Destination country and export performance of agri-food products during the COVID-19 crisis

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Abstract: In the context of markets with uncertainty, we use the stakeholder theory to explain the role and importance of destination country in the export arena. We analysed six cross-sectional Chilean case studies on exported agri-food products in three categories (fresh, frozen, and processed). Using quantitative and qualitative data, destination countries and export performance were analysed, comparing 2020 (during the COVID-19 crisis) with the previous year. Our results show that exported agri-food products maintained their main destination countries, and maintained or increased the number of destination countries. The analysis of export performance shows that export performance varies depending on both the kind of product and the category to which it belongs. The role of trade agreements confirmed the destination country as a primary stakeholder. This study thus contributes to the stakeholder theory and literature on export performance, considering the destination country as a primary stakeholder in exporting firms.

Keywords: export performance; destination country; exports; stakeholder theory; agri-food products; COVID-19; developing country; Chile.

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1 Introduction

Due to the global crisis of COVID-19, the World Trade Organization (WTO) forecasts a possible decrease in global trade volume from 13% to 32%; and notes that it can be expected to be even more negative in terms of value due to falling prices (WTO, 2020). However, as a vital sector, agricultural trade will be less affected, from 12% to 20%, in commercial value. The availability of agri-food products, according to Ker and Cardwell (2020), will depend on COVID-19 effects on health, trade, transportation, and farm's

financial stability. In this context, Hobbs (2020) stated that trust in supply chain partners could be built through collaborative relationships and flexibility in response to unexpected changes in the market. The role of government and policy makers is critical in supporting supply chains, as well as considering the agri-food businesses as essential (Hobbs, 2020).

According to Donthu and Gustafsson (2020), COVID-19 has led to dramatic changes in how businesses not only act and consumers behave in a network of actors (i.e., firms, customers, and public organisations), but it has also shown that markets are dynamic and can move rather rapidly.

Schembri et al. (2019) highlighted the participation of the government in export promotion, as a stakeholder, through market intelligence and commercial networks. As a primary stakeholder, the government has a direct and significant impact on the organisation, and their participation is essential for the company's operation (Schembri et al., 2019). Clarkson (1995), Agle et al. (1999), and Park and Ghauri (2015) defined government as a primary stakeholder. Clarkson (1995) indicated that there is a high level of interdependence between the organisation and its primary stakeholder groups. This author included the government in the public stakeholder group, which provides infrastructures, markets, laws and regulations. In this study we use Freeman's (1984) stakeholder definition following other authors such as Schembri et al. (2019), Agle et al. (1999), and Clarkson (1995). In international business, the government provides regulations (Clarkson, 1995), such as the free trade agreements (FTA), which are vital for exporting companies (Hejazi et al., 2017). Thus, in concordance with Schembri et al. (2019), this study is based on the stakeholder theory and it analyses the destination country and the product export performance of agri-food exporting companies. FTAs create networks of trust and collaboration, allowing commercial opportunities for exporting companies abroad and greater possibilities for export performance.

On the other hand, Donthu and Gustafsson (2020) stated that COVID-19 poses a unique opportunity to study change in the markets within a very limited time span, and how societies today rely on the importation of important products.

Considering the above, the aim of this research is to shed light on the determinants of firm export activity, focusing on the role of destination country as a primary stakeholder in agri-food exporting companies.

This article focuses on two research questions. First, whether COVID-19 encourages food exporting firms to maintain or increase their trade partners (main destination country; number of destination countries, which concentrate 90% of export value; and the total number of destination countries). Second, whether agri-food product exports performance (prices, quantity, and export value) will be maintained or increased during the COVID-19 crisis. To answer these research questions, we compared the destination country and export performance of exported agri-food products during 2020 (during the COVID-19 crisis) with the previous year (2019).

Due to the need to extend the literature and to study this 'emerging' topic (Donthu and Gustafsson, 2020; Pantano et al., 2020; Sheth, 2020), we chose the case study method. This research used multiple cross-sectional case studies in order to analyse the agri-food sector, which has different types of food and categories of products (fresh, frozen, and processed).

The present study focused on exported agri-food products from Chile, an emerging market in Latin America, with a strong emphasis on firm internationalisation and a

network of 28 trade agreements, the pillars of extensive bilateral and multilateral business relations (SUBREI, 2020).

For the cases studied we used quantitative and qualitative data. The quantitative data sources of destination countries and export performance of six exported agri-food products cases were based on the International Trade Centre (ITC) database (trademap.com). The qualitative data were obtained from media and web pages, as well as interviews with key company executives.

This study contributes to the literature in several ways. First, this study contributes to the stakeholder theory by unveiling the destination country as a stakeholder, following previous works who define the government as primary stakeholder (Schembri et al., 2019; Clarkson, 1995; Agle et al., 1999; Park and Ghauri, 2015). This is the first time, as far as we know, in which the destination country is analysed as a primary stakeholder in the international business context, and so, it adds to Schembri's previous study, which analysed the home country as a primary stakeholder in government export promotion. This study also highlights the relevant participation of the government in export activities in signing international trade agreements. Second, our findings contribute to the study of the impact of COVID-19 on exports within the agri-food sector that is considered essential at a global level. Third, this study used data from an emerging and very export-oriented market, Chile in Latin America, which only a few studies have analysed (Bianchi et al., 2018). Finally, we showed that the change in the markets can be studied within a very limited time span (Donthu and Gustafsson, 2020).

2 Theoretical framework

2.1 Stakeholder theory

The stakeholder is defined as "any group or individual who can affect or is affected by the achievement of the organisation's objectives" [Freeman, (1984), p.46]. In addition, the stakeholders were classified by Clarkson (1995) in primary and secondary groups. In this sense, the literature defines government as a primary stakeholder (Clarkson, 1995; Agle et al., 1999; Park and Ghauri, 2015; Schembri et al., 2019). Also, the primary stakeholder group has a direct and significant impact on the organisation, and their participation for the company operation is essential (Schembri et al., 2019). According to Clarkson (1995), the government is part of the public stakeholder group. Specifically, governments "provide infrastructures and markets, whose laws and regulations must be obeyed, and to whom taxes and other obligations may be due" [Clarkson, (1995), p.106].

The role of the government in the business context is confirmed by Dahan et al. (2015). These authors changed the status of the government, from a non-stakeholder entity to a stakeholder one; namely, to a business partner. From this stance, the findings of Schembri et al. (2019) confirmed the relevance of the home country government as a primary stakeholder. Also, Schembri et al. (2019) highlighted the participation of the government in export promotion through market intelligence and commercial networks. Similarly, Dang et al. (2020) pointed out that the government is a key stakeholder for multinational enterprises.

Additionally, within international business, destination countries are particularly assisted by the ITC, which developed a suite of online tools to make global trade more transparent, providing access to markets through market intelligence and international

commercial networks (ITC, 2021). These online tools enable business actors to identify export opportunities and compare market-access requirements (ITC, 2021). At the same time, the global trade helpdesk (GTH) initiative gives the opportunity to compare the demand for products across markets, explore tariffs, and access market conditions, among others.

2.2 Destination country

In the context of markets with uncertainty, the latter can be diminished by increasing the interaction and integration of the markets (Johanson and Vahlne, 1977). According to Cadogan et al. (2002), in order to reduce the risks associated with exports, for instance in the case of exporting companies with a high level of dependence on exports, it is important that the firms are sensitive to the changes that occur in the export environment. On the other hand, enhancing the firm's exports, networks and networking, and their quality, are key activities in foreign markets (Coviello and Munro, 1995; Ismail and Kuivalainen, 2015; Conti et al., 2014; Sraha et al., 2020). Furthermore, in order to maintain international business partners, the commitment to foreign markets, highlighting the acquisition of knowledge, and experience in these markets, is essential (Johanson and Vahlne, 1977).

In relation to the agri-food industry and COVID-19, Barichello (2020) pointed out that several implications of the pandemic in international trade apply in most countries. First, it is possible that income decreases. Second, it is expected that the import of food from developing countries will decline the most, with more modest declines coming from rich countries. Third, smaller declines are expected in the demand for food imports compared to possible declines in total trade flows as a general trend. Fourth, in the case of developing countries that generally export their food production to rich countries, it can be expected that the results for those developing countries will not be so dramatic. In some high-income countries, such as Canada, the biggest concerns for the agricultural and food sector appear in the long term, when the viability of fresh food depends on foreign producers (Ker and Cardwell, 2020).

In these uncertain times brought about by the COVID-19 pandemic, the impact on the food industry was analysed by Nakat and Bou-Mitri (2020), who emphasised the importance of maintaining the trust of customers and partners, as they are the key to success. This is further supported by Gulati (1995), who stated that organisations with prior common history tend to trust each other. In this sense, agreements between countries that drive tariff liberalisation enhance the entry of agri-food products into destination countries (Hejazi et al., 2017). The country's reputation is also relevant in order to sign trade agreements, allowing these agreements to increase exports to destination countries (Dimitrova et al., 2017).

Hence, in the future, there may be a desire to strengthen international cooperation to aid in keeping supply chains operating in times of crisis (Kerr, 2020). These arguments led us to propose the following hypothesis:

H1 The COVID-19 crisis encourages food exporting firms to maintain or increase their trade partners.

2.3 Export performance

Lages et al. (2009) proposed a broader conceptualisation and operationalisation of export performance that recognises the contribution of key external network partners to the firm, and not just one that focuses on internal stakeholders. The authors highlighted the importance of a network of ties in an international business context. Lages et al. (2009) also highlighted the need for the development of export literature centring on different stakeholder and network groups involved in exporting. In fact, Barney (2018) pointed to the potential role of stakeholders in performance-enhancing behaviours. In this regard, an FTA positively influences export performance (Na and Yoon, 2011). Indeed, according to Baier and Bergstrand (2007), an FTA could double the international trade between two countries in ten years.

In the context of agri-food products, COVID-19 has brought a substantial disruption to agricultural markets (Orden, 2020). In markets with uncertainty, Lu et al. (2010) found a negative relation between uncertainty and a firm's international performance, confirming previous findings. In addition, Orden (2020) stated that the international supply chain bottleneck problems during COVID-19 times could put a downward pressure on cereal prices. At the same time, Lin and Zhang (2020) found that on average agricultural businesses experienced declines in exports. However, these authors also state that exports of some agri-food products related to staple food had an increase in exports. Contrary to this, Hailu (2020) stated that the food processing industry has seen a decline in export and import activity. Nevertheless, the latter author also affirmed that the impact of COVID-19 may depend on the type of export product. This rationale led us to hypothesise the following:

H2 Export performance of agri-food products will be maintained or will increase in the COVID-19 crisis.

3 Methodology

3.1 Research design

The design of this research is observational-descriptive-cross-sectional. We use multiple cross-sectional case studies in order to analyse the agri-food sector which has different and varied food products and categories (fresh, frozen, and processed). The unit of analysis is the exported agri-food product.

Case studies have been used in several areas of international business research (Vissak, 2010; Vissak et al., 2020; Nummela et al., 2020) and is a very useful method to understand how and why certain events have unfolded in a certain way (Yin, 1994). Vissak (2010) stated that the case study can explain new and complex issues, explaining 'how' and 'why' (not) questions about a set of events, providing an holistic perspective on real-life events and the processes leading to certain results.

According to Donthu and Gustafsson (2020), COVID-19 has had severe economic consequences across the globe, which have led to dramatic changes in how businesses act and consumers behave. These authors highlighted that COVID-19 has shown us that markets can move rapidly, and COVID-19 allows study of the changes in markets within a very short time span. Thus, due to the need to extend the literature and study of this 'emerging' topic (Donthu and Gustafsson, 2020; Pantano et al., 2020; Sheth, 2020), we chose the case study method.

3.2 Cases selection

In order to select the cases, convenience or directed sampling was used. The choice of cases was based on the exported agri-food products from the South of Chile.

For the selection of the cases, an analysis of exported agri-food products from southern Chile was carried out considering three regions: La Araucanía, Los Ríos, and Los Lagos. In the context of foods, these regions are characterised by their production and export of agri-food.

The quantitative data source for the case selection was datasur.com, which has information about Chilean export transactions and is able to identify the region of origin of the exported products. The analysis of the exported agri-food products was based on the international classification of the harmonised system (HS) code. For each of these regions, agri-food exports were analysed, considering all products exported under HS chapters 02 to 24, at a six-digit level (subheadings HS code). This process identified the main exported agri-food products which were selected for the study.

The cases selected were: salmon, fruits, oat cereals, dairy products, meat, and other foods. These six cases included 19 exported agri-food products (see Table 1). These products are included in seven HS chapters (see Table A1), and represent 54 and 53% of the total Chilean food export value in these HS chapters, and were exported by 928 and 842 companies, in 2019 and 2020 respectively (see Table A2).

3.3 Data sources and analysis

This study used quantitative and qualitative data. The data source of destination countries and export performance of 19 agri-food products selected, was the ITC database (trademap.com), where each product was analysed alongside the international classification of the HS code with six-digits of HS-code. The total Chilean exports of each of the 19 exported agri-food products were identified: export unit value, quantity value, export value, and destination countries, for each year of study, 2019 and 2020.

The variables studied, obtained from trademap, were the following:

- export product: product specification in the HS with six digits
- main destination country: country that accounts for the largest percentage of exports of a given product
- number of countries that concentrate 90% of export value: number of destination countries covering 90% of each exported product
- total number of destination countries: number of destination countries for each product

- export unit value: price for each product, in US Dollars per ton
- export quantity: quantity exported in tons
- export value: export unit value multiplied by export quantity, in thousand US dollars.

For quantitative and qualitative data analysis, descriptive statistics were used for which absolute frequencies and percentage frequencies were determined. For the analysis and interpretation of the data, information was obtained from the media and information from formal web pages and experts in food exports, as well as interviews with key executives of companies in the southern region of the country. The two companies interviewed corresponded to the frozen beef and processed fruit sectors.

4 Results

4.1 Destination countries of exported agri-food products

The results show that most of the exported agri-food products maintained its main destination country in terms of total export value (17), however, 11 products decreased their export value to these countries. Also, maintained or increased the number of destination countries that concentrate 90% of total export value (13) and total number of destination countries (13) (see Table 1).

All the destination countries of the exported agri-food products analysed, except Russia, have trade agreements in force with Chile allowing a tariff of 0% (see Table 2). In the case of Russia, the Chile-European Community Association Agreement, in force since 2003, allows Chile to access a tariff reduction by the Global System of Trade Preferences (GSTP) among developing countries.

In times of COVID-19, the results of cases analysed show that the exported agri-food products maintained their main destination country, and also maintained or increased the number of destination countries. This led us to accept hypothesis H1, which suggests that COVID-19 encouraged food exporting firms to maintain or increase their trade partners.

4.2 Export performance of exported agri-food products

The variables of export performance analysed were export unit value, export value, and export quantity. The analysis of export performance was carried out in two ways, by case and category.

The cases of fruit, meat, oat cereal, and other foods showed the best results, increasing their export value, and export quantity in 2020 compared with 2019, highlighting processed oats and frozen bovine meat with bone in. On the other hand, the salmon and the dairy products showed the worst results, decreasing their export value in 2020 compared with 2019 (see Table 3).

In the case of salmon, most of the prices and export value decreased, but most of the export quantity increased in 2020 compared with 2019. The COVID-19 impact on fresh salmon export performance was greater than on frozen salmon. This impact could be related to both the sanitary measures imposed in the HoReCa channel (Salmonexpert, 2021) and with the general impact of COVID-19 in the fish sector (FAO, 2019).

 Table 1
 Destination countries of exported agri-food products

Product	Category	Agri-food product	Subheading	Main destina	Main destination country in terms of total export value	erms of total	Number oj concentrat	f destination e 90% of to	Number of destination countries that concentrate 90% of total export value	Total 1	number of de countries	Total number of destination countries
			пэ-соде	2019	2020	Change (%)	2019	2020	Change (%)	2019	2020	Change (%)
Salmon	Fresh	Salmon (Atlantic and Danube, fresh)	030214	Brazil	Brazil	-32.1%	3	3	0.0%	25	31	24.0%
		Salmon (fillets, fresh)	030441	USA	USA	-10.7%	-	П	0.0%	29	29	0.0%
	Frozen	Salmon (Pacific, frozen)	030312	Japan	Japan	-21.3%	3	4	33.3%	24	30	25.0%
		Salmon (Atlantic and Danube, frozen)	030313	Russia	Russia	-13.7%	13	14	7.7%	51	28	13.7%
		Salmon (fillets, frozen)	030481	USA	USA	7.2%	13	10	-23.1%	99	59	5.4%
		Salmon (fillets of trout, frozen)	030482	Japan	Japan	6.7%	-	-	0.0%	16	15	-6.3%
Fruits	Fresh	Apples fresh	080810	USA	Colombia	-25.7%	19	20	5.3%	89	64	-5.9%
		Cherries fresh	080929	China	China	19.1%	2	-	-50.0%	47	47	%0.0
		Cranberries, blueberries and other fruits of the genus vaccinium, fresh	081040	USA	USA	-16.6%	S	9	20.0%	38	38	0.0%
Other	Frozen	Fish (meat frozen)	030499	USA	USA	0.0%	9	5	-16.7%	40	42	5.0%
spooj	Processed	Mussels prepared	160553	Spain	Spain	25.0%	17	15	-11.8%	61	62	1.6%
		Cranberries prepared	200893	China	China	-5.6%	7	7	%0.0	23	22	4.3%
		Cranberries juice	200981	Netherlands	Netherlands	-16.5%	3	3	%0.0	19	19	%0.0
Oat	Processed	Oats grain flaked	110412	Colombia	Colombia	37.6%	14	13	-7.1%	30	28	-6.7%
cereal		Oats grain hulled	110422	Colombia	Colombia	26.8%	7	7	%0.0	17	18	2.9%
Dairy	Processed	Whey	040410	Peru	Peru	-1.3%	9	5	-16.7%	14	10	-28.6%
products		Cheese	040690	Russia	Mexico	-5.0%	3	3	%0.0	7	∞	14.3%
Meat	Frozen	Frozen bovine cuts, with bone in (excluding carcases and half-carcases)	020220	China	China	53.4%	-	-	0.0%	7	9	-14.3%
		Frozen, boneless meat of bovine animals	020230	China	China	-4.7%	3	3	0.0%	10	10	0.0%

 Table 2
 Trade agreements with main destination countries of exported agri-food products

Sub heading		Main destination country	tion country	,		Entered into
HS-code	Agri-Jood product	2019	2020	Taue Agreement	rarill	force
030441	Salmon (fillets, fresh)	USA	USA	Chile-United States Free Trade Agreement (FTA)	%0	2004
030481	Salmon (fillets, frozen)	USA	USA		%0	
030499	Fish (meat frozen)	USA	USA		%0	
081040	Cranberries, blueberries and other fruits of the genus vaccinium, fresh	USA	USA		%0	
080810	Apples fresh *	USA			%0	
080929	Cherries fresh	China	China	Chile-China Free Trade Agreement (FTA)	%0	2006
200893	Cranberries prepared	China	China		%0	
020220	Frozen bovine cuts, with bone in (excluding carcases and half-carcases)	China	China		%0	
020230	Frozen, boneless meat of bovine animals	China	China		%0	
030312	Salmon (Pacific, frozen)	Japan	Japan	Chile-Japan Free Trade Agreement (FTA)	%0	2007
030482	Salmon (fillets of trout, frozen)	Japan	Japan		%0	
110412	Oats grain flaked	Colombia	Colombia	Chile-Colombia Free Trade Agreement (FTA)	%0	2009
110422	Oats grain hulled	Colombia	Colombia		%0	
080810	Apples fresh*		Colombia		%0	
030214	Salmon (Atlantic and Danube, fresh)	Brazil	Brazil	Chile-MERCOSUR Economic Complementation Agreement	%0	1996
200981	Cranberries juice	Netherlands	Netherlands	Chile-European Community Association Agreement	%0	2003
040410	Whey	Peru	Peru	Chile-Peru Free Trade Agreement (FTA)	%0	2009
030313	Salmon (Atlantic and Danube, frozen)	Russia	Russia	No FTA**	2.25%	1989
160553	Mussels prepared	Spain	Spain	Chile-European Community Association Agreement	%0	2003
040690	Cheese	Russia	•	No FTA**	12.9%	1989
			Mexico	Chile-Mexico Free Trade Agreement (FTA)	%0	1999

Notes: *Apples fresh appear duplicated since in 2019 the main destination country was the USA and in 2020 Colombia. **Applies global system of trade preferences among developing countries (GSTP).

Table 3	Export value and	quantity of exported	agri-food cases
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Product	Subheading	Export val	ue US dollar	·thousand	Expo	ort quantity t	tons
Trounci	HS-code	2019	2020	Change	2019	2020	Change
Salmon	030214, 030312, 030313, 030441, 030481, 030482	4,443,329	3,758,977	-15.4%	647,791	707,800	9.3%
Fruits	080810, 080929, 081040	2,247,288	2,330,591	3.7%	1,124,023	1,116,466	-0.7%
Oat cereal	110412, 110422	90,520	131,984	45.8%	187,629	221,534	18.1%
Meat	020220, 020230	74,137	90,338	21.9%	19,529	24,392	24.9%
Other foods	030499, 160553, 200893, 200981	630,464	673,515	6.8%	131,213	145,588	11.0%
Dairy products	040410, 040690	51,758	42,487	-17.9%	25,552	22,626	-11.5%
Total		7,537,496	7,027,892	-6.8%	2,135,737	22,38,406	4.8%

Regarding fresh fruits studied, the cherry was the only one that reported positive values in the three export performance indicators in 2020 compared with 2019, highlighting an increase of 9.1% in the price and 5.5% in the quantities exported (see Table A3). This positive export performance could be related to the first part of the Chilean cherry season (November and December 2020) that represented attractive price levels achieved in wholesale markets. Also, this was mainly due to a controlled level of arrivals, which did not put pressure on the market, demand recovering from the effects of the pandemic and the good quality of the Chilean offer (iQonsulting, 2021a); in addition, by the efforts of the Chilean producers and exporters, who are members of the 'Cherry committee' and are committed to supplying a safe and healthy product (ASOEX, 2020). Fresh apples, cranberries and blueberries all decreased their export value between 5.7% and 7.8% (see Table A3), due to lower prices and lower quantities exported, in 2020 compared with 2019. The negative export performance of the apples could be related to the drought, that resulted in medium to small sizes. Also, COVID-19 caused a strong contraction of the markets, altering the flows and marketing prices, and an increase in the participation of New Zealand to the detriment of Chile (iQonsulting, 2021b). The negative export performance of blueberries could be related to the pressure generated by the growth of the supply of blueberries worldwide which has been reflected in the fall in prices (iQonsulting, 2020b).

In respect of grain hulled and grain flaked oats (HS 110412 and HS 110422), both processed, increased their export performance in 2020 compared with 2019. Specifically, their export value increased by 44.9% (HS 110412) and 46.9% (HS 110422) (see Table A3). The positive export performance could be explained by the fact that they are a

relevant source of cheap protein and by the fear of shortages caused by COVID (Revista del Campo, 2020).

Respecting meat, specifically frozen bovine cuts, with bone in (HS 020220) increased its export performance indicators in 2020 compared with 2019, increasing its export value by 54% (see Table A3). This positive result could be related to the Chilean integrated system of animal health, traceability of livestock, and an official inspection system in exporting livestock establishments (Portal Agrochile, 2020). However, frozen boneless beef (HS 020230) had negative results on all indicators (see Table A3).

In the case of other foods, processed mussels (HS 160553) highlighted positively all export performance indicators in 2020 compared with 2019, increasing its export value by 22.9% in 2020 compared with 2019 (see Table A3). Also, prepared cranberries (HS 200893) increased their export value by 21.3% and their export quantity by 23.6%, despite a 1.9% drop in price in 2020 compared with 2019 (see Table A3). The cranberries results could be related to the worldwide trend for foods classified as superfood, which boomed in the retail categories (New Hope Nature Media, 2020). The company that produces and exports prepared cranberries (HS 200893) in Chile stated that its final consumers are attracted by the characteristics of their cranberry products, which are known worldwide as superfood. The COVID-19 impact has been positive for the company, increasing demand and sales from its customers worldwide. In addition, the positive export value of prepared cranberries could have been obtained due to their sales consolidation in the Netherlands, the main entrance to the European Union, along with the worldwide trend for foods classified as superfood.

Finally, regarding dairy products, whey and cheese (HS 040410 and HS 040690) decreased their export performance indicators in 2020 compared with 2019, reducing their export value by 14.5% and 19.2% respectively (see Table A3). This negative result could be explained by international prices and COVID-19 effects (ODEPA, 2020).

In the analysis by category (fresh, frozen, and processed), the fresh category showed the worst results, decreasing its export quantity, and export value in 2020 compared with 2019. Nevertheless, the frozen category increased its export quantity, and decreased its export value in 2020 compared with 2019. On the other hand, the processed category showed the best results, increasing its export value, and export quantity in 2020 compared with 2019 (see Table 4).

Regarding the fresh category, fresh Atlantic and Danube salmon (HS 030214), was the most affected in terms of all export performance indicators, decreasing by 38.2% of its export value in 2020 compared with 2019. Also, fresh salmon fillets (HS 030441) decreased its export price, and export value, despite increasing export quantity by 11.9%, in 2020 compared with 2019. The negative export performance of the fresh salmon could be explained by the consequences of the COVID-19 on the tourism sector. According to the Executive Director of the Salmon Council: "...the fall in the value of shipments reflects the impact of the sanitary measures imposed by the pandemic, such as closure and confinement, on sales in the HoReCa channel, which represents a considerable percentage of salmon sales". This phenomenon had a greater impact on fresh salmon than on the frozen category (Salmonexpert, 2021).

With regard to the frozen category, most frozen products increased their export quantity in 2020 compared with 2019. Nevertheless, most frozen products decreased in their export prices, achieving lower exported unit values in 2020 compared with 2019. The exceptions were frozen bovine cuts with bone in (HS 020220), and frozen salmon trout fillets (HS 030482), increasing their export value, despite a drop in price, thanks to

an increase in export quantity. The positive export performance of frozen bovine meat could be explained because Chile is known as a supplier of quality food, with an integrated system of animal health, traceability of livestock and an official inspection system in exporting livestock establishments. Thus, Chile provides guarantees to third countries for compliance with their regulations, which is reflected in the opening of various markets that have been remained open for years (Portal Agrochile, 2020). One of the export companies interviewed, which processes and exports frozen bovine meat, stated that COVID-19 brought an important effect on costs and investments: it doubled the cost of transportation, while it also developed protocols consisting of testing and constant monitoring of the people inside and outside the production plant. In pandemic times, the production level remained the same but with much more effort from, workers, managers, suppliers and distributors.

Table 4 Export value and quantity of agri-food cases by category

Category	Product	Subheading HS-code		value US a thousand	lollar	Expo	rt quantity	tons
		115 - coue	2019	2020	Change	2019	2020	Change
Fresh	Salmon	030214; 030441	2,119,642	1,629,821	-23.1%	303,225	303,338	0.0%
	Fruits	080810, 080929, 081040	2,247,288	2,330,591	3.7%	1,124,023	1,116,466	-0.7%
Frozen	Salmon	030312, 030313, 030481, 030482	2,323,687	2,129,156	-8.4%	344,566	404,462	17.4%
	Meat	020220, 020230	74,137	90,338	21.9%	19,529	24,392	24.9%
	Other foods	30499	391,444	387,942	-0.9%	37,206	38,574	3.7%
Processed	Oat cereal	110412, 110422	90,520	131,984	45.8%	187,629	221,534	18.1%
	Dairy products	040410, 040690	51,758	42,487	-17.9%	25,552	22,626	-11.5%
	Other foods	160553, 200893, 200981	239,020	285,573	19.5%	94,007	107,014	13.8%

Respecting the processed category, most products increased their export value and export quantity in 2020 compared with 2019, except for dairy products. In the case of oats cereal (grain hulled and grain flaked oats), they increased their export value and export quantity in 2020 compared with 2019. This positive export unit value could have been provided by the high interest in buying oats on the international markets, since it represents a significant source of cheap protein; together with the fear of shortages caused by COVID-19, pushing importers to buy oats that were available on the international market (Revista del Campo, 2020).

This category also highlighted prepared mussel which increased on all export performance indicators, achieving an increase in the export value of 22.9% in 2020 compared with 2019 (see Table A3).

The analysis of export performance by cases and category shows that the final export performance varies depending on both the kind of product and the category to which it belongs. In this context the most important features in these times of COVID-19 are market channel, nutritional and health characteristics, storage and storage shelf life, transportation, sanitary confidence, and the product category (fresh, frozen, processed).

For the six exported agri-food products cases studied, the results show that in most cases studied there was an increase in export performance in 2020 compared with 2019, and this is also present in the processed category. But some cases decreased their export performance, as is the case with salmon and dairy products, as well as fresh products. These results led us to accept partially hypothesis H2, which proposed that agri-food products either maintained or increased their export performance during the COVID-19 crisis.

5 Discussion and conclusions

The COVID-19 pandemic has brought severe economic consequences at global level driving changes in how businesses act and consumers behave (Donthu and Gustafsson, 2020). These authors stated that countries have limited the movement of their citizens by confining them to their homes and closing their borders, with serious effects. First, the tourism and travel industries were deeply affected. Second, expos, conferences, large gatherings and events were called off. Third, countries started to stockpile food, equipment, and medicine. Finally, countries are preparing to produce them locally, in order to avoid impaired access in the future.

In this context, we have examined destination countries and export performance of six cases of exported agri-food products from Chile.

The hypotheses have been drawn from arguments built from the stakeholder theory, for which we have found empirical support. We found that, for the six exported agri-food products cases studied, in times of COVID-19 the food exporting companies maintained or increased their trade partners, and export performance. These findings resonate with calls in the literature for the need to extend the study of this 'emerging' topic, that is COVID-19 (Donthu and Gustafsson, 2020; Pantano et al., 2020; Sheth, 2020) and with calls for the study of products related to food (Lin and Zhang, 2020).

Our study shows that COVID-19 has encouraged food exporting companies to maintain or increase their trade partners, as well as confirming the importance of networks and networking as such, and their quality for export companies in their activities in foreign markets (Coviello and Munro, 1995; Ismail and Kuivalainen, 2015; Conti et al., 2014; Sraha et al., 2020). The study also endorses that, in the agri-food world industry, exports of agri-food products from a developing country towards rich countries can be expected not to decline so dramatically (Barichello, 2020). In this sense, the main destination countries regarding export value in this study, are the USA and Japan. The findings also show the importance of maintaining the trust of partners in the food industry (Nakat and Bou-Mitri, 2020; Gulati, 1995). In fact, this trust and the prior common history are reflected in the trade agreements signed between Chile and the main destination countries of the products exported.

In the six cases studied, the findings show that most of the cases maintained their main destination country in 2020 compared with 2019, supporting Johanson and Vahlne's claims (1977). Regarding, export performance varied according to the characteristics of each product (Hailu, 2020). However, the analysis by cases showed that most of the cases increased or maintained their export performance in times of COVID-19. Indeed, in times of COVID-19, the results show the importance of staple foods, such as oats processed and bovine meat (Lin and Zhang, 2020). Additionally, the results highlighted products with therapeutic value such as superfoods (Ker and Cardwell, 2020; New Hope Nature Media, 2020). Finally, the results show the HoReCa chain as the most affected under social confinement due to COVID-19 within the agri-food product chain.

Also, we found that export performance of agri-food products in times of COVID-19 is related to product features such as transportation (Ker and Cardwell, 2020; Vasylieva and James, 2021), nutritional and health characteristics (Vasylieva and James, 2021; Ker and Cardwell, 2020), storage difficulties and storage shelf life (Vasylieva and James, 2021), and value added (Vasylieva and James, 2021). Thus, export performance not only depends on the type of exported product (Hailu, 2020), but also on its category, whether it is fresh, frozen, or processed.

6 Implications for theory

The paper contributes to the stakeholder theory and export performance literature in the analysis of the destination countries as a primary stakeholder of the exporting firms, analysing the influence of COVID-19 on destination countries and export performance in the light of the export products' level.

From all the literature analysed and the authors' stance, no study has delved into destination countries enough to value them as pivotal and primary stakeholders in exporting companies. Minding this gap, the study contributes to the literature on stakeholder theory, with an analysis of destination countries and export performance of exported agri-food products. Only Schembri et al. (2019), analysed home country as a primary stakeholder in the field of export promotion, highlighting the participation of the home country government in export promotion, hence confirming the role of government and policy making.

The study provides a perspective on the export performance literature, demonstrating that export performance depends on both the stakeholders involved (Lages et al., 2009) and the potential role of stakeholders in performance-enhancing behaviours (Barney, 2018). The export performance of the cases studied is related to the trade agreements between the home country, in this case Chile, and the destination countries (Baier and Bergstrand, 2007; Na and Yoon, 2011; Barney, 2018).

The cases studied confirm the importance of the regulations provided by the government (Clarkson, 1995; Schembri et al., 2019), specifically the trade agreements between countries which enhance the entry of agri-food products in the destination countries (Hejazi et al., 2017).

7 Implications for practice

The practical implications of this study are mainly for export firms' managers and policy makers. The results suggest that recognising the importance of interaction and integration with markets is essential.

In the context of markets with uncertainty, successful export performance relies on networks and networking, and their quality, as key activities in foreign markets. Therefore, reinforcement of the bond between international business partners, commitment to foreign markets, as well as highlighting the acquisition of knowledge and experience in these markets (Johanson and Vahlne, 1997) are pivotal. As shown above, exporting to a market with a trade agreement is important, not only to be able to face uncertain times but also to achieve greater export performance.

The implications for policy makers include the importance of trade agreements for exporting companies and for those who want to enter the international arena. Trade agreements are the responsibility of policy-makers, due to both their generation and maintenance. And in times of crisis, such as the one endured throughout COVID-19, they prove to be critical in navigating the associated dramatic and dynamic changes in markets.

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Appendix

Table A1 HS-code chapter and subheadings of exported agri-food products

HS chapter	Chapter description	Subheading HS-code
02	Meat and edible meat offal	020220, 020230
03	Fish and crustaceans, molluses and other aquatic invertebrates	030214, 030312, 030313, 030441, 030481, 030482, 030499
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	040410, 040690
08	Edible fruit and nuts; peel of citrus fruits or melons	080810, 080929, 081040
11	Products of the milling industry; malt; starches; inulin; wheat gluten	110412, 110422
16	Preparation of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	160553
20	Preparations of vegetables, fruit, nuts or other parts of plants	200893, 200981

 Table A2
 Number of export companies involved in cases studied, and export value as a % of total export value of the HS-code chapter

- SH								
Internation	Vumber of	Exp	ort value US dollar tho	usand	Number of	Exp	Export value US dollar thousand	sand
cnapier	export ompanies	HS chapter	cnapter export Cases of agri-food % of chapter products analysed % of chapter	% of chapter	export companies	HS chapter	Cases of agri-food products analysed	% of chapter
02	29	1,136,098	74,137	6.5%	23	1,364,775	90,338	%9.9
03	137	5,781,495	4,834,773	83.6%	126	4,928,273	4,146,919	84.1%
75	26	134,696	51,758	38.4%	22	122,114	42,487	34.8%
90	525	5,777,233	2,247,288	38.9%	473	5,801,746	2,330,591	40.2%
11	4	119,699	90,520	75.6%	43	160,831	131,984	82.1%
91	77	393,505	202,142	51.4%	99	422,189	248,411	58.8%
50	06	623,581	36,878	5.9%	68	577,988	37,162	6.4%
Fotal	928	13,966,307	7,537,496	54.0%	842	13,377,916	7,027,892	52.5%

 Table A3
 Export performance of exported agri-food products by HS-code

Product Category Agri-Jond product Agri-Jond product Agri-Jond product Export unit value, US Export unit value, US Export unit value, US Salmon Fresh Salmon (Atlantic and Damube, fresh) 030314 -31.9% -12.6% Frozer Salmon (Atlantic and Damube, frozen) 030312 -25.4% -12.6% Salmon (Atlantic and Damube, frozen) 030313 -25.4% -9.4% Salmon (Atlantic and Damube, frozen) 030313 -25.4% -9.4% Salmon (Atlantic and Damube, frozen) 030313 -25.4% -9.4% Salmon (Atlantic and Damube, frozen) 030312 -25.4% -9.4% Fruits Fresh Salmon (Atlantic and Damube, frozen) 030412 -17.4% -0.3% Fruits Fresh Salmon (Atlantic and Damube, frozen) 030412 -17.4% -0.3% Fruits Fresh Apples fresh 080810 -17.4% -17.8% Other foods Frozen Mussels prepared Cranberries prepared 100491 -14.5% -14.5% Other food F				C.Ll. a. Jine	i)	Change 2019-2020 (%)	
Fresh Salmon (Atlantic and Danube, fresh) 030214 -31.7% Salmon (Fillets, fresh) Salmon (fillets, fresh) 03041 -21.9% Frozen Salmon (Atlantic and Danube, frozen) 030312 -28.4% Salmon (Atlantic and Danube, frozen) 030313 -25.4% Salmon (Atlantic and Danube, frozen) 030481 -17.4% Salmon (fillets, frozen) 030482 -17.4% Salmon (fillets of trout, frozen) 030482 -17.4% Cherries fresh Cherries fresh 080810 -4.0% Oods Frozen Fish (meat frozen) 160629 9.1% Processed Mussels prepared Cranberries prepared 200893 -1.9% Cranberries prepared Cranberries prepared Cranberries prepared 200893 -1.9% Cranberries prepared Oats grain flaked Oats grain flaked 200893 -1.9% Coducts Processed Whey Cheese Cheese </td <td>Product</td> <td>Category</td> <td>Agri-food product</td> <td>Subnedaing HS-code</td> <td>Export unit value, US dollar/kilograms</td> <td>Export value, US dollar thousand</td> <td>Export quantity, tons</td>	Product	Category	Agri-food product	Subnedaing HS-code	Export unit value, US dollar/kilograms	Export value, US dollar thousand	Export quantity, tons
Frozen Salmon (fillets, fresh) 03041 -21.9% Frozen Salmon (Atlantic and Danube, frozen) 030312 -28.4% Salmon (Atlantic and Danube, frozen) 030481 -25.4% Salmon (fillets, frozen) 030481 -17.4% Salmon (fillets, frozen) 030482 -0.5% Frozh Apples fresh 080810 -4.0% Cherries fresh 080810 -4.0% Foods Frozen Fish (meat frozen) 080929 9.1% Foods Frozen Fish (meat frozen) 030499 -1.7% Foods Frozen Aussels prepared 200893 -1.9% Cranberries prepared Cranberries prepared 200893 -1.9% Cranberries juice Cranberries juice 200893 -1.9% Processed Oats grain fulled 110412 25.3% Processed Viccesse Oats grain fulled 200893 -1.9% Frozen Frozen bowine cuts, with bone in (excluding carcases and half-carcases) 200690 -2.2% Frozen <td>Salmon</td> <td>Fresh</td> <td>Salmon (Atlantic and Danube, fresh)</td> <td>030214</td> <td>-31.7%</td> <td>-38.2%</td> <td>~9.6~</td>	Salmon	Fresh	Salmon (Atlantic and Danube, fresh)	030214	-31.7%	-38.2%	~9.6~
Frozen Salmon (Abarific, frozen) 030312 -28.4% Salmon (Atlantic and Danube, frozen) 030313 -25.4% Salmon (fillets, frozen) 030481 -17.4% Salmon (fillets, frozen) 030482 -0.5% Fresh Apples fresh 080810 -0.5% Foods Frozen Cranberries fresh 081040 -17.4% Foods Frozen Mussels prepared 081040 -1.7% Granberries, blueberries and other fruits of the genus vaccinium, fresh 081040 -1.7% Frozen Frozen Mussels prepared 200893 -1.9% Cranberries, blueberries prepared Cranberries prepared 200893 -1.9% Cranberries juice Cranberries juice 200893 -1.9% Oats grain flaked 110412 25.3% Processed Oats grain hulled 110422 21.8% Processed Whey Cheese 20020 -2.2% Frozen Frozen bovine cuts, with bone in (excluding carcases and half-carcases) 202020 -2.9%			Salmon (fillets, fresh)	030441	-21.9%	-12.6%	11.9%
i. Fresh -25.4% i. Salmon (fillets, frozen) 030481 -17.4% i. Salmon (fillets, frozen) 030482 -0.5% i. Apples fresh 080810 -4.0% foods Frozen Cherries fresh 080929 9.1% foods Frozen Fish (meat frozen) 030499 -4.4% processed Mussels prepared 200893 -1.9% creal Cranberries prepared 200893 -1.9% creal Cranberries prepared 200893 -1.9% products Processed Oats grain flaked 110412 25.3% products Processed Whey 040410 -6.8% Accessed Whey Cheese 22.0% Cheese Cheese 040690 -2.2% Frozen Frozen bowine cuts, with bone in (excluding carcases and half-carcases) 20230 -2.9%		Frozen	Salmon (Pacific, frozen)	030312	-28.4%	-18.3%	14.2%
i. Fresh Salmon (fillets, frozen) 030481 -17.4% i. Salmon (fillets of trout, frozen) 030482 -0.5% i. Charles fresh 080810 -4.0% foods Frozen Cranberries fresh 081040 -1.7% foods Frozen Fish (meat frozen) 030499 -1.7% foods Frozen Cranberries prepared 200893 -1.9% creal Cranberries prepared 200893 -1.9% creal Cranberries prepared 200893 -1.9% products Processed Oats grain flaked 110412 25.3% products Processed Whey -6.8% -2.2% products Frozen Trozen bowine cuts, with bone in (excluding carcases and half-carcases) 202020 2.7% Frozen Frozen, boneless meat of bovine animals 20230 -2.9%			Salmon (Atlantic and Danube, frozen)	030313	-25.4%	-9.4%	21.4%
i. Fresh Apples fresh -0.5% foods Chariest fresh 080810 -4.0% foods Frozen Cranberries, blueberries and other fruits of the genus vaccinium, fresh 081040 -1.7% foods Frozen Fish (meaf frozen) 030499 -1.7% foods Frozen Cranberries prepared 200893 -1.9% creal Processed Cranberries prepared 200893 -1.9% creal Cranberries juice 200893 -1.9% products Processed Oats grain flaked 110412 25.3% products Processed Whey -6.8% -2.2% Frozen Frozen bowine cuts, with bone in (excluding carcases and half-carcases) 202020 -2.2% Frozen, boneless meat of bovine animals 20230 -2.9%			Salmon (fillets, frozen)	030481	-17.4%	-0.3%	20.8%
i. Fresh Apples fresh 080810 -4.0% Charries fresh Cherries fresh 080929 9.1% Foods Frozen Fish (meaf frozen) 030499 -1.7% Foods Frozen Mussels prepared 160553 7.3% Freal Cranberries prepared 200893 -1.9% Cranberries prepared 200893 -1.9% Cranberries prepared 200891 0.2% products Processed Oats grain flaked 110412 25.3% products Processed Whey 404010 -6.8% Processed Cheese 040690 -2.2% Frozen Frozen bowine cuts, with bone in (excluding carcases and half-carcases) 20202 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%			Salmon (fillets of trout, frozen)	030482	-0.5%	4.0%	4.5%
Foods Frozen Cramberries, blueberries and other fruits of the genus vaccinium, fresh 080929 9.1% Foods Frozen Fish (meat frozen) 030499 -1.7% Processed Mussels prepared 200893 -1.3% Cramberries prepared 200893 -1.9% Cramberries juice 200891 0.2% products Processed Oats grain flaked 110412 25.3% products Processed Whey -6.8% Processed Whey -6.8% Cheese 040690 -2.2% Frozen Frozen bowine cuts, with bone in (excluding carcases and half-carcases) 20202 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%	Fruits	Fresh	Apples fresh	080810	4.0%	-5.7%	-1.8%
foods Frozen Cranberries, blueberries and other fruits of the genus vaccinium, fresh 081040 -1.7% foods Frozen Horcessed Mussels prepared 160553 7.3% greal Processed Cranberries prepared 200893 -1.9% creal Cranberries juice 200891 0.2% products Processed Oats grain flaked 110412 25.3% products Processed Whey 40401 -6.8% Cheese Cheese 040690 -2.2% Frozen Frozen bowine cuts, with bone in (excluding carcases and half-carcases) 20202 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%			Cherries fresh	080929	9.1%	15.1%	5.5%
Frozen Fish (meat frozen) 030499 -44% Processed Mussels prepared 16053 7.3% ereal Cranberries prepared 200893 -1.9% creal Cranberries juice 200891 0.2% products Processed Oats grain flaked 110412 25.3% products Processed Whey 110422 21.8% Processed Whey 40410 -6.8% Cheese Cheese 040690 -2.2% Frozen Frozen bowine cuts, with bone in (excluding carcases and half-carcases) 02020 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%			Cranberries, blueberries and other fruits of the genus vaccinium, fresh	081040	-1.7%	-7.8%	-6.1%
Processed Mussels prepared 160553 7.3% Cranberries prepared Comberries prepared 200893 -1.9% creal Processed Cranberries juice 200981 0.2% products Processed Oats grain flaked 110412 25.3% products Processed Whey 40410 -6.8% Cheese Cheese 040690 -2.2% Frozen Frozen bowine cuts, with bone in (excluding carcases and half-carcases) 2.7% 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%	Other foods	Frozen	Fish (meat frozen)	030499	4.4%	-0.9%	3.7%
creal Processed Cramberries pire 200893 -1.9% products Processed Oats grain flaked 110412 25.3% products Processed Whey 40410 -6.8% Frozen Frozen bovine cuts, with bone in (excluding carcases and half-carcases) 020220 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%		Processed	Mussels prepared	160553	7.3%	22.9%	14.5%
creal Processed Cramberries juice 200981 0.2% products Processed Oats grain flaked 110412 25.3% products Processed Whey 040410 -6.8% Cheese Cheese 040690 -2.2% Frozen Frozen bovine cuts, with bone in (excluding carcases and half-carcases) 020220 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%			Cranberries prepared	200893	-1.9%	21.3%	23.6%
creal Processed Oats grain flaked 110412 25.3% products Processed Whey 040410 -6.8% Frozen Frozen bovine cuts, with bone in (excluding carcases and half-carcases) 020220 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%			Cranberries juice	200981	0.2%	-21.7%	-21.9%
products Processed Whey 040410 -6.8% Frozen Frozen bovine cuts, with bone in (excluding carcases and half-carcases) 020220 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%	Oat cereal	Processed	Oats grain flaked	110412	25.3%	44.9%	15.7%
products Processed Whey 040410 -6.8% Cheese Cheese 040690 -2.2% Frozen Frozen bovine cuts, with bone in (excluding carcases and half-carcases) 020220 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%			Oats grain hulled	110422	21.8%	46.9%	20.6%
Frozen Frozen bovine cuts, with bone in (excluding carcases and half-carcases) 020220 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%	Dairy products	Processed	Whey	040410	~8.9~	-14.5%	-8.3%
Frozen Frozen bovine cuts, with bone in (excluding carcases and half-carcases) 020220 2.7% Frozen, boneless meat of bovine animals 20230 -2.9%			Cheese	040690	-2.2%	-19.2%	-17.4%
20230 –2.9%	Meat	Frozen	Frozen bovine cuts, with bone in (excluding carcases and half-carcases)	020220	2.7%	54.0%	49.9%
			Frozen, boneless meat of bovine animals	20230	-2.9%	-6.7%	-3.9%