Determinants of Export Activity. A Configurational Analysis of Family Firms

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Abstract Family firms are of great importance in the increasingly competitive and unstable environment in which they have to operate. Furthermore, they evidence a series of specific characteristics that make them behave differently -specifically, when having to export. Among these distinctive traits, their lack of resources and more conservative attitude towards risk may limit their international activity. Nevertheless, we show that these obstacles are minimized when considering certain determinants that have traditionally been seen as drivers of firms' export competitiveness (i.e. innovation, collaboration, using own means, export promotion mechanisms, and exporting to developed markets) together as a set. We perform a Fuzzy-set Configurational analysis to study the configurational effect of the abovementioned determinants on a sample of 68 Spanish family firms in the agricultural sector.

Determinantes de la actividad exportadora. Un análisis configuracional de las empresas familiares

Resumen Las empresas familiares son de gran importancia en el entorno cada vez más competitivo e inestable en el que deben operar. Es más, éstas evidencian una serie de características específicas que hacen que éstas se comporten de forma diferente -específicamente cuando tienen que exportar. De entre estos rasgos distintivos, su falta de recursos y su actitud frente al riesgo más conservadora limitan su actividad internacional. Sin embargo, nosotros mostramos que estos obstáculos son minimizados cuando se consideran ciertos determinantes que han sido tradicionalmente vistos como directores de la competitividad exportadora de la empresa (i.e. innovación, colaboración, el uso de medios propios para exportar, mecanismos de promoción de las exportaciones y exportar a mercados desarrollados) de forma simultánea como un conjunto. Ejecutamos un análisis Configuracional de Con-juntos Difusos para estudiar el efecto configuracional de los determinantes anteriormente mencionados en una muestra de 68 empresas familiares españolas del sector agrícola.
1. Introduction

This work seeks to disentangle the determinants that lead family firms (FF) to intensify their export activity. By identifying these determinants, the paper provides insights into which investments FF managers and policymakers should make in order to support FF export performance. We also believe that the typical resource constraints and risk aversion that can threaten family firms’ socio-emotional capital (Bchini, 2014; Casillas et al., 2021; Fernández & Nieto, 2005; Gómez-Mejía et al., 2023; Zahra, 2005), and which can burden FF export intensity (EI), may be offset when jointly considering a configuration of various determinants. Stressing the importance of the principles proposed by both the resource-based view (RBV; Dhanaraj & Beamish, 2003) and the socio-emotional wealth theories (SEW; Gómez-Mejía et al., 2007a; Moreno-Menéndez et al., 2021), this work may provide novel contributions to the existing literature by extending previous knowledge, which has considered the individual effect of the considered drivers of FF EI.

The ever-increasing importance of FF in the economy has prompted a deeper exploration in studies focusing on critical aspects in an effort to strengthen the position of FF and promote the impact of export activity determinants –which have proven critical in the literature–on the determinants of export activity (for example, in Sousa et al., 2008). We seek to identify possible combinations or configurations that lead to high EI in FF (according to managers’ self-perception). Due to risk aversion and limited resources, FFs avoid taking risks and investing fully in any single determinant (Bchini, 2014; Gómez-Mejía et al., 2023), despite the importance of each. Therefore, a balanced investment of resources is necessary. We consider it essential to address these determinants collectively, given the lack of required resources that characterize FF. The presence of other strategic variables atones for this scarcity to some degree, thereby enabling FF to conduct their export activity optimally and effectively and thus ensuring that this impact is intense.

We adopt a Fuzzy Set Qualitative Comparative Analysis (fsQCA) that allows us to identify the drivers that may lead to the same result (Yu et al., 2021). Our empirical research is based on data from 88 Spanish agricultural firms, in which we seek to determine which drivers lead to greater export activity.

We focus on this type of organisation because of the key role played by FF. In Spain, FFs are becoming increasingly important each year, and now represent 89% of all companies, providing 67% of private employment, generating over 6.58 million jobs, and representing 51.7% of Gross Domestic Product (GDP) (Family Firm Institute, 2021). Moreover, in terms of export activity determinants, FFs have scarcely been studied from a configurational point of view.

We focus on the agricultural sector for two reasons. Firstly, the agricultural sector represents 9.7% of Spanish GDP, and Spain is the fourth European Union (EU) country in terms of the number of agricultural holdings, the second country in terms of used area dedicated to agriculture, and the leading EU producer of certain products such as citrus fruits -59.7% of the EU total in 2019 (National Statistics Institute, 2021). Moreover, in the agricultural sector, FFs represent 86% of all Spanish companies (Family Firm Institute, 2021). Secondly, there is a lack literature in this regard (e.g. Geldres-Weiss et al., 2011 studied the impact of export marketing assistance (EMA) on FFs export performance in Chile’s agricultural and forestry sector).

FFs managers may find the study helpful because it offers information on which factors impact FFs export activity. Exploring the mechanisms through which FFs may cumulate enough resources to increase their performance is extremely important.
important during economic downturns (Agustí et al., 2021). At an institutional level, this information can also be interesting vis-à-vis developing policies and programmes that support FFs export performance.

2. Literature Review and Propositions

Each of the selected strategic determinants (innovation, collaboration, promotion instruments, own export means, and export destination) analysed below is tested in conjunction with one or more of the other determinants. These determinants were chosen due to their significant connection with export activity and the keen interest they have generated in the academic field, as evidenced by various studies. Innovation and collaboration play a crucial role in maintaining competitiveness in today’s ever-shifting international markets (e.g., Demirbag et al., 2021; Salomon & Jin, 2021; Serrano et al., 2021). Participation in trade fairs and missions—which are seen as promotional mechanisms—helps to increase brand visibility and awareness abroad (Geldres-Weiss et al., 2016; Geldres-Weiss & Monreal-Pérez, 2018; Monreal-Pérez & Geldres-Weiss, 2019). Using proprietary means provides greater control over the supply chain and distribution in foreign markets (Schwens et al., 2018), which is of great interest to FFs who are seeking to preserve their SEW (e.g., Davila et al., 2023; Gómez-Mejia et al., 2023). Directing exports towards favourable destinations benefits export stability and leverages specific advantages that certain markets, such as LBE, can offer in specific regions (Atkin et al., 2017; Bai et al., 2017).

Additionally, this choice is based on the challenge faced by FFs due to their resource scarcity, since they need to have adequate resources to invest in these strategic determinants. In many instances, these companies lack the necessary resources (Bchini, 2014; Buckley, 1989; Fernández & Nieto, 2006; Gómez-Mejia et al., 2019; Rexhepi et al., 2017), and if they do have some margin, they face the concern of losing their SEW (Davila et al., 2023; Gómez-Mejia et al., 2007a; Gómez-Mejia et al., 2019; Lin & Wang, 2021). We believe that by developing such determinants, FFs may overcome these limitations.

2.1. Determinants of export activity: innovation

Innovation in FFs has become a topic of growing interest (Freixanet et al., 2020; Salomon et al., 2021). Some authors deem that the relationship between technological innovation and family involvement is negative (e.g., Block, 2012; Muñoz-Bullón & Sánchez-Bueno, 2011), with the conservative nature of FFs being what prevents them from taking risks and, thus, from investing in innovation, given that such an investment requires significant economic resources (Casillas & Moreno-Menéndez, 2017; Gómez-Mejia et al., 2019; Moreno-Menéndez et al., 2021). In line with the agency theory however, other researchers argue that FFs' behaviour is not only driven by economic goals but also by non-economic objectives (Kammerlander & Ganter, 2015; Lin & Wang, 2021; Randolph et al., 2019) and by family values such as altruism and the desire to maintain the family brand in the market (Gómez-Mejia et al., 2007a; Miller et al., 2015). Consequently, although FFs do take risks and do invest in innovation (Filser et al., 2018; Lin & Wang, 2021), their lack of economic resources prevents them from making greater investments in innovation.

Considering the importance of innovation in this context, FFs lack of resources is a limiting condition for their innovation. We therefore believe that innovation should be studied in combination with other strategic factors which indicate that the resources available to FFs are indeed sufficient to allow them to export. Since innovation as a determinant drives EI, firms who innovate prior to exporting learn more and can build more confidence by knowing both the market and its environment, thereby minimizing the risk involved in exporting (Eriksson et al., 1997). We therefore believe that the effect which innovation has on export activity would be even more positive when correlated with other determinants. Hence, we put forward the following proposition:

Proposition 1. A configurational combination of innovation together with a set of other strategic determinants (collaboration, promotion agency mechanisms, exporting through own means and exports to developed countries) leads FFs to achieve high EI.

2.2. Determinants of export activity: collaboration

Collaboration eventually improves the firm’s competitive position within the market by exploiting the knowledge gained from exchanging information and by sharing experiences with partners (Cesinger et al., 2016; Isobe et al., 2008). Depending on its field of activity, each company should have a collaborative network that fosters interactions and allows it not only to keep abreast of the latest products or services in demand but also to be aware of regulatory and other market changes (Musteen et al., 2010). Furthermore, it has been tested and confirmed that— as regards information technology exchange— collaboration between the company and its partners leads both to a win-win situation and to greater per-
formance, especially when based on a long-term oriented relationship (Paulraj & Chen, 2007). In this regard, FFs are no exception. However, their idiosyncrasies and attachment to their SEW make them more conservative in their inter-firm relationships and more careful when opening up to other partners in foreign markets (Gómez-Mejía et al., 2007a; Hennart et al., 2019; Miller et al., 2015). Serrano et al. (2021) find that networks can be used to solve export problems concerning quality, organisational, financial or information problems as well as problems related to the export market. In the same vein, Cesinger et al. (2016) suggest that collaboration intensity has a positive effect on FFs internationalisation, as it increases knowledge of international markets. Said authors also confirm that FFs collaborate, but that they do so more conservatively as they tend to establish relationships with familiar partners with whom they usually work and whom they fully trust, which makes their network more restricted and relatively limited. Moreover, collaborating with different organisations means having more financial resources to invest and the firm’s willingness to expose itself to the risk that the investment might not pay off (Gómez-Mejía et al., 2019). That is why FFs constantly try to control their resources by being careful in the search for and development of new contacts (Kontinen & Ojala, 2011). Trust is therefore a factor that connects a FF to its network. The FF must create and maintain links not only in the local market but also with many other actors, such as customers, distributors, suppliers, competitors, non-profit organisations, and public administration bodies (Kontinen & Ojala, 2011).

A FF that enjoys a network of collaborators has a greater presence in the market and therefore a greater chance of being contacted due to the links within its network - which positively impacts its export activity. We believe that the combination of collaboration and other factors allows the firm to dedicate enough resources to carry out and improve export activity. As mentioned before, investing in collaboration requires significant financial resources. Such an investment may therefore prove to be problematic for those FFs that lack the necessary financial resources or for those that tend to avoid such an investment due to risk aversion. In addition, we believe that the presence of other determinants - together with collaboration - reduces this risk and encourages FFs to invest in collaboration. Accordingly, our proposition reads as follows:

Proposition 2. A configurational combination of collaboration, together with a set of other strategic determinants (innovation, promotion agency mechanisms, exporting through own means, and exports to developed countries) leads FFs to achieve high EI.

2.3. Determinants of export activity: promotion agency mechanisms

In contrast to firms that do not adopt an export promotion programme (EPP) (Durmuşoğlu et al., 2012; Geldres-Weiss et al., 2011), firms that do adopt promotion agency mechanisms tend to achieve their financial targets and thus have more opportunities to increase their export sales. According to Geldres-Weiss et al. (2011), companies that use the most EPPs in order to secure the necessary support - mainly due to their need to compensate for the lack of experience and information on the foreign market - are mostly small and medium-sized enterprises (SMEs), including FFs, since most FFs are SMEs. Firms that use at least one of these mechanisms (especially if they are FFs) will thus exhibit better export performance than firms who do not use any of them (Durmuşoğlu et al., 2012).

Being present at trade fairs and carrying out prospecting/trade visits are determinants that lead to good results, although this does entail significant investment due to the high costs involved. In the case of FFs - who lack the required resources for essential export operations (Fernández & Nieto, 2006) - the support of Export Promotion Agencies (EPA) is particularly favourable for export activity. We therefore believe that the impact of EPA on improving the export activity of FFs is positive if combined with other determinants and with the presence of other factors that make FFs more confident and assume the risk attached to such an investment. Accordingly, we formulate our proposition as follows:

Proposition 3. A configurational combination of using promotion agency mechanisms together with a set of other strategic determinants (innovation, collaboration, exporting through own means and exports to developed countries) leads FFs to achieve high EI.

2.4. Determinants of export activity: exporting through own means

In order to export using one’s own means, it is necessary to devote a very significant part of the company’s resources, especially for markets in countries where costs are high (Root, 1987). Such an investment requires transferring experience, workforce skills and technology from the home company to the destination country. Nevertheless, this investment can yield medium and long-term benefits.

Companies must carefully choose the mode of entry, timing, scope and pace that determine how they will conduct their international activi-
ties. In this regard, several behavioural process models have been developed. The best-known is the so-called Uppsala model, according to which firms follow a stage approach to grow internationally -first entering and allocating resources in psychologically close markets before very gradually moving to more distant ones (Onkelinx & Sleuwaegen, 2010). Johanson and Vahlne (1977) suggest that the fact that firms take small and progressive steps in terms of investment is what determines their mode of entry, generally by launching their export activity through an indirect agent at the beginning. This gradual manner of entering helps acquire and accumulate experience and a better knowledge of the market and its environment and can therefore make the firm subsequently establish its own production platform in the destination country.

FFs tend to have limited resources and a conservative business culture that leads them to be cautious when making decisions (Rexhepi et al., 2017). Entering international markets can be an important step for these firms, but it can also prove risky and costly if executed unwisely. We therefore believe that if FFs choose to enter the target market using their own means and if they have other determinants at their disposal, then the effect on their export activity will increase. Consequently, we posit the following proposition:

**Proposition 4.** A configurational combination of exporting through own means together with a set of other strategic determinants (innovation, collaboration, promotion agency mechanisms and exports to developed countries) leads FFs to achieve high EI.

### 2.5. Determinants of export activity: exports to advanced markets

Irvansyah et al. (2020) suggest that one of the factors significantly affecting trade flow is the real GDP per capita of the export destination countries, and that each target country implies a different level in various factors, such as the price of goods, the cost of customs duties and/or the cost of labour. Exporting firms thus prefer markets in developed countries, since they offer better transaction terms, such as price, and offer a higher added value, which makes it possible to achieve a high profit percentage (Ahmad et al., 2017).

Moreover, operating in these attractive markets on a regular basis allows firms to gain experience through learning by exporting at a high level (Atkin et al., 2017; Bai et al., 2017). From an RBV perspective, exposure to richer sources of knowledge and technology that would otherwise be unavailable in other markets affords exporters unique advantages which make them improve their productivity through various knowledge inputs and benefit from the technical expertise of their buyers (Dhanaraj & Beamish, 2003; López Rodríguez & García Rodríguez, 2005). This then enables them to develop their skill base by keeping their commercial, technical, and technological knowledge up to date (Wu & Chiou, 2021).

Although FFs aim to direct their exports towards these markets in order to improve their performance and diversify their exports (Del Rosal, 2019; Gómez-Mejia et al., 2007b), they may nevertheless adopt a more cautious view of the risk presented by such markets and the high resource costs they entail (Gómez-Mejia et al., 2007a). They will therefore often choose to concentrate their exports in other markets, even if these are less attractive, because they imply less risk and more entry facilities, thus leading to less use of economic resources. In order to reduce transport costs and expenses, FFs therefore tend to look for markets that are nearby and/or have less stringent regulations. Cultural distance is one of the factors that influence the decision of FFs concerning which foreign markets to enter (Kogut & Singh, 1988; Majkgård & Sharma, 1998). In this regard, FFs prefer markets with a short cultural distance, especially if the company has little experience in foreign markets (Blomstermo et al., 2006). In order to facilitate communication, firms usually export to markets in countries that speak the same language.

For companies, participating in a market in a developed country is a privilege and a guarantee of the security and economic stability that FFs seek to maintain (Zahra, 2005) due to their conservative nature, which prioritises protecting family values and socioemotional wealth (Chirico & Nordqvist, 2010; Peláez-León & Sánchez-Marín, 2021). We therefore believe that making such a decision has a positive impact on FFs exports. Despite FFs concerns about the important economic investment risk of exporting to these developed countries, FFs may, according to (Zahra, 2005), be willing to take certain risks when they know the benefits of the opportunities involved. For this reason, they focus on identifying those opportunities in order to take advantage of them by combining and efficiently utilizing existing as well as new resources to minimize risk. Thus, we put forward the following proposition:

**Proposition 5.** A configurational combination of exports to developed countries together with a set of other strategic determinants (innovation, collaboration and exporting through own means) leads FFs to achieve high EI.
3. Data and Measurement

3.1. Sample
We draw on the Sistema Análisis de Balances Ibéricos (SABI) database and firms’ Código Nacional Actividades Económicas (CNAE) to identify the companies used for this analysis. Our sample is based on interviewing 68 Spanish agricultural companies. The data analysed were collected in 2021 through a survey (see the survey model in the appendix) sent via email to company directors/managers to ensure the reliability of the replies. Most of the firms are family-based (61.76%). Due to the impossibility of obtaining a sufficient number of responses in the first two rounds—which coincided with the end of the COVID-19 period and the subsequent recovery of companies—we carried out a third round of mailing to 570 agricultural enterprises between April and September. We obtained 11.9% valid responses, a better result than Fernandes et al. (2020), Kotaskova et al. (2020) and Lobo et al. (2023), who obtained 3.9%, 2.6%, and 5.5%-3.6% in two samples, respectively.

3.2. Model
In contrast to correlational techniques, we used fsQCA, which allows for a detailed empirical investigation of causal complexity through the logic of set theory (Misangyi et al., 2017) since it identifies causes for a result that can be derived from several different combinations (Ragin, 2008); in short, multiple relationships can demonstrate different behaviours (Huarng & Rey-Martí, 2019). According to (Misangyi et al., 2017), the four fundamental elements that characterize fsQCA are 1) conceptualizing cases as set-theoretic configurations; 2) calibrating case memberships in sets; 3) viewing causality in terms of necessity and sufficiency relationships between sets; and 4) performing counterfactual analyses of unobserved configurations.

The instruments used to analyse the causal complexity implementing QCA according to Ragin (2008) are: firstly, the truth table, which allows for structured and focused comparisons. Truth tables show the logically possible combinations of the causal conditions and the empirical result associated with each configuration. Thus, they directly implement the second type of previously described explicit connection, where we opted for the intermediate solution. This solution—as the most interpretable—is also the most recommended, since it offers a balance between parsimony, which incorporates many counterfactual combinations (easy and difficult), and complexity, which produces little or no simplification, depending on the substantive and theoretical knowledge of the researcher (Ragin, 2008).

The second main element of interest is set-theoretic consistency. With sharp sets, this calculation is simply the proportion of cases in a given row that shows the outcome in question and indicates how closely it approximates a perfect subset relationship. Moreover, consistency is a measure that indicates how consistently the combination produces the result (Ragin, 2008).

The third element is set-theory coverage which, in contrast, assesses the degree to which a cause or causal combination “explains” the instances of a result. When various paths lead to the same result, the coverage of a given causal combination may be small. Thus, the mentioned coverage measures the relevance or empirical importance.

3.3. Variables
Export intensity (EI): this outcome variable is measured by calculating the percentage of sales in foreign markets out of total sales (Boehe & Jiménez, 2016; Bonaccorsi, 1992). The present study considers that the company evidences high export activity with the value (1) when its exports exceed 50% of its total sales, and (0) otherwise.

Family firm (FF): the criterion adopted to consider the firm as a FF is the director or manager’s response to the survey question concerning whether or not, in their view, the firm is a FF, following Moreno-Menéndez and Casillas (2021). If the answer is “yes”, the variable takes the value (1), and (0) if the answer is “no”.

Causal variables: our aim is to examine cases where the variables listed below share a specific causal condition or, more commonly, a specific combination of causal conditions, and to assess whether these cases show the same result (Ragin, 2008).

Innovation: this is one of the most relevant components when analysing EI (Moreno-Menéndez et al., 2021; Sousa et al., 2021).

Some studies, such as Gkypali et al. (2021), consider innovation to be an initially essential ingredient in the early stages of the export process. Mainly concerning process and product, we distinguish between input innovation R&D (input) and output innovation (output) (Love et al., 2016). This is a dichotomous variable whose value is (1) when answered “yes”, considering the company in terms of either input R&D or output innovation, or (0) if the answer in both cases is no (Bratti & Felice, 2012; Diéguez-Soto et al., 2016; Migliori et al., 2020).

Collaboration: as we are dealing with foreign markets, companies need more information about the business environment. In export markets, they therefore always try to count...
on a certain number of partners in order to gain access to up-to-date information and exchange experiences (Cesinger et al., 2016; Isobe et al., 2008). Such relationships established by FFs tend to be permanent and stable given their long-term orientation (Metsola & Kuivalainen, 2021). We construct this variable as follows: we assign it the value (1) when there is a collaboration link, and (0) otherwise (Cesinger et al., 2016; Musteen et al., 2010).

Promotion agency mechanisms (trade missions and trade fairs): participation in trade missions and trade fairs allows FFs to atone for the lack of experience and information in foreign markets (Geldres-Weiss et al., 2011). Durmuşoğlu et al. (2012) confirm that firms which use at least one of these instruments will have better export performance than firms that do not use any. In order to measure the use of promotional mechanisms, we employ a dichotomous variable, according to which we consider that the firm uses such mechanisms when the answer is affirmative in at least one of the two questions concerning participation in trade missions and trade fairs (Francis & Collins-Dodd, 2004) out of all participation in trade missions and trade fairs (Francis & Collins-Dodd, 2004).

Exporting through own means: in order to protect the family brand and values, FFs prefer to ensure the whole export process using their own means (Gómez-Mejía et al., 2007b). To measure this, we construct a dichotomous variable that takes the value (1) if the response is positive, or (0) if external means (export intermediaries) are used instead (Schwens et al., 2018).

Developed export markets: cross-cultural differences between FFs origin market and export destination play an important role in IB literature considering FFs (Casillas & Moreno-Menéndez, 2017). According to Ahmad et al. (2017), many exporting firms prefer to target their products towards markets in developed countries due to the better transaction conditions and prices available, and because it also enables experience to be gained in export activity (Atkin et al., 2017; Bai et al., 2017). To consider the measure this, we use a qualitative variable obtained from a direct question aimed at finding out the export destination country. In this regard, we distinguish between markets in developed countries and those in undeveloped ones. We thus have a classification of countries depending on their level of development, according to the categories established by the United Nations (Department of Economic and Social Affairs, 2020). In general, we consider Europe, North America, and the developed countries of Asia and the Pacific as areas with developed economies. Following this classification, we assign the value (1) when exports are directed towards a developed country, and (0) otherwise.

3.4. Calibration

FsQCA allows us to calibrate the quantitative variables. Consequently, we could carry out a calibration process with the 95, 50 and 25 percentiles, according to the thresholds defined by Woodside (Pappas & Woodside, 2021). Table 1 provides information about the data calibration process. The highest level is considered as completely inside, the middle level as a crossover point or neither completely inside nor completely outside, and the lowest level as completely outside.

4. Results

The first part of descriptive Table 1 shows what use FF make of the considered determinants during their export activity, while the second part shows how we calibrate each variable. In Table 2, we examine whether any explanatory condition is a necessary condition for greater EI. The condition is deemed necessary when the consistency value is equal to or higher than 0.90. As regards our observations, there are three values that meet this condition (collaboration = 1.00, innovation output = 0.96, and export destination = 0.96).
Table 1. Descriptive statistics and calibration values

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Full membership</th>
<th>Crossover point</th>
<th>Full non-membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Intensity</td>
<td>44.69</td>
<td>34.53</td>
<td>90</td>
<td>42.50</td>
<td>0</td>
</tr>
<tr>
<td>Family firm&lt;sup&gt;a&lt;/sup&gt;</td>
<td>61.76%</td>
<td>38.24%</td>
<td>Crisp set (1,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation input (R&amp;D)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>54.76%</td>
<td>45.24%</td>
<td>Crisp set (1,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation output&lt;sup&gt;a&lt;/sup&gt; (product and process)</td>
<td>90.48%</td>
<td>9.52%</td>
<td>Crisp set (1,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration&lt;sup&gt;a&lt;/sup&gt;</td>
<td>95.24%</td>
<td>4.76%</td>
<td>Crisp set (1,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion agency mechanisms&lt;sup&gt;a&lt;/sup&gt; (fairs and missions)</td>
<td>71.43%</td>
<td>28.57%</td>
<td>Crisp set (1,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own media</td>
<td>59.52%</td>
<td>40.48%</td>
<td>Crisp set (1,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developed export market&lt;sup&gt;a&lt;/sup&gt;</td>
<td>85.71%</td>
<td>14.29%</td>
<td>Crisp set (1,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td>68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> These are dichotomous variables and their average values refer to the cases in which the variable is 1.

Table 2. Analysis of necessary conditions

<table>
<thead>
<tr>
<th>Consistency</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation input (R&amp;D)</td>
<td>0.72</td>
</tr>
<tr>
<td>- Innovation input (R&amp;D)</td>
<td>0.28</td>
</tr>
<tr>
<td>Innovation output (product and process)</td>
<td>0.96</td>
</tr>
<tr>
<td>- Innovation output (product and process)</td>
<td>0.04</td>
</tr>
<tr>
<td>Collaboration</td>
<td>1.00</td>
</tr>
<tr>
<td>- Collaboration</td>
<td>0.00</td>
</tr>
<tr>
<td>Promotion agency mechanisms (fairs and missions)</td>
<td>0.84</td>
</tr>
<tr>
<td>- Promotion agency mechanisms (fairs and missions)</td>
<td>0.16</td>
</tr>
<tr>
<td>Exporting through own means</td>
<td>0.76</td>
</tr>
<tr>
<td>- Exporting through own means</td>
<td>0.24</td>
</tr>
<tr>
<td>Advanced export markets</td>
<td>0.96</td>
</tr>
<tr>
<td>- Advanced export markets</td>
<td>0.04</td>
</tr>
</tbody>
</table>
Table 3 shows the truth table reflecting the different causal condition combinations that are sufficient to achieve high EI, considering the consistent cut-off value of 0.80 and the threshold number of cases as two (Chuah et al., 2021). The “cases number” column shows the frequency of cases assigned to each combination. Finally, we applied standard analysis to obtain the “intermediate solution” and identify causal patterns leading to high EI.

We use an intermediate solution combination to offer a more detailed overall view of the findings (Fiss, 2011). The large black circle (●) symbolizes a nuclear presence, while the small one (●) indicates a peripheral presence of a condition. The large circle with a cross in the centre (⊗) indicates the nuclear absence or denial of a condition, and the small one (⊗) indicates the peripheral absence or denial of a condition. A blank space indicates that a condition is irrelevant (Pappas & Woodside, 2021; Park et al., 2020; Xie & Wang, 2020). We also present the general solution consistency and the general solution coverage that describes the extent to which the interesting result can be explained by the configurations and which is comparable to the coverage and consistency of the individual necessary condition of each variable.

Table 4 summarizes the intermediate solution results for high EI. As shown, there are three causal configurations that lead to high EI.

Consequently, we partially accept proposition (P1), which suggests that innovation makes FFs increase export activity when combined with certain determinants. In contrast, the impact of collaboration on EI is positively significant because it appears in all combinations with a strong presence and is correlated with the full and/or partial presence of all other determinants. P2 is thus supported.

FFs who participate a little in trade missions and trade fairs and who have their own means to export by themselves collaborate and innovate in output (only in their products and/or processes) but avoid investing in R&D and in developing their export activity in the markets of developed countries. The peripheral presence of these determinants which, together with other factors (in one combination for promotion mechanisms and two combinations for own means), leads to high EI thus leads us to partially accept P3 and P4. FFs who mainly export to developed countries improve their export activity when they combine other factors in their strategies. In this sense, we make the following distinction: on the one hand, companies whose export destinations to these attractive markets is coupled with strong product
and process innovation and slight R&D innovation and who collaborate without taking into account any other factor; on the other hand, companies who do not invest in R&D but who do innovate their products and processes, collaborate and possess their own means that allow them to export by themselves but who do not participate in trade fairs or trade missions. We therefore partially accept P5 and P4.

Table 4. Results of the intermediate solution

<table>
<thead>
<tr>
<th>FF that innovate, collaborate and export to advanced markets</th>
<th>FF that do not invest in R&amp;D but do innovate in product and process, join fairs and missions, collaborate, use their own means and do not export to developed markets</th>
<th>FF that do not invest in R&amp;D but do innovate in product and process, do not join fairs and missions do not collaborate, use own their means and who export to advanced markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation input (R&amp;D)</td>
<td>☓</td>
<td>☓</td>
</tr>
<tr>
<td>Innovation output (Product and process)</td>
<td>☓</td>
<td>☓</td>
</tr>
<tr>
<td>Collaboration</td>
<td>☓</td>
<td>☓</td>
</tr>
<tr>
<td>Promotion instruments (fairs and missions)</td>
<td>☓</td>
<td>☓</td>
</tr>
<tr>
<td>Exporting through own means</td>
<td>☓</td>
<td>☓</td>
</tr>
<tr>
<td>Developed export market</td>
<td>☓</td>
<td>☓</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.850000</td>
<td>1.000000</td>
</tr>
<tr>
<td>Raw coverage</td>
<td>0.680000</td>
<td>0.040000</td>
</tr>
<tr>
<td>Overall solution coverage</td>
<td>0.760000</td>
<td>0.760000</td>
</tr>
<tr>
<td>Overall solution consistency</td>
<td>0.863636</td>
<td>0.863636</td>
</tr>
</tbody>
</table>

5. Discussion

FFs do not invest in R&D because they usually lack the required economic resources and/or because they prefer not to risk making such an investment (Chen & Hsu, 2009; Chrisman & Patel, 2012; Gómez-Mejía et al., 2019). This is to be expected. Yet, our analysis suggests that FFs are not so worried about innovation output because the presence of this determinant alone leads to high EI, since innovation output usually means lower costs—especially when there is a greater focus on process innovation. Normally, process innovation reduces firms’ average production cost, which enables product innovation, and leads to an increase in the price that buyers are willing to pay for a given product that has new or enhanced features (Golovko & Valentini, 2014). Both effects help to improve firms’ export activity (Jang & Hyun, 2021).

Companies who collaborate and export to developed countries without considering their participation in trade fairs and trade missions and without being concerned about the means of export may have the sufficient financial resources to risk making this investment and may also be confident about market reaction to their decisions. This can be explained by the consolidated experience they acquire in their export activity when operating in these markets (Atkin et al., 2017; Bai et al., 2017). This can be said to apply to medium and/or large FFs that are already established and
that have solid export experience. The decision to export to attractive markets in developed countries reduces the risk effect and prompts these firms to invest in R&D. Consequently, this positively impacts their export activity (Sousa et al., 2021) and confirms that combining innovation with other determinants increases EI. It can therefore be seen that collaboration –as an activity through which FF exchanges information and experience with their partners and maintain permanent contact with international markets– is a key determinant that leads to high EI (Paulraj & Chen, 2007).

Collaboration favours FFs EI, regardless of whether FFs take other measures to enhance their EI. The strong presence of collaboration in pursuit of achieving high EI is not affected by the presence or absence of other factors. This allows us to confirm that FFs focus on having a network of collaborators, since this enables them to stay in touch with the professional environment and to stay up to date on international markets and on which products are in demand (Benito-Hernández et al., 2015; Cesinger et al., 2016; Kontinen & Ojala, 2011; Lobo et al., 2023).

Our analysis shows that FFs do not resort to promotional tools (PPE) –mainly through participation in trade missions and trade fairs– in order to achieve high EI, for several reasons, such as the lack of financial resources needed to adopt a PPE (Durmuşoğlu et al., 2012; Geldres-Weiss et al., 2011). This may also be due to risk aversion, which makes FFs often avoid making significant financial investments.

The fact that FFs who participate in trade missions and trade fairs have the capacity for product innovation and collaboration, and their own export means, avoid investing in R&D and exporting to markets in developed countries indicates that they could be seen as conservative and without sufficient resources to invest in other more costly determinants such as R&D innovation and/or exporting to developed countries. This is why they must resort to EPAs (Diamantopoulos et al., 1993; Durmuşoğlu et al., 2012; Geldres-Weiss et al., 2011; Geldres-Weiss & Monreal-Pérez, 2018; Lederman et al., 2007).

According to Blanco-Mazagatos et al. (2007), using one’s own means to export implies having the necessary financial resources available and being prepared to assume possible risks. For this reason, FFs who cannot afford this type of investment may see their development and growth opportunities negatively impacted. However –and despite having the resources to use their own means to export– other FFs prefer less risky financial options and do not export through their own means because they fear losing control over the family business, which would involve not only the loss of personal wealth but also the loss of the family’s human capital.

In contrast, FFs that export using their own means are willing to do so when the firm combines this activity with other determinants. In doing so, the firm aims to reduce the risks thanks to several factors, such as collaboration, innovation output and participation in trade missions and trade fairs, which share those risks, and in turn, strengthen the firm’s position by improving its ability to export with greater confidence. However, these firms progressively use their own means when exporting in order to have greater control over the costs associated with exporting (Johanson & Vahlne, 1977; Onkelinx & Sleuwaegen, 2010).

In line with Irvansyah et al. (2020), we suggest that FFs mainly focus on developed countries for export since the presence of this determinant alone leads to high EI. For FFs –and despite the high costs involved– these markets are attractive as a target for their exports because of what they can offer in terms of economic benefits, such as sales at a better price (Ahmad et al., 2017). The RBV supports the argument that exposure to markets rich in knowledge and technology allows firms to improve their productivity through expertise and knowledge diversification (López Rodríguez & García Rodríguez, 2005). Nevertheless, FFs often pursue non-economic objectives, such as acquiring experience through export activity which –according to the learning by exporting (LBE) theory– is developed and which can boost productivity by making international markets more accessible (Freixanet et al., 2020; Monreal-Pérez et al., 2012; Sánchez Marín et al., 2019; Wu & Chiou, 2021). Moreover, according to Bai et al. (2021), a FFs not only learns the first time it exports but also improves its export products when it does so again.

Similarly, the combination of exporting to developed countries and other determinants makes it possible to achieve high EI. The most significant situation for FFs is that innovation and strong collaboration play a greater role in their decision to take risks and to enter more attractive markets. These companies are more prepared for this kind of market since they have developed the required business skills or are more able to face the existing competition before entering such markets. According to Wu and Chiou (2021), these companies have consolidated economic resources and have acquired sufficient experience by exchanging information with their partners. They also possess a more up-to-date knowledge base, which allows them to be more confident as regards the risk involved in investing in order to export to these markets.
6. Conclusion

Our work helps to highlight the importance of the joint action of the determinants which a FF can adopt to improve its export activity, as it offers valuable information on how it is possible to use these factors to achieve higher EI. In contrast to the existing literature that has studied the individual effect of these factors (e.g., Ahmad et al., 2017; Gkypali et al., 2021 or Paulraj & Chen, 2007), this paper breaks new ground in exploring what impact the (configurative) set of various determinants has on FFs EI. It may be concluded that the most relevant factors which FFs use with this aim are innovation output, collaboration, and the export destination to developed countries. Despite the scarcity of resources, FFs do not hesitate to partly allocate said resources to invest in determinants such as innovation output, since this enables cost reduction. In other words, when the FF innovates in processes, the average production cost is reduced, which leads to product innovation and better selling prices. Furthermore, FFs seek to secure and develop a network of partners in order to keep their information on markets and products up to date. In addition, they prefer to export to attractive markets that not only allow them to boost their sale prices but which also help them to learn by exporting (LBE) to attractive markets and, therefore, to be able to improve these products and so become more competitive (Wu and Chioi, 2021).

Nevertheless, due to a lack of financial resources and the fear of risk (Fernández & Nieto, 2006; Gómez-Mejia et al., 2019), FFs tend to avoid investing in other determinants such as innovation input (R&D), participation in trade missions and trade fairs, adopting their own means for export, and exporting to developed countries. However, we do not rule out the impact - and which would offset this lack of resources - that each of these determinants has on improving export activity when combined with other determinants. Moreover, when diversifying investment risk through the presence of multiple factors, it is possible to increase confidence in investment by accumulating positive experiences. FFs may invest in R&D if they also innovate in process and product, collaborate, and target their exports at developed countries. In short, the availability of information on products, customers and markets that results from investing in the other factors can reduce the risk of losing the investment in those factors that are more costly.

This work may prove to be of value to FFs managers because it offers information on which factors influence their export activity. FFs may use this information to make sound decisions on how to improve their export activity by identifying the right products for their investment. In addition, FFs managers may use this information to identify the strengths and weaknesses of their organization and to draft improvement plans for long-term growth and development, as Metsola and Kuivalainen (2021) highlight. This is extremely important when FFs have to face downturn contexts (Agustí et al., 2021), as the studied one in this research.

This information may also be used at the institutional level to develop policies and programmes that support FFs in their innovation and export investment, such as by providing subsidies or low-interest loans for R&D investment or participation in trade fairs and trade missions. Another utility of this information may involve drafting collaboration programmes between organizations and FFs so as to foster the latter’s expansion into international markets.

From an academic standpoint, this study paves the way for further research into various factors within a configurational framework, not only in the context of exporting but also by extending its applicability to other domains such as FFs overall performance. Additionally, it underscores the importance of incorporating the RBV when analysing these determinants for a more comprehensive understanding. The study illustrates that FFs can enhance their performance by optimizing existing resources and by acquiring new ones according to market needs, aligning with the economic objectives established by management to either maintain or gain a competitive advantage (Dhanaraj & Beamish, 2003; Fernandes et al., 2020).

Moreover, this approach contributes to the literature on LBE by illustrating that export activity improves with the accumulation of experience in this domain, enabling continuous learning, as proposed in prior studies by Freixanet et al. (2020), Monreal-Pérez et al. (2012) and Sánchez-Marín et al. (2020). Our work therefore makes a substantial contribution to aiding FFs in the agricultural sector to overcome the challenge of resource constraints and to devise an effective strategy for undertaking risky investments that result in improvements in their EI.

7. Limitations

The findings of this research have a limited scope. The most important limitations and how they may be addressed - and thereby point way for future inquiry - are as follows:

Apart from the export strategy, it might have proved enlightening to consider other entry modes, such as foreign direct investment (Ahmad et al., 2017), combined with other determinants. In addition, it could also have been interesting to have included other control variables such as...
size, which could have enabled the results to be compared between small, medium, and large firms. Having chosen Spain as the basis for this research addressing the effect of combining EI determinants, future research should focus on other countries. This research is also limited to FFs in the agricultural sector. However, inquiry could have been expanded to other sectors, such as the industrial sector (Gómez-Mejía et al., 2007b; Mitter & Emprechtinger, 2016; Onkelinx & Sleuwaegen, 2010) or the services one (Rienda & Andreu, 2021). This work is limited by the fact that the analysis is based on generational stage management at a given moment. It is also possible to compare the effect of the set of variables between two generational stages by contrasting, for example, first and subsequent generations (Dick et al., 2017). This work analyses FFs as a whole. Nevertheless, they are heterogeneous according to their family involvement degree and in this sense, it may be interesting in the future to consider such FFs differences as Merino et al. (2015) or Rienda and Andreu (2021), stress. Internationalization decisions in FFs are driven by family specific behavioural traits that may differ between FFs, as their long-term relationships orientation, knowledge based choices or how they manage the bifurcation bias (Metsola & Kuivalainen, 2021). All these factors should take into account when considering FFs international activity. Although this study offers a transversal analysis of a sample of Spanish agricultural FF, a longitudinal analysis exploring changes in variables or in the set of variables over different time stages could also be interesting (Chen et al., 2016; Moreno-Menéndez et al., 2021; Sousa et al., 2008); for example, before and after the COVID-19 pandemic or the crisis caused by the Russo-Ukrainian war.

Author contribution statement
The authors contributed equally to the work.

Conflict of interest statement
None.

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Data availability statement
The data that support the findings of this study are available from the corresponding author [Joaquín Monreal-Pérez], upon reasonable request.

Ethical statement
The authors confirm that data collection for the research was conducted anonymously and there was no possibility of identifying the participants.

References
229. https://doi.org/10.1108/02651330610660092


Appendix

Detail of the survey sent to FF

Company information:
Business name:
Year the company was set up:
Number of employees:

Family Firm:
— Do you consider your company to be a family firm? (one or more families are involved in ownership and/or management)  [ ] Yes  [ ] No
— Specify the percentage of ownership held by a single family:
— How many family members involved in ownership hold a management position?
— In percentage terms, how many leadership positions are occupied by family members?
— What generation currently heads the company?  [ ] First  [ ] Second  [ ] Third or later
— Is the CEO a family member?  [ ] Yes  [ ] No
— As regards the generational stage, indicate whether (where 1=strongly disagree and 5=strongly agree):

<table>
<thead>
<tr>
<th>Should the descendants be involved in the business?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is there a plan to prepare and guide upcoming generations to lead the company?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

— Considering only the owning family, please rate the importance your company assigns to (1=not at all important - 5=very important)

<table>
<thead>
<tr>
<th>1. Preserving the family</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Preserving the family dynasty or legacy in the company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Preserving family values.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sustaining the family reputation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ensuring the family's recognition within the community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Building and fostering beneficial social relationships between family and business.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Enhancing family harmony through the business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Considering the family's needs in business decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Ensuring the happiness of family members who are not involved in the business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Treating non-family employees as members of the family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

— Please indicate your level of agreement with the following statements: (1=strongly disagree; 5=strongly agree)

<table>
<thead>
<tr>
<th>1. You consider the company as an integral part of the family.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. The family dedicates the required time to the business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. You are identified with the company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. You perceive the company's problems as your own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The company holds great personal significance for you.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Foreign Trade
— Does your company export abroad?  [ ] Yes  [ ] No
— What percentage of total sales do exports represent? (If your company does not export, put 0).
— What do you believe are the barriers in your company that hinder your sales abroad? (1=strongly disagree; 5=strongly agree)

| 1. Lack of company resources. | 1 | 2 | 3 | 4 | 5 |
| 2. The high cost of operations abroad. |   |   |   |   |   |
| 4. Export markets involve higher risk than the company's domestic market |   |   |   |   |   |
| 5. The lack of alignment of financial products in the target market with its needs. |   |   |   |   |   |
| 6. The company's family nature (greater conservatism, decision-making, etc.) |   |   |   |   |   |
| 7. Lack of professionalization. |   |   |   |   |   |

— What are the primary means used for exporting?  [ ] Own means  [ ] External means (intermediaries)
— Indicate your principal export destination (you can select more than one option)
— [ ] EU  [ ] North America (USA and Canada)  [ ] Asia  [ ] Latin America
— [ ] Middle East  [ ] Africa  [ ] Not applicable  [ ] Other. Specify:
— Clarify the reason why this is the selected area (1=not at all important, and 5=very important)

| 1. Consumer purchasing power in that market. | 1 | 2 | 3 | 4 | 5 |
| 2. The higher profitability of selling in that market. |   |   |   |   |   |

3. The greater security of conducting operations in that market. [ ] [ ] [ ] [ ] [ ]
4. The greater intensity of relationships with that market. [ ] [ ] [ ] [ ] [ ]
5. A more suitable allocation of resources for selling in that market. [ ] [ ] [ ] [ ] [ ]
6. Greater export experience in that market. [ ] [ ] [ ] [ ] [ ]
7. Less difficulty accessing that market. [ ] [ ] [ ] [ ] [ ]

— Approximately how many years have passed since the first export transaction?
— As regards the profitability of your operations, please indicate your level of agreement or disagreement with the following statements (1=strongly disagree; 5=strongly agree):

1. Export sales are more profitable than domestic market sales. [ ] [ ] [ ] [ ] [ ]
2. The profitability of my exports has recently grown. [ ] [ ] [ ] [ ] [ ]
3. The profitability of my exports significantly contributes to the overall profitability of my company. [ ] [ ] [ ] [ ] [ ]
4. The contribution of the profitability of my exports to my company’s total profitability has recently increased. [ ] [ ] [ ] [ ] [ ]

Collaboration and innovation
— As regards innovative activity, does your company invest in:

R & D [ ] [ ]
Product innovation (new or improved product) [ ] [ ]
Process innovation [ ] [ ]
Other innovations (marketing, IT, advertising, etc.) [ ] [ ]

— Please indicate whether your company collaborates with any of the following external agents:

1. Clients. [ ] [ ]
2. Suppliers. [ ] [ ]
3. Competitors. [ ] [ ]
4. Universities and/or research centres. [ ] [ ]
5. Other organizations. [ ] [ ]

— Does your company participate in export promotion activities (trade fairs, missions, etc.)? [ ] Yes [ ] No
If your answer is affirmative:

What do you believe has been the contribution of these mechanisms to the company’s export activity?

<table>
<thead>
<tr>
<th>Insignificant</th>
<th>Not very important</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

— As regards personnel hiring, does your company import labour? [ ] Yes [ ] No
— Why is foreign labour imported? [ ] Experienced workforce. [ ] Reduced labour costs. [ ] Intensive nature of the work.

As regards the impact of the COVID-19 pandemic:
— Sales:

Indicate how your export sales abroad have evolved since the onset of this crisis

<table>
<thead>
<tr>
<th>Very bad</th>
<th>Bad</th>
<th>Indifferent</th>
<th>Good</th>
<th>Very good</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

— Indicate your level of agreement with the following statements: (1=strongly disagree, 5=strongly agree)

1. The increase in trade barriers (mobility restrictions, border closures, transport disruptions, etc.) has hindered our exports [ ] [ ] [ ] [ ] [ ]
2. The disruption of the supply chain has hindered (increased the cost of) our production. [ ] [ ] [ ] [ ] [ ]
3. The hindrance to the free movement of people has impeded the supply of labour. [ ] [ ] [ ] [ ] [ ]
4. The closure of borders has restricted our relationships (collaboration) with our business partners (suppliers, customers, intermediaries, competitors, etc.). [ ] [ ] [ ] [ ] [ ]