

Country of Origin on B2B Automotive Aftermarket: A Scoping Review

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1. INTRODUCTION

An elementary goal for a company in a globalized context is to expand its boundaries through international business (IB), reaching foreign markets to minimize costs, increasing its production and achieving several other benefits (Vahlne, 2020). As companies expand into international markets, the country of origin (COO) becomes an increasingly important factor, particularly in industries such as automotive, where consumer perceptions of product quality and reliability are influenced by the product's origin (Uddin et al., 2022). Once placed on IB market, the product carries a set of informational cues such as price, brand, warranties, design, manufacturing location, etc. which impact perceived risk, perceived quality and, of course, customer behaviour (Bilkey & Nes, 1982). The manufacturing location commonly called country of origin (COO) is much more than just a “Made in... (country name)” phrase printed in the boxes, its effect has been longer considered an important issue in product evaluation and perceived quality, mainly for developing countries (Bilkey & Nes, 1982) (Verlegh & Steenkamp, 1999) (Kalicharan, 2014). It can also generate a positive effect on brand image, brand evaluation and purchase intention (Hien et al., 2020).

The COO effect has been studied and reported in several researches, mainly in food products like broiler meat (Pouta et al., 2010), wines (D'Alessandro & Pecotich, 2013) and organic food (Thogersen et al., 2017), but recently it has been applied to others sectors and products such as luxury goods (Godey, et al., 2012), Chinese smartphones (Yunus & Rashid, 2016) and even COVID-19 vaccines (Chiang et al., 2022). Also, consumers from emerging countries use to provide higher evaluation of product quality on goods manufactured in developed countries, especially for technological products, once developed countries are related to technological advances and the competitive nature of those markets (Kalicharan, 2014). So that, it is clear that COO plays an important role in customer preferences regarding some products, but as Verlegh & Steenkamp (1999, p. 539) said in their review: “Economic development alone cannot explain why consumers have a preference for French wine, German cars, Italian clothes, and Japanese electronics”, there should be something more related to these preferences, that could be also symbolical and emotional as mentioned by the authors.

In the other hand, the automotive industry and its supporting supply chain compose the largest industry in the world, employing more than 10% of the entire available manpower (Zailani, Govindan, Iranmanesh, Shaharudin, & Chong, 2015). In addition, it is one of most globalized sectors in the world: it sustains an enormous production level, while it goes through a fierce competition between the players placed around the globe (Zainudin et al., 2021). As a consequence of that, the automotive industry is among the most important drivers for economic growth in its leader countries: China, Japan, USA and Germany (Tang & Fitzsimons, 2013). Thereupon, the automotive parts industry can be divided into two main segments: assemblers and aftermarket.

The first one considers the parts produced exclusively for vehicle's first assemble at automakers, while the second one oversees the parts used at repairing and maintenance (Barros et al., 2015). The sector comprehends a wide range of products and services offered after the vehicle original sale to its last stage of lifecycle: including replacement parts, upgrade accessories, repairing services, lubricants, tyres, telematics, etc. The Brazilian aftermarket industry sold US\$ 13.5 billion in 2022, a third of this amount was exported to several markets around the world especially South America that leads the ranking with more than US\$ 2.7 billion in sales (Sindipeças, 2023). That means that despite of the offer of several origin like China, USA, Japan and Germany – already mentioned as the top players of the segment -, there are some customers that seem to prefer products from another COO. Another relevant issue is that in the automotive aftermarket, the product can go through a long supply chain until reach the final consumer, including import companies, distributors, retail shops and maintenance

centres (Barros et al., 2015); it means that the industry sales are often business-to business (B2B) deals.

Nevertheless, there are researches that analysed the COO effect in the purchase intention of cars (Wang & Yang, 2008), there is few explicit available literature approaching the COO effect to the automotive market in particular and generalization since other markets studies can be very questionable (Lu et al., 2016). Besides B2B literature related to COO occurs in a lower frequency than business-to-consumer (B2C) (Silva & Giraldi, 2016), the COO effect was also reported as relevant on B2B (Chen et al., 2011), and several researchers end up assuming B2C results as valid to B2B as well, what can lead to an inaccurate understanding of how B2B buyers perceive the COO (Crespo et al., 2023). Finally, B2C consumers can only purchase a range of products chosen by B2B buyers, regardless of their preferences (Uddin et al., 2022). This gap leads us to the research question: how is COO addressed on the automotive B2B market? This is why a scoping review was conducted as a way to mapping the research done which were able to converge both themes, identifying any existing gaps in knowledge and finally providing support for a possible further systematic review.

2. LITERATURE REVIEW

Once this paper is a literature review itself, this section is focused in presenting the state of art of research covering the COO effect at B2B marketing. The seminal work of Bilkey & Nes (1982) had already brought up the relevance of COO effect in “Industrial Purchasing” as referenced by the authors at the time, or B2B as commonly said nowadays. The authors mention how industrial buyers use to rank-order suppliers accordingly to their location and it affects the perceived quality as well. In addition, COO proved to be a major characteristic at high-risk situations in B2B, while price is determinant at low-risk situations. In despite of its substantial relevance, the “Industrial Purchasing” section on Bilkey & Nes’ (1982) paper only cited three previous works what already indicates a gap in the COO literature about B2B.

More than 30 years later, Silva & Giraldi (2016) conducted a literature review on B2B marketing and COO effect. At the first sight, the scenario did not change: COO effect is still studied mainly at B2C marketing rather than B2B. However, the authors concluded that despite the low number of publications, most of the emerging topics at the time were covered until the 2000, but there is still possibility for further research involving emanating subjects such as culture, purchase decision process and trade marketing. Another pertinent matter is that Silva & Giraldi (2016) cite three papers related to the automotive market: they studied the COO effect and took cars as one of the analyzed products, but all of them were in B2C context and were cited only to contextualize the research patch.

In the same year, Lu et. al. (2016) reviewed 554 articles published over 35 years to understand the status of research on country image (CI) and IB, marketing and customer behavior. The authors point out areas that still have appeal and relevance on CI research: industrial buyers, investors, services and digital marketspaces. They also criticize the poor replicability of the studies and its generalizability as well, mainly thought sampling from academic students only, a problem that rarely occurs on B2B studies.

A recent study by Uddin et al. (2022) focused on analyzing the effect of country-image (CI) on B2B buyers through three construct models. They divided CI into two dimensions: overall country image (COI) and product country image (PCI). The first dimension represents consumers' general perceptions of product quality from a given country, while the second relates to the country images a buyer can associate with a specific product (or line). Part of their findings were similar to B2C previous studies which reported that developed countries enjoy a superior image over developing ones even whether components or raw material came from developing countries (Diamantopoulos et al., 2011) (Kalicharan, 2014) (Balabanis et al., 2019).

But they also find out that for B2B buyers, the PCI is more relevant than COI once industrial buyers used to have much more information from sourcing countries than end consumers. Or just like they said: “B2B importers prioritize product-specific country image in making their supplier company choice that is not necessarily a developed country, but which has a positive image within that product category.”.

An even more recent study conducted by Crespo et al. (2023) added another crucial point: the COO image influences the perceived quality of the relational dimensions: trust, commitment and satisfaction, beyond the product quality, resulting in loyalty. The paper also reinforces the difference between B2C and B2C purchasers’ perceptions, emphasizing the essential role of industrial marketing studies. In the next section, we describe our scoping review method in details.

3. METHOD

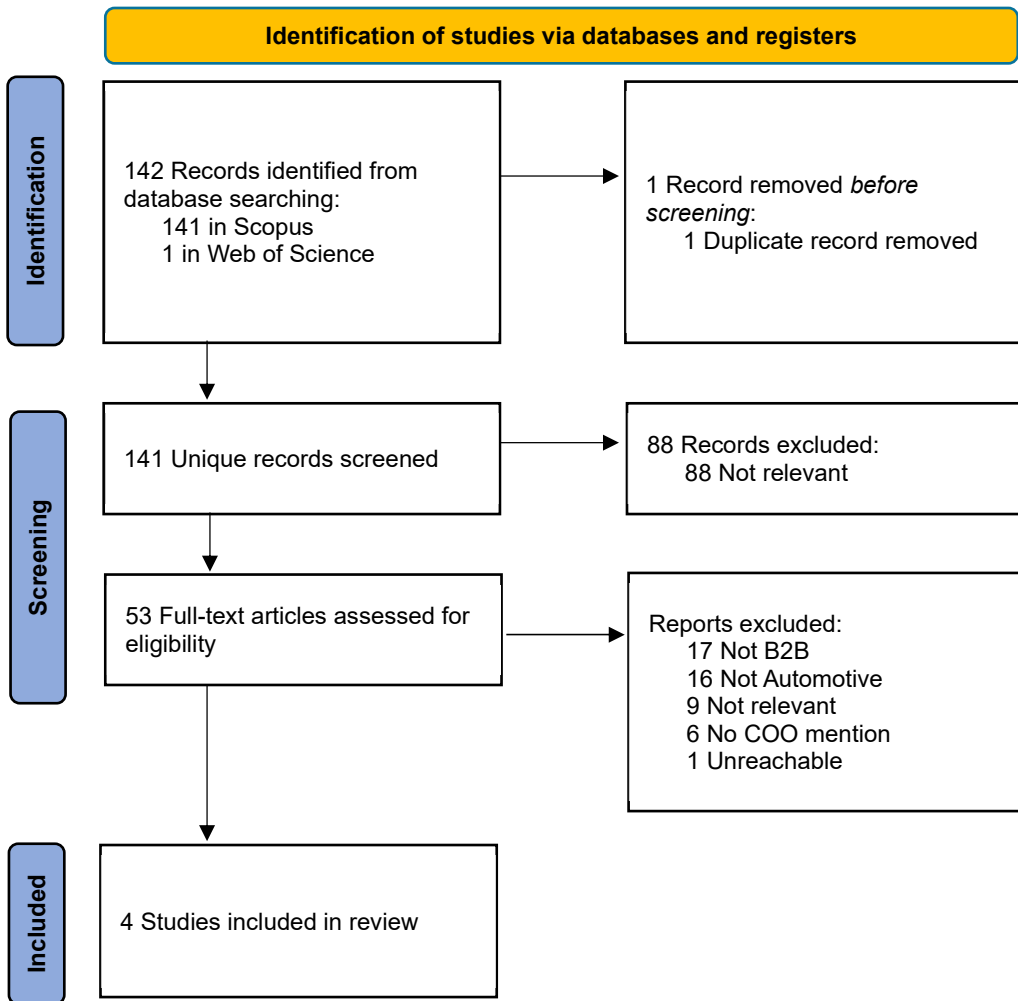
This scoping review was conducted based on the Preferred Reporting Items for Systematic Reviews and Meta-analysis Protocol for Scoping Review (PRISMA-ScR) which was revised by the research team. A scoping review aims to mapping the literature about a theme through a transparent and strict method, but without providing any critical review as it happens in a systematic review (Arksey & O'Malley, 2005). In other words, a scoping review differs from a systematic review because instead of issuing a qualitative analysis of the available content, it only intends to quickly delineate the main concepts around a knowledge field (Munn, et al., 2018).

So that, we applied the method suggested in the PRISMA website (Tricco, et al., 2018) and the papers were filtered as illustrated on Figure 1. This review was conducted as follows: as soon as the research question was formulated, Scopus and Web of Science were selected as the databases for searching due their notable use by scholars on bibliometric studies and reviews (Donthu et al., 2021). Then, the following key words were defined for the first search on the databases: “automotive aftermarket” and “country of origin”, considering all search fields. Articles or reviews were considered if they were written in English and relating somehow the automotive aftermarket to COO, e.g. how the COO affects the importer’s purchase intention; whether the COO provides a “quality scale” to the B2B customers, etc. Books and its chapters were not considered and no time period was defined to the search.

An initial search following these criteria resulted in only three papers, because of that, alternative key words were adopted in order to expand the search and strength the review itself and reported on Table 1. Instead of “automotive aftermarket”, we used “industrial marketing” or “B2B marketing” or “marketing B2B” or “organizational marketing” as suggested by Silva & Giraldi (2016); toward keeping the sector approach, the “automotive” keyword was also added. The keyword “country of origin” was kept but it was combined with his acronym “COO” through another “or” operator. In furtherance of bringing up the most of relevant aspects of the theme, the paper methodology was not an eligibility criterion: it could be qualitative, quantitative or mixed.

Figure 1

Scoping review's PRISMA flowchart



Note: Adapted from Tricco et al. (2018) with data compiled by the author.

Table 1

Scoping review's search key words

Key-words	Industrial marketing	Country of origin	Automotive
Expanded key-words	"industrial marketing" OR "B2B marketing" OR "marketing B2B" OR "organizational marketing"	"country of origin" OR "COO" OR "country brand"	"automotive" OR "autoparts"
String	(ALL ("industrial marketing" OR "B2B marketing" OR "marketing B2B" OR "organizational marketing") AND ALL ("country of origin" OR "COO" OR "country brand") AND ALL ("automotive" OR "autoparts")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOC-TYPE, "re"))		

Note. Created by the authors.

4. RESULTS AND DISCUSSION

The search through the string resulted in 142 records, but one of them was duplicated (in both databases). The screening phase consisted of two steps. First, we reviewed the abstracts and keywords to eliminate not relevant papers. Then, we conducted a more in-depth reading to focus on the essential topics: B2B, COO, and automotive. Studies which did not full fill these topics were removed in this second step. Most of the 17 papers removed for not being B2B were COO in automotive B2C studies, what supports Silva & Giraldi (2016) findings: the vast majority of the researches are placed into B2C context. Besides that, 16 records were removed because they are not automotive related, they just cite an automotive paper and then appeared in the data collection. Other records were removed due lack of COO theory and some simply were not relevant to the review after a second evaluation. The for studies included in the review are summarized in Table 2.

The oldest paper (Callahan, 2006) assess American and Canadian buyers' perceptions form American, Canadian and Mexican suppliers. It is actually a general sector study but 13% of the researched sample was from automotive market (the largest one) so we decided to keep it into the review, once its findings about ethnocentrism and xenocentrism regarding developing countries are similar to reported in B2C works (Bilkey & Nes, 1982) (Kalicharan, 2014) (Balabanis et al., 2019).

The second paper (Lockstrom et al., 2011), which was also published in the Journal of Supply Chain Management as the previous one, is actually focused in domestic supplier integration in the Chinese automotive industry through foreigner buyer's perspective. The study reveals that integration is still low comparing to the US and Europe countries, mainly in product development. The authors summarize key challenges (Table 4, p. 54): from the supplier's side, there is a lack of production capabilities, while buyers shown mixed constraints, including cross-cultural management skills which are barely related to COO theory.

The last two papers were written by same authors and published in Industrial Marketing Management. The first one (Schätzle & Jacob, 2019) brings up a common theme on B2C studies: stereotypical companies inferred from COO (Bilkey & Nes, Country-of-origin effects on product evaluations, 1982) (Kalicharan, 2014). Thought repertory interviews, the authors found similar results to B2C researches where stereotypes are also used by B2B customers as heuristics to evaluate suppliers' organizational competences. The last study (Jacob & Schätzle, 2020) resumes the previous one, but now by way of a survey and quantitative approach, the authors develop and empirically validated a supplier-country-image scale and clarify its power in the automotive business.

In terms of method, there is no prevalence: both qualitative and quantitative were done through interviews and surveys respectively, none experiment was found. That indicates a lack of mixed and more complex methods as indicated by Lu et. al. (2016).

In despite of its expected similarities with B2C studies, these papers managed to present their originality into a B2C context, highlighting its singularity as commented by Crespo, Crespo & Silva (2023) and Lu at. al. (2016). As planned, while those published in the Journal of Supply Chain Management present a logistics and operations approach; those published in the Industrial Marketing Management are much more IB and marketing related, mainly customer behaviour (even the customer is another company). This led us to a preliminary answer to the research question: In the automotive market, COO has been addressed into supply chain and customer behaviour. This indicates that the gaps identified by Silva and Giraldi (2016) were not fully addressed. Culture, noted by Lu et al. (2016) as well, is briefly mentioned in Lockstrom et al. (2011) but not thoroughly explored. The purchase decision process is touched upon in Jacob and Schätzle (2020), though not in depth. Lastly, trade marketing (Diamantopoulos et al., 2011) remains unexplored. Also, other emerging topics in the COO effect studies such as branding and country-related affect (Chen et al., 2014) were not treated.

Table 2*Scoping review relevant papers*

Year	Title	Author(s)	Journal	Method	Data Collection	Sample	Findings
2006	Comparisons of the Competitive Position of Canadian, Mexican, and U.S. Suppliers	Callahan, T. J.	Journal of Supply Chain Management	Quantitative	Survey	514 Canadian and American purchasers professionals	U.S. purchasing professionals rated Canadian suppliers lower on the dimensions of cooperation, cost, and quality than they rated U.S. suppliers. Canadian purchasing professionals rated U.S. suppliers low on cooperation. Both Canadian and U.S. suppliers rated Mexican suppliers relatively low on all competitive dimensions.
2011	Domestic supplier integration in the Chinese automotive industry: The buyer's perspective	Lockstrom, M.; Schadel, J.; Moser, R.; Harrison, N.	Journal of Supply Chain Management	Qualitative	Semi-structured interviews	30 purchasing, quality and supply chain managers from automotive companies	Domestic supplier integration in terms of joint product development and advanced production planning activities between buyers and suppliers currently takes place to a relatively low extent. A lack of critical supplier capabilities as well as buyer-side constraints act as inhibiting factors.
2019	Stereotypical supplier evaluation criteria as inferred from country-of-origin information	Schätzle, S.; Jacob, F.	Industrial Marketing Management	Qualitative	Repertory grid interview	30 purchasing agents from car manufacturers in three European countries.	Stereotypical supplier evaluation criteria reflect a customer-perceived interpretation of suppliers' organizational competences.
2020	Will a supplier's origin make a difference to its business customers?	Jacob, F.; Schätzle, S.	Industrial Marketing Management	Quantitative	Survey	157 German and French purchasing agents from automotive and machinery manufacturers	Supplier-Country-Images indeed vary when purchasing agents evaluate suppliers from different countries.

Note. Data compiled by the authors.

5. CONCLUSIONS

This scoping review examined how the country-of-origin (COO) effect is studied within automotive industrial marketing. Despite its known influence on purchase decisions, the COO effect has been explored across various segments, markets, and products. However, in the context of automotive B2B (business-to-business) marketing, only four relevant studies were identified in the searched databases (Scopus and Web of Science). The reviewed papers predominantly address the COO effect in relation to supply chain dynamics or customer behavior. Nonetheless, there is a notable gap in research exploring other critical areas such as branding, culture, sourcing process, and trade marketing within the automotive B2B sector.

While the limitations of this review—such as the choice of databases, language constraints, and keyword selection—should be acknowledged, we believe that this scoping review offers valuable insights by linking automotive market research with COO effect studies. This linkage not only underscores the relevance of COO in international business (IB) but also highlights the urgent need for further research in underexplored areas. Addressing these gaps could provide automotive companies with better tools to navigate international markets, enhance their branding strategies, and optimize supply chain management in the B2B context.

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