolini, P., Montanari, M., & Peragine, V. (2008). Povertyand Social Exclusion In Rural Areas. *European Commission*. https://doi.org/10.1093/oxfordhb/9780195367867.013.0017

Bimbo, F., Bonanno, A., Nocella, G., Viscecchia, R., Nardone, G., De Devitiis, B., & Carlucci, D. (2017). Consumers' acceptance and preferences for nutrition-modified and functional dairy products: A systematic review. *Appetite*, *113*, 141–154. https://doi.org/10.1016/j.appet.2017.02.031

Binelli, C., & Loveless, M. (2016). The urban-rural divide: Perceptions of income and social inequality in Central and Eastern Europe. *Economics of Transition*, *24*(2), 211–231. https://doi.org/10.1111/ecot.12087

Bock, B., Kovacs, K., & Shucksmith, M. (2015). Changing social characteristics, patterns of inequality and exclusion. *Territorial Cohesion in Rural Europe: The Relational Turn in Rural Development*, *15*(15), 193–211.

Bontron, J.-C. (1996). Le monde rural : un concept en évolution. *Revue Internationale d'éducation de Sèvres*, *10*, 25–30. https://doi.org/10.4000/ries.3303

Bramer, W. M., Giustini, D., & Kramer, B. M. R. (2016). Comparing the coverage, recall, and precision of searches for 120 systematic reviews in Embase, MEDLINE, and Google Scholar: A prospective study. *Systematic Reviews*, *5*(1), 1–7. https://doi.org/10.1186/s13643-016-0215-7

Bramer, W. M., Rethlefsen, M. L., Kleijnen, J., & Franco, O. H. (2017). Optimal database combinations for literature searches in systematic reviews: A prospective exploratory study. *Systematic Reviews*, *6*(1), 1–12. https://doi.org/10.1186/s13643-017-0644-y

Bruder, E., & Unal, H. (2017). Drivers of urban and rural poverty in Central Europe. *6Th Central European Conference in Regional Science: Engines of Urban and Regional Development*, 476–485.

Chivu, L., Ciutacu, C., & Georgescu, L. (2015). Household Income in Romania. A Challenge to Economic and Social Cohesion. *Procedia Economics and Finance*, *22*(November 2014), 398–401. https://doi.org/10.1016/s2212-5671(15)00310-x

Cipane, K., & Sloka, B. (2020). *Housing cost burden in regions of latvia*. 99–107.

Copus, A. (2011). *New Relationships Between Rural And Urban Areas In Eu Countries*.

Cox, D. N., Hendrie, G. A., & Carty, D. (2015). Sensitivity, hedonics and preferences for basic tastes and fat amongst adults and children of differing weight sta-

tus: A comprehensive review. *Food Quality and Preference*, *41*, 112–120. https://doi.org/10.1016/j.foodqual.2014.11.014

Depraz, S. (2007). *Quelle méthode d'analyse pour le rural centre-européen?* Aux lieux d'être.

Dijkstra, L., Poelman, H., & Rodríguez-Pose, A. (2020). The geography of EU discontent. *Regional Studies*, *54*(6), 737–753. https://doi.org/10.1080/00343404.2019.1654603

DPCoe. (2020). *Relazione annuale sulla Strategia Nazionale per le aree interne 2020*.

European Commission. (1988). *The future of rural society*.

European Commission. (2022). *Urban-rural interactions and their territorial disparities*. https://rural-urban.eu

Féret, S., Berchoux, T., Requier, M., & Abdelhakim, T. (2020). *D3.2 Framework Providing Definitions, Review And Operational Typology Of Rural Areas In Europe Project Name Sherpa: Sustainable Hub to Engage into Rural Policies with Actors* www.rural-interfaces.eu

Gebre, S. L., Cattrysse, D., Alemayehu, E., & Van Orshoven, J. (2021). Multi-criteria decision making methods to address rural land allocation problems: A systematic review. *International Soil and Water Conservation Research*, *9*(4), 490–501. https://doi.org/10.1016/j.iswcr.2021.04.005

Gerdtham, U. G., & Johannesson, M. (2001). The relationship between happiness, health, and socio-economic factors: Results based on Swedish microdata. *Journal of Socio-Economics*, *30*(6), 553–557. https://doi.org/10.1016/S1053-5357(01)00118-4

Grzega, U. (2019). *Living Conditions Of The Rural Households In Poland (Economic Aspects) Urszula*. *May*.

Havard, S., Deguen, S., Bodin, J., Louis, K., Laurent, O., & Bard, D. (2008). A small-area index of socioeconomic deprivation to capture health inequalities in France. *Social Science and Medicine*, *67*(12), 2007–2016. https://doi.org/10.1016/j.socscimed.2008.09.031

Hoggart, K., & Cheng, S. (2006). Women's pay in English rural districts. *Geoforum*, *37*(2), 287–306. https://doi.org/10.1016/j.geoforum.2005.03.002

Joanna Briggs Institute. (2017). *Checklist for Systematic Reviews and Research Syntheses Critical Appraisal*. http://joannabriggs.org/research/critical-appraisal-tools.htmlwww.joannabriggs.org

Lengsfeld, J. H. B. (2011). An econometric analysis of the sociodemographic topology of the digital divide in Europe. *Information Society*, *27*(3), 141–157. https://doi.org/10.1080/01972243.2011.566745

Li, K., Rollins, J., & Yan, E. (2018). Web of Science use in published research and review papers 1997–2017: a selective, dynamic, cross-domain, content-based analysis. *Scientometrics*, *115*(1), 1–20. https://doi.org/10.1007/s11192-017-2622-5

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *PLoS Medicine*, *6*(7). https://doi.org/10.1371/journal.pmed.1000100

Littell, J. H. (2006). Systematic reviews in the social sciences: a practical guide. *Choice Reviews Online*, *43*(10), 43-5664-43–5664. https://doi.org/10.5860/choice.43-5664

Ma, Y., & Chen, D. (2020). Openness, rural-urban inequality, and happiness in China. *Economic Systems*, *44*(4), 100834. https://doi.org/10.1016/j.ecosys.2020.100834

Macours, K., & Swinnen, J. F. M. (2008). Rural-Urban Poverty Differences in Transition Countries. *World Development*, *36*(11), 2170–2187. https://doi.org/10.1016/j.worlddev.2007.11.003

Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2005). Healthy nature healthy people: "contact with nature" as an upstream health promotion intervention for populations. *Health Promotion International*, *21*(1), 45–54. https://doi.org/10.1093/heapro/dai032

Mantino, F. (2021). Rural areas between locality and global networks. Local development mechanisms and the role of policies empowering rural actors. *Bio-Based and Applied Economics*, *10*(4), 265–281. https://doi.org/10.36253/bae-12364

Marcotullio, P. J., Sarzynski, A., Albrecht, J., & Schulz, N. (2014). A Top-Down Regional Assessment of Urban Greenhouse Gas Emissions in Europe. *Ambio*, *43*(7), 957–968. https://doi.org/10.1007/s13280-013-0467-6

Mattioli, G. (2017). 'Forced Car Ownership' in the UK and Germany: Socio-Spatial Patterns and Potential Economic Stress Impacts. *Social Inclusion*, *5*(4), 147–160. https://doi.org/10.17645/si.v5i4.1081

Mirra, L., D'Urso, G., Giannoccaro, G., Cicia, G., & Del Giudice, T. (2021). Water Pricing in Agriculture following the Water Framework Directive: A Systematic Review of the Literature. *International Journal on Food System Dynamics*, *12*(4), 327–340. https://doi.org/10.18461/ijfsd.v12i4.94

Novak, N., Komives, P. M., Harangi-Rakos, M., & Peto, K. (2020). The role of rural areas in the preservation of health. *International Review of Applied Sciences and Engineering*, *11*(2), 157–166. https://doi.org/10.1556/1848.2020.20026

Nummela, O., Sulander, T., Rahkonen, O., Karisto, A., & Uutela, A. (2008). Social participation, trust and self-rated health: A study among ageing people in urban, semi-urban and rural settings. *Health and Place*, *14*(2), 243–253. https://doi.org/10.1016/j.healthplace.2007.06.006

OECD. (2011a). *Compendium Of Oecd Well-Being Indicators*.

OECD. (2011b). How's life?: Measuring well-being. In *How's Life?: Measuring Well-Being* (Vol. 9789264121164). Organisation for Economic Cooperation and Development (OECD). https://doi.org/10.1787/9789264121164-en

OECD. (2011c). *Well-being indicators*. https://doi.org/10.1787/4ab9ee71-en

OECD. (2013). *Economic well-being*. 25–39.

OECD. (2020a). *How's Life? 2020*. OECD. https://doi.org/10.1787/9870c393-en

OECD. (2020b). Measuring Well-Being and Progress. *Social Indicators Research*, *104*(1), 47–65. https://doi.org/10.1007/s11205-010-9717-1

OECD. (2020c). *Rural Well-being - Geography of Opportunities*. OECD. https://doi.org/10.1787/d25cef80-en

Piras, S. (2020). Home-grown food and the benefits of sharing: The "intergenerational pact" in postsocialist Moldova. *Journal of Agrarian Change*, *20*(3), 460–484. https://doi.org/10.1111/joac.12351

Rietveld, P., & Ouwersloot, H. (1989). Intraregional income distribution and poverty: some investigations for the Netherlands, 1960-81. *Environment & Planning A*, *21*(7), 881–904. https://doi.org/10.1068/a210881

Rodríguez-Pose, A., & Tselios, V. (2009). Mapping regional personal income distribution in Western Europe: Income per capita and inequality. *Finance a Uver - Czech Journal of Economics and Finance*, *59*(1), 41–70.

Rodríguez-Pose, A., & Tselios, V. (2011). The determinants of regional educational inequality in Western Europe. *Advances in Spatial Science*, *66*, 135–163. https://doi.org/10.1007/978-3-642-14965-8_7

Schnorr-Baecker, S. (2021). Well-being in urban and rural areas, challenges, general policies, and their monitoring: Some evidence for Germany before and during the COVID-19 pandemic. *Statistical Journal of the IAOS*, *37*(2), 495–515. https://doi.org/10.3233/SJI-210803

Shucksmith, M., Cameron, S., Merridew, T., & Pichler, F. (2009). Urban-rural differences in quality of life across the European union. *Regional Studies*, *43*(10), 1275–1289. https://doi.org/10.1080/00343400802378750

Shucksmith, M., Cameron, S., & Tanya, M. (2006). *First European Quality of Life Survey: Urban–rural differences*.

Slettebak, M. H. (2021). Labour migration and increasing inequality in Norway. *Acta Sociologica (United Kingdom)*, *64*(3), 314–330. https://doi.org/10.1177/0001699320930261

Sloka, B., Jekabsone, I., Cipane, K., & Vasina, S. A. (2019). Income Differences in Regions of Latvia – Problems and Challenges. *European Integration Studies*, *1991*(13), 52–60. https://doi.org/10.5755/j01.eis.0.13.23562

Sørensen, J. F. L. (2012). Testing the Hypothesis of Higher Social Capital in Rural Areas:The Case of Denmark. *Regional Studies*, *46*(7), 873–891. https://doi.org/10.1080/00343404.2012.669471

Sørensen, J. F. L. (2014). Les différences urbano-rurales de la satisfaction dans la vie: Des preuves provenant de l'Union européenne. *Regional Studies*, *48*(9), 1451–1466. https://doi.org/10.1080/00343404.2012.753142

Stanef, M. R. (2012). Measuring differences in Urban - rural development: The case of unemployment. *Theoretical and Empirical Researches in Urban Management*, *7*(3), 44–52.

Sulaiman, N., Yeatman, H., Russell, J., & Law, L. S. (2021). A food insecurity systematic review: Experience from malaysia. In *Nutrients* (Vol. 13, Issue 3). https://doi.org/10.3390/nu13030945

Tobiasz-Adamczyk, B., & Zawisza, K. (2017). Urban-rural differences in social capital in relation to self-rated health and subjective well-being in older residents of six regions in Poland. *Annals of Agricultural and Environmental Medicine*, *24*(2), 162–170. https://doi.org/10.26444/aaem/74719

UVAL. (2014). *A strategy for Inner Areas in Italy: Definition, objectives, tools and governance*. http://www.dps.gov.it/it/pubblicazioni_dps/materiali_uval

van Hooijdonk, C., Droomers, M., van Loon, J. A. M., van der Lucht, F., & Kunst, A. E. (2007). Exceptions to the rule: Healthy deprived areas and unhealthy wealthy areas. *Social Science and Medicine*, *64*(6), 1326–1342. https://doi.org/10.1016/j.socscimed.2006.10.041

Vicente, M. R., & López, A. J. (2011). Assessing the regional digital divide across the European Union-27. *Telecommunications Policy*, *35*(3), 220–237. https://doi.org/10.1016/j.telpol.2010.12.013

Viganó, F., Grossi, E., & Blessi, G. T. (2019). Urban – Rural dwellers' well-being determinants: When the city size matters. The case of Italy. *City, Culture and Society*, *19*(May), 100293. https://doi.org/10.1016/j.ccs.2019.100293

Weziak-Bialowolska, D. (2014). Spatial Variation in EU Poverty with Respect to Health, Education and Living Standards. *Social Indicators Research*, *125*(2), 451–479. https://doi.org/10.1007/s11205-014-0848-7

Wochner, T., & Holzhausen, A. (2019). *Convergence of European regions: Does the narrative of the ever-widening rural-urban divide hold?*

Woods, M., & Heley, J. (2017). *Conceptualisation of Rural-Urban Relations and Synergies Deliverable 1.1*.

Yang, L., Zhang, H., Shen, H., Huang, X., Zhou, X., Rong, G., & Shao, D. (2021). Quality Assessment in Systematic Literature Reviews: A Software Engineering Perspective. In *Information and Software Technology* (Vol. 130). Elsevier B.V. https://doi.org/10.1016/j.infsof.2020.106397

Zarnekow, N., & Henning, C. H. C. A. (2016). Determinants of Individual Rural Versus Suburban. *Women and Migration in Rural Europe*, *Lucas 2007*.

Zwiers, M., & Koster, F. (2015). The local structure of the welfare state: Uneven effects of social spending on poverty within countries. *Urban Studies*, *52*(1), 87–102. https://doi.org/10.1177/0042098014523688

APPENDIX

Table A1. Criteria of the quality assessment used in this review.

Criteria assessed	Quality rating		
	Low	Medium	High
What it was the methodology researchers used in this study?	Qualitative	n/a	Quantitative
Was Sample size adequate?	no	n/a	yes
Was there a well-defined question?	no	n/a	yes
Were the outcomes measured in a valid and reliable way?	No, it is not validated and/ or it is not an objectively quantifiable measure	n/a	Yes, it is a validated and/ or objectively quantifiable measure
Was there a clear definition of rural and urban?	no	n/a	yes
Well-being differences between rural and urban areas addressed directly or just mentioned?	no	n/a	yes
Overall rating	No, one or two high rating (excluded the case of two high and two medium)	Three high ratings or two high rating and two medium	Four or more high ratings

Source: Own elaborations.