

MAPPING THE GLOBAL RESEARCH LANDSCAPE OF WORKING POVERTY: A BIBLIOMETRIC ANALYSIS OF “WORKING POOR” AND “IN-WORK POVERTY”

Marina RAYKOVA ^{1*}, Boris KAZAKOV ¹, Aleksandra RAVNACHKA ²,
Velimira STOYANOVA ¹, Dessislava POLEGANOVA ¹

¹ Bulgarian Academy of Sciences, National Institute of Geophysics, Geodesy and Geography, Department of Geography, Sofia, Bulgaria; mraykova@geophys.bas.bg (M.R.); boriskazakov1@gmail.com (B.K.); stoyanovavelimira@gmail.com (V.S.); dpoleganova@yahoo.com (D.P.)

² Bulgarian Academy of Sciences, Institute for Population and Human Studies, Department of Demography, Sofia, Bulgaria; Southwest University "Neofit Rilski", Faculty of Natural Sciences and Mathematics, Blagoevgrad, Bulgaria; a_lrvnachka@abv.bg (A.R.)

Citation: Raykova, M., Kazakov, B., Ravnachka, A., Stoyanova, V., & Poleganova, D. (2026). Mapping the global research landscape of working poverty: a bibliometric analysis of “working poor” and “in-work poverty”. *GeoJournal of Tourism and Geosites*, 68(4), 2945–2954. <https://doi.org/10.30892/gtg.68428-1909>

Abstract: Working poverty has emerged as a persistent socio-economic paradox: employment no longer guarantees protection against poverty. Over recent decades, the concepts of the “working poor” and “in-work poverty” have gained increasing attention in academic and policy debates. Despite this growing interest, the field remains fragmented in terms of definitions, theoretical frameworks, and empirical focus. This study aims to map and systematize the global research landscape on working poverty. Specifically, it seeks to identify publication trends, key contributors, collaboration patterns, and dominant research themes. The study applies a bibliometric analysis of publications indexed in the Scopus database over the period 1978–2025 using the keywords “working poor” and “in-work poverty” in titles. After manual screening for relevance of the titles and abstracts, a final sample of 169 publications was selected. The analysis employs VOSviewer software to examine co-authorship, citation, co-citation, bibliographic coupling, and keyword co-occurrence networks. Additional indicators such as publication year, subject area, country, institutional affiliation, and funding sources are also analyzed. The findings reveal a significant increase in scholarly attention after 2015, indicating renewed interest in the topic. Research is geographically concentrated, with the United States leading among individual countries, while European countries collectively contribute the largest share. The field is dominated by Social Sciences and Economics, with journal articles as the primary publication format. Collaboration networks among authors and institutions remain relatively fragmented, suggesting limited integration within the field. Highly cited studies emphasize the role of welfare regimes, social transfers, and labour market structures in shaping in-work poverty risks. The results demonstrate a shift from wage-centered explanations toward multidimensional and institutional perspectives. Overall, working poverty emerges as a structurally embedded phenomenon influenced by labour markets, welfare systems, and household dynamics.

Keywords: working poor, in-work poverty, bibliometric analysis, VOSviewer, working poverty, labour market

* * * * *

INTRODUCTION

The “working poor” phenomenon has been the topic of scientific research around the world for at least several decades now, but most probably started much later than this category of employed persons actually emerged. The working poor represent a specific category of people who generally struggle to provide the same standard of living as other employed persons in the same socio-economic and geographic environment (country), regardless of the fact that they are engaged in some type of paid labour (in many cases fulltime, but not always). Whether a person is considered poor or not is vastly subjective and highly depends on local standards – a person who is considered poor in one country/region can be regarded as middle-class or even rich in another country or region. Therefore, being poor, including working poor, is a matter of local (to the country) poverty standards. The other issue that arises regarding the term is its first part – “working”: paid jobs differ significantly, including the daily/weekly/monthly hours they are practiced. Thus a huge difference is observed among people who are considered working – some are part-time employed (e.g. 4 hours per day), others are full-time employed (normally – 8 hours per day or 40 hours per week). Given that part-time employees are going to be paid (in all other circumstances) less than what full-time employees get for the same job. Another common issue in defining “working” people are seasonal workers, who are normally employed full-time (and often extra-time), but only for a certain period throughout the year. The most problematic group of working people, however, is that of full-time workers who meet the local definitions of poor, mostly because their salary is low for various reasons, and not because they work less.

* Corresponding author

Various definitions of the working poor persons exist: The United States Bureau of Labor Statistics (2021), for example, defines the working poor as individuals who have spent at least 27 weeks in the labor force (either working or looking for work) but whose incomes still fall below the official poverty level. The European Union (EU) definition of the term working poor states that those are individuals whose equivalised yearly disposable income is below 60% of the national household median income level (Eurofound, 2026). According to Filandri & Struffolino (2019) two definitions of the working exist in literature: one that regards the working poor as low-paid workers, i.e. workers whose income is below a given threshold of the country median, and 2) one that regards the working poor as individuals who live in households with a total income below a given threshold of the country median. We believe, that the second approach to defining the working poor is relatively more precise, since the salary alone does not guarantee an employed person that they will not be poor – it depends on the household that salary is shared with. Therefore our understanding of the term matches with the one stating that working poor are individuals who work, but in the same time live in households whose total disposable income is below 60% of the median income of the country (Fraser et al., 2011; Peña-Casas & Latta, 2004). According to Lohmann (2005) low wage itself does not necessarily result in working poverty, since other sources of income could prevent a household of falling below the set poverty threshold. Therefore, low-wage work is not always the main cause of being poor.

Beyond definitional approaches, the concept of working poverty has been interpreted through several theoretical perspectives in the scientific literature. One influential framework is labor market segmentation theory, which argues that the labor market is divided into primary and secondary segments, with the latter characterized by low wages, instability, and limited opportunities for upward mobility. From this perspective, working poverty is understood as a structural outcome of the organization of labor markets rather than merely an individual condition (Piore, 1979; Reich et al., 1973).

In contrast, human capital theory explains working poverty primarily through individual characteristics such as education, skills, and work experience, suggesting that lower productivity leads to lower wages and a higher risk of poverty (Becker, 1964). However, this perspective has been increasingly criticized for overlooking structural constraints, as empirical evidence shows that even individuals with stable employment and adequate skills may experience poverty due to low pay or limited working hours (Brady et al., 2010). A further important approach emphasizes the role of institutions and welfare state arrangements. According to this perspective, the incidence of working poverty is shaped by minimum wage regulations, labor market policies, and tax-benefit systems, with more redistributive welfare regimes generally associated with lower levels of in-work poverty (Lohmann & Marx, 2008; Fraser et al., 2011).

Finally, household-based approaches conceptualize working poverty as a phenomenon that cannot be fully understood at the individual level alone. Instead, poverty status depends on household composition, the number of dependents, and the distribution of income within the household. This perspective highlights that low wages do not automatically result in poverty, and conversely, that even adequate wages may be insufficient in households with high dependency ratios (Nolan & Marx, 2000; Filandri & Struffolino, 2019). These perspectives reflect broader debates in the literature, particularly regarding the relative importance of individual versus structural factors, as well as the extent to which working poverty should be analyzed at the level of the labor market or the household. The lack of a single, unified theoretical framework remains a defining feature of the field (Brady et al., 2010; Crettaz, 2013).

Some of the first studies on the topic of the working poor date back to the 1960s and the early 1970s, while some authors (Liu, 2022) suggest that a 1965 study titled *The Working Poor* can be considered the first (Wachtel, 1965) that contains “working poor” in its title. Initially, scientific research on the topic was scarce, while at the beginning of the 1990s a considerable rise of the number of studies was recorded (Figure 1).

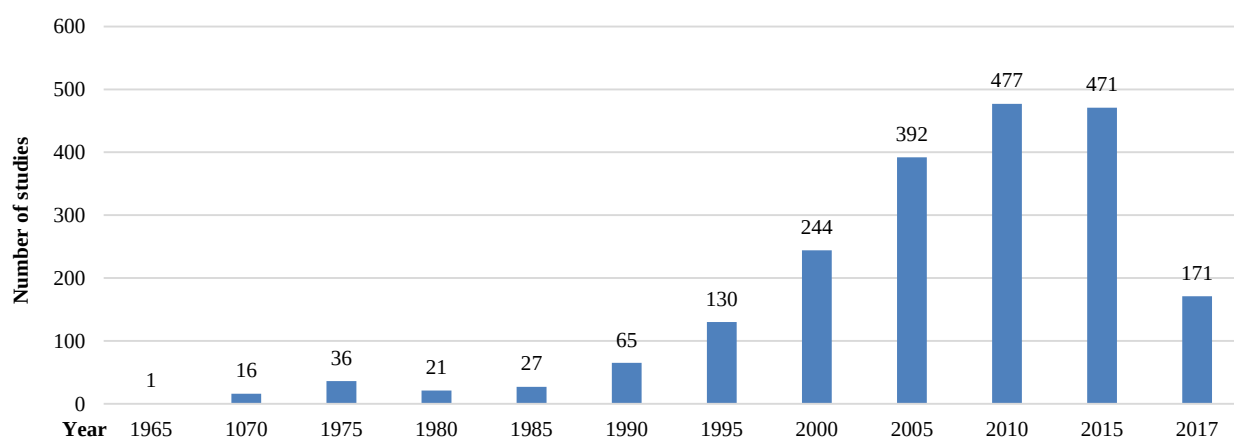


Figure 1. Working poor research in the literature. (Source: Based on Liu, 2022)

The first decade of the period - from 1965 to 1975 is considered the initial period, when researchers actually became more interested in the working poor phenomenon, focusing mostly on the relationship between poverty and wages in the labor market (Liu, 2022). Until the 1990s, the topic was mostly studied in the USA, and it was only then that it became a research topic in Europe. Initially, working poverty was ignored compared to traditional types of poverty, related to unemployment, disability, homelessness, etc. (Duggan, 1969). The early research on the working poor phenomenon showed that it affects full-time, but mostly low-paid workers (Miller, 1970; Wachtel & Betsey, 1972; Bluestone et al., 1973; Jacobson, 1975; Van Til

1975; Abbott, 1980). As research on the working poor phenomenon developed, it became clear that poverty was not strictly related to unemployed people alone, and that many people defined as poor were wage-earners (Ross, 1981; Klein & Rones, 1989). According to Liu (2022) the period between 1976 and 1990 can be defined as question-oriented one, when studies focused on questions regarding the profile of the working poor, and the main reasons behind the existence of working poverty. Further on, other aspects of working poverty began to be highlighted in scientific research, such as social security access, childcare for low-income working families, etc. (Baskin, 1982; McMurray & Kazanjian, 1982; Smith, 1985).

According to Figure 1 there has been a sharp drop in research on working poor since the beginning of 2010s. Other authors, however, talk about growing awareness and “re-emergence” of working poverty, while the topic remains relatively under-researched (Crettaz, 2013). He emphasizes the lack of specific theoretical model, vagueness of definitions, and considerable journalistic attention, as opposed to insufficient sociological and economic studies, citing Brady et al. (2010). Crettaz (2013), similar to Liu (2022), states that the working poverty literature is much more developed in the USA than in Europe. The International Labour Organisation (ILO) (2026) calculates the working poverty share of persons in employment living in poverty as a percent of total employment, using the international poverty line of US\$2.15 per day in purchasing power parity (PPP). The estimates show a constant drop of the working poverty share over the last quarter of a century (Figure 2).

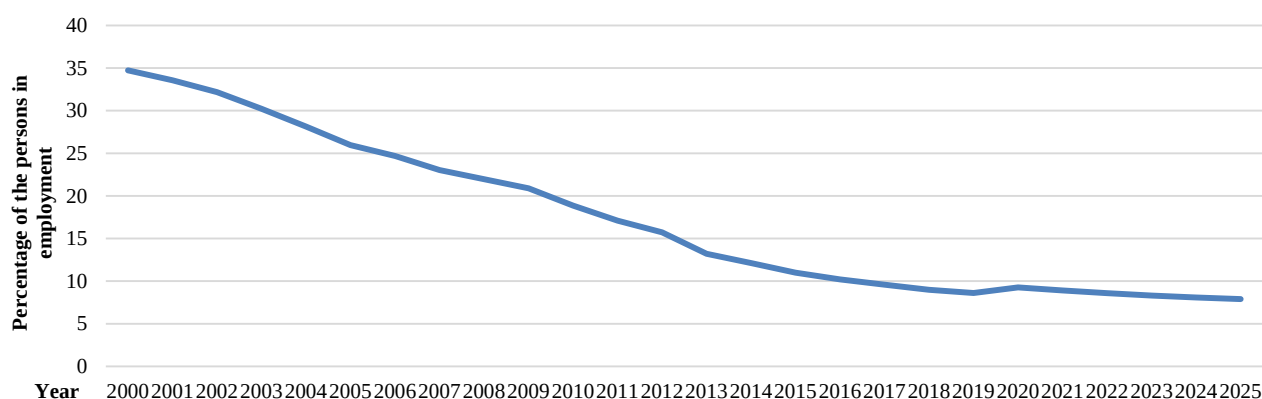


Figure 2. Global working poverty rates (2000-2025) (Source: ILO, 2026)

The current paper aims to study the research on working poor and in-work poverty through an already established method of research – the so-called bibliometric analysis. The bibliometric analysis is a method that includes statistical analysis of published books, articles, proceeding papers, etc. and citations to measure their impact on the relevant science area (Maditati et al., 2018). The bibliometric methods include mainly citation analysis, co-citation analysis, bibliographical coupling, co-authorship analysis, and co-occurrence analysis (Zupic & Čater, 2014). The ever-increasing volume of scientific publications makes traditional literature reviews harder to perform, leading to the growing need of using the so-called bibliometrics, which were first described by Pritchard (1969). Bibliometric analysis has been applied to various research fields, including tourism policy implementation (Kifworo & Dube, 2024) and the evolution of ecotourism research on geoheritage (Sutiksno et al., 2024). These studies demonstrate the application of bibliometric methods in identifying research trends, as well as potential research gaps. Bibliometric theory uses statistical and mathematical techniques to process large volumes of academic literature quickly and accurately, classifying, and organizing enormous volumes of literature data. The visualization of literature data enables researchers to analyze scientific research trends and identify the dynamics of research in specific fields, which is one of the objectives of this study. Using the bibliometric analysis helps researchers estimate the significance of their own work, thus enabling them to choose research avenues, develop successful research plans, etc (Cheng et al., 2024).

MATERIALS AND METHODS

The current study uses a five-stage bibliometric analysis model (Figure 3). At the first stage, an international and multidisciplinary scientific database was chosen. The primary selection narrowed the results down to two databases – Scopus and Web of Science, which are considered the largest ones (Visser et al., 2021). Based on research conducted to compare the two databases, the following conclusions can be drawn: Scopus indexes more scientific journals (Chadegani et al., 2013; Singh et al., 2021; Visser et al., 2021); Scopus covers a larger number of scientific journal articles, conference proceedings, and book chapters (Visser et al., 2021); high degree of overlap of materials in the two databases (Chadegani et al., 2013); Web of Science is the more selective of the two (Singh et al., 2021). For the purposes of the bibliometric analysis and the large number of documents needed, the Scopus database was chosen.

At the second stage, the keywords were selected. Since the study aims to present the publication activity related to the working poor, the keywords were fixed as follows: "working poor" OR "in-work poverty". The search was conducted only in the titles of the publications to ensure that the main scope of the research is the working poor. The third stage of the study consisted of choosing proper software for bibliometric mapping. VOSviewer (version 1.6.20) was selected as free-of-charge, quickly installed and easily operated software for bibliometric analysis results visualization. At the fourth stage, the search was performed and it showed 397 results. To ensure the relevance of the dataset, a manual screening was conducted

based on titles and abstracts. Publications were included if they explicitly focused on working poverty or in-work poverty as a central research topic, particularly in terms of socio-economic conditions, labour market dynamics, or policy implications. Studies were excluded if they addressed peripheral or context-specific issues, such as health and medical problems, taxation, or other topics not directly related to the general phenomenon of working poverty. Additional exclusions were applied to duplicates and publications lacking sufficient bibliographic information. Following this procedure, a final sample of 169 publications was retained for the bibliometric analysis.

The fifth stage consisted of bibliometric analysis of the selected publications by year, authors, subject area, document type, source title, affiliation, country, funding sponsor, source type, language, and type of access. Finally, VOSviewer network visualization was performed using co-authorship analysis, citation analysis, co-citation analysis, bibliographic coupling analysis, and co-occurrence analysis. The analyses use indicators such as sets of connected items, clusters, links, total link strength (total strength of connections for a single item to all other items in a network), etc.

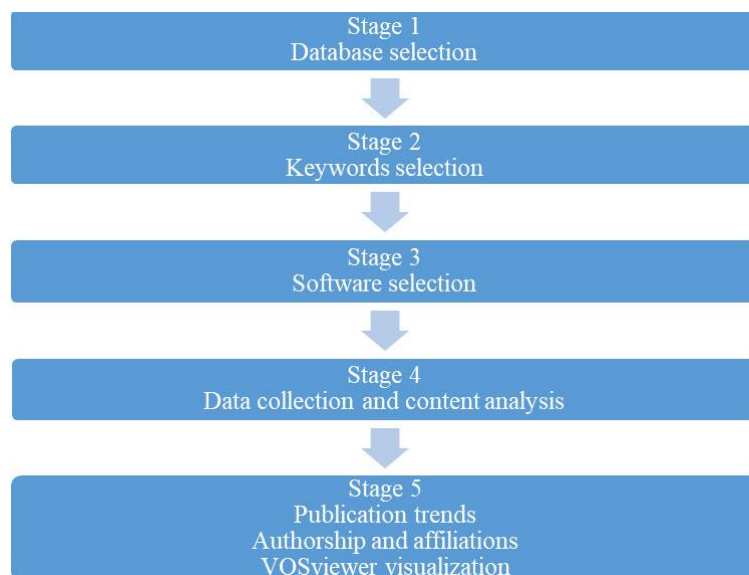


Figure 3. Bibliometric analysis flowchart process (Source: Authors)

RESULTS AND DISCUSSION

Our research shows that - as other authors have already noted – the largest volume of scientific papers regarding the working poor/in-work poverty concerns the US population. The second-largest number of titles concern the working poor population in various countries throughout the world, followed by the so-called general studies which discuss theoretical, socio-economic, psychological and other aspects of the phenomenon. Research on the European working poor population according to the selected titles is significant, and actually exceeds that of the USA if combined – Europe as a whole (EU, United Kingdom, Central and Eastern Europe, Mediterranean European countries such as Italy and Spain, etc.). Split by country, however, no European country exhibits the same number of scientific papers on working poor as in the case of the USA. Regarding countries outside Europe and the USA, only India and China stand out as relatively more significant in terms of their share of titles related to the working poor population (Figure 4).

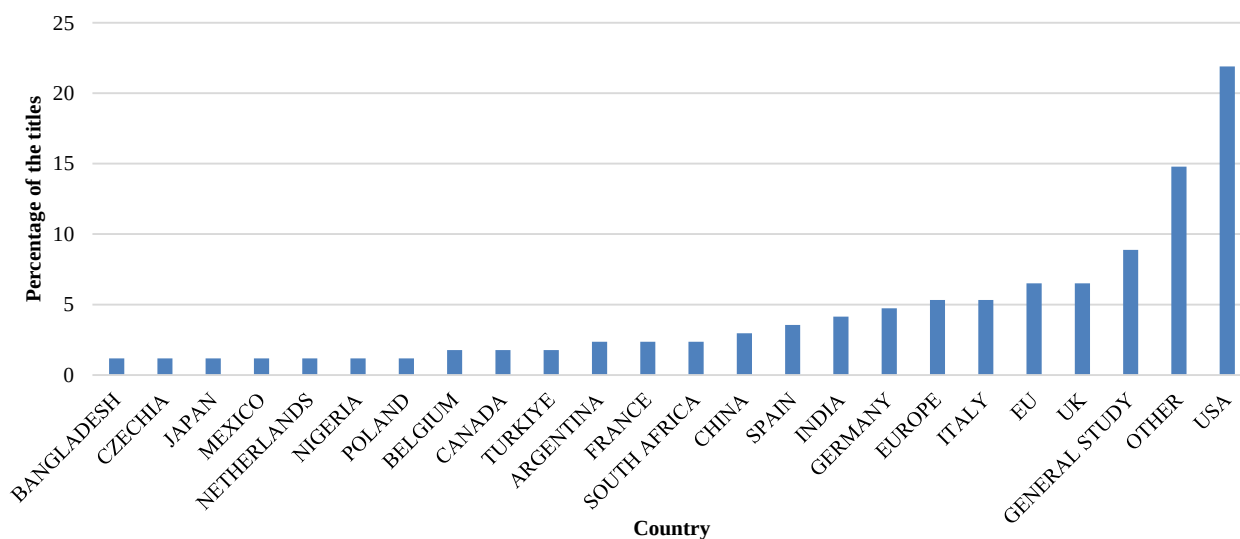


Figure 4. Distribution of the selected titles by country of the studied working poor population (Source: Scopus)

The selected studies were published between 1978 and 2025 with a noticeable increase since 2015 (Figure 5) and 2016 being the year with the higher number of publications (15). It is worth mentioning that in the current century there are gaps in the studies published (2003, 2004 and 2008). 258 scholars representing 168 organizations from 39 countries contributed to those articles, among which Ive Marx is the most active one participating in 5 studies, followed by Jinghong Liu, Henning Lohmann, Santiago Poy and Emanuela Struffolino with 4 studies each. Universiteit Antwerpen (5 studies published) is the most active among the organizations as it is represented by the most active author, Ive Marx. German Institute for Economic Research, Nankai University, Cardiff University, University of Oxford and Pontificia Universidad Catolica Argentina are represented by 4 publications each. Over 20% (35) of the studies are created by scholars from the USA, followed by scientists from the United Kingdom (25), Italy (16) and Germany (15). The authors of 30 publications received funding from 23 organizations, where Horizon 2020 Framework Programme was the leader with financing 5 of the studies.

The selected works fall into 13 subject areas, mostly in Social Sciences (138), Economics, Econometrics and Finance (53), and Business, Management and Accounting (35). A significant amount of the publications (almost 75%) are scientific articles in journals (125), while another 25 are book chapters. The other 19 studies are review papers, books and conference papers. The articles were published in 139 journals and 30 books. *Social Indicators Research* is the leader with 5 publications followed by *Sociologia Del Lavoro* with 4 publications. Most of the publications (140) are written in English. Only 43 are All Open Access and the others have different access levels.

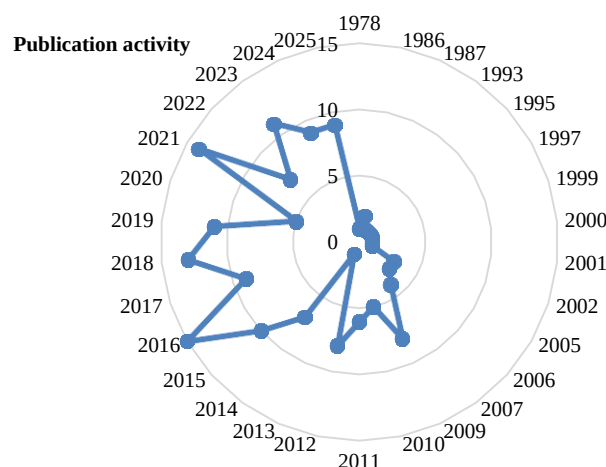


Figure 5. Distribution of publications by year (Source: Scopus)

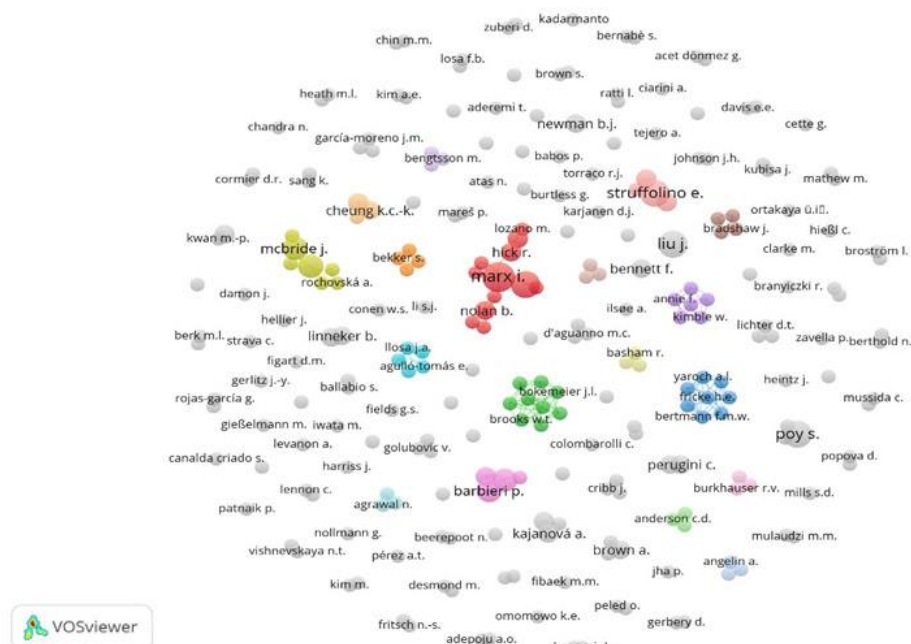


Figure 6. Co-authorship analysis by authors (Source: Authors' own processing in VOSviewer)

The co-authorship analysis reveals the relationships between researchers, institutions, or countries based on their co-authored publications. The analysis by authors shows that 9 authors have total link strength of 8 (9 of the authors have collaborated with 8 other authors each) and 67 of them have 0. Results are grouped in 133 clusters with 221 links. The largest one (in red) consists of 12 authors, among which the name of the most active author – Ive Marx, stands out (Figure 6).

The United Kingdom has a total link strength of 11 with 25 documents, followed by Germany with a total link strength of 7, with 15 documents. The leader – the USA – has a total link strength of only 1, while 23 of the countries have 0.

A significant number of the organizations (63) have a total link strength of 0. The higher link strength among the affiliations is 4, associated with 11 of them. The citation analysis demonstrates how many times a publication, author, or source has been cited by other works. The most cited research by other papers included in our study is *Welfare states, labour market institutions and the working poor: A comparative analysis of 20 European countries* (2009) by Henning Lohmann, with 27 links. The article has a total of 129 citations and is the second most cited one after *Housing and employment insecurity among the working poor* (2016) by Matthew Desmond & Carl Gershenson, with 186 total citation, but with only one link within the studied collection. The third place in terms of citations goes to Halleröd et al. (2015) and their work *In-work poverty and labour market trajectories: Poverty risks among the working population in 22 European countries* (99 citations and 6 links). Scholars from the studied area of research have also cited *low pay, in-work poverty and economic vulnerability: A comparative analysis using EU-SILC* (Maitre et al., 2012) (17 links and 72 total citations).

The VOSviewer visualization was limited in order to show only the set of connected items and to exclude those with 0 links. Thus, 80 of 169 publications met the threshold and are shown in Figure 7. The software grouped the results in 14 clusters, with Cluster 2 (in green) including the study of Maitre et al. (2012). Lohmann (2009) was distributed in Cluster 8 (in brown), Halleröd et al. (2015) – in Cluster 5 (in violet), and Desmond & Gershenson (2016) – in Cluster 7 (in orange).

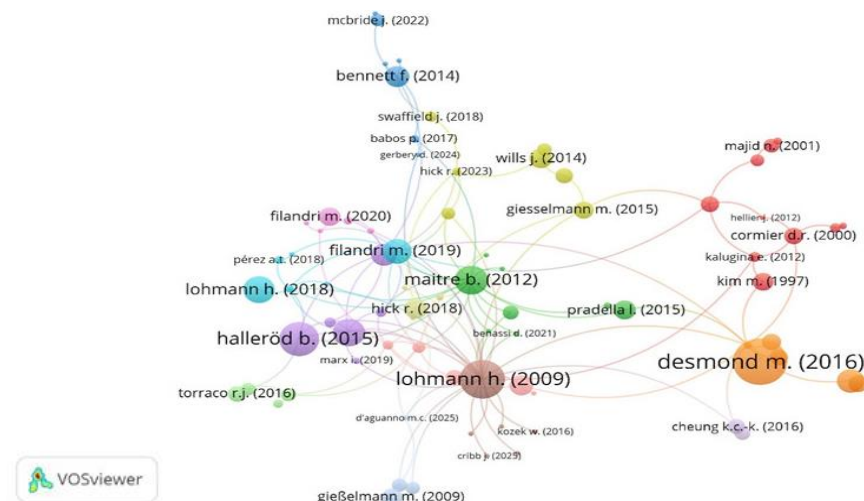


Figure 7. Citation analysis by documents (Source: Authors' own processing in VOSviewer)

In *Welfare States, Labour Market Institutions and the Working Poor: A Comparative Analysis of 20 European Countries* (2009), Lohmann examines how national welfare regimes and labour market institutions shape the risk of in-work poverty across 20 European countries. The study finds that generous social transfers, strong collective bargaining systems, and effective minimum wage regulations significantly reduce the incidence of in-work poverty, while liberal labour markets with weaker social protection are associated with higher risks. Overall, the paper highlights that institutional design—not just individual employment status—plays a crucial role in determining whether work protects against poverty.

The most cited authors, Desmond & Gershenson, in their work *Housing and Employment Insecurity among the Working Poor* (2016) show that housing instability—such as forced moves or evictions—significantly increases the risk of low-income working renters losing their jobs, with those experiencing a preceding forced move being 11–22 percentage points more likely to be laid off than similar workers who did not face displacement. The authors argue this “double precarity” of unstable housing and employment helps explain why the working poor are vulnerable to downward economic spirals, and suggest that policies promoting housing stability could also improve job stability. The article *In-work poverty and labour market trajectories: Poverty risks among the working population in 22 European countries* uses (Halleröd et al., 2015) uses longitudinal EU-SILC (EU statistics on income and living conditions) data from 22 European countries to identify distinct labour market trajectories over three years, and estimate how these patterns relate to the risk of in-work poverty, finding that employment instability and non-standard working conditions (e.g., part-time, temporary jobs) significantly increase poverty risk. The study also shows that household labour supply—especially having more than one continuously employed earner—substantially reduces the risk, and that risks are higher for disadvantaged social classes, highlighting how labour market dynamics and household composition shape in-work poverty across Europe.

The study *Low pay, in-work poverty and economic vulnerability: A comparative analysis using EU-SILC* (Maitre et al., 2012) again uses EU-SILC data for 14 EU countries to explore how low pay relates to in-work poverty and broader economic vulnerability, finding that individuals in low-paid jobs face a much higher risk of living in a household below relative income poverty thresholds than those who are not low-paid. This risk varies considerably across countries and is strongly influenced by factors like gender, age, social class, and household composition, with only a minority of low-paid workers living in vulnerable households in most cases but still markedly higher poverty exposure than non-low-paid workers.

Citation analysis by authors indicates that the most cited authors are Henning Lohmann (246 citations, 4 documents, and a total link strength of 53), Matthew Desmond and Carl Gershenson (186 citations, 1 document, and a total link

strength of 1), and Ive Marx (181 citations, 5 documents, and a total link strength of 36). As per the source, the greatest number of citations belongs to Social Problems (186 citations, 1 document and a total link strength of 1), European Sociological Review (129 citations, 1 document, and a total link strength of 28), and Journal of European Social Policy (99 citations, 1 document, and a total link strength of 6). The co-citation analysis displays the pairs of documents or authors that are cited together by a third document. A leader with a total link strength of 692 and 14 citations is the already presented article *Welfare States, Labour Market Institutions and the Working Poor: A Comparative Analysis of 20 European Countries* (2009) by Henning Lohmann, followed by *When Work Disappears: The World of the New Urban Poor*, a book by William Julius Wilson (1996) with a total link strength of 444 and 3 citations, and *The Global City: New York, London, Tokyo*, a book by Sassen (2001) with a total link strength of 416 and 2 citations.

When Work Disappears is a sociological book showing how the loss of stable jobs in US inner-city neighbourhoods reshaped social life, family life, and community conditions — especially in predominantly African-American “ghettos”. Wilson (1996) combines large-scale survey data with interviews of residents to explain the structural roots of urban poverty.

The Global City explores how New York, London and Tokyo became the most important command centers of the global economy — not simply large cities, but global hubs where economic power, corporate decision-making, and financial markets are concentrated. Sassen (2001) coined the term “global city” and crafted a framework for understanding urban influence in a globalized world. The authors with the highest total link strength are Henning Lohmann (12916, 143 citations) and Ive Marx (11695, 131 citations). As some of the authors are not connected, the largest set of connected items containing 720 of them, is shown in Figure 8. Data is grouped in 11 clusters, where Cluster 1 is the largest, with 138 items (in red). The name of Henning Lohmann is shown in Cluster 2 (in green) and Ive Marx – in Cluster 7 (in orange).

The bibliographic coupling analysis shows the thematic similarities between scientific documents based on the references they share. The analysis by documents displays that 2 studies have the highest degree of similarity based on their total link strength of 235 – Barbieri et al. (2024). *In-work poverty in Western Europe. A longitudinal perspective*, and Ballabio & Verrecchia (2021). *Working Poor: Natives and Migrants in Milan* (in Italian), followed by Filandri & Struffolino (2019). *Individual and Household In-Work Poverty in Europe: Understanding the Role of Labor Market Characteristics* with a total link strength of 223. The largest set of connected items consists of 122 documents grouped in 8 clusters, where Cluster 1 (in red) is the largest, with 33 items (Figure 9).

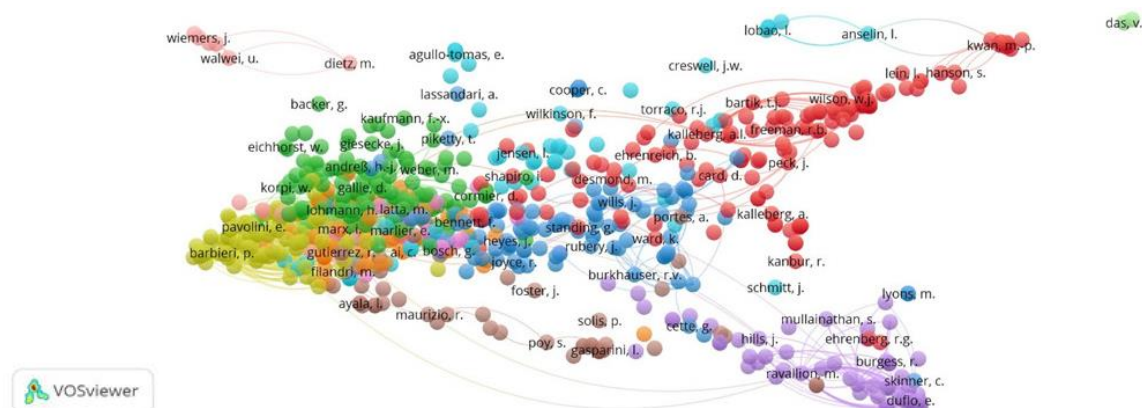


Figure 8. Co-citation analysis by cited authors (Source: Authors' own processing in VOSviewer)

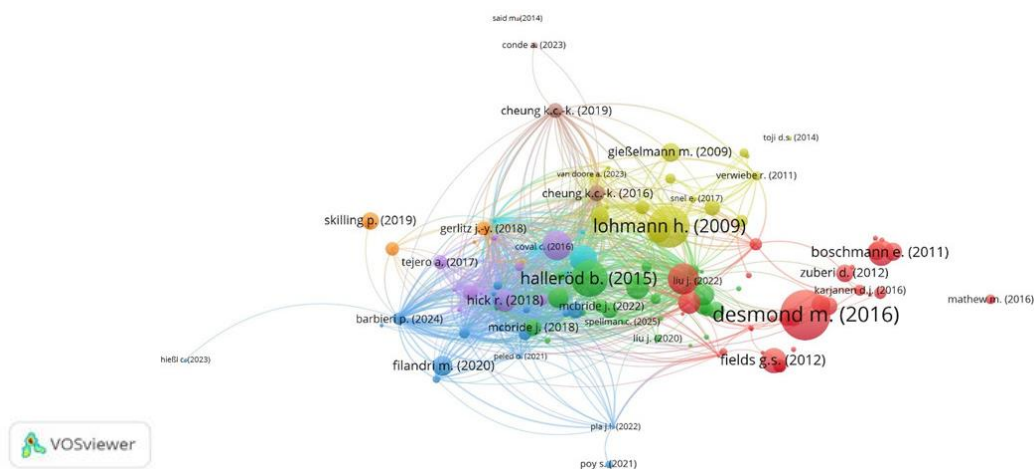


Figure 9. Bibliographic coupling by documents (Source: Authors' own processing in VOSviewer)

In their study, Barbieri et al. (2024) analyze in-work poverty across 14 Western European countries (2004–2019) using longitudinal EU-SILC data. They show that in-work poverty is strongly shaped by job quality and, especially, household employment structure: single-earner and precarious-work households face the highest risks, while dual-earner arrangements

significantly reduce poverty exposure. Although in-work poverty tends to persist over time, this persistence is largely driven by underlying structural disadvantages (e.g. low education and unstable employment) rather than poverty itself causing future poverty.

Ballabio & Verrecchia (2021) examine in-work poverty among native and migrant workers in Milan, showing that employment does not equally protect all groups from economic hardship. The authors find that migrants are significantly more exposed to working poverty due to labor market segmentation, precarious contracts, and concentration in low-wage sectors, even when employed. The study highlights how migration status intersects with job quality and household conditions to reproduce urban social inequalities. That research is one of the 6 documents published in Italian.

Filandri & Struffolino (2019) analyze in-work poverty across European countries by distinguishing between individual low pay and household-level poverty risk. They show that labor market characteristics—such as temporary contracts, part time work, and low wages—increase the likelihood of poverty, but household composition (especially the number of earners) plays a crucial mediating role. Their findings highlight that both job quality and household labor supply must be considered to fully understand and address in-work poverty in Europe. The bibliographic coupling by authors puts Giorgio Cutuli on top, with a total link strength of 1331, 3 documents and 29 citations, followed by Paolo Barbieri (total link strength of 1256, 3 documents and 30 citations), Emanuela Struffolino (1079, 4 and 111), and Stefani Scherer (1068, 2 and 27). The analysis by source points out that *European societies* have a total link strength of 546, with 3 documents and 91 citations, followed by *Sociologia del lavoro* (total link strength of 539, 4 publications and 10 citations).

The co-occurrence analysis displays the relationships between keywords by counting how often they appear together within a defined context. Among the 536 keywords, *poverty* is the one with the highest total link strength (439) and occurrences (54), followed by *in-work poverty* (total link strength of 242 and 39 occurrences), *working poor* (231 and 34), *labor/labour market* (209 and 27), and *employment* (200 and 19). Figure 10 demonstrates the largest set of connected items (96). *Poverty* appears in Cluster 3 (in dark blue). *Labor/labour market* and *employment* are in Cluster 1 (in red), *working poor* appears in Cluster 4 (in yellow), and *in-work poverty* is attached to Cluster 5 (in violet).

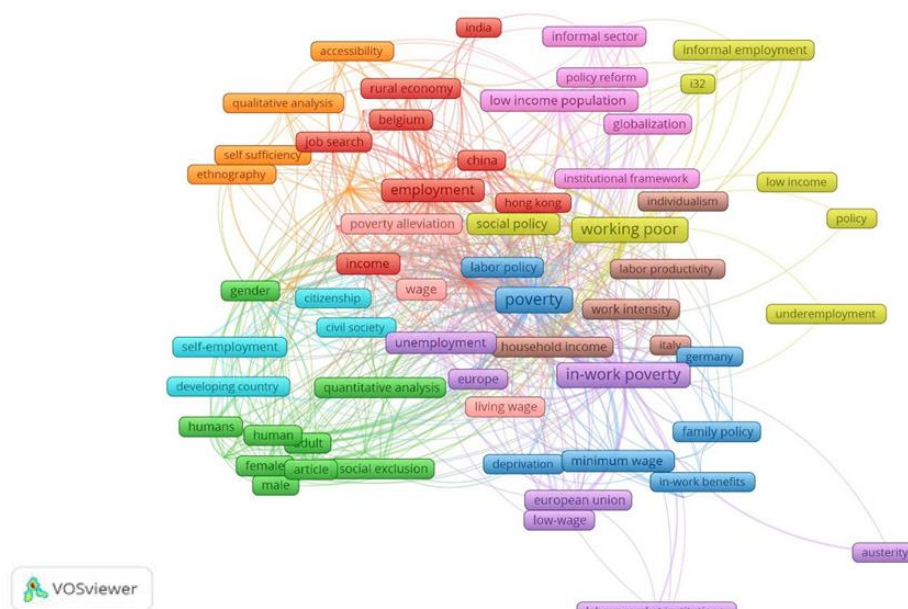


Figure 10. Co-occurrence analysis (Source: Authors' own processing in VOSviewer)

The bibliometric analysis reveals a clear increase in scholarly interest in working poverty, particularly after 2015. Although the United States remains the most studied single country, European countries collectively produce a larger body of research, reflecting the growing prominence of in-work poverty within European labour market and welfare debates. Research outside Europe and the USA remains limited, with only China, India and South Africa showing notable engagement. The field is dominated by Social Sciences and Economics, and publication output is concentrated in journal articles. Despite contributions from 39 countries and 168 institutions, collaboration networks remain relatively fragmented, as indicated by the generally low total link strength values across authors and affiliations. Only 30 of 169 publications reported external funding. Furthermore, only 43 publications are available under full Open Access, indicating that most of the research is not freely accessible. Citation and co-citation analyses demonstrate that the intellectual structure of the field is shaped by three central themes: welfare state and labour market institutions, employment instability and labour market trajectories, and multidimensional precarity. Highly cited works emphasize that in-work poverty is not merely a function of low wages, but is strongly influenced by institutional design, social transfers, collective bargaining systems, and minimum wage regulations. The studies further highlight the importance of household composition—particularly dual-earner arrangements—in mitigating poverty risk. Research linking housing insecurity and employment instability expands the analytical scope beyond income-based measures, reinforcing the understanding of working poverty as structurally embedded. Overall, the findings confirm that employment alone does not guarantee protection against poverty and that working poverty must be understood as a complex outcome of labour market structures, welfare policies, and household conditions.

The observed emphasis on welfare state regimes and labour market institutions reflects institutional and welfare state theories, as discussed by Crettaz (2013) and Brady et al. (2010), which highlight the role of social policies, labour regulations, and redistribution mechanisms in shaping in-work poverty. At the same time, the strong focus on employment instability, low pay, and non-standard forms of work aligns with labour market segmentation approaches, which explain how structural divisions in employment generate persistent vulnerability (Lohmann, 2005; Peña-Casas & Latta, 2004). Furthermore, the importance of household composition and income-sharing mechanisms supports the household-based perspective emphasized by Filandri & Struffolino (2019), reinforcing that poverty risks extend beyond individual earnings. By situating these findings within established theoretical traditions, the study underscores that working poverty is a multidimensional and structurally embedded phenomenon rather than merely an outcome of low wages.

CONCLUSION

This study contributes to the scientific literature by offering a structured overview of how working poverty has evolved as a research field over nearly five decades. By applying bibliometric techniques, the study clarifies the intellectual architecture of the field, identifies its core analytical pillars, and highlights the gradual shift from individual wage-based interpretations toward broader institutional and multidimensional frameworks. The findings demonstrate that working poverty research has matured into an interdisciplinary domain that connects labour market studies, welfare state theory, and social inequality research. At the same time, the analysis underscores the need for stronger theoretical integration and greater geographical diversification. Expanding research beyond Western contexts, strengthening cross-national collaboration, and incorporating emerging forms of precarious employment will be essential for advancing the overall research in the field. As labour markets continue to transform under the pressures of globalization, digitalization, and demographic change, future scholarship must further examine how institutional arrangements and household structures interact in order to determine whether work functions as a pathway out of poverty or a condition of persistent vulnerability.

The results of the present study lead to important implications for future researches. First, countries and regions outside Europe and United States need to be investigated as they are underrepresented in the existing literature. Such approach will allow scientists to assess whether the relationships identified in the dominant literature are applicable across different labour market institutions, welfare regimes, and levels of economic development. Second, future researches with stronger longitudinal and comparative approaches could be performed to examine how in-work poverty evolves over time and how changes in employment, household composition, and social protection influence poverty trajectories.

Finally, the study identified the need of a greater international and interdisciplinary cooperation among scientists from the fields of economics, sociology and demography with the aim of achieving a more comprehensive understanding of in-work poverty. Overall, the bibliometric evidence indicates that the field has developed substantially, but important conceptual, geographical, and empirical gaps remain. Addressing these gaps can help conduct more integrated researches capable of explaining why employment continues to coexist with poverty for significant groups of workers.

Author Contributions: Conceptualization, M.R. and B.K.; methodology, M.R. and B.K.; software, M.R.; validation, M.R. and B.K.; formal analysis, M.R. and B.K.; investigation, M.R. and B.K. and A.R. and V.S. and D.P; data curation, M.R. and B.K.; writing - original draft preparation, M.R. and B.K. and A.R. and V.S. and D.P; writing - review and editing, M.R. and B.K. and A.R. and V.S. and D.P; visualization, M.R. and B.K.; supervision, M.R. and B.K.; project administration, A.R. and B.K. All authors have read and agreed to the published version of the manuscript.

Funding: The study has been conducted within the *Regional Employment – The Working Poor in Bulgaria* project funded by the Bulgarian National Science Fund, contract KII-06-H85/1 from 05.12.2024.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Acknowledgements: The authors would like to thank the Bulgarian National Science Fund for providing the funding for this research.

Conflicts of Interest: The authors declare no conflict of interest.

Use of Generative AI: Not applicable.

REFERENCES

- Abbott, W. F. (1980). Commentary: When will academicians enter the ranks of the working poor? *Academe*, 66(6), 349–353. <https://doi.org/10.2307/40248790>
- Ballabio, S., & Verrecchia, F. (2021). Poveri nonostante il lavoro: nativi e migranti nel contesto Milanese [Working Poor: Natives and Migrants in Milan]. *Sociologia del Lavoro*, 161(3), 122–147. <https://doi.org/10.3280/SL2021-161007>
- Barbieri, P., Cutuli, G., & Scherer, S. (2024). In-work poverty in Western Europe. A longitudinal perspective. *European Societies*, 26(4), 1232–1264. <https://doi.org/10.1080/14616696.2024.2307013>
- Baskin, D. (1982). Mental illness and the working poor. *The Journal of Behavioral Health Services and Research*, 9(2), 29–31. <https://doi.org/10.1007/bf02828345>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*, Columbia University Press, New York, USA
- Bluestone, B., Murphy, W. M., & Stevenson, M. H. (1973). *Low wages and the working poor*, 22. Ann Arbor: Institute of Labor and Industrial Relations, University of Michigan-Wayne State University, Detroit, USA.

- Brady, D., Fullerton, A. S., & Moren Cross, J. (2010) More Than Just Nickels and Dimes: A Cross-National Analysis of Working Poverty in Affluent Democracies. *Social Problems*, 57(4), 559–85. <https://doi.org/10.1525/sp.2010.57.4.559>
- Chadegani, A. A., Salehi, H., Yunus, M., Farhadi, H., Fooladi, M., & Farhadi, M. (2013). A Comparison between Two Main Academic Literature Collections: Web of Science and Scopus Databases. *Asian Social Science*, 9, 18–26. <http://dx.doi.org/10.5539/ass.v9n5p18>
- Cheng, K., Li, Z., Sun, Z., Guo, Q., Li, W., Lu, Y., Qi, S., Shen, Z., Xie, R., Wang, Y., Wu, Z., Wu, Y., Wu, C., Li, Y., Xie, Y., Wu, H., & Li, C. (2024). The rapid growth of bibliometric studies: a call for international guidelines. *International Journal of Surgery*, 110(4), 2446–2448. <https://doi.org/10.1097/JS9.0000000000001049>
- Crettaz, E. (2013). A state-of-the-art review of working poverty in advanced economies: theoretical models, measurement issues and risk groups. *Journal of European Social Policy*, 23(4), 347–362. <https://doi.org/10.1177/0958928713507470>
- Desmond, M., & Gershenson, C. (2016). Housing and Employment Insecurity among the Working Poor. *Social Problems*, 63(1), 46–67. <https://doi.org/10.1093/socpro/spv025>
- Duggan, D. 1969. Still forgotten-working poor. *Nation* 208, (23), 724–726
- Eurofound (2026). Working poor, Publications Office of the European Union, Luxembourg. Available online: <https://www.eurofound.europa.eu/en/topics/working-poor> (accessed February 7, 2026).
- Filandri, M., & Struffolino, E. (2019). Individual and Household In-Work Poverty in Europe: Understanding the Role of Labor Market Characteristics. *European Societies*, 21(1), 130–157. <https://doi.org/10.1080/14616696.2018.1536800>
- Fraser, N., Gutiérrez, R., & Peña-Casas, R. (Eds.) (2011). *Working Poverty in Europe: A Comparative Approach*, Palgrave Macmillan, New York, USA
- Halleröd, B., Ekbrand, H., & Bengtsson, M. (2015). In-work poverty and labour market trajectories: Poverty risks among the working population in 22 European countries. *Journal of European Social Policy*, 25(5), 473–488.
- International Labour Organisation (2026). Working poverty rate. Available online: <https://ilostat.ilo.org/data/snapshots/working-poverty-rate/> (accessed February 7, 2026).
- Jacobson, B. H. (1975). *Radical revision of the minimum wage: The dual economy and the elimination of working poverty*. Doctoral dissertation, Reed College, Portland, USA
- Kifworo, C., & Dube, K. (2024). A bibliometric analysis of tourism policy implementation research. *GeoJournal of Tourism and Geosites*, 55(3), 1004–1011. <https://doi.org/10.30892/gtg.55302-1274>
- Klein, B. W. & Rones, P. L. (1989). A profile of the working poor. *Monthly Labor Review*, 112(10), 3–13.
- Liu, J. (2022). Rethinking the defining contextualization of in-work poverty: The challenge of individualism and globalization. *Journal of Chinese Sociology*, 9(1). <https://doi.org/10.1186/s40711-021-00160-z>
- Lohmann, H. (2005). The working poor, low wages and mobility out of poverty: A cross-country perspective. “LoWER Annual Conference – European Low-wage Employment Research Network”, 15/16 April 2005, Mannheim/Germany. Available online: <https://www.zew.de/fileadmin/FTP/div/lower/Lohmann.pdf> (accessed February 9, 2026).
- Lohmann, H. (2009). Welfare States, Labour Market Institutions and the Working Poor: A Comparative Analysis of 20 European Countries. *European Sociological Review*, 25(4), 489–504
- Lohmann, H., & Marx, I. (2008). The different faces of in-work poverty across welfare state regimes. In Lohmann, H. & Marx, I. (Eds.), *Handbook of research on in-work poverty*, 17–46, Edward Elgar Publishing, Cheltenham, UK
- Maditati, D. R., Munim, Z. H., Schramm, H., & Kummer, S. (2018). A review of green supply chain management: From bibliometric analysis to a conceptual framework and future research directions. *Resources, Conservation and Recycling*, 139, 150–162. <https://doi.org/10.1016/j.resconrec.2018.08.004>
- Maitre, B., Nolan, B., & Whelan, C. T. (2012). Low Pay, In-work Poverty and Economic Vulnerability: A Comparative Analysis Using EU-SILC. *The Manchester School*, 80(1), 99–116. <https://doi.org/10.1111/j.1467-9957.2011.02230.x>
- McMurray, G. L., & Kazanjian, D. P. (1982). *Day care and the working poor: The struggle for self-sufficiency*. Community Service Society, New York, USA
- Miller, S. M. (1970). *Prospects for the working poor*. New Generation, London, UK
- Nolan, B., & Marx, I. (2000). Low pay and household poverty. In Nolan, B. & Marx, I. (Eds.), *Low pay and household poverty*, 1–22, Edward Elgar Publishing, Cheltenham, UK
- Peña-Casas, R. & Latta, M. (2004) Working Poor in the European Union: A Comprehensive Report, Eurofound, Dublin, Ireland
- Piore, M. J. (1979). *Birds of passage: Migrant labor and industrial societies*. Cambridge University Press, Cambridge, UK
- Pritchard, A. (1969). Statistical Bibliography or Bibliometrics. *Journal of Documentation*, 25, 348–349
- Reich, M., Gordon, D. M., & Edwards, R. C. (1973). A theory of labor market segmentation. *American Economic Review Papers & Proceedings*, 63(2), 359–365
- Ross, D. (1981). *The working poor: Wage-earners and the failure of income security policies*, Canadian Institute for Economic Policy, Ottawa, Canada
- Sassen, S. (2001). *The Global City: New York, London, Tokyo*. Princeton University Press, Princeton, USA
- Singh, V. K., Singh, P., Karmakar, M., Leta, J., & Mayr, P. (2021). The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. *Scientometrics*, 126, 5113–5142. <https://doi.org/10.1007/s11192-021-03948-5>
- Smith, J. A. (1985). Working poor lack medical assistance. *California Nurse*, 81(6), 6
- Sutiksno, D. U., Souisa, W., Purnomo, A., Buyang, C. G., & Lau, E. (2024). The evolution of ecotourism on geoheritage in scientific research: A bibliometric analysis. *GeoJournal of Tourism and Geosites*, 52(1), 239–249. <https://doi.org/10.30892/gtg.52123-1200>
- U.S. Bureau of Labor Statistics (2021). A profile of the working poor, 2021. Available at: <https://www.bls.gov/opub/reports/working-poor/2021> (accessed February 7, 2026).
- Van Til, S. B. 1975. *Low wages and the working poor*. JSTOR, New York, USA
- Visser, M., van Eck, N. J., & Waltman, L. (2021). Large-scale comparison of bibliographic data sources: Scopus, Web of Science, Dimensions, Crossref, and Microsoft Academic. *Quantitative Science Studies*, 2(1), 20–41. https://doi.org/10.1162/qss_a_00112
- Wachtel, D. D. (1965). *The working poor*. University of Michigan, Ann Arbor, USA
- Wachtel, H. M., & Betsey, C. (1972). Employment at low wages. *The Review of Economics and Statistics*, 54, 121–129
- Wilson, W. J. (1996). *When Work Disappears: The World of the New Urban Poor*. Vintage Contemporaries, New York, USA
- Zupic, I., & Čater, T. (2014). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>