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Article

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Modern Supply Chain Research and Applications

Reshoring concepts: definitions and a structured bibliometric review

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Abstract

Purpose – The aim of this paper is to clearly mark the clusters in the related literature using bibliometric analysis and draw useful implications for the academic research purposes especially in the stream of Supply Chain Management (SCM).

Design/methodology/approach – By employing rigorous selection criteria, sample articles were selected for synthesizing and conducting a bibliometric analysis. This paper tries to identify the significance of the concept of reshoring with the aspect of SCM, operations, logistics etc. Starting from sample selection, systematic selection criteria has been used to generate the database, using Scopus. The sample size was 184. Using VOSViewer, statistical and graphical representations were generated for clusters in the literature that will be useful for judging the trends of research under shoring concepts.

Findings – Findings show that unclear difference compared to other supply chain concepts obstructs further theory development within reshoring concepts. To address this challenge, the review categorizes themes and defines boundaries. Based on the analysis findings, this paper advocates for additional research in areas that are crucial but have received limited or no attention. Specifically, there is a need for action research on motivations, governance modes, and location selection concerning reshoring decisions.

Research limitations/implications – This review has a few limitations. The absence of publications in other language, than English, may result in a significant loss of knowledge. This research paper cited a few relevant publications in the form of conference papers, industry reports, books, and book chapters. Nonetheless, they were excluded from the organized bibliometric audit. To further advance the knowledge in this field, exploratory longitudinal case studies will bring to focus the changes on manufacturing strategies using the shoring and reshoring stages.

Practical implications – A current example of this is a French company named Stil (Terzian, 2020) which brought its glass thermometer production back to its home after the unexpected closure of its suppliers from China. Another Italian firm has restarted production of disposal bio-degradable face masks after 15 years to compete with low-cost alternatives from China (Greco, 2020). Reshoring concepts are now under consideration of organizations including Boeing, Bosch, Phillips and more.

Originality/value – To the best of our knowledge, this represents one of the earliest efforts to conceptualize and define reshoring concepts, aiming to distinguish them from one another appropriately. To accomplish this, the earlier demarcated clusters precede this section's classification of reshoring concepts illustrated in Table 8. Based on the synthesis of definitions and thematic clusters above, we have concluded the literature review in this emerging field. It is intended to contribute to theory development and practitioner support in reshoring decisions by clarifying the dimensions.

Keywords Offshoring, Reshoring, Close shoring

Paper type Research paper

Introduction

De-internationalization can result from back-shoring/re-shoring (migrating to the nation of beginning) or close shoring (moving to a close by country) or from leaving specific

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nations or locales for different reasons. The company may reach a point at which internationalization ceases, either temporarily or permanently. The idea of de-internationalization was earliest advanced by Welch and Luostarinen, (2017),who theorized that once a firm had internationalized, there was no assurance that it would continue to grow transnational activities in the future. Academics have studied reshoring concepts and its manifestations under numerous tags such as de-internationalization, exit decision, foreign or international divestment, international market exit, export market withdrawal, reverse internationalization, back shoring, etc. These all discuss actions of a related nature in the firm's transnational trajectory, whether it is looking at downscaling its overseas setups, changing its modes of operation, re-focusing on the home market, or bringing manufacturing back home.

The current research work hardly portrays any trends regarding the evolution of specific parameters in literature pertaining to reshoring. There aren't many systematic reviews of the literature within the field, and those that do exist are limited by their lack of in-depth analysis and coverage. This study employs methodological advancements to examine the reshoring discipline's literature by clearly identifying clusters.

Reshoring concepts

The problem is compounded by the considerable number of options related to each of these arrangements. For instance, considering only divestment, terminating a subsidiary does not certainly mean reshoring of a multinational enterprise (MNE), because the firm may have opened other subsidiaries in other countries. In addition, a firm may close a production subsidiary, but leave a commercial agency or external brokers or representatives intact, which would also be measured an act of reshoring, but without leaving the foreign market. The transferal of a subsidiary from a distant country to a proximate country may have modest effect in terms of the sum of countries in which the MNE operates, but depending on the country or countries withdrawn, it may also mean nearshoring from worldwide (operating on several continents) to regional (operating on a single continent). Thus, there is a wide-ranging variation of reshoring concepts, with very dissimilar influences on the nature, scope, and intensity of the firm's intercontinental activities as shown in Table 1.

Author	Definition
Boffelli *et al.* (2020)	a. Location decision b. Change in ownership c. Reversal of the offshoring decision, so it involves only previously offshored activities
Sequeira and Hilletofth (2019), Per Hilletofth *et al.* (2019)	Process whereby manufacturing is moved back to native land
Per Hilletofth *et al.* (2019)	When companies decide to move manufacturing back to their home country
Müller and Voigt (2017)	The returning of procurement and production from abroad to home country
White and Borchers (2016)	Reversal of offshoring
Arik (2013)	In the US context, this means the relocation of the business operation to the US from emerging markets

Source(s): Authors' own creation

Table 1.
Variety of reshoring concepts

Classification of reshoring concepts

An organization will take different relocation strategies such as insourcing and reshoring largely dependent on if a change happened in the supply market and/or its channel. Relocation aspect is viewed as a change between different strategies meaning that an organization can opt for another supply strategy which they believe better suits the market conditions. This paper aims to holistically explore what has been published concerning reshoring concepts which will be crucial in guiding towards future research. Hence, the research objectives are

(1) How are reshoring concepts articles clustered?

(2) What are the emerging research aspects?

(3) Which journals, articles, and host nations that are most influential in the research of reshoring concepts?

It is imperative to understand the concept of reshoring, offshoring, back shoring, and its relevance to the aspect of supply management. As the world still grapples with COVID-19, it is being witnessed that the pandemic era will have a major impact economically, nationally, and internationally. Pandemics are having an impact on organizational structure concerning operations and supply chains (Samson, 2020). Many organizations have witnessed disruptions to their supply chains during the pandemic lockdowns due to their dependence on offshored supplies (Strange, 2020).

Countries are now making strategic reshoring decisions for pharmaceutical products as well as vital aspects of industrial supply chains like automobiles and chemicals whose supply disruptions can adversely affect GDP. In the given context, reshoring concepts are at the heart of entrepreneurial decision making to bring back manufacturing facilities toward the home country or its region. A current example of this is a French company named Stil (Terzian, 2020) which brought back its glass thermometer production back to its home after unexpected closure of its suppliers from China. Another Italian firm has restarted production of disposal bio-degradable face masks after 15 years to compete with low-cost alternatives from China (Greco, 2020). Reshoring concepts are now under consideration of organizations including Boeing, Bosch, Phillips and more.

Reshoring can be both in-house and outsourced. As part of the reshoring agenda, an organization may move its manufacturing facility back to headquarter or it might only bring back production still outsourced to another collaborative manufacturer in its home country (Wan *et al.*, 2019). Since the drivers behind reshoring decisions are resource competencies, structural changes, quality, innovation and overall supply chain responsiveness, reshoring concepts are of utmost interest for organizational leadership (Van den Bossche *et al.*, 2014).

Literature review

In the last few decades, only a handful of literature reviews have been written on reshoring concepts. Out of these nineteen literary reviews, 5 are traditional/conventional literature reviews leaving the systematic/bibliometric reviews at 14. Majority of the authors have employed content-analysis-based framework for classifying and comparing a sample of empirical research publications and provided a brief overview of the use of empirical research methods in the reshoring domain. Content analysis and descriptive analysis emerged as the most popular modes followed by segmented keyword network analysis and co-word analysis. Despite the varied sample sizes used, as shown in Table 2, only Saravanan *et al.*, (2022), da Fonseca and da Rocha (2022) have mentioned using VOSViewer software to bifurcate clusters and demarcate themes.

Saravanan *et al.* (2022) identified the current research trends and potential research avenues, by conducting an analysis of the COVID-19-related supply chain literature. For the entire corpus and the top three contributing journals (*Sustainability, International Journal of Logistics Management, and Operations Management Research*), bibliometric analysis (also known as a keyword co-occurrence network) and text mining tools (also known as N-gram analysis and topic modeling) are utilized in order to identify the most frequently discussed topics in the literature. The distinct topics in the corpus and journals can be identified using TF-IDF. In order to identify research trends and opportunities, 574 papers published up until the first semester of 2022 were gathered from the Scopus database. The application of digitalization to achieve resilience and sustainability, the utilization of additive manufacturing during the pandemic, the investigation of food supply chains, and the creation of supply chain decision models to combat the pandemic were the four topics that were considered by the keyword network. Topic modeling and segmented keyword network analysis were also carried out for the top three contributors. Even though the research concentrations for each journal are drawn from both analyses, the keyword network typically provides a more general scope, whereas the topic modeling provides more specific topics. The effects of the pandemic on plasma supply chains, cattle supply chains, and reshoring decisions, to name a few, were also revealed by the TF-IDF scores. Future research avenues are discussed based on the findings. As a result, supply chain practitioners and researchers will be able to identify supply chain advancements, literature gaps, and potential research avenues with the assistance of this study.

da Fonseca and da Rocha (2022) presented the topics of export withdrawal, subsidiary divestment, and back shoring or reshoring through a comprehensive review of research on de-internationalization. In the beginning, the main strands related to de-internationalization were confirmed using a bibliometric technique (co-word analysis) on keywords from articles and book chapters published between 1980 and 2020. The bibliometric analysis was then used in the study to identify the most recent trends within each theme. The literature was broken up into three groups that talked about the same thing—firms cutting their commitment to other countries—but used different but related terms. For each of the clusters, the effects of de-internationalization research were looked at, issues that required more investigation were mapped, and suggestions were made for future research. By defining the conceptual boundaries of the de-internationalization phenomenon and mapping its various manifestations within a single theoretical domain, the study employs a novel approach to gaining a broader comprehension.

The primary objective of these reviews seems to be simply reporting the quantity of research output without offering recommendations or making judgments and to broaden the scope of analysis to include a thematic layer. No current publication has examined the productivity of scholars despite the noticeable increase in the number of works published related to this emerging field as visualized in Figure 1. It is anticipated that this study's findings will fill the existing knowledge gap and provide insight into the direction that reshoring research will take in the future.

Table 2.
Distribution of sample sizes in reviews

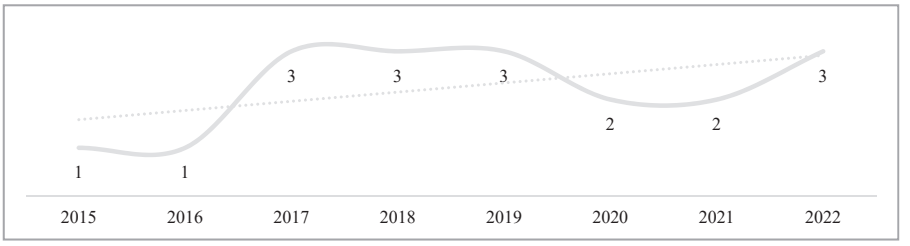
Sample size	Review papers
0–100	56%
101–200	25%
>200	19%

Source(s): Authors' own creation

For further extensive information on contributions to these literary reviews, most prolific authors were found to be Fratocchi L. Di Stefano C, Vignoli M. and Sartor M. Each of these authors has been affiliated to more than one publication in the field. Additionally, to see the area expertise of the journals publishing the bibliometric reviews, refer to Table 3. *Journal of Global Operations and Strategic Sourcing, Operations Management Research, Progress in International Business Research and Sustainability* (Switzerland) are at par with 2 literature reviews each. However, none of these journals is ranked A or B in ABDC ratings despite the reviews being Scopus-indexed.

On the other hand, the goal of this paper is to examine the literature in the field of reshoring with respect to supply network management. The current paper goes two steps further than the majority of other literature reviews to uncover complex data relationships. In order to reveal important literary trends, it first compares all major data categories against time, geographical regions, and combined time and geographical regions. Second, it provides insight that cannot be obtained from earlier sets of analysis by providing an account of cross tabulations among the various data categories.

The remainder of the paper is laid out as follows: This content analysis's procedure is described in the Methodology section. The application of research designs and popular research methods to study reshoring concepts are also covered. Trends in reshoring publication in terms of region, most prolific authors, universities, preferred journals, and



Source(s): Authors' own creation

Figure 1.
Publication trend of LRs by year

Journals	A	B	C	NL	Total
Journal of Global Operations and Strategic Sourcing			11%		*11%*
Operations Management Research			11%		*11%*
Progress in International Business Research				11%	*11%*
Sustainability (Switzerland)				11%	*11%*
Acta IMEKO				5%	*5%*
Advances in Transdisciplinary Engineering				5%	*5%*
Annual Reviews in Control				5%	*5%*
Development Policy Review		5%			*5%*
Economies			5%		*5%*
European Business Review		5%			*5%*
International Journal of Logistics Management	5%				*5%*
Journal of Purchasing and Supply Management	5%				*5%*
Management Review Quarterly				5%	*5%*
Production Engineering				5%	*5%*
World Review of Intermodal Transportation Research				5%	*5%*
Grand Total	*11%*	*11%*	*26%*	*53%*	*100%*

Source(s): Authors' own creation

Table 3.
Cross-tabulation between contributing journals and respective ABDC ratings

journal publication trend are presented. The major research findings are discussed. The conclusion and opportunities for future research are presented before the limitations of this research work are discussed.

Methodology

By extant literature review of bibliometric analysis published in this area, the search string for this paper was drawn basis the most commonly searched keywords. To begin, keyword search of all literature reviews was coded to focus on the most preferred combinations as shown in Figure 2. Although the theory building in reshoring concepts seems to be on nascent stages, this grounded-ness into existing research work circumvents any subjectivity in the keyword string so that all relevant papers are part of the final database.

A systematized literature review is undertaken to synopsize the current maturity level of theory. A structured method was used for retrieving and selecting the studies for this review. The following subsections outline the approach adopted for finding, screening and studying the articles and sample characteristics.

Finding the articles

There are, debatably, three major abstract and citation databases: Google Scholar, Scopus, and the Web of Science. Google Scholar was omitted because of its low data quality, which advances questions about its aptness for research. Meanwhile, Scopus has a wider reportage than the Web of Science, but the latter offers access to older sources. Since we are studying a recent phenomenon, the access to older sources offered by the Web of Science database is not a benefit. Therefore, Scopus was concentrated.

To uphold the reliability of practicality of the literature reviewed, the search was limited to articles published in peer reviewed journals only. Only English sources were included in our analysis given the language limitations of the author. Scopus was queried using the following string.

> (TITLE-ABS-KEY (reshor*) OR TITLE-ABS-KEY (backshor*) OR TITLE-ABS-KEY (back-shor*) OR TITLE-ABS-KEY (re-shor*) OR TITLE-ABS-KEY (back-reshor*) OR TITLE-ABS-KEY (back-sourcing) OR TITLE-ABS-KEY (“back reshor*”) OR TITLE-ABS-KEY (on-shor*) AND TITLE-ABS-KEY (“Supply Chain”)) AND (LIMIT-TO (LANGUAGE , “English”)) AND (LIMIT-TO (SRCTYPE , “j”))

This step retrieved 205 publications.

Screening the articles

At this stage, articles were included or excluded based on the abstract. Any article that covered aspects of reshoring concepts from a relevant subject area was retained. The inclusion-exclusion criteria are presented in Table 4.

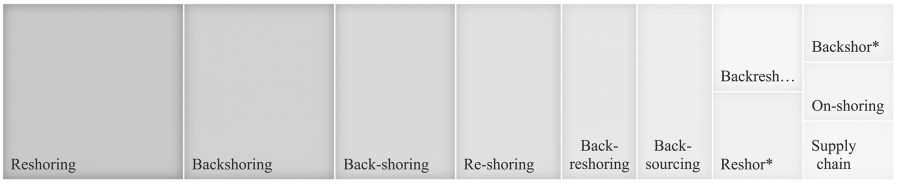


Figure 2.
Tree map for search string keywords

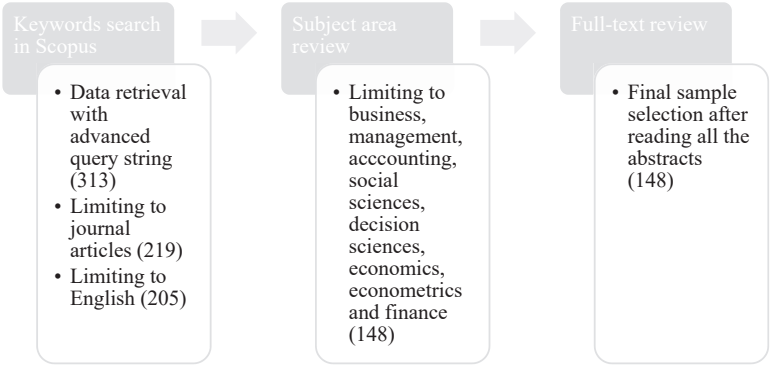
Source(s): Authors’ own creation

Subject area	Number of results	Criteria
Business, Management and Accounting	100	Included
Social Sciences	47	
Decision Sciences	47	
Economics, Econometrics and Finance	40	
Engineering	42	Excluded
Environmental Science	30	
Computer Science	23	
Energy	17	
Agricultural and Biological Sciences	16	
Medicine	8	
Mathematics	7	
Chemistry	5	
Materials Science	4	
Chemical Engineering	4	
Pharmacology, Toxicology and Pharmaceutics	3	
Multidisciplinary	3	
Physics and Astronomy	2	
Health Professions	2	
Earth and Planetary Sciences	2	
Psychology	1	
Nursing	1	
Biochemistry, Genetics and Molecular Biology	1	
Arts and Humanities	1	

Source(s): Authors' own creation

Table 4.
Inclusion/exclusion criteria

This procedure based was required since the literature on reshoring concepts is extremely expansive and covers several diverse areas. The screening condensed the relevant articles to 148. The high number of unrelated articles is validated seen our all-encompassing search terms which included several articles that did not explicitly integrate the reshoring concepts in a business context. Using numerous channels for retrieving the full articles, i.e. database subscription/access available, these 148 articles were evaluated as the final sample. This is summarized in Figure 3.



Source(s): Authors' own creation

Figure 3.
Selection criteria for relevant articles

Analyzing the articles

Tool selection for bibliometric analysis. Two of the most well-known and promising domain visualization software packages were considered for this review as shown in Table 5.

VOS viewer and Bibliometrix are both capable of providing domain visualization, but each has its own set of requirements and capabilities. VOS viewer is more user-friendly, but it sacrifices limited alternatives to its preprogrammed functions and requires repeated analysis due to its inability to combine data from multiple sources for simplicity, adaptability, and responsiveness to user needs.

Bibliometrix is more robust and adaptable because it can be customized more easily by users and can

(1) perform analyses with files from multiple databases

(2) accept files from the Cochrane Database of Systematic Reviews (CDSR) and RISmed

(3) provide exclusive analyses for a price that includes a steeper programming learning curve

It could be argued that each addresses a distinct need. VOSviewer might be all that a given client or set of clients need. However, given that a particular skill is required, it might end up

Item	VOSviewer	Bibliometrix
Software requirements	Linux, Windows or MacOS	Linux, Windows or MacOS
Install requirements	Download the appropriate version for your operating system	Requires installation of R language IDE and then of the Bibliometrix package
Requires programming knowledge	No	Yes
Ease of use	High	Low
Customizability	Low	High
Import data from (file formats accepted)	SCOPUS (CSV), Clarivate Analytics Web of Science (Plaintext or tab-delimited), PubMed/Medline (MEDLINE) and Dimensions (CSV)	SCOPUS (BibTeX or CSV), Clarivate Analytics Web of Science (Plaintext, BibTeX or EndNote), PubMed/ Medline (MEDLINE), Cochrane Database of Systematic Reviews (Plaintext) and RISmed (RIS)
Load multiple files	Yes	Yes
Data analysis from multiple sources	No	Yes
API support	Microsoft Academic, Crossref, Europe PMC, Semantic Scholar, the Open Citations Corpus (OCC), OpenCitations Index of Crossref open DOI-to-DOI citations (COCI), and Wikidata	Dimensions, NCBI PubMed and Scopus
Exports spreadsheets	Yes	No
Dictionary creation (thesaurus)	Yes	No
Exclusive analysis that only one of the tools delivers	Temporal evolution of authors and institutions	Impact indexes (H-index, G-index, M-index) Totalization of authors, sources, base document
Flexibility and responsiveness to the use	High	Low

Table 5.
Pros and cons of bibliometric tools

Source(s): Adopted from Arruda *et al.* (2022)

being a first step before deciding how much more work Bibliometrix will require. Hence, VOSviewer was chosen to be used for this review.

Analysis technique. A bibliometric investigation is valuable for thoroughly studying the total scientific information on research region. The method, which consists of a quantitative analysis of empirical data taken from the literature, is frequently used to map scientific fields, particularly emerging ones. It gives visual portrayal of the connections that can be laid out by publications, authors, journals, or keywords as they are situated in a design called the "bibliometric network". The protocol shown in Figure 4 was followed for the study.

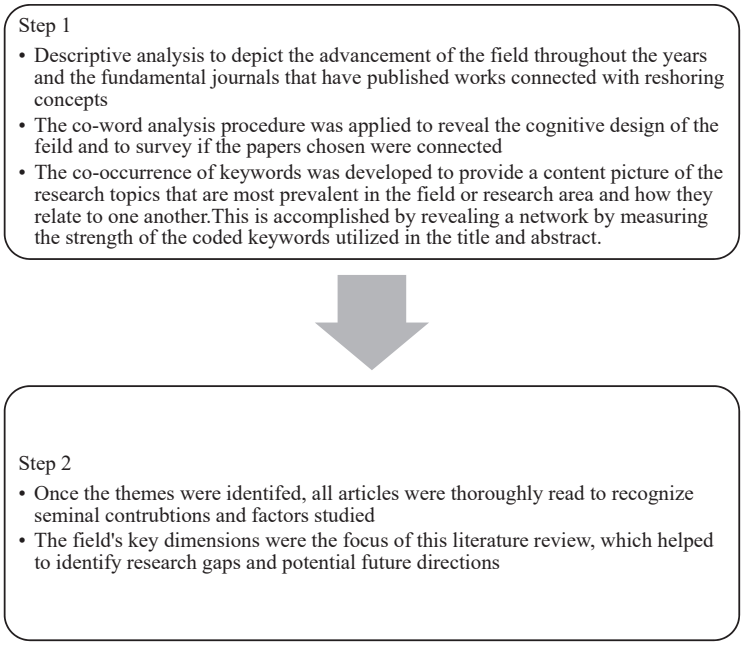
Before presenting the results, the following sub-section reviews the basic sample characteristics.

Sample characteristics

The discussion of reshoring concepts in supply chain and international business literature started in the late 1990s and continued at a modest rate until 2015. There has been an upsurge of papers in this area since the commencement of 2016, which shows a mounting research concentration in this arena, further supporting the requirement for this thorough analysis.

Table 6 presents the distribution of journals across which the articles were published. The sample contains articles from a wide-ranging set of journals. It was found that 62 journals have published just single paper on the subject. Additionally, as expected, the top journals in the field head the list with the highest contribution of relevant articles in *Sustainability* journal (7) in the evolving field of reshoring research.

Meanwhile, Figure 5 presents the dispersal of the research context by countries. The results show a principal role of United States of America in fast-tracking reshoring research. Furthermore, significant research in the reshoring concepts has also been conducted in the



Source(s): Authors' own creation

Figure 4.
Step-by-step breakdown of analysis

Journal name	Number of papers	%
Sustainability (Switzerland)	7	5%
International Journal of Production Economics	6	4%
International Journal of Logistics Management	6	4%
Operations Management Research	5	3%
Supply Chain Forum	4	3%
British Journal of Management	4	3%
Supply Chain Management	4	3%
European Journal of Operational Research	3	2%
Journal of Supply Chain Management	3	2%
Journal of Purchasing and Supply Management	3	2%
International Journal of Operations and Production Management	3	2%
International Journal of Physical Distribution and Logistics Management	3	2%
Cambridge Journal of Regions, Economy, and Society	3	2%
International Food and Agribusiness Management Review	2	1%
Manufacturing and Service Operations Management	2	1%
California Management Review	2	1%
Development Policy Review	2	1%
Omega (United Kingdom)	2	1%
Production Planning and Control	2	1%
Operations and Supply Chain Management	2	1%
Annals of Operations Research	2	1%
Production and Operations Management	2	1%
Transportation Research Part E: Logistics and Transportation Review	2	1%
Resources, Conservation and Recycling	2	1%
Journal of Fashion Marketing and Management	2	1%
IEEE Engineering Management Review	2	1%
Journal of Global Operations and Strategic Sourcing	2	1%
International Journal of Production Research	2	1%
World Review of Intermodal Transportation Research	2	1%
Others	62	42%
Total	148	100%

Source(s): Authors' own creation

Table 6. Distribution of reviewed articles by journal

United Kingdom (UK), China, and Sweden including other European countries. The European Union's (EU) increasing concentration in reshoring is apparent. However, these figures omit the publications where the research context was indistinguishable or unspecified.

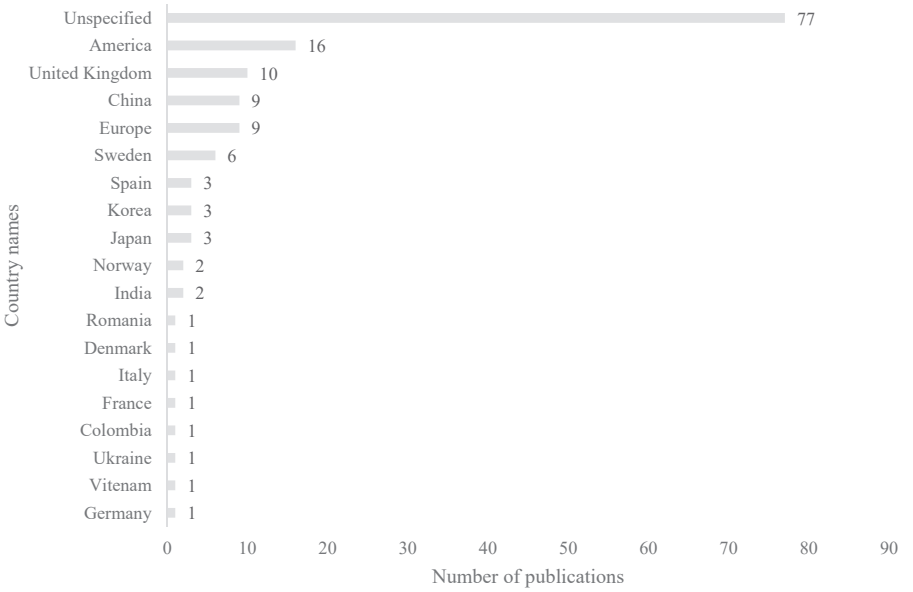
Review results

Keyword co-occurrence analysis

The co-word analysis using articles' keywords as nodes produced four clusters. Table 7 presents the clusters with the frequency of the keywords (occurrence) and the total strength of the links of an item with other items (total link strength). Keywords that were originally used to search the database are highlighted with an asterisk.

Cluster analysis

The VOSviewer-retrieved network's graphical representation Figure 6, shows that, notwithstanding the division of subjects, there are likewise associations among them. Both network actors (keywords) and network ties (links between them) were met for the



Source(s): Authors' own creation

Figure 5. Distribution of reviewed articles by country

Keyword	Occurrences	Total link strength
Reshoring*	50	112
Supply chain management	37	81
Offshoring	25	68
Supply chains	22	60
COVID-19	20	37
Backshoring*	16	39
Sustainability	12	32
Outsourcing	11	32
Global value chains	11	29
Manufacturing	11	26
Global supply chain	10	14
Resilience	9	28
Nearshoring*	7	22
Sustainable development	5	24
Insourcing	5	21
Costs	5	20
Location	5	19
Location decisions	5	19
Globalization	5	13

Source(s): Authors' own creation

Table 7. Occurrences of keywords

establishment of a network structure. Consequently, one can gather that a piece of knowledge structure of reshoring concepts is illustrated.

The clusters formed by keywords provide interesting insights. The green cluster – **internalization decisions** - shows that research on reshoring is indeed connected with

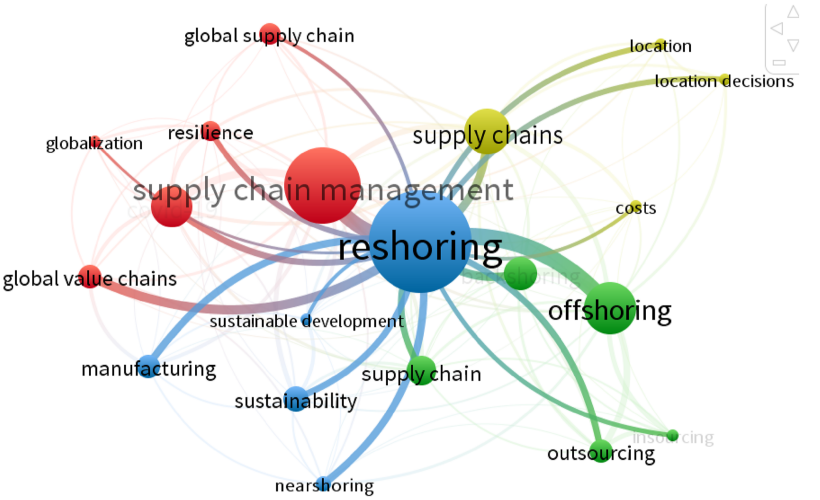


Figure 6.
Network of clusters

Source(s): Authors' own creation

sourcing decisions yet conceptually different also. Research has proven that firms do decide to source differently also as part of their reshoring decisions. Reshoring is thus a matter of interest to procurement professionals also to create winning partnerships for smart (re) localization according to dynamic competitive advantages as well as strategic stockpiling and the consideration of supply security in public procurement (Böheim, 2022). Case studies have been the primary method adopted by research on insourcing processes. Geographies have been considered from a resource-based perspective to fully uncover the non-linear processes involved within.

The red cluster **– resilient supply chains** – focuses on MNEs, which makes sense, considering that the keywords are related to global value chains and the lessons learnt from pandemic-led supply disruptions. These issues are usually investigated in the context of larger, resource-rich firms that have a global footprint. Research on global value chain management is now incomplete without the mention of COVID-19. Hence, it is no surprise that the research is tilted towards manufacturers facing complex supply chain challenges due to pandemics, trade wars, political unrest, and social unrest. Post pandemic, managers are considering creative reshoring paths to build resilience in the economy creating learning curve for supply and demand infrastructure internationally (Kersan-Škabić, 2022). The blue cluster –**manufacturing decisions** – includes the terms reshoring and nearshoring, frequently used interchangeably. This decision does not certainly mean that the firm will start manufacturing on its own, because the outsourcing possibility is still on the table, provided that the collaborative manufacturing facilities are in its home country or bordering country.

Some studies indicate that nearshoring is not unique to MNEs; medium-sized firms may wish even more keenly to nearshore, owing to differing motivations like responsiveness, R&D proximity, and service reliability. Industry related contingencies could be relevant. However, (Bárcia De Mattos *et al.*, 2021) showed that the generic trend is to repatriate operations towards high-tech and labor-intensive geographies.

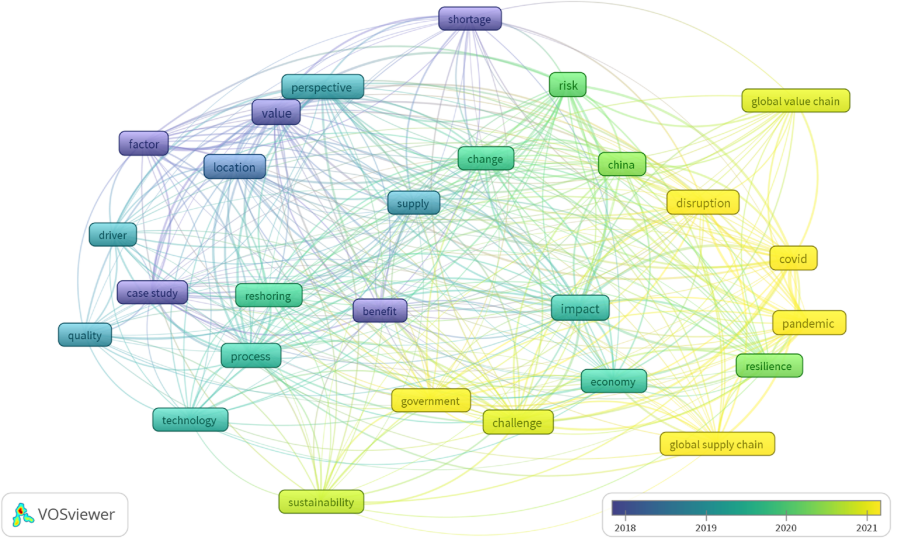
The yellow cluster – **location decisions** – includes the terms cost and location. This decision involves examining the variables influencing firms' decisions about where to locate

their manufacturing facilities using empirical data. Manufacturing location—more specifically, the potential for nearshoring or reshoring by businesses—has drawn a lot of attention lately. In order to investigate what factors, influence businesses' perceptions of the desirability of different areas as locations for owned manufacturing plants, research utilizes the location aspect of internalization theory. The causes of manufacturing site decisions, the movement of manufacturing into or out of a region, and the overall perceived risk of a region are tested in various studies in this cluster.

Ellram *et al.* (2013) show that different drivers affect different regions differently. For instance, during the next three years, North America's trade policies are seen favorably, but they are also seen as a growing source of risk, perhaps due to bipartisan tensions. To improve our comprehension of the current situation of manufacturing location decisions from an internalization perspective, numerous theoretical propositions are established. It seems that businesses are starting to consider a wider range of variables when deciding where to locate their production facilities, placing greater emphasis on supply chain concerns in addition to strategic considerations.

Conclusion

The analysis presented above exhibited that reshoring is still a developing research arena. Most related publications are theoretical works and case studies, which is representative of a research field that is still at its infancy. Nevertheless, much more research effort must be done on all supply chain functions in order to realize the full potential of reshoring. Grounded on the review results, Figure 7 summaries the emergent themes. Given that reshoring is a promising new frontier in international business, we believe that advancing reshoring concepts in the following themes will substantially aid organizations to achieve a higher level of location-specific advantages.



Source(s): Authors' own creation

Figure 7.
Terms co-occurrence in text

Resilience

As the earth heats, storms and floods become more violent, killing thousands, and upsetting electricity grids and supply chains while inflicting damage worth billions of dollars. In the meantime, demand is growing, and resources of all types are becoming scarcer. (Azadegan and Dooley, 2021; Cha, 2023; Choudhary *et al.*, 2023; Winston, 2014) caution that the two mega challenges of catastrophic weather and resource scarcity could have a previously unheard-of effect on corporate profits and world economy. In order to counter these dangers, businesses need to do what they refer to as "the big pivot." The big pivot is a drastic shift in tactics, procedures, and mindset. Enterprises should prioritize addressing the world's major difficulties and leverage capitalism's resources to do so economically, rather than prioritizing short-term profits and considering environmental challenges as specialized issues.

That implies adopting new strategies to vision, valuation, and joint effort: Organizations should define long haul objectives in view of science and seek after developments that appear to be sinful. In addition, in order to lessen their reliance on resources, they will need to collaborate with other organizations, including rivals. By taking these actions, firms will expand their strength to unpredictable asset costs, electrical blackouts, and changes in client needs. They will make businesses run better and help the whole world.

Global value chains

Castañeda-Navarrete *et al.* (2021), Freund *et al.* (2022), Khorana *et al.* (2022), Reiter and Stehrer (2023) contribute to a higher expertise of the dimensions of disruptions to industries and cost chains essential to the economies of and livelihoods in developing counties. Developing international locations are struggling disproportionately in phrases of profits, wages, protection, and safety. Five key regions of coverage to assist a resilient, inclusive, and sustainable global value chain stand out.

(1) emergency responses to make sure organization survival and the safety of employees' livelihoods

(2) reformulating FDI appeal techniques

(3) capabilities development

(4) strengthening social safety systems

(5) catering gender-specific workplace requirements

Pandemic-related disruptions

The COVID-19 pandemic has created problems for companies that operate cross borders and/or buy production inputs from abroad, import goods and deliver their products to foreign customers and markets. Against this background, (Kamp, 2021) examines the causes of supply chain disruptions caused by the pandemic outbreak and the ways companies have tried to deal with them. The paper argues that multinational companies are putting more emphasis on risk management and business continuity plans, and the adoption of advanced digital forms of market data collection and supply chain is taking root. At the same time, he assumes that instead of a back shoring wave, a multilayer offshoring format can be foreseen in the future: the localization of the format on different continents and sometimes within one continent.

China

Reshoring, whether or not regarding back-reshoring or near-reshoring, is a pretty latest phenomenon. (Fel and Griette, 2017; Katada *et al.*, 2023; Liang *et al.*, 2022; Xiang and Yu, 2021) apprehend motives for reshoring to and from China. The authors decide most important reasons for near-reshoring and display that agencies having reshored are successful in terms of product quality, responsiveness among order and delivery, responsiveness among layout and production, and in price control too.

Limitations

This review has a few limitations. The absence of publications in other language, than English, may result in a significant loss of knowledge. This research paper cited a few relevant publications in the form of conference papers, industry reports, books, and book chapters. Nonetheless, they were excluded in the organized bibliometric audit. To further advance the knowledge in this field, exploratory longitudinal case-studies will bring in focus the changes on manufacturing strategies using the shoring and reshoring stages. For further advancement of application of theory, Di Mauro *et al.* (2018) conducted a multiple case-studies analysis, searching for common patterns in offshoring and subsequent back shoring initiatives.

The academic literature typically examines offshoring and back shoring-related motivations as distinct entities. This separation prevents a more in-depth understanding of the two phenomena and implicitly rejects the idea that back shoring could be a step in the internationalization process of a company. Case research methodology will fill this void by

(1) determining whether offshoring and back shoring motivations are related at the firm level

(2) determining whether back shoring is the development of the company's competitive and location strategies or a "failure" of the offshoring initiative.

The identification of the primary reasons for offshoring and back shoring is theoretically grounded in this bibliometric literary review. For further theory building, case studies will make it possible to comprehend the connections between the motivations, governance modes and location selection. Hence, future research direction emerges to gain findings from live cases of reshoring.

Future research direction

This is, to the best of our knowledge, one of the earliest attempts to conceptualize and define reshoring concepts to appropriately distinguish them from one another. To accomplish this, the earlier demarcated clusters precede this section's classification of reshoring concepts illustrated in Figure 8. Based on the synthesis of definitions and thematic clusters above, we have concluded the literature review in this emerging field. We hope that this significantly furthers the development of reshoring concepts and provides a clear dimension for researchers and practitioners in reshoring decisions.

The developing interest in arranging and executing reshoring activities warrants more research in the fundamental underlying concepts. However, there are still a lot of misunderstandings about the terms used due to the conceptual proximity. This study argued that a lack of understanding of reshoring concepts is stifling the field's progress. We responded by offering a demarcation of the concepts and their definitions derived from the larger body of literature so that the currently confused concepts are labeled according to relevant peculiarities. We then conducted a systematic literature review to acquire a comprehensive understanding of the current state of reshoring research. The field is

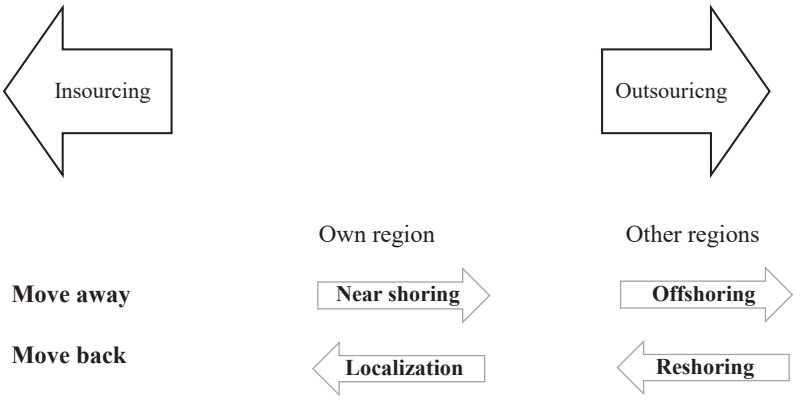


Figure 8.
Reshoring concepts

Source(s): Authors' own creation

promising and warrants numerous additional studies. Future case-based research may give some context concerning other geographical locations, industries and with different organizational sizes. In general, the study provided timely advice for researchers, practitioners, and policymakers to initiate causal relationships and framework for mature theory development.

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