Journal of Business Research 149 (2022) 927–937

Contents lists available at ScienceDirect

Journal of Business Research

journal homepage: www.elsevier.com/locate/jbusres

Revisiting the innovation–export entry link through a configuration approach

Carmen Lopez [a,*], Mohamed Yacine Haddoud [b], Dulekha Kasturiratne [c]

[a] Southampton Business School, University of Southampton, Building 2, 12 University Road, Highfield, Southampton SO17 1BJ, United Kingdom
[b] Liverpool John Moores University, Rodney House, Mount Pleasant, Liverpool L3 5UX, United Kingdom
[c] Plymouth Business School, University of Plymouth, Drake Circus, Plymouth PL4 8AA, United Kingdom

ARTICLE INFO

Keywords:
Innovation
Export propensity
Internationalization
Configuration approach
Qualitative comparative analysis (QCA)

ABSTRACT

Findings on the innovation–export entry nexus remain inconclusive, which may be attributable to methodological issues. Most research has focused on the separate effects of single predictors and has investigated only one or two types of innovation. However, firms' exporting behavior is complex, and is likely to be determined by interactions between innovation types. Drawing on resource orchestration theory, we adopt a configuration approach to uncover combinations of innovation types (considered here as resources) associated with exporting, rather than investigating them in isolation. The study incorporates four types of innovation: product, process, organizational and marketing innovation. The findings from a sample of Spanish companies show that combinations involving product and process innovation, or product and marketing innovation make a more compelling case for export entry. The results have theoretical and managerial implications that progress thinking in this area and reconcile current literature on the innovation–export nexus.

1. Introduction

Exporting is an engine for growth at both firm and country levels (Wagner, 2013; Pattnayak & Thangavelu, 2014). For countries, it is a key driver of socioeconomic prosperity, and is crucial in assisting recovery from global crises through an export-led recovery strategy (Mansion & Bausch, 2020). For companies, exporting increases sales (Golovko & Valentini, 2011), production efficiency and profits (Azar & Ciabuschi, 2017). As the most popular way to internationalize, exporting is also a key determinant of firms' success and productivity (Wagner, 2007). For this reason, through public intervention, governments are increasingly devoting more resources and effort to encouraging exporting activities (Haddoud et al., 2021). One way in which governments assist companies in securing international markets is by supporting their innovation activities. Introducing new products and services helps companies to increase their exports (Roper et al., 2015). Other factors, such as inter-firm competition, product category and firm sector, also impact on exports and internationalization. However, this study focuses on selected types of innovation and export propensity as a means to internationalize.

Despite extensive research on the link between innovation and exporting over recent decades, and theoretical consensus on the positive influence of innovation on firms' exports, empirical findings remain contradictory (Wu et al., 2021). Some studies find that innovation is a key determinant of internationalization (e.g., Williams & Shaw, 2011; Roper & Love, 2002; Azar & Ciabuschi, 2017), and specifically of exporting (e.g., Rodríguez & Rodríguez, 2005; Saridakis et al., 2019; Paul et al., 2017), while others find no link between innovation and internationalization (e.g., Lefebvre et al., 1998; Damijan et al., 2008). These inconsistent results have been attributed to methodological issues, including differences in the measures of innovation used (Añón Higón & Driffield, 2011; Saridakis et al., 2019), the countries investigated and the analytical approach adopted (Van Beveren & Vandenbussche, 2009).

Recent innovation literature (e.g., Amiolemen et al., 2013; Hu et al., 2020; Anwar and Shah, 2020) largely adopts the so-called "key success factors" approach coined by Cheng et al. (2013), based on the premise that antecedents lead to successful outcomes in isolation rather than in combination. In contrast, the "key success paths" approach views outcomes as the result of several parallel combinations of antecedents, where no single factor is sufficient to explain the outcomes. The relationships between single antecedents and outcomes are generally modest, which may explain why some studies (e.g., Lefebvre et al., 1998; Damijan et al., 2008) find no significant influence of innovation on internationalization.

* Corresponding author.
E-mail addresses: c.lopez@soton.ac.uk (C. Lopez), m.y.haddoud@ljmu.ac.uk (M. Yacine Haddoud), dulekha.kasturiratne@plymouth.ac.uk (D. Kasturiratne).

https://doi.org/10.1016/j.jbusres.2022.05.018
Received 15 January 2021; Received in revised form 4 May 2022; Accepted 9 May 2022
Available online 8 June 2022

Our study addresses this limitation by tackling the relationship between innovation and internationalization through a key success paths approach, applied to a Spanish context. The aim is to establish which configurations of types of innovation relate to exporting activity. In line with Rodil et al. (2016), we argue that the relationship between innovation and exporting is complex, as it is likely to involve various types of innovation, including product, process, organizational and marketing innovation. Similarly, Lin and Chen (2007) propose that firms should direct their innovation efforts to multiple levels simultaneously, including product, organizational structure and process. Such synergies between technical and administrative innovation are particularly crucial in hostile and competitive environments (Damanpour et al., 2009).

To address our research question, we use a novel configuration approach known as crisp-set qualitative comparative analysis (csQCA) (Ragin, 2006, 2008). This technique enables consideration of conditions likely to increase export propensity in combination rather than in isolation, offering a deeper and richer understanding of the data. It also considers equifinality, or "multiple paths to a common end state" (Mills et al., 2010, p. 335) or outcome (Rey-Martí et al., 2015). Thus, our main purpose is to explore combinations (or configurations) of types of innovation associated with export activity, rather than focusing on the separate effect of each individual type of innovation.

This paper makes three key contributions. First, it contributes to the existing innovation literature by analyzing the roles of different types of innovation (product, process, marketing and organizational/administrative) in companies' internationalization. In doing so, it addresses Saridakis et al.'s (2019) call for further research on the impact of marketing innovation on internationalization. Second, it advances current research on the role of organizational innovation, which has thus far been relatively neglected. Efforts toward organizational innovation do not seem to be integral to firms' routines (Dos Santos et al., 2020). Alblooshi et al. (2020) note that research on innovation focuses narrowly on disruptive activities (e.g., product innovation), and that a more holistic approach is needed, involving organizational innovation. Similar concerns are voiced by Azar and Ciabuschi (2017) in relation to focusing solely on a single type of innovation. Third, this paper advances the export literature by shedding light on relevant combinations for exporting, which remain largely unaddressed. Existing studies offer some insights into combinations driving general innovation performance (e.g., Wei et al., in press), but none appears to have explored combinations of the four types of innovation driving exports in a Spanish context.

In the remainder of this paper, in Section 2 we discuss theories that provide a conceptual framework for understanding associations between innovation and exporting. In Section 3 we explain our methodology, and in Section 4 we discuss our findings. In Section 5 we examine the implications and limitations of our study and suggest avenues for further research.

2. Theoretical background

2.1. Innovation and internationalization

Since Schumpeter's (1942) work, innovation has been regarded as a key growth strategy (Kyläheiko et al., 2011). Urabe (1988, p. 3) defines innovation as the "generation of a new idea and its implementation into a new product, process or service." The OECD's (2005, p. 46) Oslo Manual adopts a broader approach, conceptualizing innovation as "the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations." This conceptualization, which we adopt in our study, distinguishes four widely adopted types of innovation: product, process, organizational and marketing innovation. Although innovation has been categorized in other ways, such as radical versus incremental and input versus output, we adopt the OECD's classification in this study. In a recent review, Bıçakcıoğlu-Peynirci and Ipek (2020) find that this categorization is the most widely accepted in the literature on the innovation–export nexus. In this taxonomy, product and process innovation are considered to be technical innovation, while marketing and organizational innovation are considered to be administrative.

Product innovation involves developing a new good or service, or substantially improving the functional characteristics (e.g., materials, components) or intended uses of an existing good or service. Process innovation means developing a new method of production or delivery (e.g., new automation equipment on a production line) or substantially improving an existing one with respect to its equipment, techniques and/or software. Marketing innovation involves developing a new marketing method by making substantial changes to the design and packaging of products, distribution, promotion or pricing of products. Finally, organizational innovation refers to the development of new organizational methods in business practices, workplace organization or external relations (Chetty & Stangl, 2010; Chiva et al., 2014; OECD, 2005; Saridakis et al., 2019).

In addition to innovation, since Ansoff's (1965) work, internationalization has been considered to be a key component of a corporate growth strategy (Buckley & Casson, 1976; Kyläheiko et al., 2011; Golovko & Valentini, 2011). Exporting, as an entry mode to foreign markets, and thus a strategy for internationalization, incurs relatively low levels of risk and commitment (Johanson & Vahlne, 1977; Cassiman & Golovko, 2011) and high flexibility. Exporting refers to "outward international trade in goods and/or services, conducted either directly or through a third party" (Love & Roper, 2015, p. 29). Although other modes of internationalization may be adopted (e.g., international joint ventures), exporting is typically the first step in companies' internationalization process (Saridakis et al., 2019). Therefore, in this study we conceptualize internationalization through firms' propensity to export, understood as "whether or not a firm exports to foreign markets" (Serra et al., 2012, p. 216). Export propensity is utilized on the basis that factors important to exporters are aspects that will enable non-exporters to start to export (Atuahene-Gima, 1995). This is widely used to reflect export entry. Thus, we argue that the types of innovation prevalent amongst exporters compared with non-exporters will be key drivers encouraging firms to export. The focus here is on entry. In this regard, Chen et al. (2016) acknowledge that the extant literature lacks robust explanations of firms' export entry behavior to inform practice and policy development.

2.2. Innovation and internationalization: Self-selection or learning by doing?

Increasing interest in the relationship between innovation and internationalization is reflected in the number of papers published over the last few years (e.g., Becker & Egger, 2013; Golovko & Valentini, 2011; Leonidou et al., 2007; Wagner, 2007). Whether exporters are generally more productive (or, in this study, more innovative) than non-exporters is investigated from two distinct perspectives, namely the "self-selection" versus the "learning by doing" hypotheses (Fassio, 2018). On the one hand, it is argued that only innovative firms can enter international markets, because they are able to overcome sunk costs (self-selection), suggesting that innovation increases internationalization (Monreal-Pérez et al., 2012). On the other hand, it is claimed that exporters become more innovative as a result of their presence in international markets, through international technological spillovers (learning by doing or learning by exporting), so internationalization leads to innovation (Damijan et al., 2010).

Notwithstanding the relevance of the learning-by-doing view, in this study we adopt the self-selection perspective (Freixanet et al., 2020), which suggests that innovative firms are more likely to enter international markets when sunk costs are offset (Monreal-Pérez et al., 2012). Generally, firms first self-select their entry into export markets, and subsequently become more innovative through learning effects (Van

Beveren & Vandenbussche, 2010). Here, innovation is a precursor to export entry, which may in turn be a prelude to further innovation. Robust empirical evidence from Spanish firms confirms the self-selection hypothesis (Monreal-Pérez et al., 2012).

At the macro level, two theoretical frameworks have been used to explain the impact of innovation on exporting (Añón Higón & Driffield, 2011; Roper & Love, 2002). The product lifecycle theory (Vernon, 1966, 1979) explains patterns of international trade, and the technology gap theory (Posner, 1961; Krugman, 1979) explains that innovation may enhance international trade. Companies begin by introducing an innovation in their home country, and if this proves successful, then focus on introducing it to foreign markets. This enables the exporting company and country to enjoy a competitive advantage until other foreign companies are able to imitate it.

In addition to these two frameworks, the resource-based theory (Barney, 1991; Penrose, 1959) is most frequently used to conceptualize the influence of innovation on export propensity. Widely accepted in strategic management (Priem & Butler, 2001), this theoretical framework suggests that firms' internal characteristics, including their resources and capabilities (e.g., innovation), add value and contribute positively to gaining or generating an international competitive advantage (Barney, 1991; Penrose, 1959; Helfat & Peteraf, 2003).

2.3. The innovation–internationalization nexus: A resource orchestration approach

Resources are the "tangible and intangible assets firms use to conceive of and implement their strategies" (Barney & Arikan, 2001, p. 138). Intangible resources contribute not only to creating but also to sustaining competitive advantage over time, as their value is difficult to imitate and their functions are non-substitutable (Hitt et al., 2001, 2006). Innovation and innovative capacity through technological resources are key intangible assets for generating competitive cost advantages (by developing new and more efficient processes of production) and are based on differentiation (through product innovation), thus providing companies with superior performance and competitiveness when expanding into international markets, and incentives to enter foreign markets (Rodríguez & Rodríguez, 2005). On the other hand, marketing innovation has a more direct influence on exporting. Improved marketing activities will increase foreign market knowledge and enable firms to adapt more quickly to changing foreign markets (Lewandowska et al., 2016).

With regard to export entry, empirical evidence on the innovation–export entry nexus remains inconclusive, potentially pointing toward the superiority of product innovation over process innovation (Van Beveren & Vandenbussche, 2010). In fact, while Roper and Love (2002) identify a positive influence of product innovation on export propensity (or probability), others find no influence (e.g., Becker & Egger, 2013; Caldera, 2010; Tavassoli, 2018; Damijan et al., 2010). With regard to the effect of process innovation, several studies notice no significant link (Becker & Egger, 2013; Cassiman & Martinez-Ros, 2007; Damijan et al., 2010; Dohse & Niebuhr, 2018), whereas Caldera (2010) reports a positive influence.

Despite limited research linking marketing innovation and exporting, some evidence suggests a positive relationship. For example, Rodil et al. (2016) conclude that innovative efforts relating to product design and sales methods facilitate access to export markets. They report that marketing innovation has a greater influence than process, product and organizational innovation. Similarly, Azar and Ciabuschi (2017) conclude that organizational innovation has an indirect impact on Swedish firms' export performance through technological innovation.

Several factors may explain these inconclusive results. First, one criticism of the resource-based theory is that it does not explain how resources and capabilities can be combined and configured (Gruber et al., 2010). Thus, it is necessary to go beyond this theoretical approach to identify relevant configurations that enhance performance (Hughes et al., 2018). From a methodological perspective, resource orchestration moves away from analyzing the net effects, using conventional techniques such as multiple regression, toward investigating different resource configurations (Hughes et al., 2018).

Resource orchestration theory, an extension of the resource-based theory (Chadwick et al., 2015; Sirmon et al., 2011), overcomes the above criticism by proposing that "it is the combination of resources, capabilities, and managerial acumen that ultimately results in superior firm performance" (Chadwick et al., 2015, p. 360). An individual resource may be unimportant in its direct effect on performance; however, when combined with other resources, it may become a more valuable predictor (Ordanini & Rubera, 2008). Thus, resource orchestration focuses on the combined rather than single effects of resources and capabilities on performance (Haddoud et al., 2018).

With regard to the influence of innovation capabilities on firms' export entry, evidence confirms this combined influence. Several studies refer to the complementarity of product and process innovation. For instance, Becker and Egger (2013) show that process innovation may improve German firms' likelihood of exporting if complemented by product innovation. Similarly, based on Spanish data, Martínez-Ros and Labeaga (2009) argue that complementarities between types of innovation are crucial for positive outcomes. They explain that process innovation improves the quality and increases the rate of new product development (Martínez-Ros and Labeaga, 2009).

Furthermore, using evidence from Belgium, Van Beveren and Vandenbussche (2010, p. 19) conclude that "it is the combination of product and process innovation, rather than either of the two in isolation, that is correlated with firms' entry into the export market." Van Beers and Zand's (2014) large sample of Dutch firms also reveals that both process and organizational innovation complement the introduction of new products. In addition, Lewandowska et al. (2016) find that for Polish firms, combining product and process innovation, or product, process and marketing innovation increases new product export intensity. They show that marketing and product innovation are complementary: marketing innovation helps firms to anticipate and adapt to changes in foreign markets, allowing them to introduce new products to address those changes. Lastly, Saridakis et al. (2019) report that UK SMEs that introduce a combination of product and process innovation are more likely to export than those implementing process innovation alone.

Therefore, considering the limited scope of the existing research on combinations of these types of innovation and the lack of hypotheses from a configuration perspective (Kent, 2015), we do not develop hypotheses on combinations that are relevant to export propensity. Instead, we adopt a data-driven approach and propose the following:

P1. The combination of several types of innovation is more likely to be associated with export propensity, and no single type is sufficient.

2.4. Firm size and networks

Previous research has identified internal and external determinants of innovation. Internal drivers include firm age and size, financial resources, technological competence and capabilities, and foreign ownership (Del Río et al., 2015; Rogers, 2004; Love & Roper, 1999). External drivers include collaborative partnerships/networking, competitors, and market structure and pressures (Del Río et al., 2015; Love & Roper, 1999; Rogers, 2004).

Firm size is an indicator of the firm's resource availability (Añón Higón & Driffield, 2011), and thus, may have an impact on innovation performance (Del Río et al., 2015) and export propensity. Despite some contradictory results, most previous studies demonstrate a positive effect of firm size on exporting (e.g., Serra et al., 2012; Roper & Love, 2002; Filatotchev et al., 2009) and use numbers of employees to measure firm size (e.g., Filatotchev et al., 2009). Wakelin (1998) and Roper and Love (2002) add that the relationship between firm size and export propensity is nonlinear. Increases in company size may lead to increases

in export propensity up to an optimal point, after which a larger company size may lead to entry into host markets through foreign direct investment rather than exports, suggesting an inverted U-shaped relationship between firm size and export propensity (Cassiman & Martinez-Ros, 2007).

Firms' networks also impact on access to resources and, in turn, on innovation performance (Damanpour, 1991; Bekkers et al., 2013) and export propensity (Chetty & Stangl, 2010). Membership of networks and interactions with partners and stakeholders (e.g., suppliers, competitors, customers, distributors) enable companies to share and exchange information and resources, whereby new ideas are generated and developed that drive innovation performance (Bekkers et al., 2013; Nieto & Santamaría, 2007). Thus, collaboration is key for knowledge creation and transfer, which may, in turn, lead to innovation (Blomqvist & Levy, 2006). Chapman and Corso (2005) add that firms can generate competitive advantage by developing relationships with other companies in foreign markets. Although beyond the focus of this paper, a growing body of literature examines the impact of collaboration on social innovation (Sørensen & Torfing, 2013, Bekkers et al., 2013), co-creation (Austin & Seitanidi, 2012; Dahan et al., 2010) and open innovation (Chesbrough, 2003).

Previous studies (e.g., Johanson & Vahlne, 2006; Chetty & Stangl, 2010) highlight the impact of networks on identifying opportunities in foreign markets, deciding how to enter the markets, and obtaining the information and resources needed to internationalize. Chetty and Stangl (2010) conclude that companies' internationalization and innovation occur in a network context, and thus are not the result of a single actor. In line with this, Rogers (2004) and Kingsley and Malecki (2004) stress the key role of networking and innovation to understand exporting. Therefore, our second and third propositions are as follows:

P2. The configurations of types of innovation associated with export propensity depend on firm size.

P3. The configurations of types of innovation associated with export propensity depend on firm networks.

3. Research methodology

3.1. Data

This study is based on data from the Spanish Technological Innovation Panel (PITEC) survey, which builds on the Community Innovation Survey (CIS). The database was developed through collaboration between the Spanish National Statistics Institute (INE), the Spanish Science and Technology Foundation (FECYT) and the Foundation for Technological Innovation (COTEC). PITEC includes over 13,000 firms from all sectors, following Spain's 2009 National Classification of Economic Activities. After filtering out records with missing data, the sample contained 7,683 companies. Firms with fewer than 200 employees accounted for 72.5% of the sample. The average turnover value was approximately €87,874,918, with the 25th percentile equalling €2,025,108, the 50th percentile €9,286,935 and the 75th percentile €39,528,033. In our sample, 46.5% of companies were members of a group of companies, and 67.6% were exporters. Of the total sample, 14.09% exported only to the EU, EFTA or EU candidate countries, 1.9% exported only to non-EU countries, and 51.58% exported to both EU and non-EU markets.

Spain is classified as a moderate innovator (De Marchi, 2012). According to Eurostat statistics, in 2016 its R&D intensity (R&D expenditure as a percentage of GDP) was 1.19%, below the EU average of 2.03%. Thus, our study is particularly relevant to countries falling slightly behind the world leaders in R&D intensity. Exporting has been key to assisting Spain's recovery from global crises, such as the 2008 financial crisis. From 2008 to 2011, its exports of goods and services increased by 5% (World Bank, 2021). Thus, Spain is representative of export-led recovery. It depends heavily on cost competitiveness to export (European Commission, 2020), and its exports are largely goods and services that compete mainly on price, a strategy that is becoming more challenging owing to competition from emerging markets. Consequently, it is imperative to focus on alternatives to non-cost competitiveness by investing in research and innovation to increase the value of exports. These characteristics make Spain an interesting research context for our study.

3.2. Measures

Our model includes five variables: product innovation, process innovation, marketing innovation, organizational innovation and export propensity. All these constructs are measured using dummy variables. Table 1 provides further measurement details.

3.3. csQCA analysis

Unlike traditional regression analysis, where the focus is on explaining net effects, qualitative comparative analysis (QCA) identifies the conditions for a given outcome (Roig-Tierno et al., 2015). It also

Table 1
Measures.

Variable	Description	Codification
Core Variables		
Product Innovation	Product innovation from (*t*-2) to *t*, reflecting whether the company has introduced new or significantly improved goods or services during the 2014–2016 period.	Yes = 1 No = 0
Process Innovation	Process innovation from (*t*-2) to *t*, reflecting whether the company has introduced new or significantly improved production processes, distribution methods or activities to support the goods and services during the 2014–2016 period.	Yes = 1 No = 0
Marketing Innovation	Marketing innovation from (*t*-2) to *t*, reflecting whether firms have introduced at least one of the following innovations during the 2014–2016 period: significant modifications to the design or packaging of goods or services, new product-promotion techniques or channels, new methods for positioning the product in the market, or sales channels or new methods for establishing prices of goods or services.	If Yes to at least one of the four innovations = 1 If No to all four innovations = 0
Organizational Innovation	Organizational innovation from (*t*-2) to *t*, reflecting whether firms have introduced at least one of the following innovations in the 2014–2016 period: new business practices in work organization and company procedures, new workplace-organization methods with the objective of better distribution of responsibilities and decision making, or new methods for managing external relations with other companies or public bodies.	If Yes to at least one of the three innovations = 1 If No to all three innovations = 0
Export Propensity	Company market including either "other countries EU, EFTA or EU candidate countries," or "all other countries," or both.	If Yes to a least one company market = 1 If no to both company markets = 0
Grouping Variables		
Firm Size	Number of employees in *t* equal to or greater than 200.	If Yes = 1 If No = 0
Firm Group Membership	Membership of a group of companies.	If Yes = 1 If No = 0

overcomes limitations of linear regression and correlation analyses by taking into account nonlinear relationships. In this regard, Arslanagic-Kalajdzic et al. (2017) demonstrate a quadratic relationship between product innovation and exporting, and Bortoluzzi et al.'s (2018) empirical findings show curvilinear effects of innovation on firms' levels of internationalization. Thus, QCA allows researchers to capture complex relationships where a condition or combination of conditions is necessary and/or sufficient for an outcome. This approach assumes that a particular outcome may be reached through multiple paths, known as equifinality (Rey-Martí et al., 2015). This is typically achieved by accounting for contrarian cases that do not necessarily fit with the general trend in the data, which may be overlooked in traditional regression-based techniques (Woodside, 2013; Schlittgen et al., 2016). Although QCA was originally developed to analyze small numbers of cases, it is increasingly being used for larger samples (Fiss et al., 2013; Vis, 2012). There are three types of QCA: crisp-set (csQCA), fuzzy-set (fsQCA) and multi-value (mvQCA) (Rihoux & Ragin, 2009).

We adopt a csQCA approach using fsQCA 3.0 software (Ragin & Davey, 2016). csQCA is used when binary variables are involved. The model tested here includes four independent variables representing four distinct types of innovation, namely product, process, marketing and organizational innovation, and one dependent variable, export propensity.

The first stage in QCA analysis is typically calibration. This involves transforming all variables into sets. In csQCA, for each variable it is necessary to establish whether the cases are fully in (1) or fully out (0) of the set (Roig-Tierno et al., 2015). QCA allows researchers to undertake two different types of sub-analyses, namely necessity and sufficiency analysis. These are discussed next.

3.3.1. Necessity analysis

Necessity analysis identifies the necessary individual conditions for the sought outcome. For the outcome to occur, these conditions are necessary but not sufficient, as other factors must be present. To determine whether a condition is deemed necessary, the consistency measure must be inspected. Technically, in csQCA, consistency can be computed by dividing the number of cases with a value of 1 for both the condition and the outcome, by the total number of cases with an outcome value of 1 (Rihoux & De Meur, 2009). Consistency scores range from 0 to 1, with values that exceed 0.90 suggesting necessity (Roig-Tierno et al., 2015). In this study, necessity represents the proportion of cases (i.e., companies) that export and exhibit the condition in question (e.g., marketing innovation) in the total sample. As shown in Table 2, none of the conditions appear to be necessary for companies to exhibit high export propensity.

3.3.2. Sufficiency analysis

Sufficiency analysis captures the combinations of conditions sufficient to achieve a sought outcome (Kent, 2015). Although sufficient, these combinations may not necessarily be required for the outcome to occur (i.e., alternative combinations may exist). In sufficiency analysis, the first step is to construct a truth table, which shows logically possible combinations of conditions (in this case, innovation types) that may produce the sought outcome (export propensity). The number of configurations is 2^k, where k denotes the number of conditions. In our analysis, $2^4 = 16$ potential configurations can be obtained. However, to identify viable configurations associated with export propensity, thresholds are set for the minimum number of cases involved in each combination (frequency threshold), along with the minimum consistency level required (Woodside & Zhang, 2012). The frequency threshold is defined as the minimum number of cases exhibiting the outcome that a given combination should include to be worth investigating (Ragin, 2008). In small samples, this may be as few as a single case, whereas higher values may be considered in larger samples (e.g., 5 or 10). In our study, all configurations exceed these values, and hence all configurations are deemed viable.

The consistency threshold indicates the proportion of cases in which a given configuration produces the outcome, which in our case is export propensity. Consistency is "the degree to which the cases sharing a given combination of conditions agree in displaying the outcome in question" (Ragin, 2008, p. 44). This is analogous to the significance level in traditional regression analysis (Woodside & Zhang, 2012). Selecting the relevant consistency threshold may depend on the results. A relatively large drop in consistency scores often emerges, which may be used to set the consistency threshold (Ragin, 2008). However, the consistency cut-off should be at least 0.75 (Skarmeas et al., 2014; Woodside, 2013). In our case, a drop from 0.82 to 0.77 emerged; thus, 0.82 was selected as the consistency threshold.

The next step after constructing the truth table is known as logical minimization. This process typically yields three solutions: parsimonious, complex and intermediate. Following Kent's (2015) suggestion, the intermediate solution is interpreted. Table 3 presents the results. For clarity, we adopt a simple representation, with black circles indicating the presence and white circles the absence of a condition.

Two combinations of conditions emerged. For each configuration, raw and unique coverage and consistency are provided. Consistency scores reflect the extent to which cases sharing a given condition display the outcome. Raw coverage is the percentage of all cases covered by a combination, which may overlap with other combinations (Beynon et al., 2016), while unique coverage is the percentage of all cases in the outcome uniquely covered by a single path (Ragin, 2008). Coverage enables assessment of the empirical importance of sufficient configurations (Ordanini et al., 2014). The overall solution coverage is also provided. This shows the extent to which the outcome can be determined by the set of configurations, which is analogous to the R-squared value in regression-based techniques (Woodside, 2013).

As shown in Table 3, it can be argued that for companies to export, a combination of the presence of product innovation and either marketing innovation (solution 1) or process innovation (solution 2) is needed. However, solution 2 is more dominant empirically, with higher coverage values (raw coverage = 0.30, unique coverage = 0.13), meaning that it is relatively more frequently associated with export propensity (Ordanini et al., 2014). In summary, it can be suggested that companies that invest in product innovation are more likely to export, as long as this is complemented with either marketing innovation or process innovation. The solution coverage is 0.36, which is analogous to the explained variance (P1).

Table 2
Necessity analysis.

	Consistency	Coverage
Product Innovation	0.47	0.83
~ Product Innovation	0.52	0.57
Organizational Innovation	0.41	0.77
~ Organizational Innovation	0.58	0.61
Marketing Innovation	0.31	0.81
~ Marketing Innovation	0.68	0.62
Process Innovation	0.42	0.80
~ Process Innovation	0.57	0.60

~ = "absence of".

3.4. Comparative analyses

To gain a deeper and more holistic understanding of the data, comparisons were undertaken to identify potential differences across groups. This was deemed relevant given the heterogeneity of the companies involved in the dataset in terms of resource access, which would affect innovation and export behavior. We anticipated that size and network might impact on the pool of resources that companies could access. Therefore, the link between innovation and export behavior was assessed across firms of differing sizes and with different network membership status.

Table 3
Intermediate solution for high export propensity (All firms).

	Product Innovation	Process Innovation	Organizational Innovation	Marketing Innovation	Raw Coverage	Unique Coverage	Consistency
1	●			●	0.22	0.05	0.86
2	●	●			0.30	0.13	0.85

Solution coverage: 0.36; solution consistency: 0.85; consistency threshold = 0.82; frequency threshold = 70.
● = indicates the presence of a condition.
○ = indicates the absence of a condition.
Blank = absence or presence of a condition does not matter.

3.4.1. Small versus large firms

Firms were categorized as small or large using the number of employees variable, with a threshold of 200. This cut-off value is used by the PITEC database and by studies based on PITEC data (e.g., Cassiman & Martinez-Ros, 2007; De Marchi, 2012; Kunapatarawong & Martínez-Ros, 2016). The results are shown in Table 4.

Table 4 indicates some differences in export propensity determinants between small and large firms. While both groups share the combination of product and process innovation as a key path to successful export entry, the combination of product and marketing innovation must be complemented with organizational innovation for large firms but not for small firms (P2).

3.4.2. Members versus non-members of a group of companies

Using a dummy variable to distinguish between firms that were part of a group of companies and those that were not, the innovation–export propensity link was compared between these two categories. Table 5 shows the findings.

Table 5 reveals some similarities and differences between member and non-member firms with regard to the determinants of export propensity. Both groups share the combinations of product and marketing innovation and product and process innovation as successful paths to export entry. However, if neither marketing nor process innovation are present, member firms are still able to export with a sole focus on product innovation, whereas non-members must complement product innovation with organizational innovation for successful export entry (P3).

4. Discussion

Notwithstanding the potential influence of exporting on innovation (the learning-by-exporting perspective), this study is grounded in the self-selection approach, which suggests that innovation is a precursor to exporting. This echoes previous studies focusing on the Spanish context, in which the self-selection approach explains the innovation–export nexus (e.g., Farinas & Martín-Marcos, 2007; Monreal-Pérez et al., 2012; Serrano & Myro, 2019; Máñez & Vicente-Chirivella, 2021). In this regard, Serrano and Myro (2019) declare that the self-selection hypothesis attracts more support. It might be argued that, since Spanish exporters export more to EU countries, the learning effect may be minimal owing to similarities across the EU context. This is acknowledged by Monreal-Pérez et al. (2012), who argue that Spanish firms tend to export to a small number of EU markets, which limits potential learning. They suggest that "limited new knowledge about new products and processes can be learned from foreign markets because these markets [EU] may be quite similar to the domestic one" (Monreal-Pérez et al., 2012, p. 874).

Furthermore, using the novel configuration approach of csQCA, this paper tackles the complexity underlying this relationship, with a focus on the Spanish context. In this regard, several key findings emerge. First, export propensity is more likely to be associated with various combinations of innovation types, hence confirming both equifinality and complexity. Combinations involving product and process innovation or product and marketing innovation are more compelling cases for export propensity. This concurs with the concept of resource orchestration (Hughes et al., 2018), and with Barney's (2014) suggestion of a constellation of resources and capabilities as the optimal strategy for international performance. It also echoes Damanpours et al.'s (2009, p. 671) view that co-adoption of multiple types of innovation involving both technical and administrative aspects improves organizational performance, referring to the "combinative capability perspectives of RBV" as being a more accurate approach to capture the role of resources. They acknowledge that the uniqueness of a complex configuration of innovation types is likely to create sustainable performance.

Second, our research indicates that although none of the four factors examined in this study is an absolute necessity, product innovation seems to be important for a constellation of factors relating to exporting. Product innovation promotes differentiation aimed at capturing new markets, and several studies provide evidence that product innovation drives export propensity (Cassiman et al., 2010; Ganotakis & Love, 2011) and is a prerequisite for export involvement (Lim et al., 2006).

Table 4
Intermediate solution for high export propensity (small versus large firms).

Small Firms

	Product Innovation	Process Innovation	Organizational Innovation	Marketing Innovation	Raw Coverage	Unique Coverage	Consistency
1	●	●			0.26	0.12	0.88
2	●			●	0.20	0.06	0.89
3[1]		●	○	●	0.03	0.01	0.86

Solution coverage: 0.34; solution consistency: 0.88; consistency threshold = 0.81; frequency threshold = 48.

Large Firms

	Product Innovation	Process Innovation	Organizational Innovation	Marketing Innovation	Raw Coverage	Unique Coverage	Consistency
1	●	●			0.41	0.20	0.81
2	●		●	●	0.23	0.02	0.81

Solution coverage: 0.43; solution consistency: 0.81; consistency threshold = 0.79; frequency threshold = 22.

● = indicates the presence of a condition.
○ = indicates the absence of a condition.
Blank = absence or presence of a condition does not matter.
[1] This combination is not discussed as it is empirically marginal compared with the first two paths.

Table 5
Intermediate solution for high export propensity (members versus non-members of a group of companies).

Members

	Product Innovation	Process Innovation	Organizational Innovation	Marketing Innovation	Raw Coverage	Unique Coverage	Consistency
1	●		○		0.19	0.07	0.85
2	●	●			0.37	0.09	0.87
3	●			●	0.25	0.03	0.88

Solution coverage: 0.49; solution consistency: 0.86; consistency threshold = 0.80; frequency threshold = 38.

Non-members

	Product Innovation	Process Innovation	Organizational Innovation	Marketing Innovation	Raw Coverage	Unique Coverage	Consistency
1	●	●			0.23	0.05	0.82
2	●		●		0.22	0.02	0.83
3	●			●	0.20	0.03	0.84

Solution coverage: 0.33; solution consistency: 0.83; consistency threshold = 0.79; frequency threshold = 32.

● = indicates the presence of a condition.
○ = indicates the absence of a condition.
Blank = absence or presence of a condition does not matter.

Export propensity evidently increases in firms that combine product innovation with either marketing innovation or process innovation. This contrasts with previous studies that suggest that in more mature markets, differentiation-related factors, such as product innovation, are more important for competitive advantage in export situations than cost-related factors, such as process innovation (Becker & Egger, 2013; Cassiman et al., 2010; Verspagen & Wakelin, 1997). On the one hand, innovative products developed with differentiation to capture new markets must be supported by marketing innovation factors such as increased foreign market knowledge, new distribution channels, better marketing communications and improved customer interactions (Lewandowska et al., 2016; Kotabe et al., 2002). On the other hand, our findings indicate that if product innovation is not supported by marketing innovation, it must be supported by process innovation to achieve cost-based advantages and increased productivity, and improve export propensity (Añón Higón & Driffield, 2011). This echoes the limited extant evidence of such complementarity (Becker & Egger, 2013; Martínez-Ros & Labeaga, 2009; Van Beveren & Vandenbussche, 2010; Lewandowska et al., 2016; Saridakis et al., 2019).

Third, our study uncovers some differences between small and larger firms concerning the innovation–export propensity nexus. The aforementioned combinations (product and process innovation, and product and marketing innovation) are confirmed as commonly successful paths to exporting for both large and small firms. However, for larger firms, the product–marketing configuration must be complemented with organizational innovation in order to succeed. In contrast, for smaller firms, absence of organizational innovation with the combination of both process and marketing innovation (regardless of the level of product innovation) may also potentially increase export propensity. While this echoes Van Beers and Zand (2014) finding that both process and organizational innovation complement product innovation, what stands out in our study is the need for the product–marketing recipe to be complemented by organizational innovation in large firms but not in small firms. This is in line with studies showing that firm size impacts on the type of innovation adopted by the firm (Wagner & Hansen, 2005). Previous evidence has shown that organizational innovation affects other innovation types. In our sample, organizational innovation may potentially increase large firms' export propensity when combined with other innovation types (product and marketing). In this regard, Damanpour and Evan (1984) argue that larger firms have more complex assets and structures than smaller ones. Hence, one might conclude that such complexity requires organizational innovation to manage the other innovation types more effectively and efficiently. In contrast, small firms are typically characterized by flexibility and fluidity of communications, which is beneficial for developing other types of innovation (Shefer & Frenkel, 2005). For larger firms, Damanpour and Evan (1984) argue that developments in the structure of an organization lead to the implementation of other types of innovation. Similarly, Damanpour et al. (2009) argue that technical changes must be complemented by organizational changes to optimize outcomes.

Based on the above premise, we argue that product and marketing innovation can be more effectively managed through better organizational structure, especially in large firms. Lewandowska et al. (2016) explain that marketing innovation helps firms to anticipate and adapt to changes in foreign markets, allowing them to introduce new products to address those changes (product innovation). Our study adds that in large firms, these synergies need enhanced organizational structures and systems (organizational innovation). These findings may also explain conflicting views on the firm size–innovation nexus. A common view is that characteristics of large firms relating to structural complexity and bureaucracy may inhibit the efficiency of technical innovation (Camisón-Zornoza et al., 2004). We argue that organizational innovation may offset such complexity and help other types of innovation, such as product and marketing, in order to promote efficiency, especially in international settings.

Our fourth finding relates to differences emerging between firms that are members of a group and those that are not. For both groups, product/process and product/marketing innovation are successful paths to export entry, and members are able to export even without marketing or process innovation, by focusing on product innovation alone. In contrast, non-members must complement product innovation with organizational innovation for successful entry. This indicates that the benefits accrued from being a member of a larger group of companies may potentially overcome lack of investment in process and organizational innovation. For example, various authors (Lavie, 2009; Van Beers & Zand, 2014) discuss how cooperation within a group may lead to benefits from shared costs and risks, better market knowledge and access to markets, as well as shared technologies and advocacy. On the other hand, non-members must be well organized, implement stringent strategies and management methods, and be well structured with appropriate sales channels to overcome their lack of member benefits. These findings are in line with other studies focusing on the Spanish context. For instance, in considering networks as the main source of innovation, Nieto and Santamaría (2010) reveal that technological collaboration may be a useful factor boosting Spanish firms' innovation, especially in smaller firms. Rodríguez and Nieto's (2012) study of Spanish knowledge-intensive business services also finds that collaboration promotes innovation, which in turn increases such firms' internationalization. This evidence suggests that the collaborative nature of Spanish companies potentially contributes to these results.

5. Conclusions

5.1. Theoretical and managerial implications

Our findings obtained through the configuration approach have important implications for both theory and practice. Theoretically, we contribute important evidence to the nascent but growing resource orchestration view (Hughes et al., 2018; Haddoud et al., 2021). Our findings confirm the complexity underlying the resources–performance nexus. More importantly, we show the applicability of this approach to the innovation–internationalization link, and reconcile conflicting evidence on this complex relationship. By clarifying the role of different types of innovation, and distinguishing not only product and process, but also marketing and organizational innovation, along with interactions between them, we address recent calls for a more comprehensive approach to studying innovation (Saridakis et al., 2019; Alblooshi et al., 2020; Dos Santos et al., 2020).

With regard to export entry, our study reveals the importance of considering the role of various types of innovation in combination rather than separately. For example, in most cases, process innovation will not enhance firms' internationalization unless coupled with product innovation, and vice versa. Moreover, the study shows that equifinality, with different possible combinations of innovation, may still lead to successful export entry. This helps to explain discrepancies in current empirical evidence regarding the role of innovation in internationalization. Although existing studies offer some insight into combinations driving innovation performance (e.g., Wei et al., in press), none appears to have investigated combinations of innovation that drive exports in the Spanish context. Therefore, we urge future researchers to consider the complexity of such relationships when assessing this nexus.

Practically, decision makers in exporting firms should take account of the importance of the constellation of resources required for export entry. This study extends the optimum innovation combinations of four conditions required for successful international market entry. If firms struggle to invest in all four innovation types, those engaging in foreign markets should consider investing in either marketing or process innovation alongside product innovation for the best outcomes.

Another important implication for managers is the need to understand the maturity of the market. This will enable managers to decide whether to focus on cost-based advantages such as process innovation, or differentiation such as product innovation. Such guidance is crucial, since venturing into export markets is a costly process, making it important to be selective in the type of innovation in which to invest. Our findings clearly show that not all types of innovation are necessary to enter international markets. Our comparison of large and small firms suggests that large firms need the support of organizational innovation alongside product and marketing innovation for successful export entry. This indicates that large firms must reinforce product and marketing innovation with supportive corporate strategies and management methods, as well as appropriate organizational structures and channel partnerships.

Furthermore, this research indicates that firms with membership of a group benefit from the group's support in export activities. Non-members do not enjoy these benefits, and thus require extra support from organizational innovation alongside product and marketing innovation. Therefore, firms considering international markets should consider external collaborations as a way to gain additional resources, which may reduce the need for major organizational innovation. Access to such external resources may be crucial to overcome the sunk costs associated with export markets. By the same token, export-promoting organizations should facilitate the creation of networks and foster cross-firm collaborations, particularly through trade missions and trade fairs, which have been found to be key in enhancing firms' relationships with other companies (see Haddoud et al., 2017).

5.2. Limitations and further research

Our study has some limitations. First, the data used in this study are cross-sectional, and hence causal inferences must be made with some caution. Adopting Cadogan et al.'s (2001) pragmatic view, the associations referred to in this study are interpreted as causal links mainly on theoretical grounds. Further studies might conduct longitudinal research to confirm causality. Similarly, we do not rule out the reverse influence of export innovation (learning by exporting). We adopt a self-selection approach owing to overwhelming evidence supporting this in the Spanish context (e.g., Farinas & Martín-Marcos, 2007; Monreal-Pérez et al., 2012; Serrano & Myro, 2019; Máñez & Vicente-Chirivella, 2021), but both approaches remain plausible (Farinas & Martín-Marcos, 2007).

Second, while the focus of our study is solely on innovation, we acknowledge the importance of other managerial and organizational factors that are also crucial for firms' internationalization. Hence, further studies might apply a similar configuration approach to examine other determinants, such as knowledge and networks. Future research might also consider different ways of measuring innovation, such as through R&D expenditure, which may also alter the innovation–export nexus. Our study was restricted to exporting because it is considered to be the most popular way to internationalize, and we were subject to scope and data access restrictions. Nevertheless, according to the gradual internationalization perspective, exporting firms are likely to increase their international engagement by adopting more advanced ownership entry modes, such as international joint ventures, international mergers and wholly owned international subsidiaries. Further research might explore the influence of innovation on such entry modes. We also note that the influence of innovation on export propensity will depend on the target market, as well as on the types of products exported and market sectors. This study focuses on exporting as an activity, and does not consider the effects of target country or product type. Therefore, future studies might factor in such aspects as additional conditions in the configurations, since the type of innovation required may differ depending on recipient country characteristics as well as the types of product exported.

Third, in this study we distinguish four types of innovation (product, process, organizational and marketing), but we do not rule out the possibility of obtaining different effects with alternative categorizations (e.g., radical versus incremental, input versus output). Hence, future studies might consider various taxonomies when examining the innovation–export link. In this regard, Bıçakcıoğlu-Peynirci and Ipek (2020) acknowledge that the innovation–export nexus may be moderated by the categorizations of innovation adopted.

Fourth, although we analyze differences in the configurations of innovation types associated with export propensity depending on firm size and firms' networks, we do not investigate differences in product categories or industrial sectors (e.g., fast-moving consumer goods versus primary resources, or business-to-consumer versus business-to-business exporting firms). Thus, future research might consider sectoral differences and their managerial implications.

Fifth, a comparative study of exporting firms in developed and developing countries might also yield interesting results, indicating whether the winning combinations differ significantly between the two. Sixth, our study is based on self-reported data provided by innovators, which may be biased (Darnall et al., 2008). The seventh and final aspect to note is that the context in which companies operate influences their operations. Innovation and exporting contexts vary across countries. Therefore, as we rely on data from a single country, the findings are specific to Spain and may not apply to other countries. Generalizability of the results is thus limited to countries with similar characteristics to Spain, for example in levels of innovation and export propensity. This opens an avenue for further research to collect data from countries with different characteristics (e.g., developing countries, emerging countries such as China and India, or countries that are technologically ahead of

Spain, such as Germany, USA, Netherlands and UK). Future research might also investigate the reverse causality of the relationship, i.e., the impact of export propensity on innovation.

CRediT authorship contribution statement

Carmen Lopez: Writing – review & editing, Writing – original draft, Resources, Project administration, Investigation, Conceptualization. **Mohamed Yacine Haddoud:** Conceptualization, Writing – original draft, Writing – review & editing, Formal analysis, Methodology, Investigation. **Dulekha Kasturiratne:** Writing – review & editing, Writing – original draft, Investigation.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Alblooshi, M., Shamsuzzaman, M., & Haridy, S. (2020). The relationship between leadership styles and organisational innovation: A systematic literature review and narrative synthesis. *European Journal of Innovation Management, 24*(2), 338–370. https://doi.org/10.1108/EJIM-11-2019-0339

Amiolemen, S., Babalola, O., Adegbite, S., Ologeh, I., Adekola, O., & Ojo-Emmanuel, G. (2013). An investigation of the four dimensions of innovation in small scale firms in Lagos state, Nigeria. *International Journal of Innovation Science, 5*(2), 113–118. https://doi.org/10.1260/1757-2223.5.2.113

Añón Higón, D., & Driffield, N. (2011). Exporting and innovation performance: Analysis of the Annual Small Business Survey in the UK. *International Small Business Journal, 29*(1), 4–24. https://doi.org/10.1177/0266242610369742

Ansoff, I. H. (1965). *Corporate strategy*. New York, NY: McGraw Hill.

Anwar, M., & Shah, S. Z. A. (2020). Managerial networking and business model innovation: Empirical study of new ventures in an emerging economy. *Journal of Small Business & Entrepreneurship, 32*(3), 265–286. https://doi.org/10.1080/08276331.2018.1490509

Arslanagic-Kalajdzic, M., Balboni, B., Kadic-Maglajlic, S., & Bortoluzzi, G. (2017). Product innovation capability, export scope and export experience: Quadratic and moderating effects in firms from developing countries. *European Business Review, 29*(6), 680–696. https://doi.org/10.1108/EBR-12-2015-0180

Atuahene-Gima, K. (1995). An exploratory analysis of the impact of market orientation on new product performance: A contingency approach. *Journal of Product Innovation Management, 12*(4), 275–293. https://doi.org/10.1111/1540-5885.1240275

Austin, J., & Seitanidi, M. (2012). Collaborative value creation: A review of partnering between nonprofits and businesses—Part 2: Partnership processes and outcomes. *Nonprofit & Voluntary Sector Quarterly, 41*, 929–968. https://doi.org/10.1177/0899764012454685

Azar, G., & Ciabuschi, F. (2017). Organizational innovation, technological innovation, and export performance: The effects of innovation radicalness and extensiveness. *International Business Review, 26*, 324–336. https://doi.org/10.1016/j.ibusrev.2016.09.002

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120. https://doi.org/10.1177/014920639101700108

Barney, J. B. (2014). How marketing scholars might help address issues in resource-based theory. *Journal of the Academy of Marketing Science, 42*, 24–26. https://doi.org/10.1007/s11747-013-0351-8

Barney, J., & Arikan, A. (2001). The resource-based view: Origins and implications. In M. Hitt, R. Freeman, & J. Harrison (Eds.), *Handbook of strategic management* (pp. 124–185). Oxford: Blackwell.

Becker, S. O., & Egger, P. H. (2013). Endogenous product versus process innovation and a firm's propensity to export. *Empirical Economics, 44*(1), 329–354. https://doi.org/10.1007/s00181-009-0322-6

Bekkers, V. J. J. M., Tummers, L. G., & Voorberg, W. H. (2013). *From public innovation to social innovation in the public sector: A literature review of relevant drivers and barriers*. Rotterdam: Erasmus University Rotterdam.

Beynon, M. J., Jones, P., & Pickernell, D. (2016). Country-based comparison analysis using fsQCA investigating entrepreneurial attitudes and activity. *Journal of Business Research, 69*(4), 1271–1276. https://doi.org/10.1016/j.jbusres.2015.10.091

Bıçakcıoğlu-Peynirci, N., & Ipek, I. (2020). Export market orientation and its consequences: A meta-analytic review and assessment of contextual and measurement moderators. *Journal of Business & Industrial Marketing, 35*(5), 939–954. https://doi.org/10.1108/JBIM-04-2019-0147

Blomqvist, K., & Levy, J. (2006). Collaboration capability: A focal concept in knowledge creation and collaborative innovation in networks. *International Journal of Management Concepts and Philosophy, 2*(1), 31–48. https://doi.org/10.1504/IJMCP.2006.009645

Bortoluzzi, G., Kadic-Maglajlic, S., Arslanagic-Kalajdzic, M., & Balboni, B. (2018). Innovativeness as a driver of the international expansion of developing markets' firms: Evidence of curvilinear effects. *International Marketing Review, 35*(2), 215–235. https://doi.org/10.1108/IMR-11-2015-0258

Buckley, P. J., & Casson, M. C. (1976). *The future of multinational enterprises*. New York, NY: Holmes and Meier.

Cadogan, J. W., Paul, N. J., Salminen, R. T., Puumalainen, K., & Sundqvist, S. (2001). Key antecedents to "export" market-oriented behaviors: A cross-national empirical examination. *International Journal of Research in Marketing, 18*(3), 261–282.

Caldera, A. (2010). Innovation and exporting: Evidence from Spanish manufacturing firms. *Review of World Economics, 146*, 657–689. https://doi.org/10.1007/s10290-010-0065-7

Camisón-Zornoza, C., Lapiedra-Alcamí, R., Segarra-Ciprés, M., & Boronat-Navarro, M. (2004). A meta-analysis of innovation and organizational size. *Organization Studies, 25*(3), 331–361. https://doi.org/10.1177/0170840604040039

Cassiman, B., & Golovko, E. (2011). Innovation and internationalization through exports. *Journal of International Business Studies, 42*, 56–75. https://doi.org/10.1057/jibs.2010.36

Cassiman, B., Golovko, E., & Martínez-Ros, E. (2010). Innovation, exports and productivity. *International Journal of Industrial Organization, 28*(4), 372–376. https://doi.org/10.1016/j.ijindorg.2010.03.005

Cassiman, B., & Martinez-Ros, E. (2007). *Product innovation and exports: Evidence from Spanish manufacturing*. Barcelona: IESE Business School.

Chadwick, C., Super, J. F., & Kwon, K. (2015). Resource orchestration in practice: CEO emphasis on SHRM, commitment-based HR systems, and firm performance. *Strategic Management Journal, 36*(3), 360–376. https://doi.org/10.1002/smj.2217

Chapman, R. L., & Corso, M. (2005). From continuous improvement to collaborative innovation: The next challenge in supply chain management. *Production Planning & Control, 16*(4), 339–344. https://doi.org/10.1080/09537280500063269

Chen, J., Sousa, C., & He, X. (2016). The determinants of export performance: A review of the literature 2006–2014. *International Marketing Review, 33*(5), 626–670. https://doi.org/10.1108/IMR-10-2015-0212

Cheng, C. F., Chang, M. L., & Li, C. S. (2013). Configural paths to successful product innovation. *Journal of Business Research, 66*(12), 2561–2573. https://doi.org/10.1016/j.jbusres.2012.10.006

Chesbrough, H. (2003). *Open innovation*. Boston, MA: Harvard Business School Press.

Chetty, S. K., & Stangl, L. M. (2010). Internationalization and innovation in a network relationship context. *European Journal of Marketing, 44*(11/12), 1725–1743. https://doi.org/10.1108/03090561011079855

Chiva, R., Ghauri, P., & Alegre, J. (2014). Organizational learning, innovation and internationalization: A complex system model. *British Academy of Management, 25*, 687–705. https://doi.org/10.1111/1467-8551.12026

Dahan, N., Doh, J., Oetzel, J., & Yaziji, M. (2010). Corporate-NGO collaboration: Co-creating new business models for developing markets. *Long Range Planning, 43*, 326–342. https://doi.org/10.1016/j.lrp.2009.11.003

Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal, 34*(3), 555–590. https://doi.org/10.2307/256406

Damanpour, F., & Evan, W. M. (1984). Organizational innovation and performance: The problem of "organizational lag". *Administrative Science Quarterly, 392–409*. https://doi.org/10.2307/2393031

Damanpour, F., Walker, R. M., & Avellaneda, C. N. (2009). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of Management Studies, 46*(4), 650–675. https://doi.org/10.1111/j.1467-6486.2008.00814.x

Damijan, J. P., Kostevc, C., & Polanec, S. (2008). *From innovation to exporting or vice versa? Causal link between innovation activity and exporting in Slovenian microdata*. Licos Discussion Paper No. 204, LICOS Centre for Institutions and Economic Performance, Katholieke Universiteit Leuven, Leuven.

Damijan, J. P., Kostevc, C., & Polanec, S. (2010). From innovation to exporting or vice versa? *The World Economy, 33*(3), 374–398. https://doi.org/10.1111/j.1467-9701.2010.01260.x

Darnall, N., Henriques, I., & Sadorsky, P. (2008). Do environmental management systems improve business performance in an international setting? *Journal of International Management, 14*(4), 364–376. https://doi.org/10.1016/j.intman.2007.09.006

De Marchi, V. (2012). Environmental innovation and R&D cooperation: Empirical evidence from Spanish manufacturing firms. *Research Policy, 41*(3), 614–623. https://doi.org/10.1016/j.respol.2011.10.002

Del Río, P., Peñasco, C., & Romero-Jordán, D. (2015). Distinctive features of environmental innovators: An econometric analysis. *Business Strategy and the Environment, 24*(6), 361–385. https://doi.org/10.1002/bse.1822

Dohse, D., & Niebuhr, A. (2018). How different kinds of innovation affect exporting. *Economics Letters, 163*, 182–185. https://doi.org/10.1016/j.econlet.2017.12.017

Dos Santos, M. G., Borini, F. M., Pereira, R. M., & Raziq, M. M. (2020). Institutional pressures and the diffusion of organisational innovation: Evidence from Brazilian firms. *Technology Analysis & Strategic Management, 32*(7), 869–880. https://doi.org/10.1080/09537325.2020.1718089

European Commission (2020). *Country report: Spain 2020*. European Commission Report No. SWD(2020) 508, Brussels. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0508&from=EN.

Farinas, J. C., & Martín-Marcos, A. (2007). Exporting and economic performance: Firm-level evidence of Spanish manufacturing. *World Economy, 30*(4), 618–646. https://doi.org/10.1111/j.1467-9701.2007.01007.x

Fassio, C. (2018). Export-led innovation: The role of export destinations. *Industrial and Corporate Change, 27*(1), 149–171. https://doi.org/10.1093/icc/dtx028

Filatotchev, I., Liu, X., Buck, T., & Wright, M. (2009). The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies, 40*, 1005–1021. https://doi.org/10.1057/jibs.2008.105

Fiss, P. C., Marx, A., & Cambré, B. (2013). Introduction. In P. C. Fiss, B. Cambré, & A. Marx (Eds.), *Configurational theory and methods in organizational research* (pp. 1–22). Emerald: Bingley.
Freixanet, J., Monreal, J., & Sánchez-Marín, G. (2020). Family firms' selective learning-by-exporting: Product vs process innovation and the role of technological capabilities. *Multinational Business Review, 29*(2), 210–236. https://doi.org/10.1108/MBR-01-2020-0011
Ganotakis, P., & Love, J. H. (2011). R&D, product innovation, and exporting: Evidence from UK new technology firms. *Oxford Economic Papers, 63*(2), 279–306. https://doi.org/10.1093/oep/gpq027
Golovko, E., & Valentini, G. (2011). Exploring the complementarity between innovation and export for SMEs growth. *Journal of International Business Studies, 42*(3), 362–1280. https://doi.org/10.1057/jibs.2011.2
Gruber, M., Heinemann, F., Brettel, M., & Hungeling, S. (2010). Configurations of resources and capabilities and their performance implications: An exploratory study on technology ventures. *Strategic Management Journal, 31*(12), 1337–1356. https://doi.org/10.1002/smj.865
Haddoud, M. Y., Jones, P., & Newbery, R. (2017). Export promotion programmes and SMEs' performance: Exploring the network promotion role. *Journal of Small Business and Enterprise Development, 24*(1), 68–87. https://doi.org/10.1108/JSBED-07-2016-0116
Haddoud, M. Y., Jones, P., & Newbery, R. (2021). Export intention in developing countries: A configuration approach to managerial success factors. *Journal of Small Business Management, 59*(1), 107–135. https://doi.org/10.1111/jsbm.12470
Haddoud, M. Y., Onjewu, A. K., Jones, P., & Newbery, R. (2018). Investigating the moderating role of export promotion programmes using evidence from North-Africa. *Critical Perspectives on International Business, 14*(2/3), 282–308. https://doi.org/10.1108/cpoib-11-2016-0059
Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource based view: Capability lifecycles. *Strategic Management Journal, 24*(10), 997–1010. https://doi.org/10.1002/smj.332
Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal, 44*(1), 13–28. https://doi.org/10.5465/3069334
Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. (2006). The importance of resources in the internationalization of professional service firms: The good, the bad and the ugly. *Academy of Management Journal, 49*(6), 1137–1157. https://doi.org/10.5465/amj.2006.23478217
Hu, B., Mai, Y., & Pekeč, S. (2020). Managing innovation spillover in outsourcing. *Production and Operations Management, 29*(10), 2252–2267. https://doi.org/10.1111/poms.13222
Hughes, P., Hodgkinson, I. R., Elliott, K., & Hughes, M. (2018). Strategy, operations and profitability: The role of resource orchestration. *International Journal of Operations and Production Management, 38*(4), 1125–1143. https://doi.org/10.1108/IJOPM-10-2016-0634
Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies, 8*(1), 23–32. https://doi.org/10.1057/palgrave.jibs.8490676
Johanson, J., & Vahlne, J. E. (2006). Commitment and opportunity development in the internationalization process: A note on the Uppsala internationalization process model. *Management International Review, 46*(2), 165–178. https://doi.org/10.1007/s11575-006-0043-4
Kent, R. A. (2015). *Analysing quantitative data: Variable-based and case-based approaches to non-experimental datasets*. London: Sage.
Kingsley, G., & Malecki, E. J. (2004). Networking for competitiveness. *Small Business Economics, 23*, 71–84. https://doi.org/10.1023/B:SBEJ.0000026022.08180.b7
Kotabe, M., Srinivasan, S. S., & Aulakh, P. S. (2002). Multinationality and firm performance: The moderating role of R&D and marketing capabilities. *Journal of International Business Studies, 33*(1), 79–97. https://doi.org/10.1057/palgrave.jibs.8491006
Krugman, P. R. (1979). Increasing returns, monopolistic competition and international trade. *Journal of International Economics, 9*(4), 469–479. https://doi.org/10.1016/0022-1996(79)90017-5
Kunapatarawong, R., & Martínez-Ros, E. (2016). Towards green growth: How does green innovation affect employment? *Research Policy, 45*(6), 1218–1232. https://doi.org/10.1016/j.respol.2016.03.013
Kyläheiko, K., Jantunen, A., Puumalainen, K., Saarenketo, S., & Tuppura, A. (2011). Innovation and internationalization as growth strategies: The role of technological capabilities and appropriability. *International Business Review, 20*(5), 508–520. https://doi.org/10.1016/j.ibusrev.2010.09.004
Lavie, D. (2009). Capturing value from alliance portfolio. *Organizational Dynamics, 38*(1), 26–36. https://doi.org/10.1016/j.orgdyn.2008.04.008
Lefebvre, E., Lefebvre, L. A., & Bourgault, M. (1998). R&D-related capabilities as determinants of export performance. *Small Business Economics, 10*, 365–377. https://doi.org/10.1023/A:1007960431147
Leonidou, L. C., Katsikeas, C. S., Palihawadana, D., & Spyropoulou, S. (2007). An analytical review of the factors stimulating smaller firms to export: Implications for policy makers. *International Marketing Review, 24*(6), 735–770. https://doi.org/10.1108/02651330710832685
Lewandowska, M. S., Szymura-Tyc, M., & Gołębiowski, T. (2016). Innovation complementarity, cooperation partners, and new product export: Evidence from Poland. *Journal of Business Research, 69*(9), 3673–3681. https://doi.org/10.1016/j.jbusres.2016.03.028
Lim, J. S., Sharkey, T. W., & Heinrichs, J. H. (2006). Strategic impact of new product development on export involvement. *European Journal of Marketing, 40*(1/2), 44–60. https://doi.org/10.1108/03090560610637301
Lin, C. Y. Y., & Chen, M. Y. C. (2007). Does innovation lead to performance? An empirical study of SMEs in Taiwan. *Management Research News, 30*(2), 115–132. https://doi.org/10.1108/01409170710722955
Love, J. H., & Roper, S. (1999). The determinants of innovation: R&D, technology transfer and networking effects. *Review of Industrial Organization, 15*(1), 43–64. https://doi.org/10.1023/A:1007757110963
Love, J. H., & Roper, S. (2015). SME innovation, exporting and growth: A review of existing evidence. *International Small Business Journal, 33*(1), 28–48. https://doi.org/10.1177/0266242614550190
Máñez, J. A., & Vicente-Chirivella, Ó. (2021). Exports of Spanish manufacturing firms and financial constraints. *BRQ Business Research Quarterly, 24*(1), 53–90. https://doi.org/10.1177/2340944420916308
Mansion, S. E., & Bausch, A. (2020). Intangible assets and SMEs' export behavior: A meta-analytical perspective. *Small Business Economics, 55*, 727–760. https://doi.org/10.1007/s11187-019-00182-5
Martínez-Ros, E., & Labeaga, J. M. (2009). Product and process innovation: Persistence and complementarities. *European Management Review, 6*(1), 64–75.
Mills, A. J., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of case study research*. Thousand Oaks, CA: SAGE.
Monreal-Pérez, J., Aragón-Sánchez, A., & Sánchez-Marín, G. (2012). A longitudinal study of the relationship between export activity and innovation in the Spanish firm: The moderating role of productivity. *International Business Review, 21*(5), 862–877. https://doi.org/10.1016/j.ibusrev.2011.09.010
Nieto, M. J., & Santamaría, L. (2007). The importance of diverse collaborative networks for the novelty of product innovation. *Technovation, 27*(6–7), 367–377. https://doi.org/10.1016/j.technovation.2006.10.001
Nieto, M. J., & Santamaría, L. (2010). Technological collaboration: Bridging the innovation gap between small and large firms. *Journal of Small Business Management, 48*(1), 44–69. https://doi.org/10.1111/j.1540-627X.2009.00286.x
OECD. (2005). *Oslo manual: Guidelines for collecting and interpreting innovation data* (3rd ed.). Paris: OECD EUROSTAT.
Ordanini, A., Parasuraman, A., & Rubera, G. (2014). When the recipe is more important than the ingredients: A qualitative comparative analysis (QCA) of service innovation configurations. *Journal of Service Research, 17*(2), 134–149. https://doi.org/10.1177/1094670513513337
Ordanini, A., & Rubera, G. (2008). Strategic capabilities and internet resources in procurement. *International Journal of Operations and Production Management, 28*(1), 27–52. https://doi.org/10.1108/01443570810841095
Pattnayak, S. S., & Thangavelu, S. M. (2014). Productivity and learning-by-exporting: A firm-level analysis of Indian manufacturing. *The World Economy, 37*(7), 1016–1026. https://doi.org/10.1111/twec.12136
Paul, J., Parthasarathy, S., & Gupta, P. (2017). Exporting challenges of SMEs: A review and future research agenda. *Journal of World Business, 52*(3), 327–342. https://doi.org/10.1016/j.jwb.2017.01.003
Penrose, E. (1959). *The theory of the growth of the firm*. New York, NY: Oxford University Press.
Posner, M. (1961). International trade and technical change. *Oxford Economic Papers, 13*(3), 323–341. https://doi.org/10.1093/oxfordjournals.oep.a040877
Priem, R. L., & Butler, J. E. (2001). Is the resource-based "view" a useful perspective for strategic management research? *Academy of Management Review, 26*(1), 22–40. https://doi.org/10.5465/amr.2001.4011928
Ragin, C. C. (2006). Set relations in social research: Evaluating their consistency and coverage. *Political Analysis, 14*(3), 291–310. https://doi.org/10.1093/pan/mpj019
Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago, IL: University of Chicago Press.
Ragin, C. C., & Davey, S. (2016). *Fuzzy-set/qualitative comparative analysis 3.0*. Irvine, CA: Department of Sociology, University of California.
Rey-Martí, A., Porcar, A. T., & Mas-Tur, A. (2015). Linking female entrepreneurs' motivation to business survival. *Journal of Business Research, 68*(4), 810–814. https://doi.org/10.1016/j.jbusres.2014.11.033
Rihoux, B., De Meur, G., Rihoux, B., & Ragin, C. C. (Eds.). (2009). *Configurational comparative methods: Qualitative comparative analysis (QCA) and related techniques* (pp. 33–68). Thousand Oaks, CA: Sage.
Rihoux, B., & Ragin, C. C. (2009). *Configurational comparative methods: Qualitative comparative analysis (QCA) and related techniques*. Thousand Oaks, CA: Sage.
Rodil, O., Vence, X., & Sanchez, M. D. C. (2016). The relationship between innovation and export behaviour: The case of Galician firms. *Technological Forecasting and Social Change, 113*, 248–265. https://doi.org/10.1016/j.techfore.2015.09.002
Rodríguez, A., & Nieto, M. J. (2012). The internationalization of knowledge-intensive business services: The effect of collaboration and the mediating role of innovation. *The Service Industries Journal, 32*(7), 1057–1075. https://doi.org/10.1080/02642069.2012.662493
Rodríguez, J. L., & Rodríguez, R. M. G. (2005). Technology and export behaviour: A resource-based view approach. *International Business Review, 14*(5), 539–557. https://doi.org/10.1016/j.ibusrev.2005.07.002
Rogers, M. (2004). Networks, firm size and innovation. *Small Business Economics, 22*, 141–153. https://doi.org/10.1023/B:SBEJ.0000014451.99047.69
Roig-Tierno, N., Alcázar, J., & Ribeiro-Navarrete, S. (2015). Use of infrastructures to support innovative entrepreneurship and business growth. *Journal of Business Research, 68*(11), 2290–2294. https://doi.org/10.1016/j.jbusres.2015.06.013
Roper, S., & Love, J. H. (2002). Innovation and export performance: Evidence from UK and German manufacturing plants. *Research Policy, 31*(7), 1087–1102. https://doi.org/10.1016/S0048-7333(01)00175-5

Roper, S., Love, J., & Bonner, K. (2015). *Benchmarking local innovation: The innovation geography of the UK*. Warwick: Enterprise Research Centre.
Saridakis, G., Idris, B., Hansen, J. M., & Dana, L. P. (2019). SMEs' internationalisation: When does innovation matter? *Journal of Business Research, 96*, 250–263. https://doi.org/10.1016/j.jbusres.2018.11.001
Schlittgen, R., Ringle, C. M., Sarstedt, M., & Becker, J. M. (2016). Segmentation of PLS path models by iterative reweighted regressions. *Journal of Business Research, 69*(10), 4583–4592. https://doi.org/10.1016/j.jbusres.2016.04.009
Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. New York, NY: Harper and Brothers.
Serra, F., Pointon, J., & Abdou, H. (2012). Factors influencing the propensity to export: A study of UK and Portuguese textile firms. *International Business Review, 21*(2), 210–224. https://doi.org/10.1016/j.ibusrev.2011.02.006
Serrano, J., & Myro, R. (2019). From domestic to exporter, what happens? Evidence for Spanish manufacturing firms. *Structural Change and Economic Dynamics, 51*, 380–392. https://doi.org/10.1016/j.strueco.2019.01.005
Shefer, D., & Frenkel, A. (2005). R&D, firm size and innovation: An empirical analysis. *Technovation, 25*(1), 25–32. https://doi.org/10.1016/S0166-4972(03)00152-4
Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of Management, 37*(5), 1390–1412. https://doi.org/10.1177/0149206310385695
Skarmeas, D., Leonidou, C. N., & Saridakis, C. (2014). Examining the role of CSR scepticism using fuzzy-set qualitative comparative analysis. *Journal of Business Research, 67*(9), 1796–1805. https://doi.org/10.1016/j.jbusres.2013.12.010
Sørensen, E., & Torfing, J. (2013). *Enhancing social innovation by rethinking collaboration, leadership and public governance*. NESTA Social Frontiers, 14–15 November.
Tavassoli, S. (2018). The role of product innovation on export behavior of firms. *European Journal of Innovation Management, 21*(2), 1460–11060. https://doi.org/10.1108/EJIM-12-2016-0124
Urabe, K. (1988). Innovation and the Japanese management system. In K. Urabe, J. Child, & T. Kagono (Eds.), *Innovation and management international comparisons* (pp. 3–26). Berlin: Walter de Gruyter.
Van Beers, C., & Zand, F. (2014). R&D cooperation, partner diversity, and innovation performance: An empirical analysis. *Journal of Product Innovation Management, 31*(2), 292–312. https://doi.org/10.1111/jpim.12096
Van Beveren, I., &Vandenbussche, H. (2009). *Product and process innovation and the decision to export: Firm-level evidence for Belgium*. LICOS Discussion Paper No. 247, LICOS Centre for Institutions and Economic Performance, Katholieke Universiteit Leuven, Leuven.
Van Beveren, I., & Vandenbussche, H. (2010). Product and process innovation and firms' decision to export. *Journal of Economic Policy Reform, 13*(1), 3–24. https://doi.org/10.1080/17487870903546267
Vernon, R. (1979). The product cycle hypothesis in a new international environment. *Oxford Bulletin of Economics and Statistics, 41*(4), 255–267. https://doi.org/10.1111/j.1468-0084.1979.mp41004002.x
Vernon, V. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics, 80*, 190–207. https://doi.org/10.2307/1880689
Verspagen, B., & Wakelin, K. (1997). Trade and technology from a Schumpeterian perspective. *International Review of Applied Economics, 11*(2), 181–194. https://doi.org/10.1080/02692179700000012
Vis, B. (2012). The comparative advantages of fsQCA and regression analysis for moderately large-N analyses. *Sociological Methods & Research, 41*(1), 168–198. https://doi.org/10.1177/0049124112442142
Wagner, J. (2007). Exports and productivity: A survey of the evidence from firm-level data. *The World Economy, 30*(1), 60–82. https://doi.org/10.1111/j.1467-9701.2007.00872.x
Wagner, J. (2013). The granular nature of the great export collapse in German manufacturing industries, 2008/2009. *Economics, 7*(2013-5). https://doi.org/10.5018/economics-ejournal.ja.2013-5
Wagner, E. R., & Hansen, E. N. (2005). Innovation in large versus small companies: Insights from the US wood products industry. *Management Decision, 43*(6), 837–850. https://doi.org/10.1108/00251740510603592
Wakelin, K. (1998). Innovation and export behaviour at the firm level. *Research Policy, 26*(7–8), 829–841. https://doi.org/10.1016/S0048-7333(97)00051-6
Wei, F., Feng, N., Evans, R. D., Zhao, R., & Yang, S. (in press). How do innovation types and collaborative modes drive firm performance? An FsQCA analysis based on evidence from software ecosystems. *IEEE Transactions on Engineering Management*. https://doi.org/10.1109/TEM.2021.3102321.
Williams, A., & Shaw, G. (2011). Internationalization and innovation in tourism. *Annals of Tourism Research, 38*(1), 27–51. https://doi.org/10.1016/j.annals.2010.09.006
Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. *Journal of Business Research, 66*(4), 463–472. https://doi.org/10.1016/j.jbusres.2012.12.021
Woodside, A. G., & Zhang, M. (2012). Identifying x-consumers using causal recipes: "Whales" and "jumbo shrimps" casino gamblers. *Journal of Gambling Studies, 28*(1), 13–26. https://doi.org/10.1007/s10899-011-9241-5
World Bank (2021). *Exports of goods and services (current US$): Spain*. World Development Indicators. https://data.worldbank.org/indicator/NE.EXP.GNFS.CD?locations=ES.
Wu, L., Wei, Y., & Wang, C. (2021). Disentangling the effects of business groups in the innovation–export relationship. art. 104093 *Research Policy, 50*(1). https://doi.org/10.1016/j.respol.2020.104093.

Carmen Lopez is an Associate Professor in Marketing at the University of Southampton. Her research interests lie in the areas of international marketing and digital marketing. Her work has been published in highly regarded journals including *Journal of World Business*, *Annals of Tourism Research, Tourism Management, Journal of Business Research, Industrial Marketing Management, European Journal of Marketing, Psychology & Marketing, Computers in Industry, Production Planning & Control* and *International Journal of Production Research*, among others.

Mohamed Yacine Haddoud is a Reader in Management at Liverpool John Moores University and a Fellow of the Higher Education Academy in the UK. His research interests include small business management, entrepreneurship education and behaviour, international entrepreneurship and fuzzy-set analysis. Mohamed published several articles in *Annals of Tourism Research*, *Journal of Tourism Management, Journal of Small Business Management; Journal of Business Research, Studies in Higher education, Journal of Enterprise and Small Business Development, Critical Perspectives on International Business Journal, Strategic Change Journal and the International Journal of Innovation Management*. He currently acts as the co-editor of the *International Journal of Entrepreneurial Behavior and Research* and the Chair of the International Entrepreneurship track in the Institute of Small Business and Entrepreneurship.

Dulekha Kasturiratne is a senior lecturer in Marketing at the University of Plymouth. Her research interests lie in the areas of value chain analysis, poverty reduction, consumer behaviour and enterprise education. Her work has been published in *Production Planning and Control*, *Industrial Marketing Management,* and *International Journal of Production Research*.