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Les contrats inter-entreprises dans le commerce de produits périssables: le cas des exportations de fruits du Chili analysé avec la Théorie des Coûts de Transaction et l'Analyse Institutionnelle

Inter-firm contracts in the international perishable products trade: The case of Chilean fruit exports through the lens of Transaction Cost Economics and Institutional Analysis

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RESUME

Cette thèse examine les déterminants qui expliquent les types de contrats choisis par les exportateurs et les importateurs pour gérer les risques du commerce international. Elle analyse le cas des exportations chiliennes comme l'un des leaders de l'hémisphère sud sur le commerce des fruits. En appliquant la Théorie de Coûts de Transaction et l'Analyse Institutionnelle, ce travail étudie l'influence de l'incertitude environnementale et comportementale ainsi que la spécificité des actifs sur le degré de complétude, la formalisation et l'exécution des contrats. Cette recherche applique une méthodologie *multistrand* intégrant des méthodes qualitatives et quantitatives. L'analyse utilise les informations provenant de 39 entretiens directs avec des exportateurs et des importateurs et de 65 enquêtes auprès d'exportateurs conduites à l'aide d'un questionnaire. Elle s'appuie également sur une base de données exhaustive issue des douanes chiliennes et documentant les 170370 transactions avec leurs contrats respectifs réalisées par le Chili dans ses exportations vers l'ensemble du monde sur la période 2009-2010. Elle s'appuie enfin sur 44 cas d'arbitrage international dans le commerce de fruits et légumes. Les résultats montrent que les niveaux d'incertitude environnementale liés aux « risques - pays importateurs » conduisent à des contrats plus complets tandis que des niveaux d'incertitude liés à la périssabilité des fruits conduisent à des contrats moins complets. De son côté, la pénurie d'offre sur le marché met l'entreprise exportatrice dans une position favorable pour négocier des contrats plus complets. Ces transactions internationales sont supportées par des moyens oraux et écrits; dans le négoce international des fruits, les contrats signés sont plus importants que pressenti, et leur rôle est davantage destiné à satisfaire les exigences institutionnelles qu'à compenser les risques. Pour faire respecter les contrats, les entreprises adoptent des mécanismes formels comme les inspections, les assurances et l'arbitrage, ainsi que des mécanismes informels tels que la confiance et la réputation. Cette étude a ses limites car elle porte principalement sur le point de vue de l'exportateur, la base de données des douanes ne fournissant pas l'identité de l'importateur et l'analyse transversale ne permettant pas d'observer l'évolution des pratiques contractuelles dans la durée. Jusqu'à présent, peu de recherches empiriques ont été faites sur les contrats intégrés dans différents contextes institutionnels; cette thèse contribue donc à la connaissance des choix contractuels dans 117 pays importateurs et plus généralement à la compréhension du commerce international des produits périssables. Elle est sur le plan académique, une contribution à la littérature économique et gestionnaire des contrats (complétude, formalisation, exécution) et des changements de forme de gouvernance dans les filières internationales.

ABSTRACT

This doctoral dissertation examines the determinants explaining the type of contracts chosen by exporters and importers to manage the hazards of international trade. It analyzes the case of Chilean off-season exports as one of the southern-hemisphere leaders in the fruit trade. Applying Transaction Cost Economics and Institutional Analysis as a framework, this work will analyze the influence of environmental and behavioral uncertainty and time-specificity on the degree of completeness, formalization and enforcement of contracts. A multi-strand research design integrating qualitative-quantitative methods is applied to analyze information gathered through: 39 face-to-face interviews with exporters and importers; questionnaire surveys from 65 exporters; an exhaustive Chilean customs database containing 170,370 shipments and contracts from Chile to worldwide buyers; and 44 international arbitration cases for the fruit and vegetable trade. The results show that high levels of uncertainty in the alternative importing countries increase the use of more complete contracts. When levels of fruit perishability are high, this often leads to less complete contracts. Shortage of market supply allows the exporting company a favorable position to negotiate a more complete contract. International transactions are supported by oral and written means; the use of signed contracts is more important than perceived in the fruit industry, but its role is more oriented to respond to institutional requirements rather than as a mechanism to offset hazards, such as exporting to risky countries or dealing with distrustful importers. To enforce contracts firms adopt formal and informal mechanisms. These include inspections, insurance, arbitration, in addition to trust and reputation. Limitations of this study include: the customs database does not include the identity of the importer, the cross-sectional analysis performed does not allow observing the evolution of contracting practices, the study is placed predominately from the exporter's perspective. There is also little empirical research on contracts analyzing transactions embedded in different institutional settings. This thesis contributes to the knowledge of contractual choices in 117 importing countries. It contributes to the understanding of international trade of perishable products. It also contributes to the economics and management literature on international contract completeness, formalization, enforceability, and to literature focusing on the changes of governance in the international supply chains.

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MAIN ACRONYMS

AMS:	U.S. Department of Agriculture's Agricultural Marketing Service
ASOEX:	Chilean Exporters Association
BCC:	Central Bank of Chile
BRC:	British Retail Consortium (today BRC Global Standards)
CAIFL:	International Arbitration Chamber for Fruit and Vegetables
CBI:	Centre for the Promotion of Imports from developing countries
CEPAL:	United Nations Economic Commission for Latin America and the Caribbean
CFIA:	Canadian Food inspection Agency
CIFS:	Association of French Importers of Fruit and Vegetables
CISG:	United Nations Convention on Contracts for the International Sale of Goods
COFREUROP:	Common European Usages for the Domestic and International Sale of Eatable Fruits and Vegetables
CORFO:	Production Development Corporation, Chile
DIPO:	Danish Import Promotion Office
DIRECON:	Ministry of Foreign Relations, Chile
DRC:	Fruit and Vegetable Dispute Resolution Corporation
EC:	European Commission
EU:	European Union
EUREPGAP:	Euro-Retail Produce Working Group Good Agricultural Practices evolved into GLOBALGAP
FAO:	Food and Agriculture Organization of the United Nations
FAOSTATS:	FAO Statistical Databases
FDA:	Food and Drug Administration of the U.S. Government
FDF:	Fruit Development Foundation, Chile
FEDEFruta:	Federation of Chilean Growers of Fruit
FRUITTRADE:	International Fruit Business Round Table, FEDEFruta
HACCP:	Hazard Analysis and Critical Control Points
HS:	Harmonized System Goods Nomenclature, World Customs Organization
IA:	Institutional Analysis
ICC:	International Chamber of Commerce
IICA:	Inter-American Institute for Cooperation on Agriculture
INCOTERMS:	International Commercial Terms

INRA:	French National Institute for Agricultural Research
IPPC:	Plant Protection Convention
MOISA:	Research Unit Markets, Organizations, Institutions and Stakeholders Strategies
MRL:	Maximum Residues Levels
NAFTA:	North American Free Trade Agreement
NEI:	New Institutional Economics
ODEPA:	Agrarian Policies and Studies Bureau -Ministry of Agriculture, Chile
PACA:	US Agricultural Commodities Act
PROCHILE:	Export Promotion Bureau, Chile
SAG:	Agriculture and Livestock Service, Ministry of Agriculture of Chile
SIMFRUT:	Market Information System of the Chilean fruit industry
SME:	Small and medium enterprises
SPS:	Sanitary and Phytosanitary
SUPAGRO:	International Center for Higher Education on Agriculture Sciences
TCE:	Transaction Cost Economics
USDA:	United States Department of Agriculture
WTO:	World Trade Organization

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1. INTRODUCTION

This research examines the type of contracts chosen by exporters and importers to manage the hazards in international fresh produce trade and the determinants explaining their choice. The exporters and importers face high levels of risks and uncertainty inherent in the international commerce which are amplified when the transacted products are highly perishable, as is the case of the fresh fruit trade, and difficult to measure (Barzel). It analyzes the case of the off-season international fruit trade, from the perspective of the Chilean exporting firms. Chile is one of the southern-hemisphere leaders in the fruit trade as it accounts for 50% of fruit exports and has a highly competitive and diversified open export strategy.

This research uses the theoretical framework of the New Institutional Economics and specifically the Transaction Cost Economics (TCE) by Oliver E. Williamson along with the Institutional Analysis (IA) by Douglass C. North. The TCE gives the appropriate basis to explain the economizing efforts of agents to organize and secure transactions. This theory identifies how the attributes of the transactions, i.e. its frequency, the uncertainty surrounding the exchange, and the level of asset specificity of the transacted goods, influence the choice of alternative forms of governance (Williamson, 1996). On the other hand, North's theoretical contributions regarding Institutional Analysis are critical to understanding the contractual practices of firms, even beyond the actual contract. Its lens of analysis facilitates the interpretation of exporter-importer governance, through the study of the formal and informal rules (institutions) framing the exchanges as a result of historical evolution. By using both the theory of TCE as well as the IA, we can have a more complete view of the research phenomenon of this doctoral thesis: *how alternative contracts may constitute a means for counterbalancing the hazards of the international fruit trade.*

There is not much empirical research in regard to contracts analyzing transactions embedded in different institutional environments such as international trade. However there is increasing interest in literature focused on international business, much of it using the principles of TCE and the IA as an analytical framework. This stream of research focuses on the governance mechanisms in export-import relationships, the degree of contract formalization and the determinants of performance (Aulakh & Gençtürk, 2008; Mysen, 2013; Burkert et al., 2012). From the empirical standpoint, there is an abundance of literature regarding international contracting, mostly focusing on general practices of trade and the use of contract models: Long-Term Supply of Goods; Manufacture Agreement; Distribution of Goods; Commercial Agency, Supply of Services; Sale, Distribution, Commercial Agency, Sales Representative, Joint Venture, Strategic Alliance, Franchise, Supply, and License among others (ICC, 2012; ITC, 2010; Paveau, J., & Duphil, F., 2007; IICA, 2007). Even though these works are to some extent applicable to fresh produce, they do not allow an understanding of the complexity of international inter-firm contracting for perishable products. There is not much research on the role of inter-firm contracts in the international fruit trade as well as the role of contractual and non-contractual mechanisms used by firms to reduce the level of risk.

In order to uncover the diversity of inter-firm arrangements and the factors that influence the choice of them, in this research I followed these sequential questions: What are the types of contractual arrangements? What determines whether or not to sign a contract? What are the mechanisms to secure transactions? What are the determinants for the choice of the contractual arrangements?

To answer these questions I apply a multi-strand design within sequential and concurrent qualitative and quantitative mixed models (Tashakkori & Teddlie, 2003). I perform an analysis of rich information gathered through 39 face-to-face interviews with exporters, importers and service providers (ports, certification, legal advice, among others) and a 65-questionnaire survey carried out in Chile. Also, I analyze an exhaustive Chilean customs database, for the period 2009/2010 that corresponds to the export campaign in place during the field survey. This database registers 170,370

shipments from Chile to all destination countries including a detailed product description (contract, product, variety, level of processing). Also, using a qualitative method I analyze 44 international arbitration cases involving the fresh fruit and vegetable trade, revealing the main source of controversy between the contractual parties.

Findings show that: (i) institutional and organizational innovations have favored the growth of fruit trade, (ii) exporters (and importers), have adapted various means to counterbalance the risks of long-distance trade of perishable and complex products; these mechanisms are external -as formal inspections, insurance, arbitration, and informal -as trust and reputation, and internal -the export-import contract. Regarding the contracts, findings show that: (i) in the context of international transactions, the parties support the transactions by oral and written means, and this documentation is legally binding; (ii) that the use of signed contracts is more important than perceived in the industry but its role is more oriented to meet the needs of coordination, or the fulfillment of institutional requirements, rather than as a mechanism to reduce risk; (iii) signed contracts are not used to offset environmental uncertainties, exporting to risky countries, or behavioral uncertainty when dealing with a distrustful client.

Whether signed or not signed, all Chilean fruit exports are transacted under two main types of contracts that differ according to the price mechanisms: (i) consignment which is a less complete contract because price is not agreed ex-ante; and firm sale, where the parties agree on an ex-ante fixed price making this type of agreement a more complete contract. Binomial logit estimates show that the choice of contracts varies across destination countries, which is explained by institutional factors. High levels of uncertainty due to importing country risk increase the probability of resorting to a more complete contract (Firm Sale) rather than a less complete contract (Consignment). Seasonality estimates show that the probability of exporting on Consignment increases at the peak of the growing season. On the other hand, in situations where product is in short supply, the exporting company would be in a favorable position to negotiate a more complete contract. When higher levels of perishability are more probable, Consignment exports increase. Conversely, for less

perishable products such as dried fruits, frozen fruit and nuts, the probability of choosing a Consignment contract decreases.

There are some limitations to this research. Firstly, it is predominately positioned from the exporter's perspective, most specifically Chilean exporters, even though interviews included the point of view of the importers. Secondly, the identity of the exporter-importer dyad is not observable in the customs database used for the econometric analysis. Thirdly, I perform a cross-sectional analysis, which does not allow observing the evolution of contracting practices.

This document is organized in seven chapters. After this introduction, Chapter 2 describes the empirical context of the thesis, and is organized in two parts; 2.1 addresses the institutional changes in the Chilean fruit industry using an historical perspective. Section 2.2 describes the present institutional framework for international transaction of goods with emphasis on fresh produce. Chapter 3 identifies the key problems affecting the exporter-importer organization of transactions, which leads to the formulation of the empirical research questions. Chapter 4 develops the theoretical framework used in this study to answer those questions. It provides general elements of the New Institutional Economics with emphasis on Transaction Cost Economics (TCE) and Institutional Analysis (IA). Chapter 5 describes the general methodology applied in this study. Then I develop the results and analysis in Chapter 6 which contains the findings of the doctoral research that are presented in three parts formatted as essays: 6.1 develops the analysis of factors influencing the choice of contracts according to the degree of completeness; 6.2 addresses the question of the degree of formalization, whether and why firms sign contracts or do not sign contracts; 6.3 explores the formal and informal mechanisms to protect and enforce international transactions of fresh produce. Chapter 7 provides a general Conclusion of the Thesis. Finally, this document comprises six annexes: Annex 1 and 2 contain two co-authored articles elaborated as part of this doctoral research process. The first article addresses the issue of the export strategies at the firm level, the choice of specializations or diversification and the choice of governance between relational to spot transactions (Annex 1). The second article

analyzes the exporter-importer dependence and the transactional factors influencing this situation. Annex 3 provides the interviews guides and the questionnaire survey used in this thesis research. Annex 4 provides details on 44 international arbitrations on fresh fruit and vegetable trade disputes. Annex 5 illustrates the export documentation used by Chilean exporters for international sales. Annex 6 provides some examples of export-import contracts. Finally, Annex 7 provides a translation into French of the main parts of the thesis.

2. CONTEXT

2.1. The Institutional Changes in Chilean Fruit Exports

“We cannot understand where we are going without an understanding of where we have been” (North, 2005:51)

This part aims to allow a better understanding of the institutional evolution and trade development of the Chilean fresh fruit export industry. I first introduce the current situation and afterward, using an approach inspired by North (1991), I describe the main historical events of the Chilean fruit industry. This information provides the basis for studying the actual contractual practices in 6.1.

2.1.1. Current situation of Chile's export industry of fresh fruit

Chile is a relevant player in the international trade of perishable products. In past decades it has become a major supplier of fresh fruit in the international market. In 1961 it accounted for 3.9% of fruit exports from the southern hemisphere, 25.1% in 1980 (FAO, 2003), in 2007 it accounted for 59.3% (Chilean Fresh Fruit Association, 2010 based on FAOSTATS 2007). Moreover, Chile has a leading position in large emerging markets such as China where it competes with major producing countries of the northern hemisphere (Table 1).

This outstanding performance is the consequence of a combination of factors such as the entrepreneurial capacity, logistical and technological improvements, government support, suitable agro-ecologic and phytosanitary conditions, an appropriate economic environment and the stability of commercial policies, among others.

Ranking	Grapes	Apples	Cherries	Plums	Kiwifruit	Blueberries
1	Chile	Chile	USA	USA	New Zealand	Chile
2	USA	USA	Chile	Chile	Chile	
3	Peru	Japan	New Zealand	New Zealand	Italy	
4	Mexico	France			France	
5	South Africa	New Zealand			Greece	
6	Australia	Argentina				
7	India	Australia				
8	New Zealand	Thailand				

Source: Agricultural Office, Embassy of Chile in China based on Prochile. Fruittrade Workshop, October 2012.
(according to value imported by China in 2011, U.S. Dollars)

Table 1. Chile's positioning in the Chinese market

From 1961 to 2010 the evolution of fruit exports shows a solid expansion. The rates of growth for the period 1971–1980 compared to the previous period were 153.8%. The 80s (1981–1990) is considered the boom of Chilean fruit exports as it showed the highest growth rate of 391.6%. For the next two periods, growth continued to show a high performance, although at more moderate rates, reflecting a maturity of the industry (Table 2).

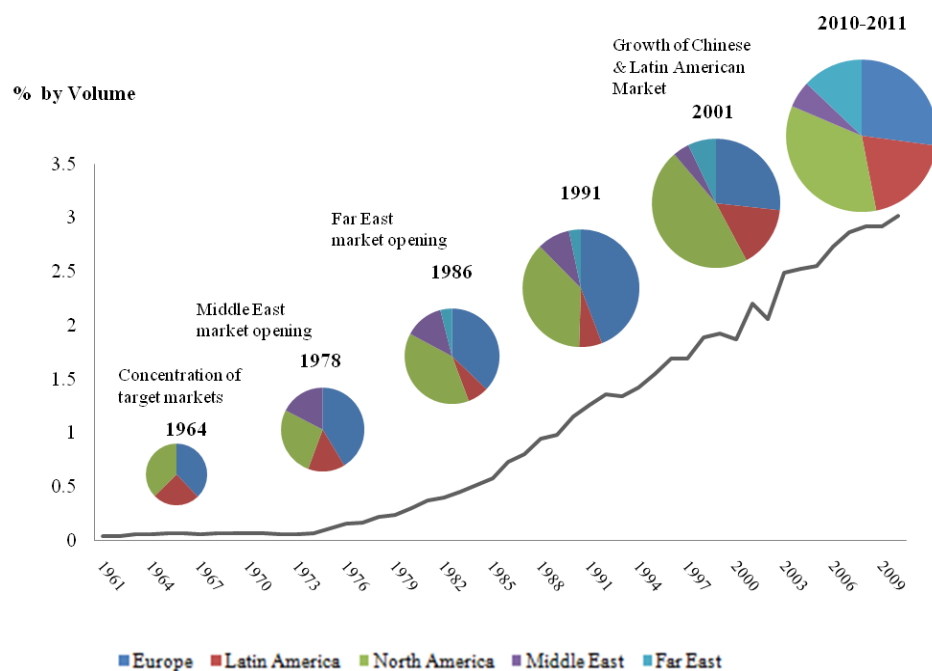
Period	Fresh Fruit Exports				
	1961-70	1971-80	1981-90	1991-00	2001-10
Total Exported (Tons)	510,924	1296,631	6374,511	13806,013	21807,145
Period Growth rate (%)		153.8	391.6	116.6	58.0
Annual Growth rate (%)	8.1	18.4	14.5	5.1	5.2

Source: This research based on FAOSTAT. (Nuts and processed are not included)

Table 2. Evolution of fresh fruit exports in Chile

2.1.2. Market Diversification

Chile has developed a strategy of market diversification. In 1964¹ Chile exported mainly to three major destinations—Europe (38% of exported volume), 37% to North America, and 25% in Latin America (Fig. 1). In 1978 exports expanded to the Middle East market accounted for 17%, in 1986 market penetration in the Far East with 4% was observed. Finally, in 2010–2011 exports to these 5 major markets as well as the remarkable increase of exports to the Far East and Latin America are observed.



Source: Own elaboration based on FAOSTAT, Contreras (1995); Data 2001 EXIMFRUT; data 1964 -1991 CORFO, CEPAL, ODEPA, BCC; 2010-11 ODEPA. Calculations concerned exported volume. Years from 1964 to 1991 correspond to the main exported fruits: Grapes, Apples and Pears

Figure 1. Share of Chilean fresh fruit exports by market of destination

¹ It is necessary to specify that, due to the available information, figures from 1964 to 1991 concern three exported products: grapes, apples and pears. The shares for these products are: Per. 1961–70 (57%) (In this period melons was an important exported product which disappeared during the following periods); Per. 1971–80 (88.4%); Per. 1981–90 (87.6%); Per. 1991–2000 (78.7%); Per. 2001–10 72.8%. Source: Own calculations based on FAOSTAT.

2.1.3. Product portfolio diversification

Another feature of the Chilean fruit industry expansion is its product diversification strategy. In 1961 three products -apples, grapes and melons accounted for 81% of Chilean fruit exports. While, in the exporting campaign 2010-11, Chile's fresh fruit exports accounted for 3.1 billion dollars U.S., with a growth rate of 13% from the previous year. The 86% of these exports are concentrated in 6 major products. Grapes accounted for 40% of the fresh fruit export value (U.S.\$ 1.24 billion). Apples rank second with a participation of 19% (U.S.\$ 0.59 billion). Other significant new products are: blueberries (10%), cherries (7%), kiwifruit (5%), and avocados (5%). Furthermore, diversification has also been achieved through a wider range of varietal products. Thus, in 2010-2011 more than 100 items were exported (own calculation based on Chilean customs database).

How did Chile reach this position in international commerce and what were the factors that allowed the country to achieve this performance? I attempt to partially answer these questions in the following historical description.

2.2. Historical Evolution of the Chilean Fruit Exports

Period from the 1800 to 1974

In the 1800s the economic and mineral activity boasts a flourishing trade. The shipping industry began to be developed. In 1840 the first shipping company, Pacific Steam Navigation Company, was established. The American builder who also established the first railroad (1848) in Chile, chose Valparaíso for its location, as it was the most important port city of the South Pacific. Subsequently, two Chilean capital companies were created in 1864 and 1870, and later merged in 1872 to constitute the *Compañía SudAmericana de Vapores S.A. -CSAV-*. In 1936 to 1938 this company marked a milestone by acquiring ships with refrigerated chambers that allowed export of fresh fruit to Europe and the U.S. Later in 1950 the use of reefer vessels for maritime transport was dominant (Espinoza, 1999).

It is relevant to mention that the development of a national shipping capacity was a State priority for Chile in order to reach the objectives of economic growth. Two

facts demonstrate this. First, the Law of Coastal Trading of 1922 gave exclusive rights to Chilean Ships, and secondly, endorsement by the government for the construction of refrigerated ships in 1936 (Espinoza, 1999: 386).

The support from the State for the development of productive activities is fairly relevant throughout these periods. In 1889 the first National Fruit and Forest Plan was designed, resulting in a legal project that, while not concretized, demonstrating that fruit began to be taken as an economic alternative for the country. In 1922 a Government Commission traveled to California to study its fruit industry, which resulted in a comprehensive report on the plantation system, cultivation, processing, post-harvest, packaging, transport and marketing of fruit in California. This emblematic report was essential for future development plans and programs for fruit growing in Chile (Espinoza, 1999).

In 1953 the state-owned company *Empresa de Comercio Agrícola* -ECA (Agricultural Trade Company) was created and played an important role in the installation of a cold chain for fruit. An academic program between Chile-California Universities (1965-) succeeded in training professionals specialized in the fruit industry. In 1968 a Fruit Industry Development Plan was established by the governmental agency *Corporación de Fomento* (CORFO, created in 1953 and in subsequent decades would play an important role, its goal was to reach 113,000 hectares planted with fruit by 1980; Espinoza, 1999).

The private sector, on the other hand, had a strong role in the development of the fruit industry and in the positioning of Chile in overseas markets. Since 1832 the boom of mineral exports resulted in the coastal trade from the Port of Valparaíso, to Caldera (north of Chile), Callao (Peru) initially, and then the maritime route was expanded to Guayaquil (Ecuador), Panama and San Francisco (California, U.S.A), (Espinoza, 1999). There are also records of exports of dried fruits and nuts to England in 1868 (*Boletín de Agricultura* cited by Espinoza, 1999).

The precursors of the food trade were Chilean peddlers (“*pacotilleros*”) who rented spaces on deck boats and traded from port to port. At the beginning of the journey, the Chilean peddlers obtained supplies in Valparaíso, often dried fruit and vegetables,

grains and wine, and marginally fresh produce, and then departed on their route to sell the merchandise. When returning, they would bring back bananas from Ecuador to sell in Chile. In 1921 these Chilean peddlers associated and constituted a commercial company that successfully exported Ecuadorian bananas to the U.S. and Germany and afterward, opened the German market to Chilean apples, and also exported Chilean fruit to the U.S..

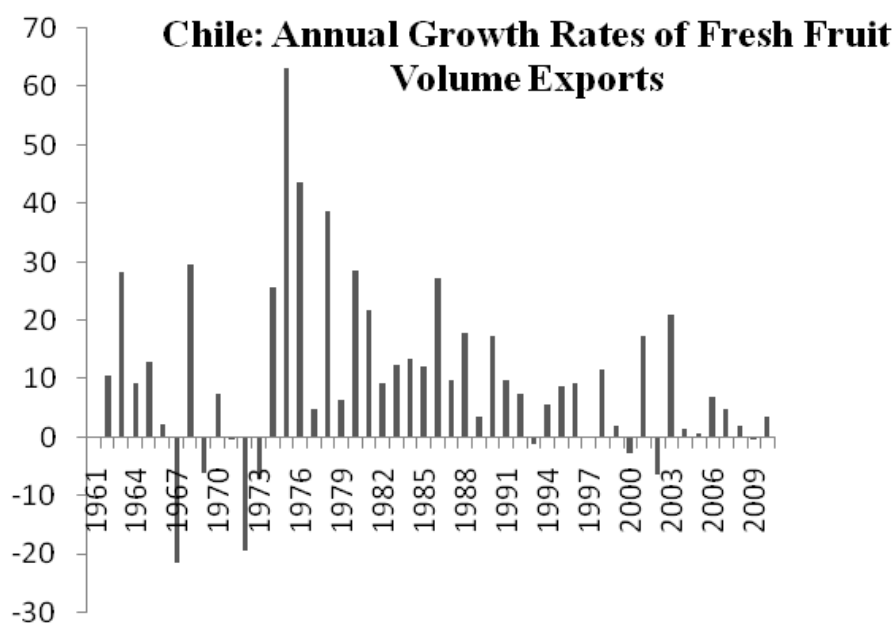
Therefore, fruit exports were boosted by individual traders and at times later by commercial companies that marketed goods produced by farmers. The direct participation of farmers in the export activity would increase in subsequent decades. However, the first attempts can be traced to 1929 when a Chilean producer achieved the first export of fresh table grapes to New York, on consignment thorough a marketing company. In spite of the poor packaging and transport conditions, the product was sold. Nevertheless, poor results in the following year halted the exports until 1925 when it restarted, this time through an agent in New York. In 1929 the same Chilean producer sent to London a trusted person, who had knowledge of the business, to act as an agent for the U.K. market (Espinoza, 1999). This pioneer producer had previously “captured” foreign technology to improve grape cultivation².

In the 30s a key process of private organization development started. In 1935 the Association of Exporters, ASOEX was created. This private and non-profit organization would have throughout the years an active role in the defense of exporter’s interests, to create a powerful commercial network to facilitate the flow of information, the identification of market opportunities and linking exporters to importers, as well as the commercial promotion of Chilean products in the international markets. On the other hand, the first organization of producers was established in 1938, an Association of Apples and Pears Producers created to strengthen capabilities, scale economies and improve negotiation power. The same year of its creation, this association established a marketing agreement that lasted for

² In 1925 a Chilean and an Argentinean producing society was established. The Chilean producer contributed with his land and the Argentinean producer with the grape plants and the know-how. The Argentinean producer sent to Chile some of his employees (Italian immigrants settled in Argentina), who trained Chilean workers in the production, harvesting and packing of the grapes (Espinoza, 1999).

35 years with the most important trading company of that time, the one created by the Chilean peddlers. Later in the 50s, the State encouraged the establishment of farmer organizations some of whom would later became exporting companies.

From 1962 to 1972 major changes occurred. A process of agrarian reform was implemented. This reform occurred in various stages. In 1962 a law authorized the State to take possession of land against a cash payment of 20% and the remainder in bonds. The Act of 1967 deepened the reform by limiting the extent of the property to 80 hectares; the excess land was to be expropriated and redistributed, likewise, poorly exploited land, or land owned by corporations could be seized by the State. During 1970–1972 the process of expropriation and agricultural land occupations accelerated, 43% of agricultural land was expropriated (Carter et al., 1996). From 1970 to 1973 the government restricted free exportation, requiring fruit exports to be performed through a State trading company of the Agrarian Reform (SOCORA).



During this period, annual rates of fruit export growth were mostly negative (Fig 2).

Figure 2. Chile fresh fruit exports: annual growth rates

Period 1974 to 1984

Until 1974, Chile was one of the most protected economies in South America that rapidly opened to international competition (Krutz, 2001). A major change in the Chilean economic model occurred. Structural reforms were implemented, as the reduction of the State's intervention and on the other hand, the empowerment of the private sector especially those oriented to external markets. Policies for export promotion were implemented, as a drawback system to refund taxes to export products that used imported inputs (CEPAL, 2000). Neoliberal policies were applied: the liberation of land, labor and transport markets. In this way, 30% of the land expropriated during the Agrarian Reform was restored to former owners, and by 1986, 57% of the original 48,000 beneficiaries had sold their land (Carter et al., 1996). Port labor markets were liberalized, the public monopoly of the Seaports Administration was eliminated and port services (loading/discharging, handling, storage, among others) were privatized. These, as well as the introduction of the use of bins, pallets and forklifts instead of procedure performed until the 60's when loading and stowage was done by hand, increased the efficiency of loading and unloading and reducing management costs (Codron, 1989; Espinoza, 1999). The performance of cargo handling capacity increased by 50% in 1986 (35 t/hr/hatch) compared to 1979 (20 t/hr/hatch) and 150% in 1995 (40 t/hr/hatch) compared to 1979. Port costs fell by 63% in 1986³ (U.S. \$ 0.2/box of fruit), compared to 1979 (U.S.\$ 0.6/box of fruit) (Beato, 1996).

Additionally, between 1975 and 1980 there were major technological changes as the privatization, modernization and expansion of plants for selection, packaging, cool chambers and in 1985 the first fruit packing house with electronic selection lines and a controlled atmosphere was installed. These allowed extending the shelf life of fruit, to improve the quality of products at arrival, and to expand the exports to far destination markets (Espinoza, 1999).

³ Costs remained at the same levels of 1986 for the subsequent years. Information on this study is available up to 1995.

Due to liberation of trade started by a unilateral tariff reduction for imports (Bull, 2008) in the 80s and during the 90s Chile became the country with greater dynamism and continuity in its trade policy of opening new markets. The private sector as the Exporters Association (ASOEX) and the Fruit Producers Federation (FEDEFRUTA, created in 1985), actively joined the official organizations in these trade negotiation processes, in which the fruit sector was clearly one of the biggest beneficiaries (Bull, 2008).

From 1978 to the 80s, the most important Chilean exporting companies organized themselves into groups to increase the efficiency of fruit shipments. Some groups constituted as maritime transport operators, and other groups were able to improve their negotiating power with shipping companies to get better prices and transport conditions (Codron, 1989).

Come 1980-1982 and an international recession impacted Chile and affected its financial system. As a consequence, major Chilean export companies had credit difficulties causing bankruptcy. This situation combined with the new policy for foreign investment attraction favored the entry of multinationals. It should be noted that multinationals had previously functioned as importers for Chilean companies. They kept most of the Chilean employees, which allowed maintaining the human specific assets and business relationships of the acquired companies (Espinoza, 1999; Gomez, 1994; Escobar & Contreras, 1995; Murray, 1999).

After the 1982 financial crisis, the State started implementing “less orthodox policies,” as it supported the rescue of the private financial system and assumed a more active role in the development of the competitiveness of economic activities carried out by the private sector (CEPAL, 2000).

In terms of market orientation, Chile had a high concentration in few destination markets. Mainly the U.S. and Europe, and two products: grapes and apples. In 1989 the country confirmed its high vulnerability of relying on few markets. The Food and Drug Administration (FDA) of the U.S. announced it had detected in the port of Philadelphia two Chilean grapes containing cyanide. The FDA issued a news release

announcing its national decision to quarantine all fruit from Chile headed for the U.S. market. This measure caused losses of U.S.\$200 million (Engel, 2000).

The 90s to date

The 1990s and 2000s are influenced by the effects of globalization, increased buying power of supermarket chains (Reardon et al., 2009), health, environmental and social concerns, along with multiplication of quality and food safety standards and regulations (ASOEX, 2010; FEDEFRUTA, 2007). Faced with these challenges, nonrefundable financial instruments were available through public institutions, as CORFO and ProChile, to promote production and commercial activities and to improve the competitiveness and insertion in international markets.

Chile continued to strengthen its trade policy and deepened its international trade negotiations; to date, it has signed 21 free trade agreements with 58 countries and 90.3% of all Chilean trade is conducted through these agreements (Table 3). Chile maintains public export programs implemented in early decades, especially during the 90s, to support the private sector in its internationalization efforts. In the 2000s export administrative procedures were simplified.

Country/Bloc	Signed	Country/Bloc	Signed	Country/Bloc	Signed
Bolivia	06/04/1993	Europe Union	18/11/2002	Colombia	27/11/2006
Venezuela	02/04/1993	United States	06/06/2003	Ecuador	22/08/2006
Canada	05/12/1996	EFTA	26/06/2003	India	08/03/2006
Mercosur	25/06/1996	South Korea	15/02/2003	Guatemala	07/12/2007
Mexico	17/04/1998	China	18/11/2005	Japan	27/03/2007
Cuba	20/12/1999	Honduras	22/11/2005	Peru	10/03/2008
Costa Rica	18/10/1999	P-4	18/07/2005	Australia	30/07/2008
El Salvador	18/10/1999	Panama	27/06/2006	Turkey	14/07/2009

Mercosur= Argentina, Brasil, Paraguay, Uruguay; EFTA= Liechtenstein, Iceland, Norway and Switzerland; P4= New Zealand, Singapore and Brunei Darussalam. Source: (Prochile, 2013)

Table 3. Chile trade agreements

This period is characterized by the strengthening of public-private partnerships and development of private services to acquire information; especially market intelligence, quality control and certification services. For instance, in 1992 the *Fundación para el Desarrollo Frutícola* (FDF) was created. This is a non-profit private organization (41 companies associated representing approximately 70 % of all fresh fruit exports) specialized in scientific and technical development solutions to solve quarantine, production, quality and post-harvest issues affecting the industry. In the 90s the information and market intelligence systems developed (Sectoral information and analysis by ODEPA, Ministry of Agriculture; EXIMFRUT, EXPORDATA and SIMFRUT, the three of them developed by the private sector). In 2001 the National Commission on Good Agricultural Practices composed of public and private entities was formed leading to the creation in 2002 of the Chilean GAP program. This is the only program worldwide that has reached a benchmarked status with European GAP Standard (GlobalGAP) and U.S. GAP Programs (NSF Davis Fresh) and in 2012 obtained recognition with China GAP. (FDP, 2009; Melo et al., 2012). In 2005 a Technological Consortium was created to integrate the public and academic sectors for development of new fruit varieties.

These years were also characterized by the increasing number of companies involved in export activity (Aubert et al., 2011). Analyzing the indicators of existing exporting companies or the percentage share of the companies in fruit exports in different periods, one can see the huge shift that has occurred. From 1921 to 1950, one trading company dominated the exports; in 1960s one trading company exports 70%; at the beginning of 70s, three trading companies export 65%, in 1978 these same three companies exported only 50%; in 1979 there were 40 exporting companies (Espinoza, 1999); in the 1980s, ten companies exporting 70 % (Codron, 1989) and 200 exporting companies are registered (BCC, cited by Espinoza, 1999) in the 1990s. Ten companies export 56% (Gomez, 1994) in the 2000s out of 450 exporting companies (ASOEX), and in 2010, 10 companies export only 39% (ASOEX) as there are 747 exporting companies.

As previously mentioned, Chilean firms' export strategies tend toward diversification, although specialization in few products and markets remain predominant (Aubert et al., 2011). Another relevant issue is that a third of the transactions between Chilean exporters and its importers partners, over the period 1996-2007, were exchanges on relational basis, repeated transactions embedded in long-term relations (ibid, see annex 1 for more details). To enlarge on the relational aspect of fruit trade transactions, another study was done to examine the potential dependence between 872 exporter-importer dyads transacting fresh grapes (13 varieties) and other fruits from Chile to Europe over one crop year (2006/2007). Results showed the presence of high levels of dependence between the exporting-importing parties. Importers tend to be more dependent on the exporter, when the transactions at stake involve high volume and large number of products and varieties. On the contrary, the exporting firm is more likely to be in situation of dependence when its product portfolio is less diversified (Codron et al., 2013, more details on this study in Annex 2).

2.3. Institutional Framework for the International Trade of Fruit

Export-import transactions are embedded in national and international layers of public-private institutions, regulations and standards. These institutions focus on the legal aspects related to the commercial exchange itself, and regulations that enterprises must comply with regarding the produce at stake, for instance, quality, sanitary and phytosanitary, social, and environmental issues.

The international exchange of merchandise involves a succession of contracts: (1) the inter-firm export-import contracts concerning the transaction itself, (2) the collateral contracts completed by one of the parties to the transaction with third actors of the supply chain, i.e. carriers, insurance, banks, etc.; and, (3) the product related rules that lead to a sort of collateral contract for inspection and certification on issues related to tariff regulations, sanitary and phytosanitary, quality, social, and environmental issues (Fig. 3).

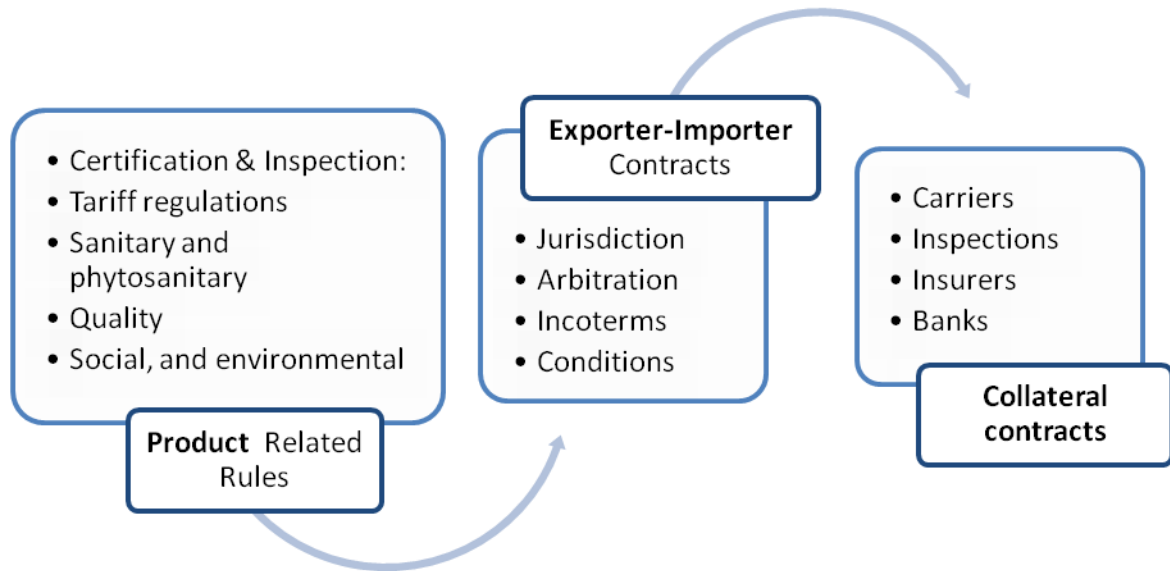


Figure 3. Rules governing international transaction of goods

Even though this study focuses on the exporter-importer contracting level it is important to have a general picture of the institutional framework surrounding international transactions. In the following I first discuss the rules surrounding the export-import transactions; then, I briefly present the rules governing carriages, as one of the main issues of international trade of perishable goods and finally I present the rules related to products.

2.3.1. Rules related to the export-import transactions jurisdiction and applicable laws

The fact that international transactions are performed across the boundaries of countries makes the issue of jurisdiction unavoidable. Jurisdiction is defined as, “the power, right, or authority to interpret and apply the law within the limits or territory in which the authority may be exercised” (Merriam-Webster Dictionary), in other words, “jurisdiction means the place where the parties can refer the dispute to litigation” (Goh E., 1999). Jurisdiction can be defined by presence or by consent. By presence means that a court can have jurisdiction over a company when the

company's business operations are conducted within the limits of the court's authority or when the goods at stake are physically present within the court's jurisdiction. Jurisdiction by consent occurs when parties to a transaction explicitly establish within a contract the applicable jurisdiction in case of conflict (Goh E., 1999).

Depending on the terms of the contract, the applicable law may be: (i) national legislation, i.e. the exporter country or the importer country, as the Uniform Commercial Code of the United States, the French Commercial Code, or Chilean Commercial Code; or, (ii) an international law as the United Nations Convention on Contracts for the International Sale of Goods (Vienna Convention of 1980 or CISG). (CCI, 2012).

In the case of the CISG, this convention was established due to the recognition that "the adoption of uniform rules which govern contracts for the international sale of goods and take into account the different social, economic and legal systems would contribute to the removal of legal barriers in international trade." It states that contracts "need not be concluded in or evidenced by writing and is not subject to any other requirement as to form. It may be proved by any means, including witnesses" (Art. 11 CISG, 1980). Even though according to the CISG, unwritten contracts may be legally binding, written contracts are highly recommended to facilitate processes in case of disputes (ICC, 2012). Moreover, while a majority of relevant trade countries have adopted the CISG (79 States as of March 2013), among them, the European countries, the U.S., Chile, China, among others, there are some non-signatory countries, such as the U.K. (Kritzer, 2013; Moss, 2005). The purpose of this study is not to deepen legal issues but to show that there is an international normative that governs the cross-border transactions. In spite of this fact, the harmonization of international trade law remains greatly complex.

In the event of conflicts arising between the parties to a contract, international arbitration is a method for resolving disputes of international commercial agreements. International arbitral decisions are enforceable under the 1958 "New York Convention" (Convention on the Recognition and Enforcement of Foreign Arbitral

Awards), which has been adopted by over 148 countries. The signatory countries to this Convention have the obligation to recognize the international arbitral awards (binding decisions) and to enforce them at the national court level and to use the proceedings to comply with the arbitral award decision (Ibid). The enforceability of international arbitration is one of the major reasons for which this mechanism has been widely adopted in international business. Other relevant reasons are: neutrality to resolve disputes outside the counter-party's domestic courts; confidentiality to protect trade sensitive information; and specialist decision-makers, meaning that arbitrators are chosen according to the capacity required to handle technical issues (Anway, 2012).

According to the ICC, a well-written contract must include provisions to determine where and how disputes will be resolved. The parties should specify the place for settlement that can be either: the courts of one party's country or an international arbitration organization such as the International Court of Arbitration (ICC, 2012). It is recommended for parties to include in the contract an arbitration clause that explicitly refers to "all disputes arising out of this contract shall be arbitrated at...; any dispute arising hereunder shall be governed by ... Law." This clause can speed the resolution of any arising disputes, rather than resorting to courts for litigation (Ibid).

In the case of the fruit and vegetable trade, there are arbitration chambers specialized in the sector as the following: the International Arbitration Chamber for Fruits and Vegetables, which undertakes arbitrations through the Chamber of Arbitration of Paris; the Fruit and Vegetable Dispute Resolution Corporation (DRC) and for the case of the U.S. there is the Agricultural Commodities Act (PACA) which is a federal law enforced by the U.S. Department of Agriculture that regulates interstate and foreign commerce in the U.S.. These issues are addressed in 6.3.

In order to facilitate coordination, there are standard models of contracts, as those of the ICC. The more pertinent for this study, are: sales agreement, distributorship agreement, and brokerage agreement. Standard contracts include the following main clauses: product specifications, volume and calendar of delivery, payment, duration

of the agreement, terms of payment; penalties and indemnity, applicable jurisdiction and arbitration, as well as the International Commercial Terms (Incoterms). I develop this in the following subsection.

2.3.2. Related to the complementary contracts

2.3.2.1. Rules for shipping and delivery

The exporter and importer must agree on crucial issues related to the international sale of goods. Particularly, the delimitation of the responsibility around the following: (i) completing a contract with the carrier, i.e. the company in charge of performing the transport by rail, road, air, sea, inland waterway or multimodal (carrier's definition by ICC, 1999); (ii) taking out transport insurance, (iii) performing and paying for the export-import customs formalities, the export clearance procedures at the origin country and the import clearance procedures and tariff duties at destination. Parties have to clearly define who bears the costs and who assumes the risks at each stage of the export-import process. Also, they have to establish within their agreement, at which exact point and at which moment these risks and obligations are going to be transferred from one party to the other.

Agreements involving all these aspects are performed by traders who come from a diversity of cultures, languages, legal frameworks and different trade practices. The homogenization of a common technical language has been necessary to facilitate the coordination of international trade; this need has been addressed by Incoterms.

Incoterms is "a set of international rules for the interpretation of the most commonly used trade terms in foreign trade. Thus, the uncertainties of different interpretations of such terms in different countries can be avoided or at least reduced to a considerable degree" (ICC, 1999). It was created by the International Chamber of Commerce (ICC) and is accepted worldwide by governments, customs authorities and trade companies. It applies to the relation between sellers and buyers under the contract of sale, in the following: seller's and buyer's obligations with regard to delivery and to reception of the goods at the place agreed; insurance obligations; mode of transportation, obligations to clear the goods for export and import. Incoterms is

designed to complement the contracts of sale, not replace them and do not deal with other issues as: transfer of property, breaches of contract, etc. (Incoterms 2000). The importance of Incoterms is that every export-import agreement should include a clause specifying the agreed Incoterm, although, they are often misused (ibid).

The first version of the Incoterms was published in 1936; however, these rules are in constant review in order to adapt them to changes in trade and up-to-date commercial practices. Revisions were made in 1953, 1967, 1976, 1980, 1990, 2000 and 2010. For instance, in the 2010 version, terms were reduced from 13 to 11. DAF (Delivered At Frontier) (... named place), DDU (Delivered Duty Unpaid) (... named place of destination) and DEQ (Delivered Ex Quay) (... named port of destination) were eliminated, while DAT (Delivered At Terminal) and DAP (Delivered At Place) were added (see Table 4 for a brief description of each term).

Incoterm		Description
Any mode of transport		
EXW	Ex Works (... named place)	The seller delivers the goods at his premises or another named place (i.e. works, factory, warehouse, etc.) not cleared for export and not loaded on any vehicle. This term represents the minimum obligation for the seller. The buyer has to bear all costs and risks involved in taking the goods from the seller's premises.
FCA	Free Carrier (... named place)	The seller delivers the goods, cleared for export, to the carrier nominated by the buyer at the named place. If delivery occurs at the seller's premises, the seller is responsible for loading. If delivery occurs at any other place, the seller is not responsible for unloading.
CPT	Carriage Paid To (... named place of destination)	The seller delivers the goods to the carrier nominated by him but the seller must in addition pay the cost of carriage to bring the goods to the named destination. The buyer bears all risks and any other costs occurring after the goods have been delivered.
CIP	Carriage and Insurance Paid To (... named place of destination)	The seller delivers the goods to the carrier and pays the cost of carriage and insurance against the buyer's risk of loss of or damage to the goods during the carriage. The buyer bears all risks and any additional costs occurring after the goods have been delivered.
DAT	Delivered At Terminal (...name of terminal)	The seller delivers the goods at the disposal of the buyer at the agreed terminal (quay, warehouse, rail or air terminal). Seller is responsible for the export clearance procedures and bears the risks to bring the goods to the point agreed by the parties. The importer is responsible for effecting and paying cost for customs clearance.
DAP	Delivered At Place (...named place)	The seller delivers the goods at the agreed point at destination.

		The seller bears the responsibility and risks of delivering the goods to the named place. The seller is responsible for dealing with the contracts of carriage and for clearing the goods for export. Importer is responsible for effecting customs clearance and paying duties.
DDP	Delivered Duty Paid (...named place of destination)	The seller delivers the goods, cleared for import at the named place of destination. The seller bears with all the costs, including customs duties, and risks involved in bringing the goods.
Maritime and inland waterway transport only		
FAS	Free Alongside Ship (... named port of shipment)	The seller delivers the goods, cleared for export, to the carrier nominated by the buyer at the named place. If delivery occurs at the seller's premises, the seller is responsible for loading. If delivery occurs at any other place, the seller is not responsible for unloading.
FOB	Free On Board (... named port of shipment)	The seller delivers when the goods pass the ship's rail at the named port of shipment. The buyer has to bear all costs and risks of loss of or damage to the goods from that point. The seller has to clear the goods for export.
CFR	Cost and Freight (... named port of destination)	The seller delivers when the goods pass the ship's rail in the port of shipment. The seller must pay the costs and freight to bring the goods to the named port of destination. The risk of loss of or damage to the goods and any costs due to events occurring after the time of delivery are transferred from the seller to the buyer.
CIF	Cost, Insurance and Freight (... named port of destination)	The seller must pay the costs and freight necessary to bring the goods to the port of destination and the cost of marine insurance. The risk of loss or damage to the goods and any additional costs due to events occurring after the time of delivery, are transferred from the seller to the buyer.

Source: Incoterms 2010©, ICC, 2012

Table 4. Description of incoterms 2010

2.3.2.2. Transportation of goods

The transportation of goods is governed by specific rules according to the means of transport; I will refer to the three means of transportation that apply in the case of exports from Chile: by sea, air, and road.

Transportation by sea: The rules governing contracts for maritime carriage of goods are: the Hamburg Rules (1978) which is an international convention that protects the exporter in a few countries of the world. Chile is a signatory to this convention. The

Hague Rules (1924) and the Hague-Visby (1968) offer greater protection for shippers of most developed countries rather than exporters from developing countries. In 2008 a new “United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea” (called the “Rotterdam Rules”) was adopted. Generally speaking, maritime law has different regulations (Fedefruta, 2011) from country to country. The “Rotterdam Rules” aim to unify existing conventions, i.e. create a single convention that governs in all countries.

Transportation by air: The Warsaw Convention (signed in 1929 and amended in 1955 and in 1975) rules the international carriage of goods by air when the departing and destination places are located in signatory countries of the Convention. These rules apply for the period while goods are in the charge of the carrier in an airport or on an aircraft. This is why the importer is obliged to accept delivery of the merchandise at arrival as explained in the previous section of Incoterms. In case of loss or damage of the merchandise, the exporter must formulate a claim within a time limit.

Transportation by road: As for the carriage of goods by road the CMR Convention applies when merchandise departs and arrives in signatory countries of this convention. The carrier is legally responsible for loss, damage or delays within the period between receipt of the goods and their delivery, and for the acts of his agents and sub-contractors. On the other hand, the carrier is not liable when loss is due to negligence by the consignor, i.e. wrong instructions, inherent defect in the goods, etc.

I finish this brief description of Incoterms and the transport issues by referring to a central topic, the delivery of the goods. Thus, the seller has fulfilled his obligations and the buyer takes or accepts the goods. I will stop at this point to demonstrate the complexity of international transactions of merchandise: “The buyer is bound to accept delivery of the goods and to receive them from the carrier and if the buyer fails to do so, he may become liable to pay damages to the seller who has made the contract of carriage with the carrier or, alternatively, the buyer might have to pay demurrage charges resting upon the goods in order to obtain the carrier’s release of the goods to him.” However, when the buyer “accepts delivery” (ICC, 1999: 9) of the product from the carrier, it does not mean that “the buyer has accepted the goods as

conforming with the contract of sale, but only that he has accepted that the seller has performed his obligation to hand the goods over for carriage in accordance with the contract of carriage” (ICC, 1999). In the next section I will develop specifically the problem of delivery and acceptance of fresh fruit in compliance with exporter-importer contracts.

2.3.3. Related to the products

Exporters and importers have to comply with public and private requirements at national, regional or international levels. These requirements may be tariff or non-tariff, as well as mandatory or voluntary. Tariff regulations impose measures as customs duties and quotas at the entry country, while non-tariff regulations impose requirements such as sanitary and phytosanitary. Some countries demand the fulfillment of mandatory requirements in order to allow entrance of certain products, e.g. Chilean apples, kiwis and grapes are allowed entry to the Chinese market since 2004; before that year imports were prohibited in an effort to protect the health of Chinese plants. On the other hand, the fulfillment of voluntary requirements allows certain niche markets, for example, organic foods, or large-volume clients like supermarkets (e.g. Nature’s Choice, Tesco, U.K.) to receive products. Hence, to demonstrate compliance, exporters must resort to inspections and certifications through collateral contracts with official and/or private services. In the following, I will briefly introduce the topic of tariff regulations, and then non-tariff regulations. To do so I use some examples concerning trade between Chile and the European Union. At this stage of the document, I do not discuss inspections and certification issues; these topics will be treated in later subchapters.

2.3.3.1. Tariff regulations

As mentioned, Chile has signed 27 Trade Agreements (Prochile, 2013; Chilean Fresh Fruit Association, 2010). These Trade Agreements have resulted in beneficial tariff treatments for Chilean fruit. As for the case of Chile–European Union, trade relations strengthened after the signing of an association agreement in 2000, which includes a Free Trade Agreement in force since February 2003. Even if both the European Union and Chile adhere to the regulations of the World Trade Organization, in the

case of imports into the European Union, there are some exceptions to free trade that affect principally agricultural commerce. The protection mechanisms imposed by the EU are: (i) quantitative limits on imports. This legislation seeks to protect European production from imports entering from certain third countries at very low prices (EC No 375/2008); (ii) safeguard measures. This instrument is applied on a temporary basis in case of an emergency or menace to EU industry; (iii) surveillance measures consist of a system of mandatory import licenses which serve to monitor the trade flow and to provide information for the administration of tariff quotas or safeguard measures (EC No 376/2008) (<http://exporthelp.europa.eu/>; and European Union law).

These regulations affect the temperate fruit trade entering from the southern hemisphere, specifically: apples, pears (entry prices, tariff and quotas); and for table grapes, apricots, oranges, minneolas or tangelos, lemons and cherries (for tariff and quotas). Some products, such as Chilean fresh apples and pears, have a standard import value. If import volumes of the products concerned exceed the quota levels determined for the product and the period of application, additional duty as provided in the Common Customs Tariff may be imposed (EC N° 1580/2007). Equally, imports with a lower price than the entry price have to pay an additional duty. As recognized by the Commission Regulation, there are difficulties to calculate the entry price since most of the perishable fruit are supplied on consignment (EC No. 580/2007). On the other hand, the Free Trade Agreement between Chile and the EU benefits from zero tariffs on fresh fruit. <http://ec.europa.eu>.

While trade agreements concern the negotiation of tariff conditions for traded goods, critical issues for agricultural trade, such as human and plant health regulations, are out of reach. In the following I refer to these non-tariff regulation issues.

2.3.3.2. Non-tariff regulations

Non-tariff regulations refers to sanitary and phytosanitary measures (i.e. human and plant health), environmental issues (e.g. organic agriculture) as well as social issues (e.g. labor conditions), requirements on chain management and traceability as the Farm-to-Fork legislation of the EU for the entire process of products (CBI, 2004).

As for the Sanitary and Phytosanitary Measures Agreement (SPS) within the frame of the World Trade Organization (WTO), it ratifies the right of member countries to protect their animal, plant and human health. However, countries are obligated to substantiate with verifiable scientific principles any commercial restriction related to SPS. The provisions of the SPS Agreement bind all member countries of the WTO. As for the case of fruit and vegetables, countries have adopted international standards in the frame of (i) the International Plant Protection Convention (IPPC) that aims to protect plants by preventing the introduction and spread of pests; and, (ii) the Codex Alimentarius Commission that develops food standards to protect the health of the consumers (WTO).

Beside these official SPS regulations, which are at an international level, there are official rules at a regional level, i.e. the UE normative, and at a national level, e.g. the U.S. Agricultural Standards. Furthermore, there is a wide spectrum of private standards that are characterized by “a lack of harmonization, both in requirements and enforcement mechanisms, across countries and buyers that add a significant cost to compliance” (Fernandez-Stark et al., 2011). Table 5 is a picture of the diversity of regulations.

	Public		Private	
	Mandatory	Voluntary	Individual	Collective
National	. National legislation (pesticides use, labor environment and sanitary regulation) . US Department of Agriculture Standards	. Hazard Analysis Critical Control Point (HACCP) . USDA National organic Program	. Nature's Choice (Tesco) . Field-to-Fork (M&S) . Terre et Saveur (Casino) . Conad Percorso Qualità (Italy) . Albert Heijn BV: AH Excellent (Netherlands)	. British Retail Consortium (UK) . Assured Foods Standards (UK)
Regional	EU Regulations		. Filières Qualité	. EurepGap . Dutch HACCP . Qualitat Sicherhiet (QS – Belgium, Holland, Autria) . International Federation of Organic Agriculture Movements (IFOAM) standard
International	. World Trade Organisation . Tariff regulation . Non tariff regulation . SPS Agreement	. ISO 9000 . ISO 22000	. SQF 1000/2000/3000 (US)	. GlobalGap . Global Food Safety Initiative . SA 8000 . International Federation of Organic Agriculture Movements (IFOAM) Standard

Source: Fernandez-Stark et al., 2011 based on Gereffi & Lee, 2009; Henson & Humphrey, 2009; Jaffee & Masakure, 2005

Table 5. Summary of the main regulations and standards

By way of example, I will again focus on the case of fruit exports to the EU in order to briefly show the effect of these regulations.

Fresh fruit has to comply with the legislation set out by the EU. The requirements apply to both products produced in the Union as well as for imported ones. There are also regulations at a national level of the member countries. The European Commission established the regulation for food safety to ensure consumer protection through an integrated approach from primary production to market. This regulation

includes: (i) legislation establishing the minimum hygiene requirements; (ii) official controls to verify fulfillment by food business operators (EC No. 852/2004).

The private sector has an important role in these issues as it has the responsibility for compliance, and also has been extremely active in the creation of private standards as BCR, EurepGAP, and GlobalGAP (the GlobalGAP protocol includes: Food safety and traceability, integrated crop management (ICM), integrated pest control (IPC), quality management system (QMS), hazard analysis and critical control points (HACCP); worker health, safety, welfare; animal welfare; and environmental, biodiversity, pollution and conservation management (globalgap.org). There are some differences as to the legal framework between countries with important implications, i.e. in the United Kingdom there is a principle of responsibility called “due diligence defense” which is part of the Food Safety Act (1990), that lead to greater participation by the private sector in the development of standards, certification, and control systems (such as BRC, EurepGAP, and GlobalGAP or specific standards by supermarkets (Holleran et al., 1999; Codron et al., 2002; Reardon et al., 2003) and that assigns responsibility for the quality of products sold to consumers to the last operator in the chain, i.e. the supermarkets, as well as their responsibility for the good practices implementation by their suppliers (Codron et al., 2006). In contrast, in France legislation on this matter states that the responsibility is on the first operator in charge of entering the goods in the market, i.e. the importer for imported products. This has resulted in the creation and implementation of rules and mechanisms of safety, self-control by the importing companies, and the verification of maximum residue limits (Codron et al., 2006). Other regulations that apply to fruit trade are: maximum residue levels, traceability, food labeling, marketing standards and packaging. All these regulations may affect the content or type of contract reached by importers and exporters, as will be shown in the Chapter 6 of this document.

In summary, as described in this section, in order to boost the Chilean fruit industry and seize international market opportunities, Chile has: (i) made substantial efforts to diversify its export markets and its product basket; (ii) strengthen the entrepreneurial capabilities at a firm and collective level; (iii) improved the logistics, commercial,

and the sanitary and phytosanitary public-private services; (iv) applied and complied with international legislation; thus, companies operate in a network of institutions that frame international transactions. However, there are huge risks that firms face. How to reduce these risks will be detailed in the next section.

3. STATEMENT OF THE PROBLEM AND RESEARCH QUESTIONS

Notwithstanding the marketing success of Chilean fruit as presented above, this is a risky sector as it is, in general, the agricultural sector. The risks inherent in the international trade add more complexity to the business. In this section I present the analysis unit of this study, then I present the risks, and finally I will answer the empirical research questions of this study.

3.1. THE UNIT OF ANALYSIS

In this research, the unit of analysis is the transaction between the exporter of fresh fruit from Chile and first importer in the entry market (Figure 4). However, the perspective from the exporter is prevalent.

The exporters can be classified into two categories: (i) producing-exporting firms, and (ii) export-trading firms:

- **Producing-exporting firms** are characterized by producers who join their productive capacities to create an export company or group of family-owned companies. These firms have the following characteristics: (i) a significant percentage of the exports come from their own production, sometimes complemented by products from third parties, (ii) the ability to generate a diversified export supply looking for a year-around offer in the case of the firms whose associates are located in different geographic areas and therefore, produce different types of fruit, (iii) the specialization in certain products or markets in the case of firms concentrated in a single production area. This category includes companies of varying size: large, medium and small.

- **Export-trading companies.** These are companies whose core business is the export of third parties' production. Their competitive advantage lies on knowledge of the markets links with international buyers, and their logistics capabilities. This category includes transnational corporations as well as Chilean capital firms of different sizes. Some of the export-trading companies may have their own production; however this represents a minor part of their offer.

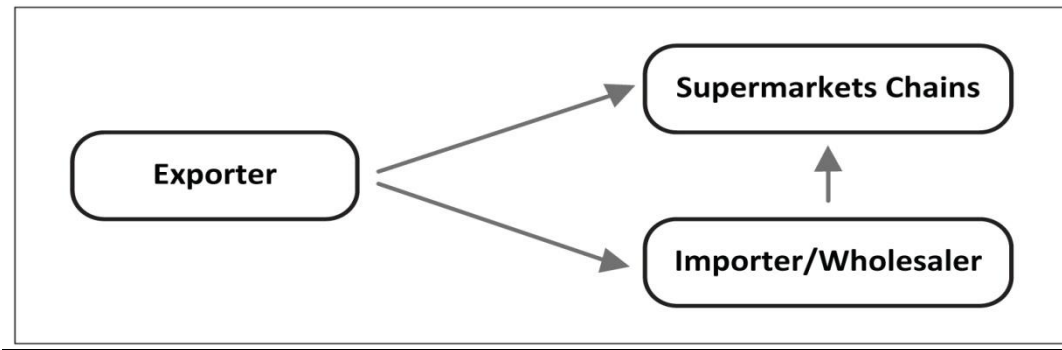


Figure 4. Simplified export-import channels

The Importers: We adopt a general classification of the import channel used by the exporters in the exploratory interviews, which I validated with the importers. European imports from Chile take place through two basic channels: (i) **traditional importers**, who are oriented to the wholesale market and the supermarkets; and, (ii) **non-traditional importers** such as supermarkets importing directly from the exporter.

Dealing with perishable products implies a complex just-in-time coordination, but it also means for exporters a given duration of exposure to the risk of non-payment or under-payment (Paveau et al., 2012).

In Figure 5 I attempt to show this risk in a simplified way. If we consider only the time between the harvest (excluding the period of production) until the completion of payment for a shipment of fruit, one can observe the following: The functions of harvest, packing and shipment, which are performed at the producer and exporter level, can take up to 8 days (for the case of low perishable fruits). The duration of the maritime transportation (which is the most used means of shipping) obviously varies according to the destination (see Table 6 for some relevant sea routes).

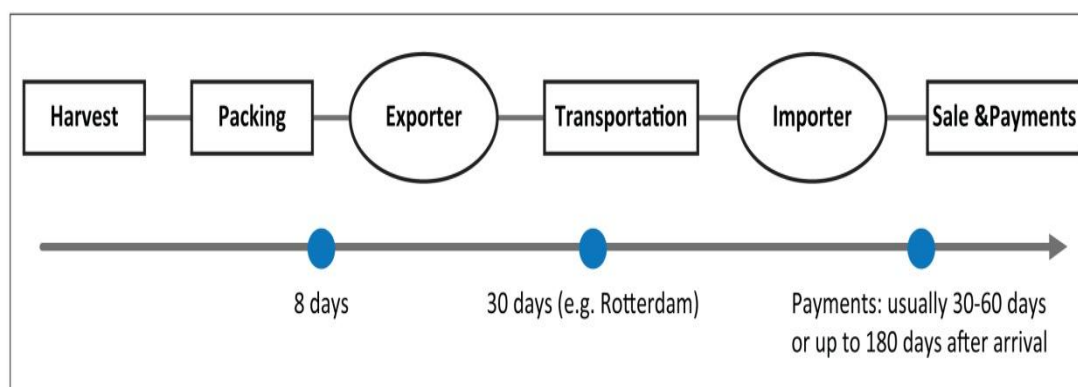


Figure 5. Duration of the exposure to the risk regarding payments

Departing Port	Port of Destination	Transit Time (Days)
Valparaiso	Buenaventura (Colombia) ²	8
San Antonio	Long Beach, California (USA) ¹	16
San Antonio	Miami, Florida (USA) ¹	18
San Antonio	Newark, New Jersey (USA) ¹	27
San Antonio	Rotterdam, (Netherlands) ¹	30
San Antonio	Bremerhaven (Germany) ¹	31
Valparaiso	Shangai (China) ³	30

Notes: The distance between Port of San Antonio and Port of Valparaiso is 86.7 km, both are located in the same Region. Sources: Maersk ,2001¹; GET, 2013²;SITRANS, 2012³

Table 6. Selected maritime routes and transit times

The sales at the destination market, which is the function performed by the importer, as well as the final payment to the exporter, can usually take up to 180 days. Therefore, the period of exposure to the risks regarding payment, may actually be around 218 days. Delays may even have one year or more in cases of deferred payments after one export season. Beyond the risk related with payments, this delay makes exporters more vulnerable to collateral hazards like market changes, price variations and currency exchange rate variations and loss of quality and value.

Most of the exports are transacted on credit because importers prefer this alternative to offset the uncertainty related to the quality of products at arrival. Indeed, the

exports on credit for Chilean food products can be as high as 95% (Aisen et al., 2012: 9). Transactions performed on credit make exporters vulnerable to opportunistic behaviors. According to one leading export credit insurance company, the fruit export sector is more susceptible than other exporting sectors to the risks of default; 50% of non-payments by international buyers affecting Chilean insured firms (period 2011–2012) correspond to the fruit export sector (COFACE, 2012).

On the other hand, given the importance of fresh fruit exports, which accounts for 3.1 billion dollars (ODEPA, 2011), not an insignificant amount, it is surprising that export-import contracts remain largely informal as indicated by the most relevant legal adviser of the Chilean fruit export sector, “the fruits and vegetables export sector is especially sensitive to non-payment due to the informality with which deals are made” (Portalfruticola, 2012). Furthermore, the lack of contracts signed by both parties, make recovery of the unpaid money difficult, as well as the claims against credit insurance (ibid). The informal way of doing business is more relevant at the exporter-importer level, rather than at the producer-exporter level. In an extensive study, results showed that 96% of the fruit producers surveyed made a formal agreement with the exporting companies. The remaining 4% said they did not use formal contracts but relied on friendship and trust (Dominguez et al., 2003).

Building on the discussion above, I identify the main risks faced by exporters and importers of fresh fruit (Figure 6): (i) market uncertainty; (ii) quality deterioration; (iii) adverse selection of the contractual partner; (iv) risks at the importing country; and (v) unfavorable factors in the exporting country.

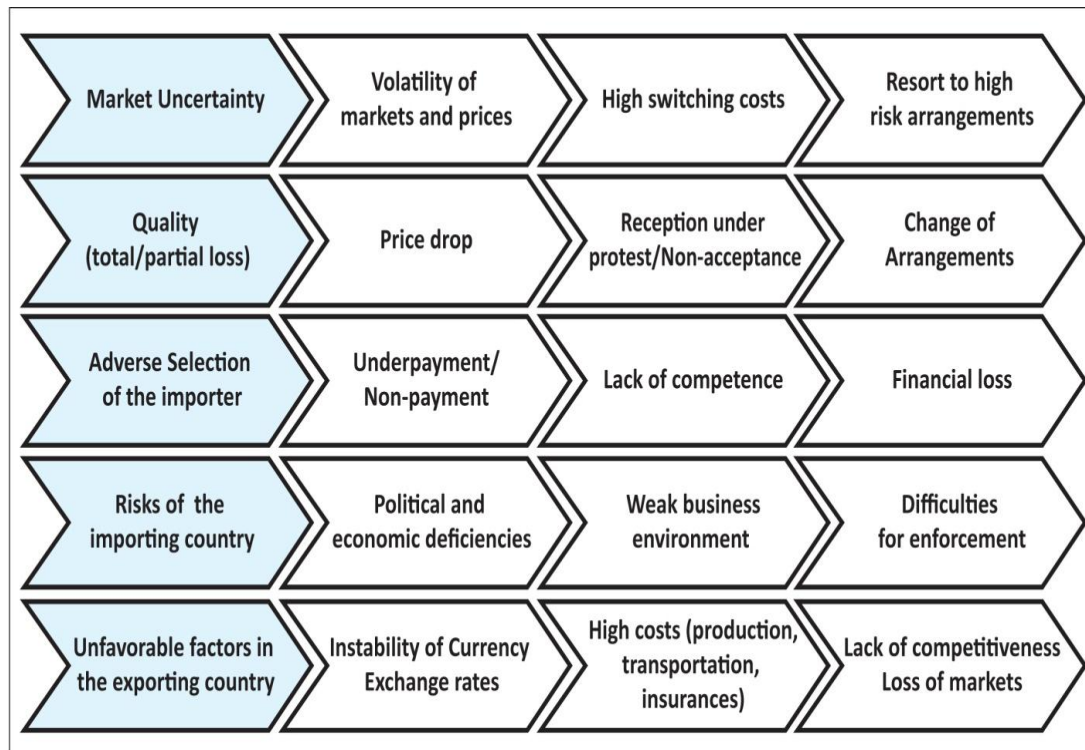


Figure 6. Risks in the international fresh fruit trade

Before describing them in more detail I should mention that the fifth risk refers to exogenous economic and policy constraints relate to the issue of competitiveness. Chile's fruit sector is affected by, on the one hand, the increase of production costs, especially energy and transportation costs because of the rise in oil prices, as well as labor costs; in addition, the steady decline of the U.S. dollar exchange value since it is the currency in which export payments are received, and the appreciation of the Chilean peso, in which domestic payments are made by producers, results in the loss of profitability of the fruit industry and the deterioration of its competitiveness (FEDEFruta, 2011; Retamales, J.B., & Sepúlveda, J.C., 2011). Although extremely important and a source of great concern for Chilean producers and exporters (ASOEX, 2013; FEDEFruta, 2011), this type of risk is beyond the scope of this study. In order to correct it, policy level action must be taken, which includes mobilization, and debates to influence the achievement of favorable policy measures. This study focuses on the inter-firm decision level to uncover which actions parties to

a transaction are able to take in order to reduce the risks at stake. Therefore, in the following I proceed to develop the first four source of risks highlighted above.

3.2. MARKET UNCERTAINTY

Fresh fruit traders, especially exporters, in this case Chilean exporters, are exposed to high levels of **market uncertainty**. In general, neither distributors nor importers have a dependent relationship with exporters; they can buy from different countries of the southern hemisphere. However, buyers should ensure regular and consistent procurements, and seek regular suppliers; this is sometimes problematic when there is a strong global demand or when the economy is favorable to Chilean exporters (i.e. climatic problems in competing countries). Uncertainty makes it difficult for traders to predict the volume required, the availability of product and consequently, prices. On the other hand, long distance fresh fruit procurements entail time constraints for marketing and lack of flexibility to make last-minute changes due to high switching costs. In the case of the Chile fruit trade, importers have the option of acquiring fruit from diverse origins within the southern hemisphere that are also its competitors in the fruit market (New Zealand and South Africa to name some). But even with these extra sources, it is difficult to meet order requirements on short notice because volumes are normally defined prior to shipment. The adjustments that the importers can implement in a contingency can only occur by requesting other importers for assistance, or within circuits where the merchandise is already shipped with no purchaser (“to order” exports). The exporter faces the same problem in the case of the last minute desertion of the importer (Brousseau & Codron, 1998). Moreover, there is also the risk of change in prices between the time of shipment and the time of delivery. The longer the transport time, the higher the possibility of price variation between the time of shipping the goods and the time of arrival and delivery (ibid).

3.3. QUALITY

This source of risk is intrinsic to the perishable nature of the product. Fresh fruits are highly susceptible to spoilage during transport (Figure 6). The quality of the fruit can deteriorate between the time of shipment and the time of delivery at the destination

market. For this reason, products are subject to a variety of requirements, certifications and controls throughout the supply chain, from production to export, and from exporter to importer, distribution and retail. Concerning the export process there are checkpoints at the farm level, at the conditioning facilities for export, at the port, shipment and at the port of arrival. Complaints at the port of arrival may generate numerous controversies: First, the exporter may doubt the reliability of the claim. Did the product actually arrive in poor condition? Or, on the contrary, has intentionally wrong information been provided by the importer? It may happen that at the time of concluding the agreed payment, the importer alludes poor condition or poor quality of the fruit and attempts to change the conditions of such payment (Portalfruticola, 2012). Second, if the product really arrived in poor condition, who is responsible? Did the exporter comply with suitable shipping conditions, in other words, that “the product meets contract terms at shipping point and will not deteriorate abnormally given normal transit time and conditions” (PACA, 2010)?

For both parties it is difficult to establish responsibility for the damages, whether the consigner (the exporter), the carrier (transport company) or the receiver (the importer). The difficulty of establishing the responsibilities between the two parties to an international transaction who are separated by large distances, leads to the next risk.

3.4. RISK OF THE RELIABILITY OF COUNTER-PARTIES

Expanding into foreign markets or sourcing from overseas countries is a challenging task; choosing a reliable counter-party is therefore essential. The risk of making a poor choice of the partner in a business transaction is a major problem. For an exporter, it is difficult to verify the solvency of the importers to lower the risk of underpayments; delays of payment or even non-payment. It is also difficult to verify ex-ante the competence (or lack of competence) by the importer, understanding competence to mean “a cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act effectively in a job or situation” (Business Dictionary). Does the importer have the competence required to satisfactorily meet its sales functions at the destination market? For the importer, this risk is associated with the reliability of the exporter to comply with the terms of the

agreements such as the shipping of the merchandise on time, with the quality conditions and volume agreed. The fulfillment of agreements by the exporter permits the importer to meet with the commitments assumed with his customers. Furthermore, it is usual for importers to advance a partial payment for the merchandise at the time of shipment of the goods, and in some cases, although less frequent for the case of Chile, importers can make an advance payment before harvest. Consequently, importers assume part of the risk of trading, and are exposed to the risk of lack of compliance with commitments assumed by their suppliers, that is the exporters. Importers need to have reliable suppliers who guarantee that the merchandise meets the terms of the agreements and that it complies with the normative rules (i.e. traceability, quality, sanitary, food safety and other standards such as ecological, and social) of the importing country and customers (i.e. supermarkets or specialized stores). A breach of the contract by the exporter may lead to a breach of the contract by importers to their clients.

The relevance of this risk emerges from the fact that in the international fruit trade, export-import transactions are made mostly on consignment due to such critical factors as the volatility of prices (Codron, 1989). This type of arrangement implies that the exporter only knows the price once the importer has sold the products in the destination market, until the completion of the sales; the exporter retains the ownership of the products, and therefore bears most of the risks. The price paid to the exporter is made after deduction of an agreed margin. In the event that prices are lower than expected, the exporter bears the risk of loss (CBI, 2008). The other main type of arrangement is the firm sale. This is a sales contract where the price is defined ex-ante. However, this arrangement is less used in this industry (ibid). These facts, explain the importance of a good selection of commercial partners and the need to maintain long-term business relationships with suppliers.

From the legal perspective, according to the specialists, an effective way to avoid this risk is to conclude contracts duly signed by both parties prior to the exchange of the fruit. These should clearly define the mode of sale, payment obligations, and the obligations of inspection, as well as the provisions to enforce the terms of the

agreements (Portalfruticola, 2012). However, there is another risk that results from the conditions of the importing country which are the institutional and economic environment that facilitates, or not, compliance with the terms of the contracts and its enforcement (North, 2005). I refer to this below.

3.5. RISKS OF THE IMPORTING COUNTRY

The risk of the importing country can be defined as the “probability of loss due to economic and/or political instability in the buyer’s country, resulting in an inability to pay for imports” (definition of country risk in the *Business Dictionary*). Political instability implies war, strikes, and abrupt changes of authorities with all the damages these situations cause to business operations (ICC, 2012). The economic policy instability resulting in unfavorable measures as restrictions to repatriate profits, tax increases or increase on the trade tariffs, currency controls and in general, policies that result in inflation, recession, volatility of exchange rates, increases of interest rates affecting the investments and credit (ibid). Another set of risks refers to the weakness of the institutional framework in the host country, as the instability of the rules of trade, the lack of private property rights protection that leads to an unfavorable environment to enforce contracts (ibid; North, 2005).

A weak business environment in the importing country may harmfully affect the exporting transactions and its payments resulting in financial losses. In fact, risk of default may result not only because of an opportunistic behavior but, because of a firm’s liquidity problems. In Chile, an important proportion of defaults by international buyers are due to bankruptcies resulting from the high cost of credit (e.g. foreign currency debts, volatility of currency exchange rates) and the scarcity of or difficulties to access financial sources in the importing countries, especially for SMEs (COFACE, 2012).

In sum, parties to a transaction have to deal with incertitude related to quality and the specific attributes of the product transacted as well as the uncertainty of international markets. They are also exposed to the possibility of opportunism and manipulation of information due to the complexity of measuring the fresh fruit attributes and the

limited capability of the agents to anticipate the condition of the product at a later stage in the marketing chain. Exporters and importers are also exposed to economic, political and institutional changing conditions of the international scenario, and to the risk of institutional environment weakness that may affect the enforcement of the terms of agreements. Having set out the risk of international trade of perishable produce, I will now proceed to formulate the research questions.

3.6. THE RESEARCH QUESTION

In the light of the background discussed above, the objective of this doctoral thesis is to examine the contractual relations between Chilean fresh fruit exporters and importers with particular focus on their role to mitigate the hazards emerging from international trade. Consequently, the main research question is formulated as follows: *How are exporter-importer contracts chosen for counterbalancing the hazards of the international fruit trade?*

This question is divided into four specific sub-questions: In order to have a better knowledge of the diversity of the export-import arrangements the first sub-question is:

1. *What are the types of contractual arrangements?*

To clearly identify and explain the factors that entrepreneurs take into consideration when deciding the type of arrangement to use, the second sub-question is:

2. *What are the determinants for the choice of the contractual arrangements?*

To have a better understanding of the role of contracts and the degree of formalization in export-import transactions (understanding formalization as the act to sign a contract), the third sub-question is:

3. *What determines whether to sign a contract or not?*

Finally, to identify other contractual and non-contractual mechanisms, besides the contractual arrangements used to lower the hazard of export-import operations, the fourth question is:

4. *What are the mechanisms to secure transactions?*

In the following I discuss the framework that allows interpreting this questioning in theoretical terms, and subsequently how this theoretical frame provides the elements to answer these questions.

4. THEORETICAL FRAMEWORK

The purpose of this section is to provide a basis for the theoretical framework of this work. This study is based on the New Institutional Economics (NEI) particularly to Transaction Cost Economics (TCE) and Institutional Analysis (IA). It does not attempt to give an exhaustive review of the various approaches to study contracts nor to deepen knowledge of TCE nor IA. In this section, the review of the literature of both branches focuses on its relevance for the analyses of inter-firm contracts. The interest is to: a) identify the main characteristics of such arrangements; b) uncover the variables that influence the choice of different types of contracts; and, c) identify the institutional and organizational means for contract enforcement. In the following I briefly introduce the NEI and afterward the TCE and the IA. Then, at the end of this section I explain how the three subchapters of results of this study fit into this framework.

4.1. THE NEW INSTITUTIONAL ECONOMICS

“The source of a mighty river is a puny little stream
and that it derives its strength from the tributaries
that contribute to its bulk.” Coase, 1998:72

Through the preceding citation, Ronald Coase (1998) refers to the fact that the NEI has been formed thanks to substantial contributions besides his own seminal article “The Nature of the Firm” (Coase, 1937) which is widely recognized as the origin of the NEI. Coase (1998) specifically acknowledges the contribution of Oliver Williamson (1975) who coined the term “the new institutional economics” in his book *Markets and Hierarchies*. He also acknowledges Harold Demsetz for his developments on property rights, and Steven Cheung for his contribution to the TCE. According to Menard and Shirley (2012) in their review on the history of the NEI, other relevant contributions come from North: *Institutional Change and American Economic Growth* (Davis & North, 1970), *The Rise of the Western World* (North and Thomas, 1973); from influencing works in political sciences as Kenneth Shepsle,

Barry Weingast, James Buchanan and Gordon Tullock; managerial sciences as Chester Barnard; legal sciences as Llewelyn and Macneil, sociology as Merton and Macaulay, among others (Menard and Shirley, 2012:6). These contributions provided “the building blocks that transformed NIE’s initial intuitions into a useful analytical apparatus” (ibid:5) which differentiates the NEI from the Old Institutional Economics of John R. Commons, Wesley Mitchell “who were anti-theoretical, and without a theory to bind together their collection of facts, they had very little that they were able to pass on” (Coase, 1998:72).

Three key concepts: transaction costs, property rights and contracts, constitute the “golden triangle of NIE” and structure the two leading branches of NIE: the TCE and the IA (Menard and Shirley, 2012: 6). In the following I develop in more detail the concept of transaction costs, which is the central concept of new institutional economics, while the concepts of property rights and contracts are developed within the presentation of TCE and IA.

4.2. TRANSACTION COSTS

The concept emerges from Coase’s seminal article “The Nature of the Firm” (1937). In his article, Coase contests the mainstream economics (neoclassic) specifically, microeconomics⁴:

“The normal economic system works by itself. For its current operation it is under no central control, it needs no central survey. Over the whole range of human activity and human need, supply is adjusted to demand, and production to consumption, by a process that is automatic, elastic and responsive” (Coase, 1937:388)

Coase refutes the fact that the economic system works by itself and asks:

⁴ As Coase asserts: “When I speak of mainstream economics, I am referring to microeconomics. Whether my strictures apply also to macroeconomics I leave to others.” Coase, 1998:72

“If production is regulated by price movements, production could be carried on without any organization at all, well might we ask, why is there any organization?” (ibid: 388)

Then, basing his argumentation on examples from the real world in contrast to the ideal world of neoclassical economics, Coase reaches an answer:

“The main reason why it is profitable to establish a firm would seem to be that there is a cost using the price mechanism”(ibid. :390).

Coase reveals that the cost of economic exchange is not zero as the mainstream theory assumed. Even if Coase does not use the term transaction costs, he employs some examples to describe them.

“[T]he most obvious costs of *organizing* production through the price mechanism” (Coase, 1937: 399, emphasis by the author) are:

(i) “Discovering what the relevant prices are” (ibid).

Recognition of the information cost is fundamental. The neoclassical theory assumption was that “all the relevant prices are known to all individuals” which Coase argued “is clearly not true of the real world” (Coase, 1937: 390 footnote 4), and he proceeds with his argument, the cost of information “... may be reduced but it will not be eliminated by the emergence of specialists who will sell this information.”

(ii) “[T] he costs of negotiating and concluding a separate contract for each exchange transaction which takes place on a market must also be taken into account. Again, in certain markets, e.g. produce exchanges, a technique is devised for minimizing these contract costs but they are not eliminated” (Coase, 1937: 391).

Therefore, exchanging through the firm reduces the cost of contracting since, even though contracts are not eliminated, they are reduced.

(iii) “[O]wing to the risk attitude of the people concerned, they may prefer to make a long rather than a short-term contract. Now, owing to the difficulty of forecasting, the longer the period of the contract is for the supply of the commodity or

service, the less possible, and indeed, the less desirable it is for the person purchasing to specify what the other contracting party is expected to do. It may well be a matter of indifference to the person supplying the service” (Coase, 1937: 391).

In the preceding paragraph we can discover various topics that resulted in high interest for the analysis of contracts: (i) the duration (long term vs. short term contracts); (ii) the degree of completeness (due to the lack of capabilities to anticipate future conditions), and due to the difficulty of monitoring the other party to the contract, the risk of default or lack of compliance; and (iii) the difficulties of enforcement.

In summary, Coase’s (1937) transaction costs are the information cost (discovering what the prices are), negotiating and closing a contract, and the enforcement costs (Allen, 1999). Another two ground-breaking contributions of Coase was: (i) the introduction of the concept of property rights; and (ii) analysis of the externalities of the use of resources, in Coase’s terms “those actions of business firms which have harmful effects on others” (Coase, 1960:1).

(i) In his article on the Federal Communication Commission, Coase goes beyond the analysis of the exchange systems for products and services. He introduces the analysis of the exchange of rights, such as the right of a broadcaster to use a frequency. The nature of these rights has to be precisely defined, as well as the mechanisms of the enforcement, such as regulations and agencies for enforcement (in order to allow the good functioning of the system). In Coase’s terms:

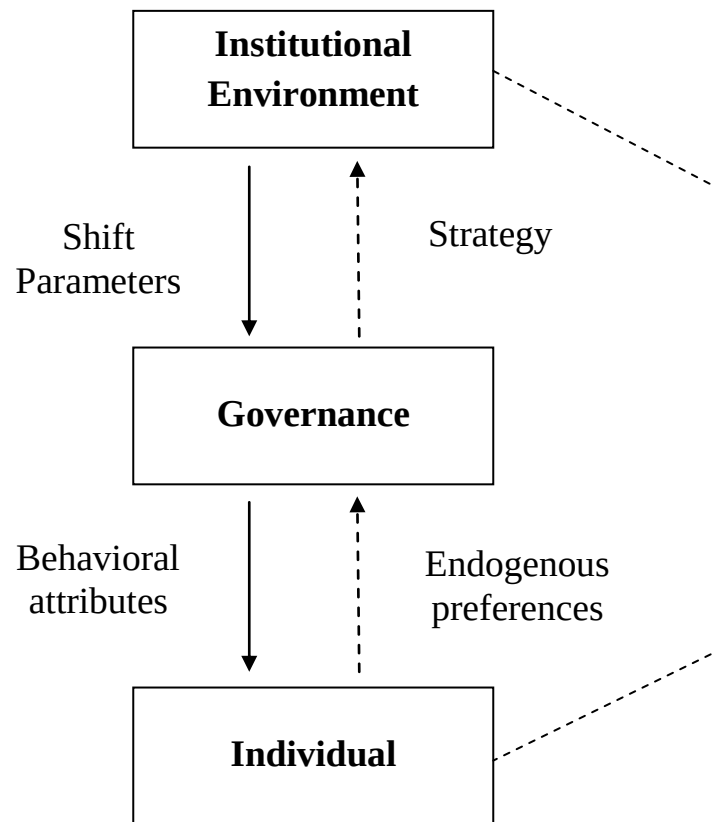
“A private-enterprise system cannot function properly unless property rights are created in resources, and, when this is done, someone wishing to use a resource has to pay the owner to obtain it. Chaos disappears; and so does the government except that a legal system to define property rights and to arbitrate disputes is of course necessary” (Coase, 1959:14)

(ii) In his article “The Problem of Social Cost,” Coase makes a significant contribution to the debate and analysis of the negative externalities or “those actions of business firms which have harmful effects on others” (Coase, 1960:1). This article

led to the assertion that in a world without transaction costs, property rights are transferred to those who value them most. The parties would reach an agreement on the rights of each one on the use of the property, regardless of what the law states (Coase, 1960).

Returning to Coase's (1937) contribution on the analysis of markets and firms, his article "The Nature of the Firm," even though it was little used for several years, its core concept regarding transaction costs, became central for two main developments: (i) Williamson's work on the choice between market and firm which lead to the Transaction Cost Economy; and, (ii) North's work on Institutional Analysis, especially on the means of contract enforcement (Menard and Shirley, 2012). Williamson explains this as follows: "The NEI actually took shape in two complementary parts. One of these parts deals predominantly with background conditions, and the second branch deals with the mechanism of governance. The two-part definition proposed by Lance Davis and Douglass North (1971: 5-6) distinguishes between the institutional environment and the institutional arrangements. The first of these describes the rules of the game. The second is what I refer to as the institutions of governance. This is what transaction cost economics has been predominantly concerned with, the governance of contractual relations" (Williamson, 1996:325–326).

Williamson proposes a scheme that shows the effects interacting at three levels (Figure 7): (i) the institutional environment (the rules of the game); (ii) the governance (the play of the game), and (iii) the individual level. The institutional environment as property rights, contract laws, norms, customs, standards, among others, affects the effectiveness of the alternative modes of governance (markets, hybrids and hierarchies).



Source: Williamson, 1996

Figure 7. Theoretical levels for the analysis of contracts

Changes at the institutional level would lead to adaptive changes at the modes of governance. There is a strong effect arising from the individual level due to the behavioral assumptions on which transaction cost economics is based. There are also effects from the governance and institutional environment levels to the individual level due to the assumption that governance and economic institutions influence the evolution of individual preferences (the endogenous preferences), and therefore this aspect is endogenous to the analysis (Williamson, 1996; Bowles, 1998).

This differs from the mainstream theory assumption where the individual preferences are exogenous and the possibility that something might change individual preferences is not considered by the economist (Friedman, 1986; Bowles, 1998).

There are also secondary effects as governance influencing the institutional environment. These effects may be instrumental as “requests of parties who find that extant law is poorly suited to support the integrity of the contract” or strategic as “protectionist trade barriers” (Williamson, 1996:225). North shares this point of view since he asserts that “economic change is a ubiquitous, ongoing, incremental process,” that is, a consequence of the choices individual actors and entrepreneurs of organizations are making every day. While the vast majority of these decisions are routine (Nelson and Winter, 1982) some involve altering existing “contracts” between individuals and organizations. Sometimes that re-contracting can be accomplished within the existing structure of property rights and political rules; but sometimes, new contracting forms require an alteration in the rules. Equally, norms of behavior that guide exchanges will gradually be modified or wither away. In both instances, institutions are being altered” (North, 1993:4).

TCE is essentially focused on the governance of contractual relations, while the Institutional Analysis led by North, is focused on the analysis of the institutional environment (Williamson, 1996:222). In the following I discuss both approaches.

4.3. Transaction Cost Economics

Williamson improved Coase’s insights on transaction costs and its implications for the choice between markets or firms (Menard and Shirley, 2012). Indeed, as asserted by Williamson (1975), Coase’s contribution lacked of precision to define the transaction costs.

“[T]ransaction costs ... are not operationalized in a fashion that permits one to assess the efficacy of completing transactions as between firms and markets in a systematic way” (Williamson 1975: 3).

Subsequently, Williamson detailed the key aspects for operationalization: (i) identifying the behavioral assumptions that are responsible for transaction costs and developing their contractual ramifications; (ii) proposing a basic unit of analysis; and (iii) developing the logic of microeconomic organization (whereby some transactions

are predictably organized one way and others are organized another) and discovering and explicating distinctive patterns or regularities in the process (ibid; 229–230).

Williamson developed the fundamentals of the TCE and established its differences with respect to the neoclassical theory (Table 7):

Behavioral assumptions: TCE is based on two behavioral assumptions: bounded rationality and opportunism. The concept of bounded rationality was coined by Herbert A. Simon in his study of organizational behavior (Williamson, 1975). According to Simon, humans are “intendedly rational, but only limitedly so” (Simon, 1957a:xxiv) because: “the capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems, whose solution is required for objectively rational behavior in the real world” (Simon, 1957b:198). A limited rationality impedes the actors to calculate and to anticipate the future and therefore to develop complete contracts. In other words: “all contracts are unavoidably incomplete” (Williamson, 1996: 37). Opportunism is “defined as self-interest seeking with guile, to include calculated efforts to mislead, deceive, obfuscate, and otherwise confuse. Opportunism should be distinguished from simple self-interest seeking, according to which individuals play a game with fixed rules that they reliably obey” (Williamson, 1996:378). This assumption “is less offensive than it first appears. To assume that human agents are opportunistic does not mean that all are continually given to opportunism. Rather, the assumption is that some individuals are opportunistic some of the time and that is costly to ascertain differential trustworthiness ex-ante” Williamson, 1996:48). On the contrary, neoclassical theory assumes hyper-rationality of the agents while risk of opportunism is mostly suppressed. The occurrence of bounded rationality and opportunism affect how the economic agents organize transactions to reduce the hazards (Williamson, 1996).

Fundamentals	TCE	Neoclassical theory
Behavior assumptions	Bounded rationality Risk of opportunism	Hyper-rationality. Risk of opportunism is often suppressed
	The transaction	A composite goods and services
Governance structure	Firm is a governance structure (an organizational construction) Firms and markets are alternative modes of governance (Coase, 1937)	Firm is defined as a production function (a technological construction)
Property rights and contracts	Property rights and contracts are problematic	Often and implicitly assumes that property rights are easy to define
Discrete structural analysis	Alternative modes of governance	Marginal modes of analysis

(Source: Williamson 1996:6-10)

Table 7. Fundamentals of TCE and differences with the neoclassical theory

Unit of analysis: Williamson integrated the transaction cost approach of Coase with Commons' contribution regarding the unit of analysis, which is "...the ultimate unit of activity ... must contain in itself the three principles of conflict, mutuality, and order. This unit is a transaction" (Commons 1934:4). As Williamson asserts, "not only does transaction cost economics subscribe to the idea that the transaction is the basic unit of analysis, but governance is an effort to craft order, thereby to mitigate conflict and realize mutual gains" (Williamson; 2000: 12). Subsequently, Williamson makes the transaction as the unit of the analysis, considering that "a transaction occurs when a good or service is transferred across a technologically separable interface" (Williamson 1996: 58).

Governance structure: The TCE considers firms as an institutional matrix, which differs from the neoclassical approach that defines firms as a technological structure. For the TCE there are three alternative types of organization or governance structures

for handling transactions: The market, hybrid contracting and hierarchy. Market is where the parties to the transaction are autonomous and anonymous; it involves the participation of a large number of buyers and sellers that may trade with any of the sellers or buyers at low cost. As the asset specificity of the product or service transacted rises and the identity of parties matters, the transactions occur through hybrid contracts and hierarchy. Hybrids are long-term contractual relations of autonomous parties that provide specific safeguards to protect transactions compared to markets (Williamson 1996:378). Hierarchy corresponds to the unified ownership organizations, where the buyer and the seller are under the authority of the same firm (ibid).

Property rights: The TCE considers the following interpretation of property rights: (a) “the right to use the asset [and delimitations that apply thereto]... (b) the right to appropriate returns from the asset . . . , and (c) the right to change the asset’s form and/or substance” (Furubotn and Pejovich, 1974:4 cited by Williamson 1991:287). Contrary to the neoclassical theory, for which property rights are easy to define at a negligible cost, the TCE property rights are difficult to establish and are vulnerable to opportunism of the economic agents. Furthermore, property rights are difficult to enforce by the legal system due to the bounded rationality that reduces the capability of the parties to draft complete contracts and that generates inability of the judges to verify difficult clauses and enforce incomplete contracts. Consequently, TCE stresses the use of security features as safeguards to reduce hazards, as well as to resort to private enforcement mechanisms (Williamson, 1996).

Discrete structural analysis: Williamson is based on Simon’s concept of discrete structural analysis:

“As economics expand beyond its central core of price theory, and its central concern with quantities of commodities and money, we observe in it...[a] shift from a highly quantitative analysis, in which equilibration at the margin plays a central role, to a much more qualitative institutional analysis, in which discrete structural alternatives are compared” (Simon, 1978:6–7 cited by Williamson 1991:270).

Subsequently, Williamson considers that discrete structural analysis is necessary because: “(1) firms are not merely extensions of markets but employ different means, (2) discrete contract law differences provide crucial support for and serve to define each generic form of governance, and (3) marginal analysis is typically concerned with second-order refinements to the neglect of first-order economizing” (ibid:170).

Remediableness: For the TCE organizational efficiency is not necessarily that which allows the cost maximization or the lowest cost, as stated by the neoclassical theory, but rather the organizational form constitutes the best and feasible alternative compared to other choices (Williamson, 1996). In other words, “a condition is held to be remediable if a superior feasible alternative can be described and implemented with net gains” (Williamson, 1996:376).

4.3.1. Choice of governance

The interest of TCE is focused on to explain the economizing efforts of the agents to organize transactions. To do so, the TCE identifies the attributes of the transactions, and how these attributes influence the choice of alternative forms of governance that vary in their costs and competences (Williamson, 1996). The main attributes of transactions are: “the frequency with which they recur, the degree and type of uncertainty to which they are subject and the condition of asset specificity” (Williamson, 1996:59).

Frequency: According to Williamson organizations opt for integration when transactions are large and recurrent. In other words, while one-off transactions are characteristic of the spot market, occasional and recurrent transactions result in bilateral governance or integration. However this prediction has not been confirmed (Chabaud et al., 2008, Macher J.T. and Richman B.D., 2008). There exists another divergence with regard to the effects of frequency on a partner’s behavior. Although Williamson argues that frequency increases the risk of opportunism, many authors claim that the repetitions of transactions inhibit the occurrence of opportunistic behavior due to a rise of reputation, and reputation between the parties reduces the

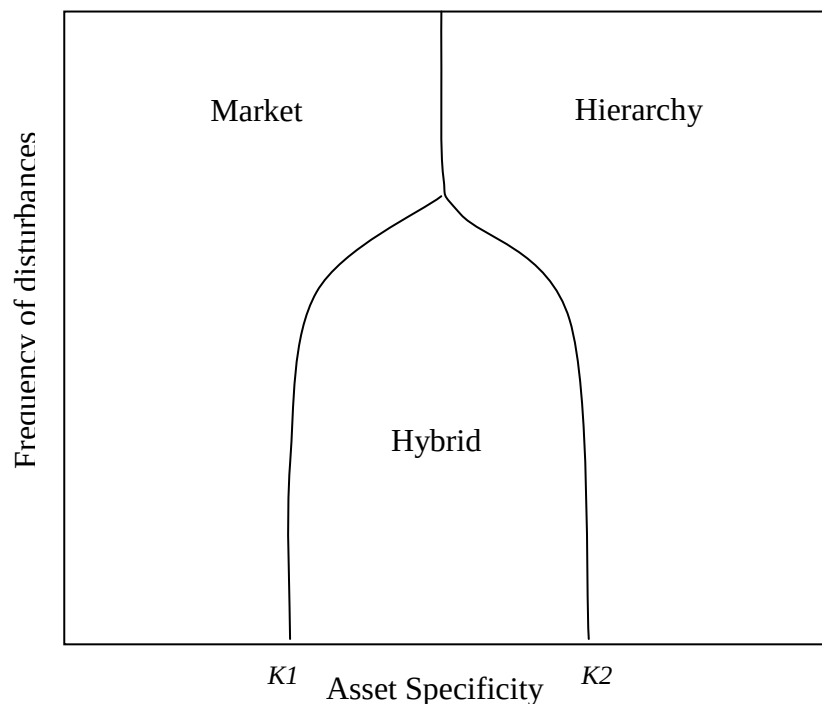
need for the parties to resort to formal coordination mechanisms (Saussier & Yvrande-Billon, 2007).

Uncertainty: Williamson builds on Koopmans's distinction between primary and secondary uncertainty. The first arising "from random acts of nature and unpredictable changes in consumers preferences" or other changes in markets, while the secondary uncertainty arising from the lack of knowledge concerning the other market participants' actions. Consequently, Williamson identifies two types of uncertainty: the **environmental uncertainty**, which is linked to the state of nature and is exogenous to the decision of contract parties; the **behavioral** or strategic uncertainty which is endogenous to the parties and may have its origin in the opportunism of parties (Williamson, 1996; Saussier & Yvrande-Billon, 2007). "The comparative efficacy of alternative forms of organization for dealing with uncertainty through adaptive, sequential decision making is a recurrent concern in the transaction cost economics" (Williamson, 1995:45). Williamson coincides with Hayek's assertion: "The economic problem of society is mainly one of the adaptations to changes in particular circumstances of time and place" (Hayek, 1945:524 cited by Williamson, 1985) and to some extent is close to Cyert and March statements of how managers deal in the short run to reduce uncertainty, "[managers] impose plans, standard operating procedures, industry tradition, and uncertainty (absorbing contracts)" (Cyert and March, 1963:119). Uncertainty has a key role in economic organization.

Asset specificity: "Has reference to the degree to which an asset can be redeployed to alternative uses and by alternative users. Asset specificity can take various forms: site specificity, physical asset specificity, human asset specificity, and dedicated asset specificity. The concept of specificity of investments refers to those investments made expressly for a specific transaction or a specific client or use, which cannot be reoriented for other uses or for other clients, without sacrifice of productive value; this implies a high risk of hold-up for the party that has made the investment. The TCE defines six forms of the specificities: Physical asset specificity (such as equipment, facilities); Human asset specificity (specific knowledge of the

market/product/service); Dedicated assets specificity (investments in general purpose that are made for a particular customer). Other assets that have been added are: brand name capital and temporal specificity (Williamson, 1996) and complementary assets (physical or human assets required to support the marketing of another asset) (Teece, 1986).

The attributes of the transactions such as the levels of assets specificity and the uncertainty surrounding the exchanges influence the choice of alternative forms of governance. Williamson (1996) exposes this phenomenon through Figure 8.



(Source: Williamson, 1996:11)

Figure 8. Choice of governance

The transaction may involve assets specificity ranging from zero (as generic products) to “purely firm-specific”; while uncertainty, which can be represented by frequency of disturbances, ranges from “low” when the environment is stable, to very high. When there are high levels of uncertainty, the choice of market increases if the exchange involves low assets specificity, while if the product at stake involves high levels of assets specificity the choice of hierarchy will increase. The hybrid

governance can be unviable when there are high levels of uncertainty “because hybrid adaptations cannot be made unilaterally (as with market governance) or fiat (as with hierarchy) but requires mutual consent” (ibid: 117) to renegotiate and adjust agreements or contracts to the changing circumstances.

Williamson “advance the hypothesis that each generic form of governance (market, hybrid, and hierarchy) needs to be supported by a different form of contract law... the form of contract law that supports hierarchy is that of forbearance... Classical contract law applies to the ideal transaction in law and economics,” sharp in by clear agreement; sharp out by clear performance” (Macneil, 1974: 738) in which the identity of the parties is irrelevant. “Classical contract law is congruent with and supports the autonomous market form of organization” (Macneil, 1974, 1978) cited by Williamson (1991): hybrid modes of contracting, as relational contracts, are supported by neoclassical contract law. The parties to such contracts maintain autonomy, but the contract is mediated by an elastic contracting mechanism (Ibid).

Contracts: According to Williamson, “[c]ontract is an agreement between a buyer and a supplier in which the terms of exchange are defined by a triple: price, asset specificity, and safeguards” (Williamson, 1996:377), where safeguards is defined as “the added security features, if any, that are introduced into a contract in order to reduce hazards (due mainly to asset specificity) and to create confidence (ibid:379). The motivations for contracting are the risk transfer, incentive alignment, and transaction cost economizing (Masten, 1999). Contracts allow transaction costs to be reduced by planning actions, making provisions for ex post adjustments and for the distribution of benefits and restrict ex post renegotiations and hold-up in operations that involve specific investments (Williamson, 1975, 1979; Klein et al, 1978 cited by Masten and Saussier, 2002). From a theoretical point of view, is necessary to identify the sources generating these costs in order to have a better understanding of the problematic and therefore of the agent’s motivation for choosing among a variety of contractual forms (Saussier & Yvrande-Billon, 2007). Costs of contracting are classified into: ex-ante costs (writing, searching the counterparts, negotiating the agreement, defining warranties, and the costs of studies) and ex post costs (bad

adaptation of the contract, monitoring costs, and potential breach or renegotiation) (Saussier, 2007).

The study of contracts has allowed generating predictions concerning some key aspects: the contract's duration; the contract's degree of completeness; and the enforcement procedures (Menard, 2002). Another trend of analysis is the relational component of contracts (Macneil, 1978) and its degree of formalization (Macaulay, 1963; Palay, 1985). For the purpose of this study I am focusing on the degree of completeness and formalization.

Incomplete contracts: “A major advance in economics involves the recognition that contracts adopted by transactors are incomplete” (Klein, 2002). The parties cannot define complete contract agreements, providing for all contingencies, obligations and conditions ex-ante, by various factors: problems of interpretation due to the limited rationality of agents, limitations on available information, uncertain environment, and the complexity of the transaction, which reduces the ability of anticipation of future situations (Klein, 2002; Goetz and Scott, 1981 cited by Macleod, 2002). “Such contracts arise when the number of contingencies are so large that it is not possible to write a complete contingent contract, creating problems for the interpretation and enforcement of contract terms and conditions” (Macleod, 2002). According to Williamson (1996:378), “contracts are effectively incomplete if: (1) not all the relevant future contingencies can be imagined, (2) details of some of the future contingencies are obscure, (3) a common understanding of the nature of the future contingencies cannot be reached, (4) a common and complete understanding of the appropriate adaptations to future contingencies cannot be reached, (5) the parties are unable to agree on what contingent event has materialized, (6) the parties are unable to agree whether actual adaptations to realized contingencies correspond to those specified in the contract, and (7) even though both the parties may be fully apprised of the realized contingency and the actual adaptation that have been made, third parties (e.g. courts) may be fully apprised of neither, in which event costly haggling between bilaterally dependent parties may ensue.” Therefore, “one contract is more complete than another if it gives a more precise definition of the transaction and of the means to carry it out” (Saussier 2000).

Formal contract: The concept of formal contract has an essential connection between contract design, and contract enforcement (Masten, 1999). Williamson (1991), referring to transactions in the market, indicates that the law of contracts is very legalistic, meaning that formal contracts prevail over informal contracts, and he illustrates with examples the difference between formal “written agreements” and informal “oral amendments.” (ibid: 271). In economic literature, the mainstream meaning of formal contract is a legally enforceable agreement where the transactors are able to appeal to a dispute resolution system and a coercive power to enforce promises (Masten, 1999). The parties enter into legal agreements and accept the intervention of a judicial third-party, which has the authority to dictate sanctions and to intervene in case of controversy, or requirements of adjustments in the terms agreed in the contract (Masten and Saussier, 2002). The higher the complexity of the contract, the greater detail in the specification of the terms regarding the characteristics of the product or service to be exchanged, obligations, penalties, method of control and monitoring, as well as the foresight of conflict resolution mechanisms (Poppo & Zenger, 2002).

Although many of the studies on the formalization of contracts have been developed using the framework of the TCE, there has been a relevant complementing with IA that is more oriented to the analysis of the contract enforcement mechanisms. Below I will briefly present this second branch of the NEI.

4.4. INSTITUTIONAL ANALYSIS

“The costs of exchange depend on the institutions of a country: its legal system, its political system, its social system, its educational system, its culture, and so on. In effect it is the institutions that govern the performance of an economy and it is this that gives the “new institutional economics” its importance for economists” Coase (1998:73).

According to North, Coase's contribution was essential to link institutions and transaction costs: when it is costly to transact, institutions matter. This challenged the neo-classical theory that was based on an idealized world where there are no transaction costs and where institutions do not count (North, 1993). North built on these ideas and developed the IA whose central interest is explaining how the quality of institutions and property rights enforcement affect the development of societies (Menard and Shirley, 2012:9). North states that 'the central issue of economic history and of economic development is to account for the evolution of political and economic institutions that create an economic environment that induces increasing productivity' (North, 1991, p. 98).

Institutions matter because they "form the incentive structure of a society and the political and economic institutions, in consequence, are the underlying determinant of economic performance" (North, 1993:1). On the other hand, the historical analysis is important since "[t]ime as it relates to economic and societal change is the dimension in which the learning process of human beings shapes the way institutions evolve" (North, 1993:2). North builds on Hayek's theory of cultural evolution where culture is "the transmission in time of our accumulated stock of knowledge" and knowledge is "all the human adaptations to the environment which were derived from past experience: habits, skills, emotional attitudes, as well as institutions" (North, 2005: 51).

Therefore, the IA seeks to provide an analytical framework for the economic analysis to promote the conditions to enhance the economic performance of societies. To achieve this purpose, institutional analysis has opted for a research strategy that integrates the historical perspective of the economic evolution in different societies. This allows a better understanding of why some countries (or societies) have achieved and maintain economic development while others have remained stagnant in the underdevelopment (North, 1993).

The IA considers that "the interaction between institutions and organizations... shapes the institutional evolution of an economy." Institutions are defined as "the rules of the game," while "organizations and their entrepreneurs are the players"

(North, 2005:59). Institutions are formal and informal and are intrinsically connected given that formal institutions are embedded in a context of informal norms. '[F]ormal rules ... make up a small ... part of the sum of constraints that shape choices; ... the governing structure is overwhelmingly defined by codes of conduct, norms of behavior and conventions' (North, 1990, p. 36 cited by Klein, 2000). Formal and informal institutions change, evolve, forming part of a dynamic economic world (North, 2000a). The former can be changed quickly, while the latter usually change gradually and slowly "and play a critical role in the evolution of policies" (North, 2005: 51). Therefore institutional changes occur through an evolutionary process and not through the attempt to transplant the institutions from one society to another (North, 1993; 2005).

North also asserts that informal institutions can evolve towards the establishment of formal institutions. To support this point, North builds on Greif who analyzed the evolution of rules to facilitate trade in the Mediterranean during the eleventh and twelfth centuries. The Genoese merchants developed bilateral enforcement that evolved into formal legal and political institutional structures to monitor compliance with agreements allowing the anonymous and impersonal exchange that leads to the expansion of trade (North, 1994; 2005). In contrast, other societies "did not evolve into the impersonal exchange essential to capturing the productivity gains that came from the specialization and division of labor that have produced the Wealth of Nations" (North, 1994: 364).

In summary, both formal and informal institutions change, evolve and current static theories do not allow having a complete understanding of this complex phenomenon (Ibid). North goes one step further to identify what the critical aspects generating transaction costs are and that may constitute sources of inefficiencies in the economic systems. These key factors are: "(i) measuring the multiple valuable dimension of a good or service; (ii) the protection of individual property rights; (iii) the integration of the dispersed knowledge of a society; (iv) the enforcement of agreements" (North, 2005:158) (Table 8).

Measuring the multiple valuable dimension of a good or service: Goods and services have different dimensions or attributes that are valuable to the individual (North, 1993; 2005). These dimensions may be physical and therefore having “objective characteristics as size, weight, color, etc. (North, 1993:2) or/and property rights that “are defined in legal terms” (ibid). To lower transactions costs of specifying what is being traded and of enforcing the consequent contracts, it is necessary to improve the capabilities to measure these attributes through a uniform system of weights and measures and to improve the specification of property rights (North, 1993; 2005)

The protection of individual property rights: Appropriate policies significantly shape economic performance because they delineate and enforce the economic rules. Consequently, the policy development of an enabling framework to enforce property rights efficiently is fundamental. It is necessary to develop enforcement mechanisms of third parties as the judicial systems, which provides both a coercive enforcement and complement the individuals’ resources allocated to protect property rights (North, 1993; 2005).

Integration of the dispersed knowledge of a society: In contemporary societies economies have become highly complex, the division of labor has allowed greater precision and greater productivity, but also has generated the dispersion of knowledge, which is a source of transaction cost, as the cost to measure and ascertain the performance of goods and services. North cites Hayek (1979:190) to define that knowledge is: “the problem of finding a method that not only best utilizes the knowledge dispersed among individual members of society but also best uses their abilities of covering and exploring new things.” Knowledge can reduce uncertainty through the development of institutions and organizations that “provide warranties, guarantees, and the necessary informational structure to deal effectively with the vast range of goods and services available” (North, 2005:73).

Enforcement of agreements: A weak institutional environment generates uncertainties due to the insecurity of property rights and the limitations of contract enforcement. Therefore, efficient economies require institutional structures consisting

of formal rules and informal norms and their enforcement mechanisms to define “the way the game is played” (North, 2005:48) and to provide efficient protection for transactions and property rights which is critical to the functioning of relative efficient markets (North, 1990). To reduce the cost of enforcement, North advocates for the creation, strengthening of third party enforcement systems, judicial systems and mechanisms for monitoring agreements and for measuring whether the terms of the agreements have been met and for applying effective penalties in case of default, although “third party enforcements is never ideal, never perfect” (North, 1990:35). These legal systems (public or private), are complementary with informal institutions as reputation systems and “[t]hey are complementary parts of a total system that works together to enforce honest behavior” (Milgrom, North and Weingast, 1990:21).

Sources of transaction costs	Means to lower transaction costs
Measuring the good or service	Development of a uniform system of weights and measures
Protection of property rights	Improvement of the specifications of property rights
Dispersed knowledge	Development of institutions to integrate dispersed knowledge
Enforcement of agreements	Creation of an effective judicial system Monitor and meter agreements and adjudicate disputes

Source: North, 2005:158-159

Table 8. Sources of transaction costs and means to lower transaction costs

North’s theoretical contributions are critical to understanding the contractual practices of firms, which are beyond the contract itself. By using both the theory of TCE as well as the IA, we can have a more complete view of the problems of this study. Therefore, having established the fundamentals of these two branches of the NEI, in the following I will discuss its application to this study.

4.5. APPLICATION OF THE THEORETICAL FRAMEWORK TO THE STUDY

The TCE and the IA are based on assumptions that reflect the real conditions of the international fruit trade: (i) the incomplete and asymmetric information of contracting parties; (ii) limited rationality of agents that impede them to calculate and anticipate the future and to develop complete contracts, and disable the judges to enforce incomplete contracts especially those with clauses difficult to verify (Williamson, 1985; 1996).

As previously discussed, a contractual relation is embedded in three levels: the institutional, the governance, and the individual level (Williamson's schema Figure 1). For the purpose of this study, I focus on the institutional and the governance levels and the interaction of both (Figure 9). Using this theoretical framework, I attempt to answer the research question of the study: *How are exporter-importer contracts chosen for counterbalancing the hazards of the international fruit trade?*

To analyze the exporter-importer contractual arrangement itself, which correspond to the governance level, I resort to the TCE framework developed by Williamson. The TCE is the main framework of this study; it allows explaining the choice of alternative forms of contractual arrangements for managing the *very same transactions* (Williamson, 1996:25, emphasis by the author). In this study the TCE allows explaining the choice of different types of exporter-importer contracts within the same economic sector. I position the analysis mainly from the perspective of the exporter and explain the factors influencing the choice of contracts. The TCE also provides the theoretical and empirical framework that generates testable hypotheses that are developed in 6.1 and 6.2 of the results.

The institutional analysis branch, developed by North, allows us to: (1) uncover and interpret current contractual practices using the lens of a historical perspective of the evolution of institutions; (2) understand how institutions (such as courts, arbitration, insurance, and contract innovations), as well as informal institutions (such as reputation), provide, or not, a suitable frame to enforce contracts, reduce transaction costs, secure transactions and therefore provide incentives for the development of

trade; and (3) interpret the effect of different institutional settings in the destination countries on the choice of alternative types of contracts (North, 1991).

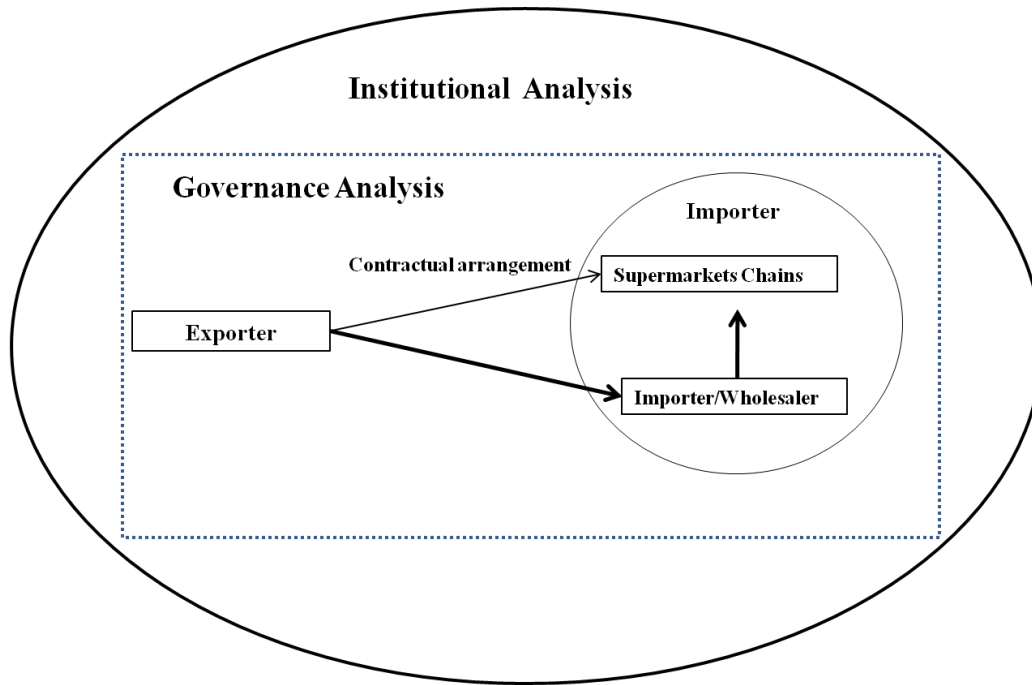


Figure 9. Theoretical levels of the exporter-importer contract analysis

Subsequently, the TCE and the IA frames are used in a complementary manner. Both approaches help explain the research phenomenon of this doctoral thesis: *How alternative contracts may constitute means for counterbalancing the hazards of the international fruit trade*. This theoretical frame gives me support to interpret the questions arising from the empirical context that were discussed in the previous section, and to convert them into theoretical questions that guide the analysis of each part of the results of this study. In Table 9, I attempt to reflect the transformation from the empirical to the theoretical questions.

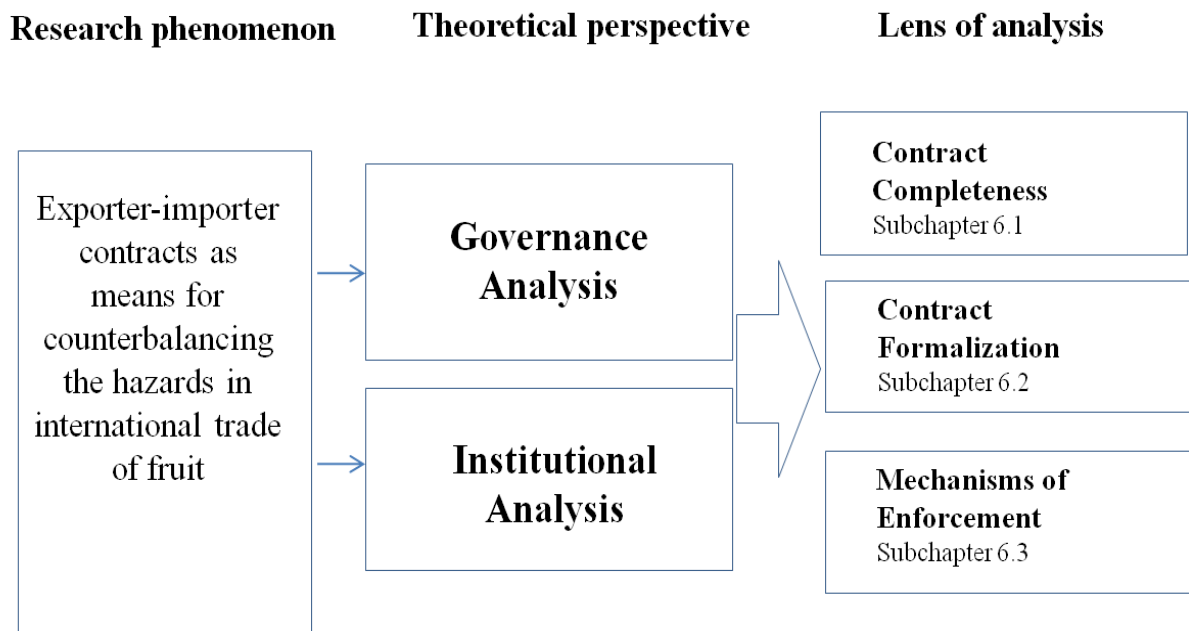
Empirical questions	Theoretical questions
1. What are the types of contracts?	What is the degree of completeness of each type of contract?
2. What are the determinants for the choice of alternative types of contracts?	What are the determinants of the choice of the degree of contract completeness?
3. What determines whether to sign a contract, or not?	What is the degree of formalization of contracting?
4. Which are the mechanisms to secure transactions?	What are the mechanisms to enforce contracts?

Table 9. Transformation of the empirical questions into theoretical questions

The most important transformation refers to the first three questions. I first have to uncover the types of contractual arrangements used in the industry and then interpret them by two lenses of analysis: the degree of contract completeness and the degree of formalization. I split the analysis of the phenomenon from the starting point of the empirical questioning and I arrive to the following theoretical questions: (1) What is the degree of completeness of each type of contract? (2) What are the determinants of the choice of the degree of contract completeness? (3) What is the degree of formalization of contracts? (4) What are the mechanisms of contract enforcement?

The analysis of these theoretical questions is performed separately in subchapters 6.1, 6.2 and 6.3 of results. In this chapter I only advance some elements to explain this choice of analysis while, in chapter 6, I expand on the theoretical discussion to address each question. Consequently, 6.1 focuses on the degree of contract completeness, explaining some of the factors affecting choice of exporters between two alternative types of export-import contracts a more complete contract (firm sale) or a less complete contract (consignment); 6.2 focuses on the degree of formalization, introducing the discussion of formality/informality of fruit trade contracts and deepens the choice of exporters for signing, or not, a contract; and finally 6.3 analyzes the mechanisms of public/private and formal/informal enforcement that

allow for a reduction in certain hazard levels in the international fruit trade (Figure 10).



Adapted from Makela, 2006

Figure 10. The theoretical perspective and lens of analysis of the study

A governance analysis permits the understanding of the contractual arrangements used by exporters and importers to organize transactions more effectively, reducing transaction costs by planning the export-import operations, making provisions that enable the parties to have, on the one hand, sufficient flexibility to adapt within the changing situations and complexity of the business, while generating, ex-ante, the necessary provisions to ensure an effective allocation of risks and benefits, and to mitigate the risks of opportunistic behavior or even the risks of hold-up (Williamson, 1975). At the governance level of analysis, I identify the attributes of the transactions, i.e. frequency, uncertainty, asset specificity, that influence the choice of contracts in the international fresh fruit transactions. I focus mostly on the last two attributes, especially the uncertainty attribute because, as can be inferred from the empirical discussion in the previous section, it constitutes a major source of risks in this case of analysis. I also incorporate in the analysis the role of relational attributes (trust, distrust, reputation) that may also influence the choice of contracts (Figure 11).

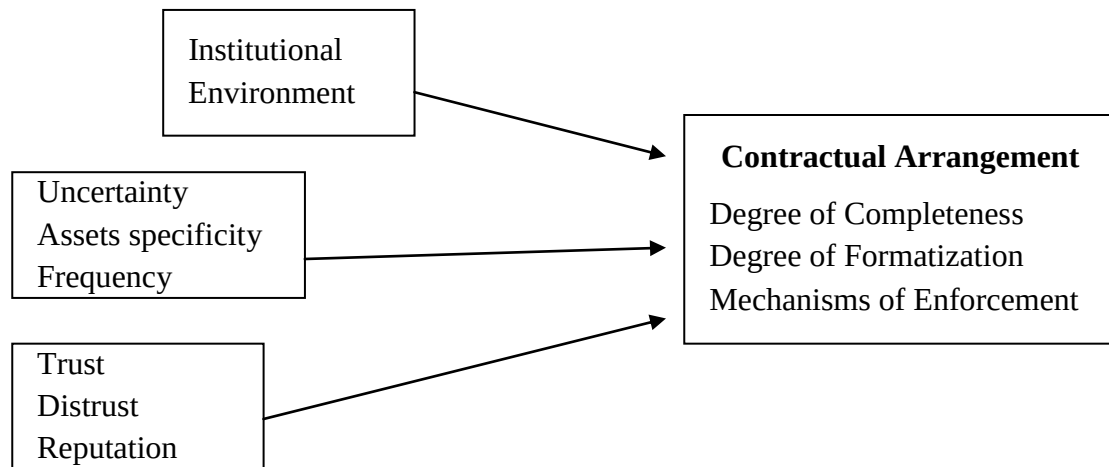


Figure 11. The model of the study

As asserted by Williamson (1996) the contractual relations at the governance level are influenced by the institutional level; therefore, I include this level of analysis to understand how parties deal with the source of transaction costs, especially those of measuring the goods, the protection of property rights, and the enforcement of agreements (North, 2005). Consequently, I take into consideration institutional environmental variables such as the institutional law, regulations, norms, arbitration, insurance, among the principal ones that provide the credibility of business environments which may influence the choice of specific contractual arrangements (Figure 11).

The three subchapters of results are built on relevant economic and management literature. At this stage of the document, I do not develop on these contributions; however, in the following table I attempt to evidence the main references used for each subchapter including the key variables analyzed.

Lens of analysis	Variable to explain	Explanatory variables	Key references used
Degree of completeness (Subchapter 6.1)	Choice between alternative contracts		Crocker and Reynolds (1993)
		Uncertainty	Williamson (1996)
		Time specificity	Williamson (1996)
		Institutional Environment	Allen & Luek (2005)
			Davis & North, (1971) Aulakh & Gencturk (2008)
Contract formalization (Subchapter 6.2)	Signing a contract		Lyons (1994)
		Uncertainty	Williamson (1996)
		Trust	Macneil (1978)
			North (1991)
		Distrust	Poppo & Zenger (2002)
Contract enforceability (Subchapter 6.3)	Mechanisms of enforcement		Levi (2000)
		Institutional Environment	North (1991)
		Contractual practices	North (1991,2000,2005) Menard (2002)
		Informal institutions (trust, reputation)	Greif (1991)
		Formal institutions (public, private)	Milgrom, North & Weingast (1990) Zhou & Popoo (2010) Mazé, Menard, 2010

Table 10. Key theoretical and empirical references of the study

I close this chapter by stating that, in addition to the combination of the two theoretical perspectives and the analysis through various lenses discussed above, I applied both qualitative and quantitative research methods in order to gain a more complete understanding of the phenomenon. The next chapter describes the methodology of the study.

5. METHODOLOGY

This study is based on the post-positivism philosophical paradigm, which embraces the assumptions of critical realism, objectivism and critical multiplism (Guba and Lincoln, 1994:108). The research questions are addressed by using a multistrand design within sequential and concurrent qualitative and quantitative mixed models

(Tashakkori and Teddlie, 2003). The empirical data analyzed in the three subchapters of results were gathered through a three-phase research process: (i) in the first phase of the exploratory study, 39 semi-structured interviews were conducted with export-import managers and service providers to identify and describe the contractual practices in the international fruit trade, with emphasis on the Chilean exporters' perspective. Resulting data was analyzed using qualitative methods in Chapter 3 of findings; (ii) in the second phase of a confirmatory study, 65 in-person survey questionnaires were conducted with Chilean export managers. Resulting data were analyzed using descriptive and non-parametric statistical methods in subchapter 6.2 and served to complement the analysis in subchapters 6.1 and 6.3; (iii) in a third phase, findings from phases 1 and 2 were triangulated with a Chilean customs dataset containing all export shipments (N=170,370) and its corresponding exporter-importer contract. A logistic model regression analysis was performed in subchapter 6.1. Also, 44 international arbitration cases were analyzed using a qualitative method that was used in subchapter 6.3. This multistrand research design increases the power of the inferences and the reliability of the results, providing new explanations of the phenomenon (Creswell et al., 2003, Tashakkori and Teddlie, 2003).

5.1. THE PHILOSOPHICAL PARADIGM

The choice of a paradigm⁵ is fundamental for the design of a research study. A paradigm “guides the investigator, not only in choice of methods but in ontologically and epistemologically⁶ fundamental...” questions (Guba and Lincoln, 1994:105) that frame the research. The ontological question: What is the nature of reality and what can be known about it? The epistemological question: What is the relationship between the researcher and what can be known? The methodological question: How can the researcher find out whatever can be known (Guba and Lincoln, 1994:108)?

⁵ “A **paradigm** may be viewed as a set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the “world,” the individual’s place in it, and the range of possible relationships to that world and its parts.” Guba and Lincoln 1994:107

⁶ **Epistemology** refers to the nature of the relationship between the knower, the researcher, to the known (Lincoln and Guba, 1985:37), is concerned with questions about whether and how valid knowledge about reality can be achieved (Erzberguer and Kelle, 2003 :708).

This study is positioned in the **post-positivist paradigm**, which evolved from the positivist approach (For a comparison with the positivist paradigm see Table 11). Post-positivism is based on the **ontological** principle that reality is only imperfectly apprehendable because of the imperfect human intellectual capabilities and the complex nature of phenomena (Cook and Campbell, 1979; Phillips, 1990; Guba and Lincoln, 1994; Gavard-Perret et al., 2008). This ontological position is described as **critical realism** (Cook, 1985) where “reality must be subject to the widest possible critical examination” (Guba and Lincoln, 1994:106), through the use of multiple alternatives of method choice “to triangulate on the most useful or the most likely to be true” (Cook, 1985: 40).

On the other hand, while positivism seeks to verify a priori hypothesis, post-positivism seeks to falsify them. A clear way to understand the concept of falsifiability is Popper’s well-known illustration: “Whereas a million white swans can never establish, with complete confidence, the proposition that all swans are white, one black swan can completely falsify it” (cited by Guba and Lincoln, 1994:106). Therefore, “every genuine test of a theory is an attempt to falsify it, or to refute it. Testability is falsifiability; but there are degrees of testability; some theories are more testable, more exposed to refutation, than others” (Popper, 1968).

Item	Positivism	Post-positivism
Ontology	Naïve realism, “real” reality but apprehendable	Critical realism, “real” reality but only imperfectly and probabilistically apprehendable
Epistemology	Dualist/objectivist, findings true	Modified dualist/objectivist, critical tradition/community, Findings probably true
Methodology	Experimental/manipulative, verification of hypothesis, chiefly quantitative methods	Modified experimental/manipulative, critical multiplism, falsification of hypotheses, may include qualitative methods

Source: extracted from Guba and Lincoln, 1994: 109

Table 11. Comparison between the positivism and postpositivism paradigms

From an **epistemological** perspective, in contrast to positivism which is based on a dualist/objectivist assumption that: the researcher can be separated from the researched and is able to objectively determine the reality and findings are universally generalizable regardless of the context and time in which the phenomenon occurred (Denzin, 1989), post-positivism modified the dualist/objectivist position (Table 10). Post-positivism consider that the observations made by the researcher are not neutral because there is a theoretical pre-orientation and the researcher can influence the subject of research as well as the subject of research can influence the researcher (Phillips, 1990). Therefore, in order to enhance the objectivity of the research, the researcher must resort to means to counterbalance the risks of bias: through the report of findings (that are probably true) to the judgment of scholarly tradition of the field (critical traditions) and the critical scientific community, such as professional peers (Phillips, 1990; Guba and Lincoln, 1994).

In terms of **methodology**, post-positivism evolves from an experimental/manipulative positivist approach to a modified experimental/manipulative one where a **critical multiplism** (Cook, 1985) – a form of elaborated triangulation (Denzin, 1978) is sought to improve the validity of the findings. Consequently, while positivism resorts exclusively to quantitative methods, post-positivism accepts and endeavors to use more than one method of research, including qualitative methods – for data collection, analysis and interpretation of the phenomenon – in order to achieve the maximum possible objectivity (Phillips, 1990; Guba & Lincoln, 1994; Gavard-Perret et al., 2008; Gephart, 1999).

The post-positivist paradigm offers to this research an adequate guide to achieve a valid knowledge about reality (Erzberguer and Kelle, 2003:708) and attempts to find the answers to the questions of the study: What are the types of contractual arrangements? What are the determinants of the choice of the degree of contract completeness? What are the mechanisms of contract enforcement? What factors influence the choice of signing (or not) a contract? It allowed me to address an issue as complex as the subject of this dissertation. Complexity arising from the nature of the sector studied the confidentiality of inter-firm agreements and the institutional differences affecting worldwide transactions, because the world is not one single

entity. “There are worlds within worlds” (Stake, 1993 in Guba and Lincoln, 1994:117).

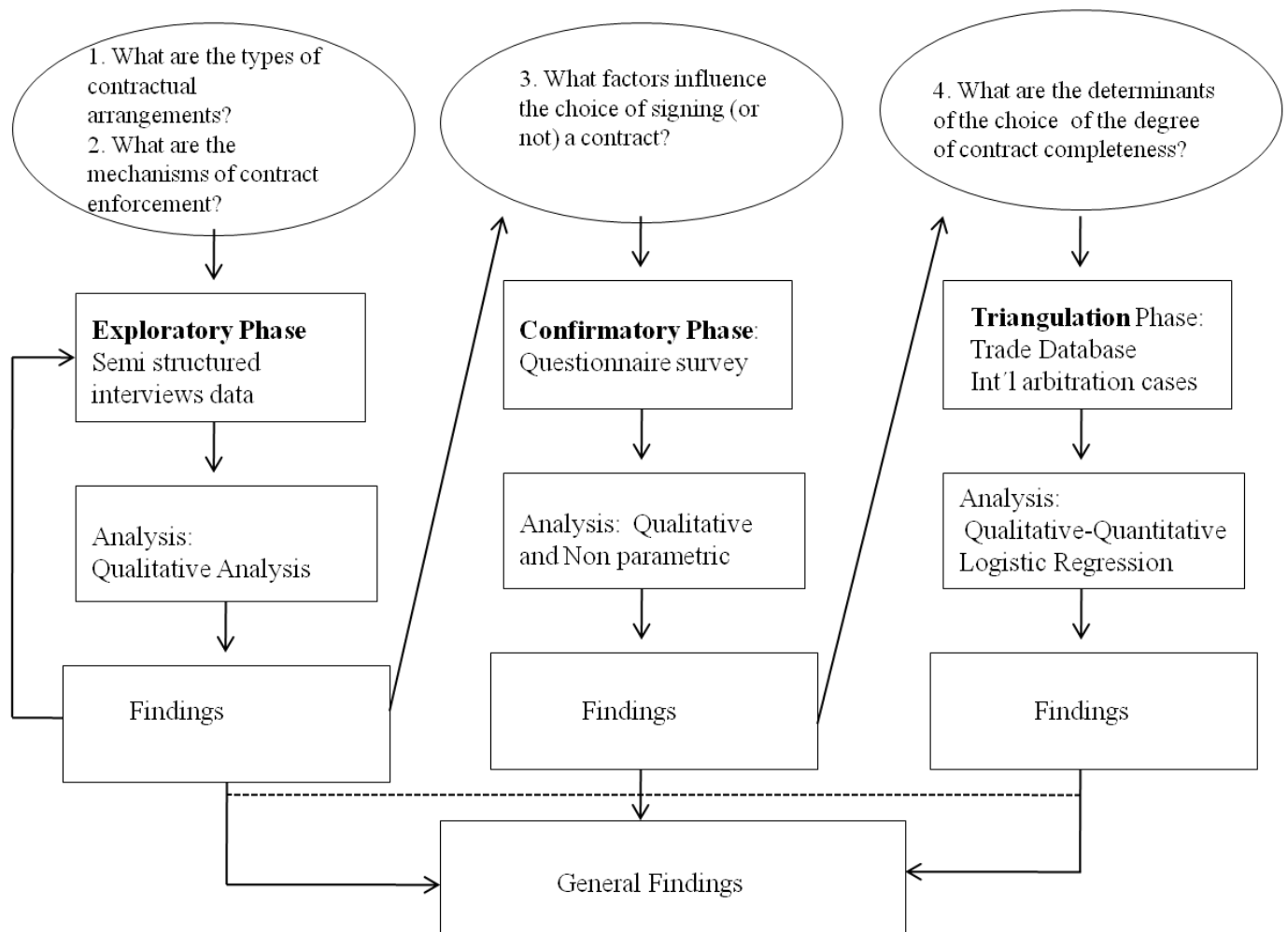
In the following I present the methodological strategy developed for this thesis.

5.2. METHODOLOGICAL STRATEGY

From a theoretical perspective, this research is built on the New Institutional Economics perspective through Transactional Cost Economics (TCE) and Institutional Analysis (IA). NEIs “...search for dynamic rather than static explanations of economic evolution, and by its openness towards interdisciplinary approaches” (Ménard & Shirley, 2012:3). The methodological strategy applied was a **multistrand design**. A multistrand design is an approach that uses more than one research method or data collection procedure (Figure 12). It can have: (i) a single or multiple qualitative and/or quantitative strands; (ii) a process of integration across all stages of the research or within method; as well as (iii) procedures for linking the strands that can be sequential, and/or concurrent (Tashakkori and Teddlie, 2003).

This research is integrated by three phases following a **sequential mixed method** and a **concurrent mixed method**. A **sequential mixed method design** is distinguished by the use of two methods of study, whether qualitative and/or quantitative, to answer exploratory questions in a **first phase** and where the findings reached lead to the formulation of confirmatory questions within a **second phase**. A **concurrent mixed method design** was applied in a **third phase** in which external data to triangulate and complement the results from the first and the second phase was considered. This concurrent design allows: addressing one kind of question simultaneously by collecting and analyzing, both qualitative and quantitative data and the triangulation of information for confirming, cross-validating or corroborating findings within a single study by the use of separate qualitative and quantitative methods. The interpretation of the results provides new explanations of the phenomenon on the basis of more than one data source (Tashakkori and Teddlie, 2003, p: 685). This increases the power of the inferences and the reliability of the results due to the fact

that the weaknesses inherent in one method are compensated by the strengths of the other (Creswell et al., 2003).



Adapted by the author from Tashakkori A. and Teddle Ch., 2003

Figure 12. Multistrand method design

In the following each of the phases is discussed, more details are developed in Chapter 6 on the results (Subchapters 6.1, 6.2 and 6.3).

5.2.1. First Phase: the exploratory study

The general objective of the exploratory study was to:

(i) Examine the exporter-importer business relationships for off-season fresh fruit international transactions, with special emphasis on Chilean exports;

The specific objectives were to:

(ii) Uncover the types of contracts used by the international participants;

(ii) Uncover the factors influencing this choice, and

(iii) Determine the mechanisms to secure international transactions.

5.2.1.1. Data collection in the exploratory phase.

The strategy for data collection in the exploratory phase had three different stages:

- Three rounds of semi-structured interviews (n=3) were conducted with three managers on the French importer side. Two of them are representatives of the Chamber of French Importers of Fresh Produce (*Chambre Syndicale des Importateurs Français de Fruits et Légumes*), and one is a senior manager of an importing firm. To prepare for these interviews I reviewed secondary information regarding the export-import industry to prepare the interview guide. Results of these interviews provide input to build a semi-structured interview guide for the field work of the second stage.
- I conducted 19 in-depth and semi-structured interviews with industry managers of exporting firms and key informants of the Chilean fruit industry. These interviews were performed in Chile in October 2010. Thus, 14 respondents were exporting firms and 3 respondents were providers of legal, inspection and insurance services; 2 interviews were dropped. Of the 14 exporting companies, 10 were producer-exporter companies, 4 were export-trading companies. 9 of the companies have more than 7 years in the export market (in a range from 7 to 27 years) and they concentrated up to 12% of total exports of fresh fruit from Chile in 2010; 3 companies were initiating the exporting operations, and 1 company which began operations 40 years ago had ceased operations. The companies exported apples, grapes, kiwi, plums, peaches, cherries, blueberries and other berries and one company also exported frozen fruit. Some of the interviewees provided copies of the contractual documentation under

confidentiality conditions. Most of the managers interviewed have wide knowledge of the industry, averaging 15 years of experience. They showed willingness to provide information although there were difficulties to get an appointment.

Although the interview was originally focused on the European market, respondents naturally tended to compare the European market (they differentiate U.K., Northern Europe, Southern Europe and Eastern Europe) to other regions such as North America, primarily the U.S.A, Asia and Latin America.

- I conducted 19 semi-structured interviews with managers of import and export firms as well as service providers (ports, marketing associations). These interviews were conducted during the *Fruit Logistica*, the biggest international trade fair for fruit and vegetables, in Berlin, Germany from February 9 to 11, 2011. These interviews were distributed as follows: from France (2), U.K. (1), Spain (3), Italy (2), Germany (1), and Netherlands (3), Argentina-Spain Binational firms (2), Mexico (1), Dominican Republic (1), Chile (1). Service providers: Algeciras Port (1), Rotterdam Port (1) and Produce Marketing Association of the U.S. (1). Most of the importing firms (13) were also re-exporters, especially within the European zone. And 11 of them were traditional (wholesaler) importers; 7 were multiproduct and multisource importers, 4 importers from Spain, Italy and England imported from Chile to complete their product portfolio and the 2 binational firms integrated the producers-export-import functions.

The interview guides were built after an iterative analysis of theoretical and empirical literature. The key questions were: *How do export-import companies do business in the fresh fruit trade? Do they sign contracts? If not, why not? What is the difference in terms of enforceability? What are the most important clauses/terms in export-import arrangements? What are the factors that influence these arrangements? What are the mechanisms of enforcement? How do firms secure transactions?* The interview guides and the questionnaire survey are provided in Annex 3.

The selection of the interviewees was done in two ways: first, through a random selection in two trade shows Fruit Business Round Table – FRUITTRADE in Chile and Fruit Logistica in Berlin; second, through a network of personal and professional contacts with whom I previously had done research which facilitated my access to the industry. These contacts were indirect; I had neither previous contact nor a relationship with any of the interviewees or with the firms in the sample.

The interviews were conducted in Spanish (mother tongue), English and French. Respondents in Chile allowed being tape-recorded, with two exceptions. Most of the respondents in Germany (Fruit Logistica) chose not to be recorded; therefore, immediately after each interview I taped the findings of the interview with the maximum possible detail. All interviews were integrally transcribed. The full text of each interview was identified by a code (as X_001 corresponding to first exporter interviewed, and M_001 to the first importer interviewed); each record included the description and history of the firm as well as information regarding the manager's position and carrier history. The fact that I conducted and transcribed all the interviews allowed me to have a thorough familiarity with the content of the material. This material was used to carry out a thematic analysis that I proceed to describe in the following.

5.2.1.2. Thematic analysis of the exploratory phase

The thematic analysis is similar to the content analysis where “segments of the text are systematically organized in categories which are similar to each other and are different from segments from other categories. Categories must be preplanned on the basis of the theory and conceptual framework (a priori themes) or might emerge during the analysis (emergent themes analysis)” (Tashakkori and Teddlie, 2003, p: 705). In this case, the analysis grid was built taking into account the theoretical and empirical literature review, on the one hand, and the reading and analysis of the contents of the interviews, on the other hand. This review served to create the categories of analysis that can be used as units of analysis: the words, sentences or paragraphs from the interviews (Gavard-Perret et al., 2008). Then, an organized grid

of analysis of the text must be defined. There is great variability and flexibility among systems. For this case I adapted Paillé and Mucchielli's (2003) proposition, consisting of: (a) extracts, (b) statement, (c) topic, (d) code of the topic, (e) category; and, (f) code of the category. I opted for a simplification of the elements, reducing them to the following: (a) extracts; (b) category; (c) code; and, (d) description. The unit of analysis selected was the paragraph because it allows capturing the context of the information expressed by the respondents. It also enriches the analysis and the presentation of results by the use of verbatim or extracts of the interviews (Creswell 2003, Gavard-Perret et al., 2008). It also allows the reader to have direct access to the original source, which improves the validity of the study (Creswell 2003). Tables 12 and 13 show the grid of the thematic analysis of the interview texts and an example of its utilization.

Category	Code	Description
Contracts	Signature (of contracts)	Why or why not? Factors influencing: trust, reputation, relationship,...
	Clauses	Advance payment, property rights, Incoterms...
	Export documentation	Bill of lading, purchase order,....
	Type	Firm sale, Free Consignment, Guaranteed Minimum
	Choice	Factors influencing: type of entry channel, trust/reputation/non previous relationship with the client, country of destination, product;...
Risk	Source	Oversupply, non payment, quality loss ...
	Control	Type of contract chosen, inspections, insurance, hedges, other
Conflict	Resolution Litigation	Negotiation...
		Mediation, arbitration , private chambers, courts
		Enforceability of signed/non-signed contracts
Dependence	Sources	Dealing with supermarkets/large importers, having few clients, ...
	Effects	Positive or/and negative effects
		Non dependence
Other		Coordination, planning, monitoring, path dependency,...

Table 12. Grid of thematic analysis

Extract	Category	Description	Code
<i>The agreement may change from year to year, as far as the business evolves. If an importer sells the fruit well and I see that he is so interested that he increases the number of orders, that he pays on time... the agreement can be increasingly more flexible to optimally reach an agreement on consignment.</i> X_007	Contract		Choice -> length and performance of the relation -> risk of country.
<i>There are importers who sell to wholesale markets. They work on consignment. Those who have no direct relationship with supermarkets do not dare to set a price. Normally the packaging required by importers who sell to supermarkets is more demanding... I require a more solid agreement: a minimum guarantee, a firm price.</i> X_004		Factors influencing the choice of type of contracts whether Firm Sale, Consignment, Guaranteed Minimum.	-> product/perishability . -> type of importer; -> country of destination
<i>On free consignment is the exporter who takes the risk and remains owner of the product until the importer sells. The avocados go on consignment because the price variation is higher; the market can change and double in two weeks. Depends on the offer, is a fruit that cannot be conserved, it must be sold without delay.</i> M_02			

Table 13. Example of the thematic analysis

Findings from this exploratory phase were mainly used to build the design of the second phase of the research and to explain the mechanisms of enforcement of contracts in Results, Subchapter 6.3. They also complement the analysis in 6.1 and 6.2.

5.2.2. Second Phase: The confirmatory survey

This phase consists of a questionnaire survey conducted in Chile with 65 managers of exporting firms. As stated by Rea & Parker (2012), survey information can be gathered through different means: mail-out, WEB, telephone, in-person interviews and intercept. In-person interviews have several advantages that suited better to this research: (i) *the ability to contact hard to reach populations* (text in italics is from Rea & Parker, 2012), as exporting firm managers who lack of time. The personal interaction facilitated the confidence of respondents regarding the nature and purpose

of the research and increased their willingness to provide information; (ii) *allows for more complexity*, such as the study of inter-firm contracts, because the topic is confidential and because the term contract/agreement/arrangement may have different interpretations; (iii) *flexibility to explain unclear questions or gather more details*, in fact, in-person interviews reduced misunderstanding and therefore reduced the risks of non-responses. Furthermore, managers tended to use examples to substantiate or illustrate a response, which enriched and enlarged the collected data; (iii) the possibility of assurance *that instructions are followed*, which improves the accuracy of the information.

The survey questionnaire was pre-validated to assess factors of: (i) clarity, to verify precision and to avoid ambiguities in the questions; (ii) comprehensiveness, to cover a complete and relevant range of questions and to avoid irrelevant ones; (iii) acceptability, to identify potential problems, such as the length of the questionnaire as well as privacy and ethical concerns (Rea and Parker, 2012). Pretesting was done through a group of academics and by managers who suggested some changes in the content, scales, the wording of the questions and the extension of the questionnaire, especially due to respondent time constraints. Thus, a 20-minute long questionnaire was suggested by managers, which is close to the 30 minutes Rea & Parker (2012) recommend. Based on these remarks, the questionnaire was fine-tuned for its implementation in the field. Interviews lasted approximately 45 minutes on average, only two interviews lasted 20 minutes.

A random selection of exporting firms from a directory containing the last available data on the export campaign 2009/2010 by the *Asociación de Exportadores de Fruta de Chile* (ASOEX) was done. I called the firms from France by telephone. The main difficulty was reaching the manager directly; several calls were needed before contacting the key person. This proved to be more effective than sending an email or a letter explaining the research and asking for an appointment, an option normally suggested in literature (Gavard et al., 2008; Rea & Parker, 2012), which was tested during the exploratory phase, with no success. All the appointments were made personally with the export manager or the general manager after explaining the

purpose of the research, the nature of the information requested, the confidentiality and the duration of the appointment. Immediately after the phone call, an email confirming the appointment was sent. This followed the usual practice to cement agreements, which I have observed during the exploratory phase: first an oral agreement and then an email for confirmation.

The survey was conducted during June and July 2011 (winter in the southern hemisphere). This period of the year was chosen because export activity is slower; managers have more available time and may be more willing to dedicate time for research purposes. During the exploratory phase I was advised that trying to get an appointment during the export campaign was close to impossible, due to the intensity of the activity. The respondents reconfirmed this during the interviews. Nevertheless, during this period, managers often travel to the importing countries to meet their clients and to prepare the next export campaign, so this increased the difficulty to reach managers.

Besides the advantages of the in-person interview method, Rea and Parker (2012) signal some disadvantages to take into account: (i) *higher costs* that lead to a trade-off between the size of the sample and feasibility; (ii) *interviewer induced-bias*, because even if the involvement of the interviewer is valuable for the research, there is a risk of bias since the interviewee's responses may be influenced by unintentional reactions of the interviewer, or the respondents might seek to gain approval from the interviewer. One of the means to lower this risk is the preparation of the interviewers. I conducted all the interviews and even though I had previous experience in this matter and previous professional experience with business managers, my capabilities were tested before starting the field work. During the first interviews with importer managers in France, the interviews were conducted in the presence of the director of this thesis. Other disadvantages of this method are: *respondent reluctance to participate, greater stress and less anonymity*. The initial hesitation to participate in the investigation decreased rapidly during the telephone conversation I had with managers to request the appointments. During the interviews, there was no stress, the questionnaire language was Spanish and I went through the questionnaire together

with the respondent as if it were a conversation as suggested by Rea and Parker (2012). Furthermore, once the interview finished, I had on some occasions the opportunity to ask the respondents about how they deal with stress. This was not a question for research purposes but a spontaneous interest that emerged after seeing that the managers of this industry are constantly submitted to high levels of pressure due to the complexity of the perishable products, export-import logistics, and making decisions in a rapidly changing environment. As some of those interviewed told me, talking about their personal experience as exporters, was close to taking a break.’ I consider that this contributed significantly to gathering more information than initially expected.

The resulting sample consists of 65 exporting company questionnaires. The respondents were export managers (62% of the cases) and CEO (38%). Table 14 provides further details of the characteristics of the sample.

Variable	Label	Mean	Standar Deviation	Minimum	Maximum
C_EXP_CO	Experience in the Co.	9.72	9.75	1	52
C_EXP_SCT	Experience in the Sector	18.49	10.87	1	55
C_Y_CO	Lifespan of the Co.	16.17	12.98	1	60
C_OWN	Exports from Own production	57.45	40.85	0	100
C_THIRD	Export from Third’s production	42.55	40.85	0	100
C_VOL	Export Volume (Million Boxes)	1.69	2.32	0.05	12.5
C_VAL	Export Value (Million US\$)	23.88	30.53	0.9	150

Table 14. Characteristics of the respondents

5.2.2.1. Content of the questionnaire

The questionnaire was constructed using as a reference, theory and empirical literature, as well as the information gathered during the exploratory phase. This process permitted to fine-tune the hypothesis that guided the composition of questions, as well as the construction of the variables to analyze (more details on subchapters 6.1, 6. 2 and 6.3). The questionnaire included close-ended questions

instead of open-ended. This type of question has an advantage as fixed answers facilitate comparisons among respondents, which are a condition for statistical analysis. It is also easier – and quicker – for respondents and interviewers to go through and complete the questionnaire and therefore the response rate is higher than in open-ended questions (Gavard-Perret et al., 2008; Rea and Parker, 2012). Two key aspects influenced the choice during the questionnaire phrase. First, in the exploratory interviews I noticed that managers tended to explain their decisions according to specific real-life situations; in other words, they positioned themselves in different scenarios. Second, they preferred a formulation like “in this circumstance is it more probable to use” because it reflects the complexity of decision-making in international market conditions. This coincides with Kibbeling et al., (2009) scenario-based questioning in their study of Dutch and French buyer-supplier relationships. For instance, the exploratory phase showed that factors such as the risk of country, market supply in the importing country, and price volatility, among others, influence the choice between three types of contracts (firm sale, guaranteed minimum or free consignment). Therefore, for each factor, three scenarios – low, moderate and high – were formulated. Respondents were asked to choose one option for each (Figure 13a and 13b). As for the question regarding the risk of country:

Indicate the more probable arrangement to use when the risk of the importing country is:

	1. Low	2. Moderate	3. High
Firm Sale	☐	☐	☐
Guaranteed Minimum	☐	☐	☐
Free Consignment	☐	☐	☐

Figure 13a. Question formatting

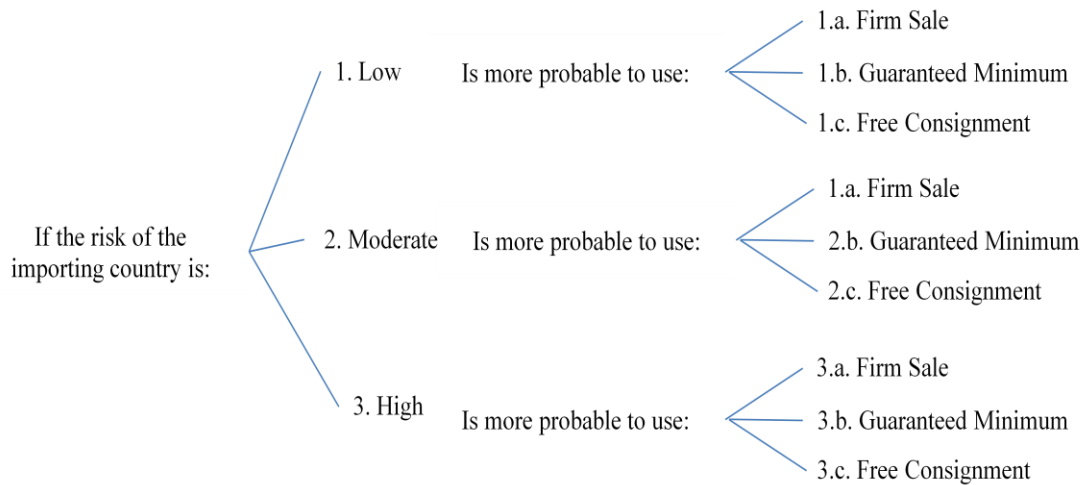


Figure 13b. The logic of the oral questioning and interpretation

Variables in the questionnaire are mostly qualitative and have distinct measurement scales: nominal, ordinal and interval. Therefore, distinct type of questioning was required: (a) *The contractual arrangement with the same importer may vary from year to year?* Its two possible answers: yes or no (corresponding to a nominal scale); (b) *If the importer is a wholesaler is it more probable to sign a contract?* Alternative answers: Not probable, slightly probable, moderately probable, very probable (ordinal scale); (c) *An advance payment is more probable to be:* Less than 30%, between 30–50%, 50–70%, 70–90% or more than 90% (interval scale). (Rea and Parker, 2012).

The difference in the type of the questions and nature of the variables lead to a different statistical treatment.

5.2.2.2. The analysis

Questionnaire variables were coded and descriptive statistics were used to analyze the data. Then, a deeper analysis was performed on the decision of the exporters to sign a contract. To measure the relationship between the variables that influence this choice I ran a Spearman's Rho rank order correlation. Spearman's correlation

(hereafter) is a measure of association based on the rank of the data values that is indicated for testing correlations of ordinal variables. It does not require variables measured on a linear association between variables. And, for a sample size (> 25) the variable has a student's t-distribution under the null hypothesis of absence of correlation (Tuffery S., 2005).

The Spearman's Rho correlation coefficient formula is:

$$\rho = 1 - \frac{6 \sum_i d_i^2}{n(n^2 - 1)}$$

Where:

n is the number of paired ranks

d_i is the difference between each rank of corresponding values of X and Y.

When two or more observations of one variable are the same, ranks are assigned by averaging positions occupied in their rank order:

$$\rho = \frac{\sum_i (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_i (x_i - \bar{x})^2 \sum_i (y_i - \bar{y})^2}}.$$

The interpretation of Spearman's Rho correlation is equivalent to Pearson correlation coefficients. It allows interpreting the sign of the correlation between two variables, the magnitude of the relationship, the statistical significance and the confidence interval (Canela A. and Monge L., 2007).

The sign of the correlation reveals the direction of the association between an independent variable (X) and the dependent variable (Y). A positive correlation is when high values of X associated with high values of Y, a negative correlation when high values of X are associated with low values of Y; finally, a no correlation (correlation of zero) indicates that values of X are not predictive of values of Y. (Gerstman B., 2012)

The magnitude of the correlation determines the strength of the correlation.

The closer ρ is to +1, the stronger the positive correlation. The closer ρ is to -1, the stronger the negative correlation.

If $|\rho| < 0.3 \rightarrow$ weak correlation

If $0.30 \leq |\rho| \leq 0.70 \rightarrow$ moderate correlation

If $|\rho| \geq 0.70 \rightarrow$ strong correlation

Furthermore, when necessary, I tested the reliability of items using the Cronbach Coefficient Alpha (Cronbach, 1951). This test assesses how well a set of items measures a single uni-dimensional phenomenon (Raykov, 1998; Miller, 1995; OECD, 2010). Nunnally (1978) suggests 0.7 as an acceptable reliability threshold.

$$\alpha_c = \left(\frac{Q}{Q-1} \right) \frac{\sum_{i \neq j} \text{cov}(x_i, x_j)}{\text{var}(x_o)} = \left(\frac{Q}{Q-1} \right) \left(1 - \frac{\sum_j \text{var}(x_j)}{\text{var}(x_o)} \right) \quad c = 1, \dots, M; i, j = 1, \dots, Q$$

$$x_o = \sum_{q=1}^Q x_j$$

Where M indicates the number of observations considered, Q the number of items
 $X_{o=}$ is the sum of all individual.

In summary, findings from the confirmatory phase were mainly used to explain the choice of signing (or not) a contract as in Subchapter 6.2. They also complement the analysis of Subchapter 6.1 and 6.3. Also, results from this phase strongly guide the third phase of the research, the data triangulation.

5.2.3. Third Phase: Data Triangulation

The term triangulation refers to “the combination and comparison of multiple data sources, data collection and analysis procedures, research method, and/or inferences” (Denzin 1978: cited by Jick, 1979:602). The exploration of additional empirical

evidence using another source of data and/or another research method regarding the same phenomenon, contribute to ensure that “the variance reflected that of the trait and not of the method” (Erzberger and Kelle, 2003⁷).

Triangulation can be applied between or across methods and more than one method should be used in the validation process (Campbell and Fiskel, 1959 cited by Jick, 1979). Jick (1979) in his well-known article regarding the use of triangulation in mixed qualitative and quantitative methods suggests a research strategy including surveys and semi structured interviews – as described in phases 1 and 2 of this study – as well as an unobtrusive and nonparticipant observation such as the use of archival materials. In this third phase, I crosschecked the findings from phases 1 and 2 and provide more detail on some key issues where a data triangulation was imposed:

First, to confirm and measure the effect of key variables (i.e. risk of country and perishability) on the choice of contracts, trade data containing an exhaustive fruit and nuts export records from Chilean customs was gathered. This database registers all export shipments (N=170,370) and its corresponding type of exporter-importer contract. I also resorted to external sources to construct explicative indicators.

An econometric analysis was conducted to explain the variables affecting the choice of a type of contract. The variable to be explained: the contract is not continuous in nature but instead is a discrete or a categorical variable. Therefore, the election of a discrete choice model, as the logistic regression model, was imposed. In the following, building on Wooldridge, 2009; Dougherty, 2011, Carriano et al.,2010, Tuffery S., 2005, I describe some main aspects of this model.

In a logistic model the relationship between the explanatory and the explained variable are not necessarily linear and does not requires a normal distribution of the variables. The explanatory variables may be of all types whether continuous or discrete. A binary logistic model is used when the dependent variable is dichotomous (0, 1 values) and a multinomial logistic model when the dependent variable takes more modalities.

⁷ Christian Erzberger and Udo Kelle. Making inferences in mixed methods: the rules of integration. in Handbook of Mixed Methods. In social& Behavioral Research. Tashakkori A. and Teddlie C. eds. Sage Publication, 2003.

In the logistic regression equation X is the explanatory variable which can be denoted as $X_1, X_2 \dots X_k$; where k is the number of variables being considered. These variables contribute to the explanation of the dependent variable Y .

The aim of the regression is to model the conditional probability $E(Y/X=x)$ as a function of x . It seeks to estimate the mean value of Y for X . For a value of Y of 0 or 1, this mean value is the probability that $Y = 1$.

Then, Y can take the value of 1 with the probability $P(Y = 1 / X)$ that the “success” outcome occurs, and the value of 0 with probability $(1-P(Y = 1 / X))$, the probability of a “failure” outcome (the outcome does not occur). This can be written as:

$$E(Y/X) = \text{Prob}(P(Y=1/X=x)) \text{ or } \pi(x) = \text{Prob}(P(Y=1/X=x)).$$

The model is expressed as:

$$\pi(x) = \frac{e^{\beta_0 + \sum_j \beta_j x_j}}{1 + e^{\beta_0 + \sum_j \beta_j x_j}}$$

Where $\pi(x)$ represents the probability that the “success” outcome occurs

Or

$$\text{Log} \left(\frac{\pi(x)}{1 - \pi(x)} \right) = \beta_0 + \beta_1 x_1 + \dots + \beta_k x_k$$

Now, in order to determine the variables affecting the choice of contracts I performed a Binary Logistic Regression. Where Y is a dichotomous outcome variable, corresponding to the two basic types of contracts, coded as $Y = 1$ for one type of contract, and $Y = 0$ for the other type of contract. The logistic regression allowed estimating the positive or negative and the strength of the relationship between the probability of a type of contract outcome, p , and the explanatory variables $X_1, X_2, \dots, X_k$ based on the Chilean customs export data and indicators constructed with external data. Further details on the methodology for this analysis are described in Subchapter 6.11 of Findings.

Second, in order to crosscheck information gathered during the field work that related to the source of conflicts at the international level, I downloaded the entire available arbitration records of the Fruit and Vegetable Dispute Resolution Corporation

(DRC) (Table 15). The individual records consisted of 191 arbitration cases within the period 2000 to 2011. Only one dispute case in 2011 concerned Chile. However, these files provided an extremely rich opportunity to review systematically the last four years, corresponding to 44 cases. The method used was a thematic analysis where the cause of disputes was classified into four categories: disputes on contracts, disputes on prices, failure to pay, quality issues. Also, I constructed three cross-sectional categories: **Type of contract** (firm sale or consignment) and whether written or oral, **countries** and **products** involved in the arbitration.

Inferences from the data triangulation on Chilean Customs trade statistics were used to explain the choice of contracts according to their degree of completeness (Subchapter 6.1). While, the data triangulation concerning the international arbitration cases of DRC was mainly used in the description of the mechanisms of enforcement in international fruit trade developed in Subchapter 6.3 of Results.

Category	Code	Description	Type of contract	Country	Product
Disputes on contracts	Contract	Controversy regarding the type and contents of the contract agreed by the parties.	Whether: Firm sale or Consignment,		
Disputes on prices	Price	Misinterpretation or renegotiations of the ex-ante agreed prices.	Whether written or oral		
Failure to pay	Payment	No fulfillment of buyer financial obligations.			
Quality issues	Quality	Controversy on grade and condition of the transacted product.			

Table 15. Source of conflicts in arbitration cases in the DRC

5.3. VALIDITY OF THE RESEARCH

The validity of a scientific inquiry is given by the consistency of the: (i) epistemological framework; (ii) methodological strategy; and (iii) measurement

validity (Gavard-Perret et al., 2008:55). The strength of this study lies mainly in coherence between the philosophical paradigm adopted, the post-positivism, and the methodological strategy used (multistrand qualitative-quantitative method). The process of triangulation applied across distinct sources and through different methods of data collection as well as the use of external data to construct indicators, allows for reducing the risk of bias and increases the validity, accuracy and reliability of the results (Bouchard, 1976; Jick, 1979; Tashakkori & Teddlie, 2003). This agrees with Phillips, as “it is essential that the findings of an inquiry be based on as many sources of data, investigators, theories and methods as possible. Further, if objectivity can never be entirely attained, relying on many different sources makes it less likely that distorted interpretation will be made” (Phillips, 1990:39).

Measurement validity relates to the question: How well do the data represent the phenomena for which they stand? (Punch, 1998: 258). To ensure that the results truly represent the phenomenon, I put into practice recommendations by Tashakkori & Teddlie, 2003; Rea & Parker, 2012 and Gavard-Perre et al., 2008. Although most of them have already been detailed throughout this section, I highlight some of them: (i) data collection procedures, including the interview guides, the questionnaire, and the construction of indicators for the quantitative analysis were built from a repeated iteration between theory and data; (ii) the interview guides and the questionnaire were pre-tested on managers and verified by academics; (iii) to reduce bias due to external factors a recommended practice is to perform the survey within a period as short as possible (Campbell & Stanley, 1966), questionnaire where conducted within a period of two months, and the triangulation using external data corresponded to the same export campaign that exporters referred to during the survey; (iv) evidence was gathered, as samples of contracts, tape-records and transcriptions of the interviews and the survey questionnaires.

Results from the exploratory and confirmatory phases aim for theoretical validity rather than statistical validity. As for the data analyzed through econometric tools, it does not come from a sample but from the entire population of fresh fruit transactions from Chile to the rest of the world within the exporting campaign 2009–2010. In

general, this study seeks for a theoretical validity which “goes beyond concrete description and interpretation and explicitly addresses the theoretical constructions that the researcher brings to, or develops during the study” (Maxwell, 1992: 50) as is demonstrated in Chapter 6 where I discuss the empirical evidence that support or not the theoretical assumptions (Erzberger and Kelle, 2003) that were formulated on the basis of the Theory of Transaction Cost and the New Institutional Economics.

6. RESULTS AND ANALYSIS

6.1. DEGREE OF CONTRACT COMPLETENESS IN ENVIRONMENTAL UNCERTAINTY CONDITIONS: THE INTERNATIONAL TRADE OF PERISHABLE PRODUCTS

This subchapter analyzes how the use of firm sale (more complete contract), and consignment (less complete contract) varies according to the region of destination, the risk of the importing country, and the type of product transacted (especially due to the perishability and seasonality). A binomial logit analysis of an exhaustive Chilean customs database is applied.

6.1.1. Introduction

This subchapter examines the type of contract – according to its degree of completeness – chosen by exporters and importers to deal with the hazards of the international fruit trade and the determinants explaining the choice of these contracts. Firms dealing with long-distance trade face external uncertainties due to changing conditions and different environmental settings in markets abroad and the difficulty of contract enforceability. Economics and managerial literature has showed vast empirical and theoretical evidence on the explanation of the choice of inter-firm contracts according to the degree of completeness (Joskow, 1988; Crocker and Reynolds, 1993; Saussier, 2000). Regarding the analysis of contracting in the agricultural sector, research has focused on the effect of transaction costs and risk sharing on land contracts (Cheung, 1969), agricultural labor, crop-sharing and integration Allen & Lueck (2005), farming contracts for export oriented products (Jaffee, 1992), hybrid forms of governance and private enforcement using as evidence the label system of the French poultry industry (Menard, 1996) and the French millers and bakers arrangements to trade high quality collective-brand products (Menard & Raynaud, 2010). This research focuses mostly on the inter-firm contracts within the same institutional environment frame. To my knowledge, there is less, although increasing, literature focusing on the choice of inter-firm contracts in a cross-country international environment.

Chile is an interesting case for study as a relevant off-season fruit exporter to the northern hemisphere. I focus on fresh fruit international commerce because this sector presents a high level of risks due to the nature of the products (their perishability) and the difficulties to control and measure the attributes engaged (the quality). Uncertainty is the key issue in fresh fruit trade which is affected from external uncertainties such as the volatility of prices, the pressure of competition from other exporting countries, demand fluctuations, country risk levels, and internal uncertainty such as the possibility of making an adverse selection of trading partner, the informality of the enterprises, the risk of opportunistic behavior, and the failure to pay due to insolvency or bankruptcy.

I resort to the findings from the exploratory phase and the field survey that allowed us to analyze an exhaustive Chilean customs database for the period 2009–2010, which corresponds to the export campaign in place during the field survey. This database registers 170,370 shipments from Chile to all countries of destination, with a detailed product description (product, variety, level of processing). The specificity of this database contains the type of exporter-importer contract agreements for each one of the shipments, whether consignment or firm sale.

Applying a Transaction Costs Theory framework of analysis, I study the degree of contract completeness chosen according to its transactional attributes as uncertainty and time-specific assets. The binomial logit estimates show that the choice of contracts varies across destination countries, which is explained by institutional factors. High levels of uncertainty due to importing country risk increase the probability of resorting to a more complete contract (firm sale, with ex-ante fixed price) rather than a less complete contract (consignment ex-post price). Seasonability estimates show that the probability of exporting on consignment increases at the peak of the campaign, on the contrary in situations of shortage of supply, the exporting company would be in a favorable position to negotiate a more complete contract. The degree of product perishability also shows to be statistically significant. The econometric results show that when higher levels of perishability exist, it is more probable to export on consignment, and conversely for less perishable products such

as dried fruits, frozen fruit and nuts the probability of choosing consignment contracts decreases.

There are a number of limitations in this study. It does not include variables that might affect the choice of contract, namely: market volatility, risk of adverse selection that could allow a more complete construction of the variable uncertainties, as well as relational variables, due to the fact that I cannot observe the identity of the importer.

This research contributes to the knowledge of the inter-firm choice of contracts in highly uncertain and long-distance trade. Furthermore, it contributes to the analysis of the effect of environmental variables on the choice of alternative contract completeness, given that to my knowledge, previous research has mostly focused on the impact of institutional environment, whether weak or strong, on the degree of contract formalization (e.g. written or signed contracts vs. informal) rather than the effect of this lack of enforceability on the analysis of the degree of completeness of the contract.

This subchapter is organized as following: Section 6.1.2 introduces the theoretical framework; Section 6.1.3 examines the research context; Section 6.1.4 presents the model and methodology for the econometric analysis; Section 6.1.5 examines the results; Section 6.1.6 discusses the results; and finally, Section 6.1.7 highlights the conclusions of the subchapter.

6.1.2. Theoretical framework

The research on contracts seeks to explain agents' behavior and factors that influence their decision-making in terms of mechanism of coordination such as: incentives, authority, coercion and conflict resolution; as well as the definition of various aspects of the transactions such as the properties, characteristics and quantities of traded products, price mechanisms and the agreed conditions (Brousseau and Glachant, 2002). According to the Transactional Cost Economics, contracts are instruments that allow transaction costs to be reduced by planning actions, making provisions for ex-post adjustments, for the distribution of benefits and restrict ex-post renegotiations

and hold-up in operations that involve specific investments (Williamson, 1975, 1979; Klein et al, 1978 *cited by* Masten and Saussier, 2002). Costs of contracting are classified into: ex-ante costs (writing, searching the counterparts, negotiating the agreement, defining warranties, and the costs of studies) and ex-post costs (bad adaptation of the contract, monitoring costs, and potential breach or renegotiation) (Saussier & Yvrande-Billon, 2007).

Contracts adopted by transactors are all incomplete (Klein, 2002), as the parties cannot define complete contract agreements, providing for all contingencies, obligations and conditions ex-ante, due to various factors: problems of interpretation because of the limited rationality of agents, limitations on available information, uncertain environment, and the complexity of the transaction, which reduces the ability of anticipation of future situations (Klein, 2002; Goetz and Scott, 1981 *cited by* Macleod, 2002). “Such contracts arise when the number of contingencies are so large that is not possible to write a complete contingent contract, creating problems for the interpretation and enforcement of contract terms and conditions” (Macleod, 2002). Incompleteness and the specificity of assets transacted in environments of high uncertainty generate quasi rents and give the parties incentives to opportunism.

Regarding inter-firm contracts, vast empirical research has been built around the TCE and other contract theories, seeking to explain the choice among a variety of contractual arrangements found in the field. Lafontaine & Slade (2007) in an extensive review of literature classify the contracts as “pricing contracts,” “cost-plus” and “share contracts.” **Pricing contracts** are mostly used in sectors where “products are fairly homogeneous and the production technology is well understood. It is common to contract on little besides price... when there is a market price for a product, it is often not necessary to specify a price in the contract, when the market is thin contracts specify not only the price but also how the price will adjust over the time” (ibid: 5). **Cost-plus contracts** are mostly used when “products or projects are unique to a buyer and can involve production technology that is not well understood ... future costs are highly uncertain ... and can be somewhat vague concerning project specifications” (ibid:10–11). An example is the case of GM and Fisher Body

(Klein, Crawford and Alchian, 1978; Klein, 1988). This type of contract has been described in government procurement (Crocker and Reynolds, 1993), construction (Bajari and Tadelis, 2001), and computer products (Banerji and Duflo, 2000; Kalnins and Mayer, 2004). **Share contracts** are mostly used in different sectors such as agricultural, i.e. sharecropping (Cheung, 1969), franchising, joint ventures (associations of two or more companies engaged in a business without actual partnership or incorporation) (def. Legal Dictionary) and limited partnerships (partners join to conduct a business liable only to the extent of the amount of capital invested for the operation at stake) (def. Legal Dictionary).

As described previously, most of the studies are focused on sectors like franchising (Brickley J.,...), fuel (Joskow, 1988; Saussier, 2000) and non-fuel mineral markets (Hubbard and Weiner, 1989 and Slade, 1991), industrial markets (Masten 1984), and the movie-video industry (Gil and Lafontaine, 2008; Mortimer, 2008; Cachon and Lariviere, 2005). In agriculture, some authors analyze the effect of transaction costs on land contracts (Cheung, 1969), the choice of integration (Masten, 2000; Allen & Lueck, 2005), the choice of governance and enforcement (Jaffee, 1992), Menard and Raynaud (2010). Menard (1996) describes three types of contracts in the poultry industry in France, namely, fixed-price, buy and sell, and subcontracting. Pennings and Wansink (2004) studied the use of fixed price contracts and the spot market in the Dutch hog industry. Fischer et al., 2010, in an intra-European countries study of pork meat, beef and cereals chains, analyze the factors influencing the choice to resort to the spot market, relational contracts, written contracts and cross-shareholding arrangements. Allen & Lueck (2005) in a review of the agricultural contract literature, classify the types of contracts as: equipment, labor, land, production, service and marketing. Marketing contracts, which are closer to this research, refers in this review mostly to transactions within a same institutional environment, in other words, transactions within a country.

In summary, economic agents resort to different types of contracts that also have different degrees of completeness, depending on the characteristics of the transactions at stake. To my knowledge, there is less literature focusing on the choice of inter-firm

international contracts for agricultural products. In this case, I found in the exploratory and confirmatory phase of this study, that exporters use different types of contracts, namely sales contract and consignment according to the degree of behavioral and environmental uncertainty, and the level of assets specificity. The purpose of this research is to uncover how these factors influence the choice of contracts.

6.1.3. Research context

In this subchapter I examine the exporter-importer business relationships in the international off-season fresh fruit trade. I deepen the analysis from the perspective of Chilean exporting firms. Chile is a southern hemisphere leader in the fruit trade, representing 50% of off-season exports (Fernandez-Stark et al., 2011). Contrary to its main competitor from the southern hemisphere, South Africa, that has for a long time operated through a central exports board, Chile has an open export strategy highly competitive and diversified. In the 2009–2010 export campaign, Chile exported 2,466,824 TM worldwide. The destination markets were: U.S.A (38%), Europe (29%), Latin America (16%), Far East (11%), and Middle East (6%). All destinations showed positive growth rates compared to the previous year except for Europe due to its economic crisis (-4.37%), The Far East had an outstanding growth of 16% and the Middle East 6% (ASOEX, 2011).

There are two basic export-import types of contracts in the international fruit commerce: the firm sale contract and consignment (whether free consignment and guaranteed minimum price) that entail different levels of risks for the exporter and the importer (Table 16). While a firm sale involves less risk to the exporter and higher to the importer, selling on consignment, carries the highest risk for the exporter and the lowest for the importer. The guaranteed minimum price balances risk between both parties, even if there may be exceptional situations, such as quality problems, where the parties have to adjust the minimum price agreed ex-ante.

Risk for the importer		Risk for the exporter
Firm Sale	+++	-
Guaranteed Minimum Price	++	+
Free Consignment	-	+++

Source: Elaboration of the author based on the interviews

Table 16. Distribution of risk according to the contractual arrangement

For the **firm sale**, the parties agree to an ex-ante price (fixed price) for a given product, quantity, date, place of delivery and terms of payment: prepaid or progress payments. This type of contract can be more precise concerning the ex-ante terms of product's quality agreed between the buyer and the seller. This does not mean that products sold under this type of contract are of higher quality because this will depend on the level of price agreed. The agreed price is normally confirmed after inspection and acceptance of the product at arrival. The exporter normally requests an advance payment that can be higher than in the consignment modality. According to some interviews referring to the case where firm sale contracts are established with large volume anticipated for the entire exporting campaign with particular buyers, for example, supermarkets, there can be some variations in the price mechanism as the introduction of a comparative prices clause allows an adjustment of prices within a price-band according to the levels of prices during the week of delivery (this clause is also described in Michelson et al., 2012). Also, the transfer of the product ownership from the buyer to the seller is made when the buyer accepts the product at delivery (if the product complies with the ex-ante agreed conditions). Then, a firm sale arrangement is a sale contract.

In the **consignment** contract, the exporter sends the goods to the importer who is in charge of its sale at the destination market at the best possible price. This means that the price is not agreed ex-ante, but the importer reports the price agreed upon after arrival and sale (after sale price). The exporter normally requests an advance

payment. A variation of free consignment is the guaranteed minimum price, where the parties agree on a minimum and maintain opportunity for price improvement after the sale at the destination market with no downside risk (except special situations as quality problems, market downfall). Another less frequent variation is a revenue-sharing clause where the exporter and the importer agree to a joint sale, sharing profits and losses; and a comparative price clause where parties define a reference to compare the sale prices at destination, e.g. USDA Market News Prices (see Subchapter 6.3 for a description of international disputes, among others, on prices).

The guaranteed minimum price and free consignment arrangements are consignment type contracts. The importer acts as a commissioner who must sell the goods and afterwards must send a sales account report to the exporter, informing about the sales results, costs and disbursements agreed as the commission. The transference of the product's ownership from the buyer to the seller is made after sale at the destination market. “A consignment is not a sale. It creates an agency relationship between the consignor and the consignee, where the produce continues to belong to the consignor until the consignee sells it on the consignor’s behalf. After such sale, the proceeds of the sale belong to the consignor, with the consignee allowed only to retain expenses of the resale and commission” (USDA/AMS, 2011).

To interpret these arrangements according to the TCE, I resort to some definitions that were introduced in general terms in the section of the Theoretical Framework. According to Masten (1998), clauses to a contract can be interpreted as mechanisms that provide incentives and flexibility to organize transactions. Menard (2002) proposes a contract classification by four factors: (i) duration, “which is closely related to the attributes of the transaction at stake...”; (ii) degree of completeness “with regard to variables of adaptation: prices (referring to the mechanisms to determine the prices), quality, quantities, delays, and penalties; (iii) incentives, “as price rate systems, hourly wages, share distribution to employees, returns on assets paid to owners, and rent divided among partners to joint project with linearity or non-linearity as a major characteristic”; and (iv) enforcement procedures which are of

different classes depending on the variation of uncertainty surrounding the transaction and the asset specificity involved (Menard, 2002: 12).

In this thesis I opt for a classification by the degree of completeness with regard to the price mechanisms. This is because (i) The price mechanism is the most marked and observable characteristic of these export-import arrangements; and, (ii) It is one of the most important terms/clauses in the contracts to define the degree of contract completeness (Crocker & Reynolds, 1993).

Crocker & Reynolds (1993) in their study of the determinants of the degree of contract incompleteness classified the U.S. Air Force procurement contracts by its price mechanisms: “The most restrictive and complete possibility is the “firm-price” also called firm-fixed price contract (FPF), for in this type of contract the price is specified ex-ante and does not permit ex-post adjustments to prices. On the other extreme, the less complete contract is the “fixed-price incentive successive targets” (FPIS), which allows for ex-post negotiation of prices (ibid: 131). This form of classification of contract completeness (or incompleteness) is very useful as a framework to apply in this study. Consequently, even if fresh fruit export-import contracts are all incomplete, the price mechanism is suitable to classify them by their degree of completeness. Following Crocker and Reynolds (1993), the firm sale is a more complete contract compared to the consignment contract, whether guaranteed minimum or free consignment (see Table 17).

Type		Negotiated Ex Ante	Negotiated Ex Post
Firm Sale		Price	No negotiations ex post to charge price. Excepting in case of poor product condition at arrival
Consignment	Guaranteed Minimum	Minimum Price	The final price is determined after sale at the importing market No negotiations ex post to charge the Minimum price, excepting when quality problems or market downfall
	Free Consignment		The price is known after sale at the importing market

Table 17. Degree of completeness according to the price mechanisms of the arrangements

The binary choice of contracting on firm sale or consignment is the dependent variable of the analysis I develop here below.

6.1.4. The model

According to TCE the choice of governance depends on certain variables affecting the transaction at stake, which are: the level of uncertainty, specificity of investments and the frequency (Williamson, 1985). With respect to institutional environment Williamson (1996) recognizes its importance but states that for TCE, the institutional environment is taken as given and not included in tests. However, from empirical literature resorting to a wider approach of New Institutional Economics, the credibility of the institutional framework affects the decision to choose one type of contract – i.e. formal or informal – and from these field findings, to choose a more or less complete contract.

Uncertainty. Williamson identifies two types of uncertainty: **environmental uncertainty**, which is linked to the states of the nature and is **exogenous** to the decision of contract parties; **behavioral** or strategic uncertainty, which is endogenous to the parties and may have its origin in the opportunism of the parties (Williamson, 1996, Saussier & Yvrande-Billon, 2007). Uncertainty is the key issue in the fresh

fruit trade which is affected from the two sources of cost of transaction: **Environmental uncertainty** is due to exogenous factors, such as the volatility of prices, the pressure of competition from other exporting countries, the demand fluctuations, the country risk levels (economic instability, institutional weakness), among others;⁸ **behavioral uncertainty** which is endogenous to the parties, may have its origin in the opportunism of parties. In this subchapter I focus on the environmental uncertainty.

The **institutional environment** “is the set of fundamental political, social and legal ground rules that establishes the basis for production, exchange and distribution. Rules governing the rights of contracts are examples...” (Davis and North, 1971, cited by Williamson, 1991). This implies two levels: first, the rules of the game: law, policy, customs, norms; and second, the institutions of governance (markets, firms, bureaus). Changes in the parameters of the institutional environment (property rights, contract law, reputation effects and uncertainty) influence the choice of the structure of governance or the mode of organizing transactions – from market, hybrids (contracts) or hierarchy (Williamson, 2002).

Field findings of this research suggest that institutional environment, such as regulations, forms of distribution, trade usages, and quality norms, which may vary according to countries of destination, influence the choice of contracts. Therefore:

Hypothesis 1: The choice of contracts varies according to the importing country

The theoretical predictions suggest that the degree of contract completeness increases with the specificity of assets and decreases with uncertainty” (Menard, 2002 p. 7 citing Palay, 1985; Joskow, 1988; Menard, 1996). Since, the greater the uncertainty level of the transaction, the more difficult, expensive, and risky it will be to establish a contract that aims for completeness” (Saussier 2000:193). Another factor influencing the choice for the degree of contractual completeness is the behavioral

⁸ The fluctuation of currency exchange rates is an important risk. In order to counterbalance it, exporters transfer part of this risk to producers, by paying the producer in the same currency as importers (dollars); some companies, the bigger ones, may take exchange rate hedges.

uncertainty. Low levels of trust and reciprocity revealed by the population of traders in the industry, would probably lead to more complete contracts (Bowles, 1998).

The fresh fruit trade is characterized by higher levels of uncertainty and therefore, as predicted by the theory, the predominant contract used is the consignment contract (60.3% of the contracts for 2009/2010) which is a less complete contract. However, from the field findings, weak legal framework, political and economic instability in the destination market and the history of the importing firms' payments and non-payments, affect the choice of contract. Therefore, I can hypothesize that:

Hypothesis 2: The higher the risk of the importing country the higher the degree of contract completeness

6.1.4.1. Assets specificity

As mentioned in the theoretical framework of this thesis, specificity of investments refers to those investments made expressly for a specific transaction or a specific client, which cannot be reoriented for other uses or for other clients. This implies a high risk of hold-up for the party that has made the investment. The Transaction Cost Theory defines six forms of these specific assets: (i) site specificity, (ii) physical asset specificity, (iii) human asset specificity, (iv) dedicated asset specificity; (v) brand name capital, and (vi) temporal specificity *has been added* (Williamson, 1996:59, emphasis added).

In the case of the fruit trade, those assets that might influence contract choices of traders are: time asset or temporal specificity, “particularly in the harvest and delivery of perishable products” (Allen & Lueck, 2005 supranote 30); human asset specificity, i.e. specific knowledge of the market/product/service; dedicated assets specificity, which are “investments in general purpose that are made for a particular customer (Williamson, 1996:60) or an “asset that cannot be redeployed because of the market size” (Saussier, 2000:198), and brand name capital, associated with the use of buyer's brands that cannot be redeployed to others in case of commitment breach (Williamson, 1996).

Theory and empirical research shows that the more important the investment there is a greater tendency of parties to opt for a structure of governance, such as a hierarchy that reduces transactions costs and prevents opportunism (Williamson cited by Saussier & Yvrande-Billon, 2007); or hybrid forms such as long-term contracts rather than short-term contracts (Joskow, 1987). In this case, contracts in international fruit trade are mostly short-term contracts within a long-term relationship, where the most important specificity is the time constraint due to the perishability of the agricultural products (Masten, 2000). As asserted by Masten, “the threats of hold-ups may also arise, or be exacerbated, where the timing of performance is important. In such settings, delay may become an effective strategy for eliciting price concessions ... because of the difficulties of arranging substitute performance on short notice.” Also, “because a product’s value is inherently time-dependent, like newspapers [or] because the serial nature of production...” (Masten, 2000: 180).

Specific investments have an effect on the duration of contracts and on the duration of the relationships;⁹ as well as on the degree of completeness of contracts “with regard to variables of adaptation: prices, quality, quantities, delays, and penalties... *the degree of completeness in contracts increases with the specificity of assets* and decrease as with uncertainty. This suggests a trade-off between security, required by substantial dependency, and flexibility required by changing circumstances” (Ménard, 2002: 7, emphasis added). This is in accordance with Saussier’s (2000) results on the study of transportation of coal to electricity power plants in France, which showed that contracts involving higher levels of asset specificity, i.e. site investments, were more complete. Therefore, considering perishability a proxy of time specificity asset, I propose that:

Hypothesis 3: The higher the perishability of the products the higher the degree of contract completeness

⁹ Duration is associated with the attributes of the transaction. “The more specific are the investments, the more continuity of the relationship matters, and the longer the duration of the contract” (Palay, 1984; Joskow, 1987; Masten et al., 1991; Shirley et al., 1995; Saussier, 1997, cited by Ménard, 2002).

Furthermore, according to the exploratory and confirmatory phases of this study, the perishable nature of agricultural products and their strong seasonality patterns increase the difficulty of exporters and importers to adapt to the hazards emerging from the rapid seasonal market changes as the oversupply in the market, the difficulty to sell the products and the resulting price fall. This has been documented by Knoeber (1983) “at harvest time, the grower has a perishable crop and so default of the processor would mean either loss of the crop or a quick (costly) sale in the thin spot market (and likely some crop deterioration as well)” (Knoeber, 1983 cited by Masten, 2000: 188). In the same line of reasoning, Masten (2000) illustrates the effect of the perishability of fruit on the choice of contracts. An example is the case of the integration through the multinationals to lower the risks of the U.S.–Caribbean banana trade: “the extreme perishability of bananas posed acute logistical problems. Once the fruit was cut, it had to be delivered to port, loaded, transported (often great distances), and distributed promptly... Growers faced uncertainty about the availability of buyers for their product.” Based on these arguments and according to Chilean exporters:

Hypothesis 4a: As the exporting season progresses the lower the degree of contract completeness

Hypothesis 4b: The longer the transit time the lower the degree of contract completeness

Figure 14 shows the model for this analysis

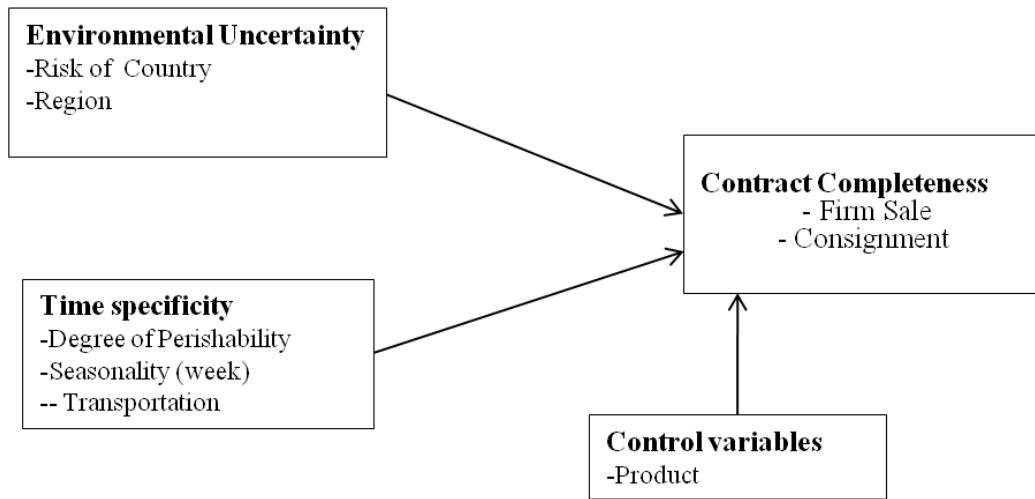


Figure 14. Determinants of the contract completeness

6.1.4.2. Data collection

I conducted 40 semi-structured interviews with managers on the exporter and importer sides, and experts; 19 of the interviews were in-depth during the biggest international trade fair for fruit and vegetables, in Berlin, Germany, February 2011. Findings from this exploratory phase were used to build a survey questionnaire. Data collection through the questionnaire was performed through face-to-face interviews in June and July 2011. The interviewer was the same person in all the appointments who presented the questions orally and completed the questionnaire. This reduced lack of understanding and therefore reduced the risks of non-responses. In addition, personal interviews facilitated the confidence of respondents regarding the purpose of the research, its confidentiality and therefore their willingness to provide information. Sixty-five exporting companies were interviewed. The respondents were export managers (62% of the cases) and CEO (38%).

Findings from the exploratory phase and the field survey give us some insights to analyze a Chilean customs database, for the period 2009–2010 (August 1 to July 31) which corresponds to the export campaign in place during the field survey. This database registers all the shipments (170,370) departing from Chile by country of destination at a detailed level of 8 digits (Chapter 08 Edible fruit and nuts of the Harmonized System Goods Nomenclature of the World Customs Organization). The specificity of this database is that it contains the type of exporter-importer contract agreed for each one of the shipments, although the identity of the importer is not available.

6.1.4.3. The variables

The dependent variable

In the model the dependent variable is the type of contract chosen by the exporter for each product exported (by each shipment). As previously mentioned, contract types are basically of two types: Sale (firm sale 39.7% of total shipments for 2009–2010) and consignment (guaranteed minimum 9.1% and free consignment 51.2%). In order to simplify the analysis, I analyze the dichotomous choice, where 1 equals the consignment contract and 0 equals the firm sale contract.

The independent variables

Region: During the interviews, exporters tended to summarize by region the contractual practices, namely the type of contracts chosen. To do so, they tended to use a geographical/environmental criterion complemented spontaneously with diverse explanations. I tried to capture this determinant by constructing a dummy variable named Region using the World Bank Geographical Country Classification. This allowed us to classify the 117 destinations appearing in the Chilean customs database for 2009–2010, into 13 regions: Eastern Europe: Belarus, Bosnia–Herzegovina, Bulgaria, Croatia, Slovenia, Estonia, Georgia, Hungary, Latvia, Lithuania, Poland, Czech republic, Romania, Russia, Ukraine; Northern Europe: U.K., Denmark, Finland, Ireland, Iceland, Norway, Sweden; Western Europe: Netherlands, France,

Belgium, Germany, Switzerland, Austria, Luxemburg; Southern Europe: Spain, Greece, Italy, Malta, Portugal; Northern America: I first classified the U.S. and Canada into a Northern America Region.¹⁰ However, due to the U.S. importance in world fruit imports, I opted to use it as country of reference, and separated it from Canada which also resulted having different fruit import regulations (I discovered this later in the analysis, during the process of interpretation of results); South America: Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela; Central America: Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panamá. Other Regions are: the Caribbean, Middle East, East Asia and Pacific, South Asia and Africa (detailed list upon request).

Time specificity: All types of fresh fruit are perishable; however the degree of perishability varies from one species to another and even from one variety to another. This defines the main attribute of fresh produce: the time specificity, which is especially important in long-distance trade. For instance, berries are very highly perishable (less than two weeks of post-harvest shelf life) and, according to the interviews, are mostly transported by air. Kiwis can be in storage for 3 to 4 months and therefore are mostly shipped by sea, while frozen fruit can be stored for 10 months. To measure this variable, I calculated the ratio of the exports by each firm and by the perishability degree of the exported products. To do that, I extracted the entire exports from a Chilean customs database corresponding to the 2009–2010 campaign. I determined the level of perishability following specialized sources (Table 18) (Kader, 2002; Welby & McGregor, 2004; Chilean Fresh Fruit Association, 2010; and exporters information). Products such as grapes, apples, and pears were divided by varieties since there are variations of the degree of perishability. For instance, most grape varieties are classified as highly perishable, while red globe grapes are very highly perishable and crimson are moderately perishable. I created a dummy variable **Perishability** where 1=Very highly perishable; 2=Highly perishable; 3=Moderate; 4=Low; 5=Very Low. This variable was included in the model as a

¹⁰ Even though Mexico could be considered in the Northern Region, especially due to its condition of NAFTA (North American Free Trade Agreement) the Chilean exporters consider Mexico as a Latin-American country and more specifically Central American.

continuous variable in order to avoid possible collinearity problems with the variable *products* (Dougherty, 2011).

To capture the variable seasonality (**Week**) within the 2009–2010 period in which the export took place, I transformed the daily dates recording each shipment into week periods where 1 equals the first week of the year and 52 the last one.

Finally, I created a dummy variable named *Transport*, which captures whether the product was exported by air (1), road (2) or sea (3).

Dummy Var.	Degree of perishability	Approximative Post harvest Life (month)	Fruit
1	Very High	< 1 mo	Figs, Berries, Avocados, Mandarins and Clementins, Red globe Grapes, Coscia Pears, Apricots, Cherries, Nectarines, Peaches, Prunes, Endrines, Cherimoyas, Pepino, Loquats, Plumcots
2	High	1-4 mo	Oranges, Other Citrus, Grapefruit, Lemon and Limes, Thompson seedless Grapes, Flame seedless Grapes, Ribier Grapes, Sugraone Grapes, Ruby Grapes, Other grapes, Black seedless, Asian Pears, Abate Pears, Peras Bosc, Quinces, Kiwis, Durians, Persimons.
3	Moderate	4-7 mo	Crimson Grapes, Royal Gala Apples, Red starking Apples, Braeburn Apples, Other Apples, Packham's triumph Pears, Barlet Pears, D'Anjou Pears, Other Pears
4	Low	7-10 mo	Richard delicious Apples, Fuji Apples, Granny smith Apples, Red chief Apples
5	Very Low	>10 mo	Frozen, Preserved, Dried, Nuts

Source: Elaboration based on Kader, 2002; Welby & McGregor, 2004; Chilean Fresh Fruit Association, 2010; and exporters' information

Table 18. Classification of products by degree of perishability

Risk Country: Literature framed on the international economics theory has studied the effect of risk in importing countries. The perspective of this analysis is mostly focused on the effect in performance, as the risk of a country causes a decline in trade (Anderson and Marcouiller, 2002). In this case, exporters argue that in the presence of good market opportunities, even in risky countries, exporters seek alternative forms of risk management that allow them – at least partially – to reduce the uncertainty. This can be accomplished by the choice of contracts, requirement of safeguards, and advance payments.

However, the risk of a country is a relevant variable to analyze. To do so, I used the risk country classification published by the main credit insurance company for the Chilean exporting sector. This classification is based on the business climate (policy, legal, economic) and an enterprise's payment history. It reflects the extent to which a country's economic, financial, and political outlook influences financial commitments of local companies and will depend not only on a company's qualities but also on those of the country in which it operates (COFACE). For each destination I created a dummy variable named **RSK_CTR**. I assigned the value 1 for risk countries; and value 2 for no-risk countries (detailed list upon request).

The control variables

According to the exploratory and confirmatory phase, findings from the interviews and questionnaire survey suggest that the product transacted appears to be one of the determinants that may influence the choice of contracts. I constructed a dummy variable named **Product**, into which all 110 items of fruits and nuts (varieties and distinctions from fresh, dried, frozen and preserved) exported by Chile during 2009–2010 were divided into groups. These products are disaggregated to 8 digits of chapter 08 of the International Customs Harmonized System (HS) (note that this chapter does not include processed fruits as jellies, juices, etc., which are out of the scope of this research and do not concern the surveyed exporting firms, processed fruits are included in chapter 20 of the HS). In total 18 groups were built. This strategy allowed constructing a categorical variable, that besides helping to explain the contracting choices, gives enough information for manager's decisions since

products are observable. Table 19 shows an example of the construction of this variable where it equals 8 for grapes, grouping 7 varieties plus 1 subgroup of other minor varieties exported by Chile (detailed list upon request).

Dummy Variable	HS	Product
8=Grapes	08061010	Uva fresca, Thompson seedless (Sultanina)
	08061020	Uva fresca, Flame seedless
	08061030	Uva fresca, Red globe
	08061040	Uva fresca, Ribier
	08061050	Uva fresca, Crimson seedless
	08061060	Uva fresca, Black seedless
	08061070	Uva fresca, Sugraone
	08061080	Uva fresca, Ruby seedless
	08061090	Uva fresca, Others

Table 19. Example of one product dummy variable using the HS

Table 20 shows the descriptive statistics of the model

	Minimum	Maximum	Mean	Std. Deviation
Region	1	14	8.03	4.891
Country Risk	1	2	1.75	.431
Transport	1	3	2.71	.632
Perishability	1	4	2.39	1.329
Weeks	1	53	20.08	13.870
Product	1	18	14.58	9.631

Table 20. Descriptive Statistics

I first proceeded to run a correlations test (such as Pearson and Chi Square) in order to determine the best strategy of analysis and to avoid possible presence of multicollinearity between the explanatory variables. I declined to include in the final model some variables as **Type_pdt** that classified the exported products according to their degree of transformation (1=fresh, 2=nuts, 3=frozen, 4=dried, 5=preserved) because of its correlation with perishability and because it showed a lower power of

prediction. As stated by Dougherty (2011), observations on the variables over time periods may have strong time trends; however, this is not a problem when the regression coefficients remain unbiased and the standard errors remain valid (ibid: 166). This is especially valid in this case where seasonal factors and the nature of the product are marked by time determinants. Finally, the explanatory variables retained show no correlations higher than 0.6 (Table 21).

Correlation matrix							
		Region	Country Risk	Transport	Perishability	Weeks	Product
	Pearson Sig. (2-tailed)						
Region		1	.228 .000	.012 .000	-.216 .000	-.127 .000	.043 .000
Risk Country			1	-.013 .000	-.312 .000	-.123 .000	.123 .000
Transport				1	.243 .000	-.147 .000	.120 .000
Perishability					1	.204 .000	-.085 .000
Weeks						1	-.229 .000
Product							1
N	170370						

Table 21. Correlation matrix

6.1.5. The results

To test the hypotheses, I ran a binary logistic regression on the contract choice, where 1 is consignment and 0 is firm sale, on the independent variables. The model performs well, 63.4 per cent of firm sale contract, 90.2 per cent of consignment contract, and, overall, 79.6 per cent of contract types are correctly classified. The Cox & Snell R Square is 0.319 while Nagelkerke's R Square is 0.432 (Table 22a).

Performance statistics	
Percentage of Firm Sale Contract correctly predicted	63.4
Percentage of Consignment Contract correctly predicted	90.2
Overall percentage correctly predicted	79.6
Chi-square	65512.219***
Cox & Snell R ²	0.319
Nagelkerke R ²	0.432

Significance levels: *** at 0.01

Table 22a. Model summary

Table 22b presents the exhaustive results of the estimates. The results of the estimates show that the country of destination influences the choice of contract. This variable is statistically significant for all the categories. I retained the U.S. as a category of reference that is mainly a consignment market (consignment, 79.4%, while exports on sale contract, 20.6% of shipments). Chilean exports to Western Europe compared to exports to the U.S. are also likely to be performed on consignment, the odds ratio (Exp(B) 1.732, $p < .000$) is higher than 1. For the case of East Asia and Pacific, results show that the probability to resort to a consignment contract is lower for these markets (Exp(B) 0.310, $p < .000$) and (Exp(B) .059, $p < .000$) for the case of South Asia. For the Northern Europe Region the more likely to resort to consignment is lower than for the U.S. (Exp(B) 0.588, $p < .000$). One could expect a certain similarity between Canada and the U.S.A contracting pattern. However exports to Canada are less likely to be performed on consignment (Exp(B) .239, $p < .000$), and more likely to be performed on firm sale. These results support Hypothesis 1, stating that the choice of contracts varies according to the importing country.

The *country risk* variable is statistically significant and the odds ratio (Exp(B) 0.331, $p < .000$) is lower than 1, so this suggests that the probability to export on consignment is lower when the destination country is considered risky while the probability to export on firm sale increases. Thus, Hypothesis 2 is supported. The *degree of perishability* also shows to be statistically significant. The coefficient (Exp(B) 1.138, $p < 0.000$) suggests that when the product perishability is higher it is more probable to export on consignment; therefore, Hypothesis 3 stating that higher the perishability of the products the higher the degree of contract completeness is not

supported. *Seasonality* in the model for the variable *week* proves to be statistically significant, the (Exp(B) 1.003, $p < 0.000$) is slightly higher than 1, meaning that the probability of exporting on consignment increases at the peak of the export campaign. This result supports the Hypothesis 4a. As for *Hypothesis 4b* stating that longer transit time leads to lower the degree of contract completeness, the *transport* variable coefficient shows that when exports are performed by sea (Exp(B) 8.307, $p < 0.000$) it is strongly probable to export on consignment while when exporting by road is more probable to contract on firm sale, therefore, H4b is supported.

Regarding the control variable *product* is significant, since it allows us to see in detail the probability to choose between the two types of contracts for each product or group of products. For instance, for avocados the (Exp(B) 1.389, $p < 0.000$) and for berries is (Exp(B) 2.003, $p < 0.000$) (blueberries are the most exported product of this group), meaning that exporting on consignment is more probable for very highly perishable fruit (post-harvest life less than 1 month), and this probability decreases as persishability decreases, e.g. apples (Exp(B) 0.629, $p < 0.000$). Also, the parties to the contract tend to opt for a consignment contract instead of firm sale (OR higher than 1) when dealing with products with very low perishability such as frozen fruit (Exp(B) 0.006, $p < 0.000$), dried fruit (Exp(B) 0.012, $p < 0.000$), nuts (Exp(B) 0.016, $p < 0.000$) the probability of choosing a consignment contract decreases while the probability to export on firm sale increases. The explanations of these results are discussed below.

Determinants of Contract Completeness						
Estimates using binomial LOGIT model (Y = 1 if Consignment Contract; 0 if Firm Sale)						
	B	S.E.	Wald	df	Sig.	Exp(B)
Region						
USA (Reference)			17200.810	13	.000	
Western Europe	.549	.027	417.287	1	.000	1.732
Southern Europe	-.288	.029	100.122	1	.000	.750
Northern Europe	-.531	.025	456.081	1	.000	.588
Eastern Europe	-2.834	.040	4928.456	1	.000	.059
South America	-4.046	.038	11611.821	1	.000	.017
Canada	-1.429	.041	1201.419	1	.000	.239
Central America	-3.439	.040	7504.810	1	.000	.032
Caribbean	-3.418	.079	1866.758	1	.000	.033
Middle East	-2.919	.041	5141.504	1	.000	.054
East Asia and Pacific	-1.172	.020	3289.506	1	.000	.310
South Asia	-2.838	.072	1561.219	1	.000	.059
Africa	-3.318	.307	116.924	1	.000	.036
Other	-3.899	.106	1361.670	1	.000	.020
Country Risk						
RISK_CTR	-1.105	.026	1778.611	1	.000	.331
Time specificity						
Perishability	.130	.012	114.108	1	.000	1.139
Week	.003	.001	28.022	1	.000	1.003
Transport						
Air (Reference)			4684.819	2	.000	
Road	-.331	.030	121.359	1	.000	.718
Sea	2.117	.032	4508.124	1	.000	8.307
Control Variables						
Product						
Grapes (Reference)			10587.789	27	.000	
Avocados	.329	.041	65.141	1	.000	1.389
Oranges	1.119	.069	266.668	1	.000	3.062
Mandarins	.392	.073	28.457	1	.000	1.480
Other Citrus	-.128	.562	.052	1	.819	.880
Grapefruits	-2.670	.301	78.481	1	.000	.069
Lemons	.561	.070	63.589	1	.000	1.752
Other	-1.635	.097	285.405	1	.000	.195
Apples	-.464	.031	224.833	1	.000	.629
Pears	-.213	.039	30.283	1	.000	.808
Quinces	.778	.406	3.680	1	.055	2.177
Apricots	-.721	.086	70.261	1	.000	.486
(Continue...)						

...	B	S.E.	Wald	df	Sig.	Exp(B)
Cherries	.215	.036	36.475	1	.000	1.239
Nectarines	.138	.030	21.112	1	.000	1.148
Peaches	.031	.037	.696	1	.404	1.031
Prunes	-.083	.031	7.178	1	.007	.921
Berries	.681	.038	314.493	1	.000	1.976
Kiwis	-.452	.030	228.893	1	.000	.636
Persimons	.241	.321	.563	1	.453	1.273
Cherimoyas	-.603	.246	5.996	1	.014	.547
Loquats	-3.319	.434	58.377	1	.000	.036
Plumcots	.644	.143	20.159	1	.000	1.904
Frozen	-5.068	.084	3614.887	1	.000	.006
Dried	-4.402	.066	4419.515	1	.000	.012
Figs	-.171	.159	1.162	1	.281	.842
Nuts	-4.158	.102	1668.456	1	.000	.016
Constant	3.496	.060	3348.629	1	.000	32.988

Table 22b. Logit results on the determinants of contract completeness

6.1.6. Discussion

To explain the econometric results, in the following I resort to the findings from the exploratory phase and the confirmatory phase, which gave some plausible explanations that can be retained. The respondents revealed the following:

6.1.6.1. Environmental uncertainty

As shown, the choice of contracts varies according to the importing country as was explained by the exporters because of several factors:

- **The importing channel** has an influence on the choice of contract. I will illustrate this point using the same country examples given by the exporters:

The predominance of traditional importers as brokers and wholesalers. For example, In the U.S., according to the interviews,¹¹ consignment contracts are used by brokers to sell the merchandise in the U.S. on behalf of foreign exporters, brokers do not take

¹¹ Interviews with an Executive of the Produce Marketing Association of the U.S. (PMA), one Mexican exporter, one Dominican Republic exporter, several Chilean exporters and the main legal advisor.

possession of the merchandise and act solely as an agent. On the other hand, firm sale contracts are mostly used by foodservices and secondly by supermarkets. According to the interviews, supermarkets in the U.S. contract mostly on consignment; however they seek to ensure a part of the supply at stable prices on sale contracts.

The results for Western Europe show that shipments on consignment accounted for 78.8%, very close to the proportion of consignment exports to the U.S.. This choice is influenced by the weight of the Netherlands, which is the main importer and re-exporter in Europe, because of the key role of Rotterdam harbor. As the relevant presence of brokerage companies in the U.S., and the subsequent form of contracting in the Netherlands, imports are mostly performed by brokers on consignment. This was confirmed through interviews with exporters and two interviews with a Dutch importer and a Rotterdam Port representative.

For the rest of the regions, the probability of contracting on consignment decreases with respect to the U.S., due to the following:

The role of supermarkets or importing companies dealing with supermarkets (product managers) is relevant to the choice of contracting on firm sale. During the field survey, I asked the exporters what was the most probable arrangement when dealing with a supermarket, directly or through a product manager? 56% of the respondents considered it more probable to use a firm sale contract. I then asked them on the choice of contract when dealing with an importer-wholesaler, 92% of respondents considered it more probable to resort to a less complete contract (free consignment, 54% or guaranteed minimum, 38%).

As an example, exporters frequently referred to the case of the U.K. and Germany. The explanation for this may be found on the increased concern for human health that led to the multiplication of private food safety standards mainly by supermarkets. For instance, in the U.K. where supermarkets represent 72% of the sales (figures of 2006, Gauthier and Journo, 2008), food crises that occurred in the late 80s, showed the weakness of the official European institutional framework to control and prevent

health emergencies.¹² This mainly led to the application of new regulations such as the U.K.'s Food Safety Act in 1990, which states that the last operator in the chain, i.e. the retailer, is responsible for the quality of products sold to consumers and is responsible for the good practices implementation by their suppliers (Codron et al., 2006). In this direction, as a U.K. importer explained during the interview, firm sale contracts allow for stricter requirements in terms of quality of the products to fulfill supermarket standards while the consignment contracts may leave quality provisions less complete.

“There are importers who sell to wholesale markets, they work mostly on consignment. Those who have no direct relationship with supermarkets do not dare to set a price (ex-ante). Normally the packaging required by importers who sell to supermarkets is more demanding: they request the PLU code [Price-Look Up, small stickers used primarily in U.S. supermarkets or retail grocery stores], packaging in smaller bags, special bags in a lighter weight package, the specifications get tighter and the market more demanding, then to the extent that one is adding value to the type of packaging, we require a more solid agreement: a minimum guarantee, a firm price. In other words, the more free and generic the packaging, the more consignment. As we advance in the distribution chain, the packaging conditions get more specific.” CEO of a trading-exporting company

One interesting illustration of this is the case is the Asian markets, where firm sale is predominant. As mentioned, the probability of resorting to a consignment contract is lower for these markets. I will briefly refer to East Asia. Some exporters specialized in this market revealed hints regarding certain differences in the contractual practices depending on the development of supermarkets. They explained that the probability to export on firm sale is higher in Korea (non-risk country) than in China (risk country). In Korea there is more presence of supermarkets, while in China distribution systems are more traditional and therefore the influence of supermarkets,

¹² The most prominent food safety crisis in Europe was Bovine spongiform encephalopathy (BSE) which led to the dissolution of the Ministry of Agriculture, Fisheries and Food (MAFF) in the U.K. (Beck M., Kewell B. and Asenova D., 2007).

at least for fresh fruit, is lower. I verified this information and found the following: 74% of the shipments to China were transacted on consignment (free consignment 25.4%, and 48.5% on guaranteed minimum), while 26.1% on firm sale; as for South Korea the proportion is inversed, 36.9% of the shipments were transacted on consignment (free consignment 36.4%, and 0.5% on guarantee minimum), the 63.1%, was exported on firm sale.

The centralization of the importing channel. Exporters referring to Europe mentioned that for the Scandinavian countries, the distribution of fresh produce is centralized by fewer and larger wholesalers that are integrated with main retailers imposing their own conditions. As the econometric results showed, exports to the European Northern Region are less probable to be on consignment compared to the U.S.A. In the field survey, exporters asserted that exports to these countries were mostly on firm sale because of the importance of supermarkets and high levels of quality requirements. I researched this and found that five retail groups and importers take up 80% of the total fruit and vegetable sales in these countries (DIPO, 2005). In fact, 64.3% of the shipments to Norway were transacted on consignment, 81.7% for Sweden, 69.6 % for Denmark and 51.3% for Finland (this shows a non-concordance between information gathered through the field survey and information from the database).

- **Institutional framework: regulations and standards**

Trade regulations: One of the econometric results concerning the choice of contracting in Canada was quite surprising. Contrary to the U.S. where, as mentioned, transactions are performed mostly on consignment, 59.5% of the shipments to Canada were transacted on firm sale. The explanation for this is a specific legal framework, which I have not observed in other countries during this investigation. In Canada, imports on consignment are prohibited by the Canada Border Services Agency Act, Customs Act, and the Licensing and Arbitration Regulations. “For imported fresh fruit and vegetables and interprovincial sales on consignment... members of the Dispute Resolution Corporation (DRC) are exempt from these

prohibitions.” Approximately 80% of produce dealers in Canada are members of the DRC” (WT/TPR/S/179 P: 97).

Quality and food safety standards: During the field survey I asked the exporters: Which is the more probable choice of contract when the importer requires specific health, social or environmental standards as GlobalGAP, and maximum residue levels (MRL)? For the case of exports to Europe, the general response is that when importer requirements are higher than the standard norm, the choice of a more complete contract is higher. In fact, 34% of the respondents declared that the firm sale was the more likely to be chosen when the importer required stricter exigencies on MRL. Respondents stated that this situation arises when exporting to certain supermarkets in the United Kingdom and in Germany. On the other hand, for norms as GlobalGAP even been a private voluntary standard has become practically a “mandatory” requirement (because even in countries where it is not required, its certification enhances the credibility of the company facilitating the access to other markets, and has no influence on the choice of contract).

In summary, the foregoing arguments explain why environmental factors of different countries affect the choice of contracts. According to the interviews, other factors influencing the choice of a more or less complete contract depend also on considerations regarding the risk of a country, which was addressed by the second hypothesis. I analyze this in the following.

- **Country risk:** Hypothesis 2 states that the higher the risk of the importing country, the higher the degree of contract completeness. According to the exporters, when there are high levels of country risk, it is more probable that exporters will opt for a firm sale (78.46% of the responses) (Table 23).

	High Country Risk	
	Frequence	%
Firm Sale	51	78.46
Guarantee Minimum	3	4.62
Free Consigment	3	4.62
Not apply	3	4.62
Non influence	5	7.69
N	65	100

Source: Questionnaire survey results

Table 23. Exporter responses on the choice of contracts
when exporting to risky countries

The econometric results confirmed this information. Furthermore, 75.3% of Chilean fruit exports are sold to no-risk countries, while 24.7% of sales are to risky regions. The choice of consignment contracts decrease when exporting to risk regions, 36.6% consignment contracts in risky countries, while 68.1% in no-risk countries (Table 24). Consequently, the use of consignment is notably less predominant in regions such as Eastern Europe (32%), South America (35%), Central America and the Caribbean (31% respectively), Middle East (30.6%), Africa (23.5%).

Risk Country * Contract Binary Crosstabulation					
			Contract Binary		Total
			Firm Sale	Consignment	
Risk Country	Risk country	Count	26699	15420	42119
		% within Risk Country	63,4%	36,6%	100,0%
		% within Contract Binary	39,5%	15,0%	24,7%
	No Risk	Count	40973	87278	128251
		% within Risk Country	31,9%	68,1%	100,0%
		% within Contract Binary	60,5%	85,0%	75,3%
	Total	Count	67672	102698	170370
		% within Risk Country	39,7%	60,3%	100,0%
		% within Contract Binary	100,0%	100,0%	100,0%

Source: Elaboration based on Chilean Customs Database

Table 24. Exports shipments by type of contract according to the risk of the importing country

For the case of South America, exporters consider that most countries in this region are risky, primarily because of institutional failures, the informality of the enterprises, weak legal environment, and economic or political instability. These factors have influenced the mode of contracting for the entire region. Below I present the Table 25 containing the exporter risk perception for selected countries.

Country	Type of contract most likely used by country	Reasons
Bolivia, Peru	Firm sale	Informality of firms, presence of firms not legally established
Colombia, Ecuador, Venezuela	Firm sale	Lack of enforceability In the case of Venezuela, delay of payments due to regulatory restrictions on foreign payments
Russia	Firm sale	High perception of risk. In general there is a lack of confidence on a firm's compliance with agreements, high default risk. There is the presence of market players with no experience in the business, linked to the old political power that does not share the codes of conduct for trade. However, in case of repeated relationships and increased market knowledge, trust can be developed. Broadly, Eastern Europe Countries are perceived as risky

Source: Questionnaire survey results

Table 25. Exporters' risk perception for selected countries

As shown in Table 25, exporters mentioned some other examples to illustrate the influence of risk in their choice of contracts. Regarding Russia (67% of exports on firm sale), “the economic and political environment in Russia (which is the most important market in Eastern Europe) is uncertain and prone to affect payment behavior due to low transparency of Russian company accounts, as well as the lack of fairness for the creditor's rights” (COFACE, 2010). At the time of the survey, Russian companies did not qualify as a subject of insurance, and therefore exporters resorted mostly to firm sale and prepayments. The perception of risk for the Eastern European region and the resulting contract choice was confirmed through interviews with the western European re-exporters. However, exporters and re-exporters explained that in the presence of repeated transactions with an Eastern importer and good performance, the contractual practices could smooth out.

Perishability. I measured the time specificity by degree of **perishability**, by **seasonality** and by means of **transportation**. Concerning **perishability**, as shown,

more perishable products are more probable to be exported on consignment. Therefore, Hypothesis 3 predicting recourse to a more complete contract when product is more perishable was not supported. To expand on this, I built a cross table which shows that 70% of very highly perishable products and 73% of highly perishable were exported on consignment. And inversely, on the other extreme, for low perishable or moderately perishable products, 91% and 54% of exports were on firm sale (Table 26).

Source: Elaboration based on Chilean Customs Database

Degree of Perishability * Contract Binary Crosstabulation					
			Contract Binary		Total
			Firm Sale	Consignment	
Degree of Perishability	Very High <1 mo	Count	19800	46169	65969
		% within Degree of Perishability	30.0%	70.0%	100.0%
		% within Contract Binary	29.3%	45.0%	38.7%
		% of Total	11.6%	27.1%	38.7%
	High 1-4 mo	Count	9952	26613	36565
		% within Degree of Perishability	27.2%	72.8%	100.0%
		% within Contract Binary	14.7%	25.9%	21.5%
		% of Total	5.8%	15.6%	21.5%
	Moderate >4 mo	Count	34714	29596	64310
		% within Degree of Perishability	54.0%	46.0%	100.0%
		% within Contract Binary	51.3%	28.8%	37.7%
		% of Total	20.4%	17.4%	37.7%
	Low >10 mo	Count	3206	320	3526
		% within Degree of Perishability	90.9%	9.1%	100.0%
		% within Contract Binary	4.7%	.3%	2.1%
		% of Total	1.9%	.2%	2.1%
Total		Count	67672	102698	170370
		% of Total	39.7%	60.3%	100.0%

Table 26. Exports shipments by type of contract according to the perishability of fruit

This can be explained by assertions made by managers: In a scenario of high levels of price volatility, which is more probable for very highly and highly perishable products, it is more probable to contract on consignment (56% of the responses). This is also consistent with the information provided by importers who affirmed that they could not take risks of importing under firm sale or even guaranteed minimum contracts products of short shelf-life, such as blueberries and avocados, and high

price volatility. On the contrary, as the exporters asserted, for nuts and frozen fruit the firm sale is chosen for around 96% of the shipments. The reasoning is that high levels of perishability result in a short marketing cycle, meaning that once the product is harvested and dispatched, the possibility for storing the product as in case of a bad market (i.e. season oversupply) is extremely limited. This reduces the capacity to negotiate prices or to shift the product to better markets. Poppo & Zenger (2002) assert that the prediction regarding the effect of specificity assets on contracts, changes when there are high levels of uncertainty. In this situation, managers tend to use relational governance instead of more complete contracts or formal contracts. Bocaletti & Karantininis (2002), in their case study on the dairy supply chain organizations in seven countries, found that when the product transacted involves higher asset specificity, as complex quality specifications above the standard requirements, producers-processors contractual arrangements “can be supported only with strict relational contracts and sometimes with vertical integration” (ibid:273).

Seasonality: Fruit trade is marked by seasonality. This fact led to H4: As the exporting season progresses, the lower the degree of contract completeness. From the interviews, I found that even within a year there are peak demand periods like Christmas that may alter the choice of contract. The same effect may occur when there is a lack of supply in certain seasonal windows due to less supply from third countries, or domestic production in the importing country or region, as in the EU. According to interviews these windows can appear at the beginning of export campaigns for certain fruits (i.e. kiwis and cherries). Table 27 and Figure 15 show the use of types of contracts by month.

At the peak of the campaign, the exporters have large volumes that should be quickly sold in the market due to fruit perishability. This may influence the increased use of consignment contracts. However, a seasonal analysis of the aggregated does not allow us to identify specific characteristics of the production cycles of fruit.

Month	Firm Sale	%	Consignment	%	Total
Jan	6354	31.9	13560	68.1	19914
Feb	6433	31.2	14197	68.8	20630
Mar	7595	31.3	16672	68.7	24267
Apr	8852	38.3	14270	61.7	23122
May	8824	45.9	10408	54.1	19232
Jun	7197	45.5	8610	54.5	15807
Jul	6182	50.5	6069	49.5	12251
Aug	3811	51.3	3623	48.7	7434
Sep	3405	51.0	3270	49.0	6675
Oct	2538	49.5	2586	50.5	5124
Nov	2350	52.1	2161	47.9	4511
Dec	4131	36.2	7272	63.8	11403
Total Shipments	67672		102698		170370

Source: Elaboration based on Chilean customs database (2009/2010)

Table 27. Export shipments by type of contract and by month

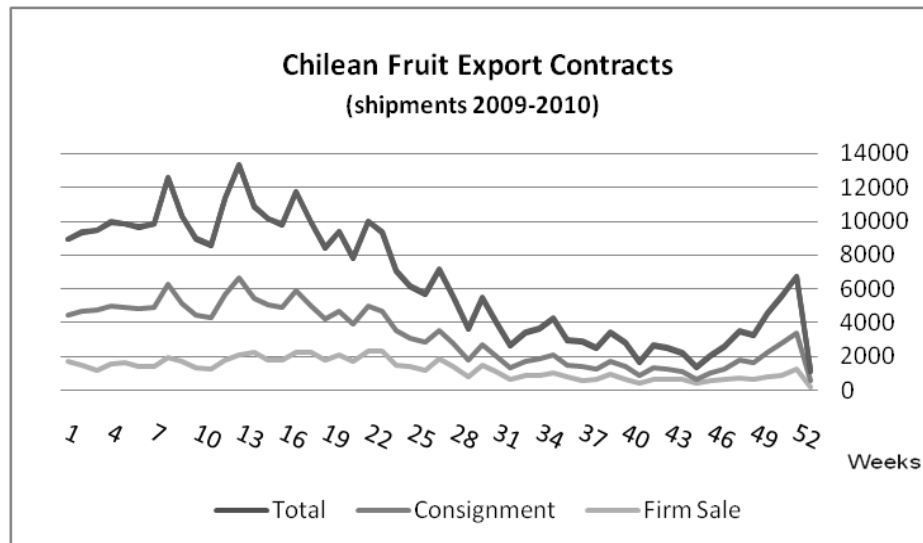
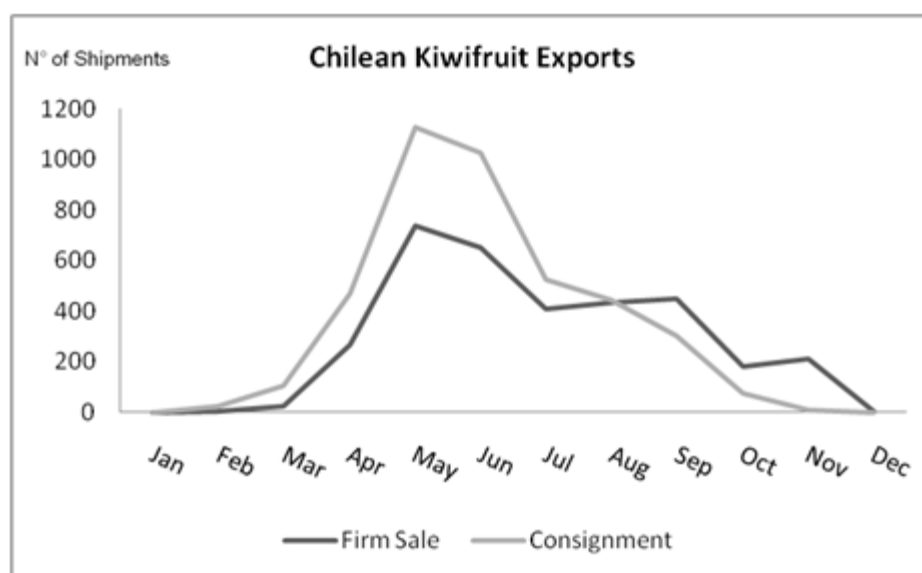


Figure 15. Fruit export by type of contract and by month

Thus, I conducted an approximation for certain products. Here below I briefly present the case of kiwifruit. Figure 16 shows that the type of contract varies according to the seasonality. According to the Chilean Kiwi Committee, the Chilean supply increases in May, and at that time, kiwifruit is sold slowly because of the presence of the product from Italy and other northern hemisphere countries (Gonzalez, 2010). When the market is oversupplied, the resort to consignment contracts increases. On the contrary, the resort to firm sale contracts increases by November and December. This is because Chile's main competitor in the Southern Hemisphere, New Zealand, finishes its season at that time (Gonzalez, 2010).



Source: Elaboration based on Chilean Customs Database

Figure 16. Kiwifruit exports by type of contract and by month

This coincides with results from this survey. Exporters mentioned that in situations of supply shortage and higher levels of demand, the exporting company would be in a favorable position to negotiate a more complete contract as they explain using the cases of organic products and frozen fruits.

“Organic products are in a category involving more strict specifications. To deal with these products, we normally operate either on firm sale or guaranteed minimum, and no, or almost no, free consignment. The higher the specificity of the product

more fixed is the arrangement. As there is not much availability of organic products, it is a specific niche of customers, thus we tighten the contract terms a little more. The negotiation conditions for the exporter decrease as the volume increases and the competition increases.” (Sales Manager, Export Trading).

“We have been working in fruit exports for 22 years and 15 years ago we started dealing in frozen fruit. At the beginning the offer was smaller, and then prices were higher and all exports were on firm sale. Today, we have 15 clients in some cases with an exporting program for the entire campaign and in some cases on Free Consignment.” (CEO, Export Trading)

Therefore, another aspect of the specificity of time for fresh produce may be explained by microeconomic considerations: under conditions of supply exceeding demand for a given good, the price of the good rises. The TCE accepts this principle; however, it is more interested in the price mechanism agreed between the parties to a contract rather than the price itself (Williamson, 1996).

Transportation: The longer the transport time, the higher the possibility of price variations between the time of shipping the goods and the time of arrival and delivery. On the contrary, a shorter transport time, such as by air, implies a reduction of risks in prices changes. Fresh fruit is more susceptible to the danger of spoilage during transportation. The quality of the fruit can deteriorate between the time of shipment and the time of delivery; therefore, highly perishable fruit such as berries, and exotic fruits are likely to be transported by air. For these reasons, when the transport is by sea, the usual mode of contract is consignment and when the mode of transportation is by air, it is more likely to be a firm sale (Table 28). This proves to be true only when exporting by air to Northern Europe (58.9% on firm sale), Eastern Europe (70%), South America (59.5%), Central America (98%) and Middle East (87%). Road transportation is more probable to contract on firm sale, which is mostly explained by uncertainty variables, due to the fact this means of transport is used for exports to South America, a risky region. This is concordant with findings from the questionnaire survey.

		Contract Binary		Total
		Firm Sale	Consignment	
Air	Count	4922	11442	16364
	% within Transport	30.1%	69.9%	100.0%
	% within Contract Binary	7.3%	11.1%	9.6%
	% of Total	2.9%	6.7%	9.6%
Road	Count	8713	8647	17360
	% within Transport	50.2%	49.8%	100.0%
	% within Contract Binary	12.9%	8.4%	10.2%
	% of Total	5.1%	5.1%	10.2%
Sea	Count	54037	82609	136646
	% within Transport	39.5%	60.5%	100.0%
	% within Contract Binary	79.9%	80.4%	80.2%
	% of Total	31.7%	48.5%	80.2%
Total	Count	67672	102698	170370
	% within Transport	39.7%	60.3%	100.0%
	% within Contract Binary	100.0%	100.0%	100.0%
	% of Total	39.7%	60.3%	100.0%

Table 28. Exports by type of contract and transport

6.1.7. Conclusion

Chilean Fruit exports are transacted using two main types of contracts: firm sale, and consignment (whether free consignment or guaranteed minimum). These arrangements differ in the price mechanisms, which are the most important terms/clauses in the contracts. As theory predicts, fresh fruit export-import contracts are all incomplete. However, the price mechanism defines a different level of completeness, thus a firm sale contract (final price defined ex-ante) is more complete

than a consignment contract (final price determined after sale in the importing market).

The binomial logit estimates show that the choice of contracts varies across destination countries. According to the field survey results, possible explanations for this are the type of importing channels. In countries such as the U.S. and the Netherlands with a predominance of traditional importers as brokers and wholesalers, exports are more probable to be transacted on consignment contract. On the other hand, in countries where there is more participation of supermarkets or importing companies supplying supermarkets, the probability to export on consignment decreases while the probability of exporting on firm sale increases (i.e. China and Korea). I observe exceptions to this, as in the case of Scandinavian countries where it is more probable to export on consignment even though retailers having a predominant role in the importing channels that are centralized by few groups. Regulations and norms matter for the choice of contracts, as in Canada due to a specific legal framework for importing and interstate transactions of fruit and vegetables.

The fruit trade is marked by uncertainty, so this explains the predominance of consignment contracts (60% of the exports) according to TCE predictions. However, in conditions of high levels of uncertainty due to importing country risk, exports are less likely to be performed on consignment while the probability of resorting to a firm sale rises. On the contrary, exports on consignment are more likely to occur in no-risk countries. In other words, the higher risk of the importing country will increase the probability of resorting to a more complete contract.

I measured the time specificity by perishability, seasonality and mode of transportation (as a means to shorten the time between harvest and marketing in destination markets). According to exporting managers, the choice of contract may vary in the course of a year due to demand and supply variations. According to the econometric results, the probability of exporting on consignment increases at the peak of the campaign. Conversely, in situations of shortage of supply, the exporting company would be in a favorable position to negotiate a more complete contract as

firm sale. This can be explained by microeconomic considerations: under conditions of supply exceeding demand for a given good, the price of the good rises. While the TCE accepts this principle, it is more interested in the price mechanism agreed between the parties to a contract rather than the price itself (Williamson, 1996), which is what I observe when comparing the two types of contracts used for Chilean fruit exports. The degree of perishability also shows to be statistically significant. The econometric results show that when product perishability is higher it is more probable to export on consignment than when the product is fresh. On the other hand, products with lower perishability as in the case of dried fruits, frozen fruit and nuts, the probability of choosing a consignment contract in comparison with a firm sale, decreases. The following table provides a summary of the hypotheses.

Hypotheses	Results
H1: The choice of contracts varies according to the importing country	Supported
H2: The higher the risk of the importing country the higher the degree of contract completeness	Supported
H3: The higher the perishability of the products the higher the degree of contract completeness	Not Supported
H4a: As the exporting season progresses the lower the degree of contract completeness	Supported
H4b: The longer the transit time the lower the degree of contract completeness	Supported

Table 29. Summary of Hypotheses

6.1.8. Contributions and limitations

This subchapter contributes to increase knowledge on how firms use alternative contractual choices to face the increased hazards of international transactions, especially when dealing with complex transactions within environmental uncertainties linked to the political, economic, and weak legal enforcement environments of alternative importing countries.

This subchapter makes a practical contribution to manager knowledge of how contracts can be used as a means to reduce hazards, on the one hand, and, on the other hand, it gives an overview of the Chilean contracting pattern that has been implemented by the industry and can be useful for firms to compare their individual strategy. It also contributes to increase understanding of new firms entering into the export activity, and to have detailed information on the contracting practices. At the theoretical level, this analysis makes an important contribution to the research on contract incompleteness analysis, especially because of the richness of the information that allowed analyzing all fruit shipments made by all firms of one entire industry to 117 destinations around the world. It contributes to the understanding of the role of uncertainty and especially it gives a deeper understanding of the role of temporal specific assets which are essential in agriculture and the international trade of perishable products.

This subchapter has a number of limitations. First, the analysis does not include other relevant variables that, according to the field survey, might affect the choice of contract, namely: price volatility, variables related to behavioral uncertainty that could allow a more complete construction of the variable uncertainty, as well as other variables regarding the relationship between the dyad, due to the fact that, I cannot observe the identity of the importer in the database. Second, a cross-sectional analysis does not allow observing the evolution of contracting practices in accordance with the length of the relationship; thus, future research can be done to test how the evolution of the exporter-importer relationship affects the choice of contracts and the effect on performance. Third, I could not construct a dummy variable to measure specific institutions affecting the agricultural choice of contract, e.g. the regulation governing contracts as the case of Canada, or the predominance of supermarkets in the importing market. To my knowledge there are no worldwide indicators that would allow covering the entire set of 117 Chilean fruit export destinations.

Another set of variables that could be included are related to the firm's characteristics, its experience (Aulakh & Gençtürk, 2008), the firm's size and the type of firm, such as multinational, producing-exporting or export-trading, as these

variables may affect governance decisions (Poppo & Zenger, 2002, López-Bayón & González-Díaz, 2010; among others), and to the importing country characteristics, as the distance, the cultural similarities or differences, which raise the coordination and monitoring costs in overseas markets (Masten, 2000).

Due to lack of information, this analysis did not include the analysis of the brand-specificity role in the choice of contract completeness. According to the interviewees, this practice is most used when dealing with supermarkets and other special buyers, because it increases the level of asset specificity and thus is more probable to lead to more complete contracts. This would join Lyon's findings: when the product is highly specialized (specialized technology for the case of engineering industry), the use of formal and complete contracts increases (ibid: 1994). Otherwise, as found by Bocaletti & Karantininis (2002) when needing specific trademarks, the choice of governance tend more to hierarchy structures. Finally, even though the choice of integration was out of the scope of this study, I observed that besides traditional multinationals, as described by Masten (2000) in his illustration on the case of the banana trade, a new generation of multinationals has emerged to handle higher temporal specificity and high value products, such as blueberries. Consequently, these limits provide directions for future research.

6.2. THE CHOICE OF SIGNING A CONTRACT (OR NOT) IN INTERNATIONAL FRESH FRUIT TRADE

This subchapter describes the contract as an internal mechanism for coordination between exporters and importers. It analyses the role of contracts and the factors that influence the decision of entrepreneurs to sign and some reasons for not signing. The importance attached by entrepreneurs to signed contracts was described by Lyons (1994). A qualitative analysis method and nonparametric analysis (Spearman) of the ordinal scale responses in the questionnaire to 65 Chilean exporters are applied.

6.2.1. Introduction

A prevailing view among the fresh fruit international trade players is that contracting is mostly informal. But what do players mean by informal? A recurrent assertion is that the “fresh fruit trade is a business of man’s word and trust” therefore, no signed contracts to back up the transaction. Given that fresh fruit exports reached 3.1 billion dollars (ODEPA, 2011), not an insignificant amount, and that most of the exports are transacted on credit due to the “uncertainty in the quality of products can make purchases on credit the preferred option for importers [exports on credit for Chilean food products rise up to 95%]” (Aisen et al., 2012: 9), it is surprising that contracting would tend to be largely informal. Consequently, the motivation of this subchapter is to understand how a business as large as fresh fruit exports, that handles highly complex products due to its perishable condition and that is surrounded by the risks of the long-distance trade, may rest on informal contracts.

Contract is a complex concept both in theory and in practice. Also is the concept of formal and informal contract. What is a contract? What makes a contract formal or informal? Williamson (1991), illustrates the difference between formal as “e.g. written agreements” and informal “oral amendments” (ibid: 271). Most of the literature, including Williamson, refers to a contract when it is legally enforceable by a court of justice: “Consistent with the legal definition of contract, I reserve the term contract only for agreements that would be legally binding in a public court of law” (Masten & Prüfer, 2012: 3). A clear definition of informal is “agreements reached

outside official channels” (Palay, 1985: 156), referring to rail freight official contracts, while most recent business concepts equate formal contracts with written or explicit contracts (Lusch & Brown, 1996, Aulakh & Gencturk, 2008). To understand this case, the interpretation that formal contracts are explicit or written is not sufficient to characterize the export-import agreements since these transactions are backed by the written communication and formal documentation required for the international transit of goods, which are legally binding. Subsequently, why is there the assumption that contractual practices in the fruit trade are predominantly informal?

Our study shows that exporters consider that a formal contract is a document signed by both parties to the transaction, that is, by the exporter and the importer, which coincides with Lyons findings (1994). This fact led us to the following question: What are the factors that influence the decision of entrepreneurs to sign or not to sign a contract? To answer this, I conducted a qualitative and non-parametric analysis to interpret the in depth face-to-face interviews with 40 exporters and importers, complemented by a non-parametric analysis of a face-to-face survey of 65 Chilean fruit exporters.

Our results show that the decision to not sign a contract is determined primarily by the cost of drafting and negotiating a document that has to be invariably incomplete due to difficulty of anticipating the market and product conditions weeks or months before the completion of the sale at the destination country. This finding is consistent with the literature. On the other hand, the decision to sign a contract depends, among other things, to institutional factors, such as legal or administrative requirements, and to relationship and trust. Regarding relational factors, there is an inverse relation between the choice of signing a contract and the presence of long-term business relations where trust has been instilled. However, when instead of trust, mistrust exists, the use of the contract is not the primary means to countervail the risk of the transaction. In the same direction, when exporters deal with risky importer countries, a signed contract does not appear to be a tool for risk management. Consequently, the

role of the contract is closer to a means to improve the planning and coordination of the transaction rather than as a protection mechanism.

This subchapter is organized as follows: in 6.2.2 the theoretical framework is presented; 6.2.3 examines the context of this topic; 6.2.3.4 examines why exporters do not sign contracts; 6.2.3.5 examines why exporters do sign contracts; 6.2.4 presents the methodology for the analysis of a scale response questionnaire; 6.2.5 highlights the results; 6.2.6 presents the discussion and conclusions; 6.2.6 the contributions and 6.2.7 the limitations.

6.2.2. Theoretical framework

“In order to carry out a market transaction it is necessary to discover who it is that one wishes to deal with, to inform people that one wishes to deal and on what terms, to conduct negotiations leading up to a bargain, to draw up the contract, to undertake the inspection needed to make sure that the terms of the contract are being observed, and so on” (Coase, 1960: 15).

When analyzing contracts it is unavoidable to start with Coase’s contribution to the recognition of the existence, and importance, of transaction costs, namely: search and information costs, bargaining and decision costs, and policing and enforcement costs (Coase 1937; 1960) when transactions occur between two separate technological entities (Williamson, 1996). Furthermore, analyzing transactions that are embedded in different institutional frameworks for the international trade and the transacted products are difficult to measure, and susceptible to deterioration because of the long-distance trade.

The parties to a transaction cannot define complete contracts, providing for all contingencies, obligations and conditions ex-ante, due to various factors: problems of interpretation because of the limited rationality of agents, limitations on available information, uncertain environment, and the complexity of the transaction, which reduces the ability of anticipation of future situations (Klein, 2002; Goetz & Scott, 1981 cited by Macleod, 2002). “Such contracts arise when the number of contingencies are so large that it is not possible to write a complete contingent

contract, creating problems for the interpretation and enforcement of contract terms and conditions” (Macleod, 2002). Therefore, “a major advance in economics involves the recognition that contracts adopted by transactors are incomplete” (Klein, 2002).

When literature refers to contracts, most authors equate the term with a written contract that is understood to be formal. In these types of contracts, the parties enter into legal agreements and accept the intervention of a judicial third-party which has the authority to dictate sanctions and to intervene in case of controversy, or requirements of adjustments in the terms agreed in the contract (Masten & Saussier, 2002). The legal system enforces contracts and provides a set of rules and procedures for resolving disputes between parties (Hviid, 1999). However, the legal approach is insufficient to explain the diversity of contracting practices in real life. The contribution of new institutional economics and transaction cost economics has been to recognize the existence and relevance of private ordering, in which parties structure their relation without resorting to third-party enforcement (Williamson & Masten, 1995).

In this direction, Palay (1985) contested the assumption that contracting within an industry was of the classical type, and asserted that transactions are more complex than what regulatory frameworks provided. This inadaptability encouraged parties to look for ways to get around the rules. In this context, Palay introduced the concept of an informal contract as being “legally unenforceable contracts, that is, agreements reached outside officially sanctioned channels” (Ibid: 156).

For their part, Masten & Saussier (2002) establish that when parties transact without a contract, they have the freedom to renegotiate, to breach the agreement and to unilaterally terminate the relationship with no possibility to be legally forced to fulfill their commitments. “Informal agreements are categorized as a traditional form, close to the market and therefore primarily regulated by the price mechanism” (Jaffee, 1992 cited by Codron et al., 2009). Indeed, Jaffee (1992) used the term market reciprocity agreements developed by Geertz (1978) in his study of traditional markets in Morocco, to refer to informal market agreements which are based on personal ties and loyalty between the parties and that lead to long-term business relationships.

A major contribution to the understanding of contracts is the one developed by Macneil (1978) that changes the traditional vision of the contract, which applies especially to short-term and sporadic contracts, i.e. discrete contracts. Relational contracts are developed in the framework of personal relations between the parties based on long-term relationships (Boisman, 2005). Macneil (1978) differentiates transactional contracts and relational contracts since both involve opposite characteristics. For this research I will only mention some of them. Contrary to a transactional contract, a relational contract presents the following characteristics: (a) the personal involvement, unique, non-transferable; (b) duration, long-term relation; (c) planning, while “transactional contracts focus on exchanges” relational contracts “focus on structures and processes of relation,” adhesion without bargaining out the terms of the existing contract, except for incoming new members; in other words, an extended mutual plan combined into the ongoing creative relationship being established; (d) time-sense “futuraizing the present;” and future cooperation “success of the relationship dependent on future cooperation in performance and planning.” Through contracts the contractors seek to limit opportunistic behavior, to ensure compliance, performance and to reduce uncertainty.

At present, theory and empirical research agree that a contract is not the only support for transaction. “Firms are riddled with relational contracts: informal agreements and unwritten codes of conduct that powerfully affect the behaviors of individuals ... Even ostensibly formal processes such as compensation, transfer pricing ... often cannot be understood without consideration of their associated informal agreements” (Baker et al., 2002 : 20).

The study of contracts in economic and managerial literature has received much growing attention. “The conceptual and empirical study of contracts governing business relationships is an important area of inquiry ... because the misuse of contracts could create irreconcilable conflict and other forms of dysfunctional behavior that could ultimately harm channel member performance” (Lusch & Brown, 1996 : 9).

Frazier highlights the importance of self-enforcing contracts, which incites respect for agreements between firms, the effect of dependence in the use of explicit and normative contracts, the role of normative contracts in the relational exchange behavior, and the enforcement practices (Lusch & Brown, 1996; Heide et al., 1998; Dutta et al., 1994; Bergen et al., 1998 cited by Frazier, 1999: 230).

Zhou & Popoo (2010) in their empirical research analyze whether managers would choose to use formal contracts over relational reliability when the legal environment is perceived to be credible, that is, it will enforce contracts, over relational means. However, if “formal legal institutions are unpredictable, managers may rely on informal, personal-based mechanisms to substitute the institutional void and coordinate exchanges” (Peng, 2003; Xin & Pearce, 1996 cited by Zhou & Popoo, 2010). Zhou & Xu (2012) deepen the analysis when firms are confronted with weak legal and informal environments where detailed contracts could result in a higher propensity for opportunism.

One stream of research is interested in understanding the choice of formal, written, or explicit contracts (Lusch & Brown, 1996), versus the use of informal or implicit contracts and the reasons for which businessmen often prefer to rely on ‘a man’s word’ in a brief letter, a handshake, or ‘common honesty and decency,’ even when the transaction involves exposure to serious risks’ (Macaulay, 1963: 58).

6.2.3. The context

During the realization of this research I confront the difficulty of defining what a contract is. From a theoretical-legal perspective a contract is “[those] agreements that would be legally binding in a public court of law” (Masten & Prüfer, 2012: 3). From this empirical study, for entrepreneurs, a contract is a document that details the terms of the agreement and is signed by both parties. If the transaction is not supported by a signed contract, entrepreneurs use the expression “agreements,” which are mostly oral negotiations confirmed by written as email/fax and complemented by oral/written coordination. This joins Lyons (1994) who in his research on subcontractor-customer relationships determines the probability of a transaction being

governed by a formal contract. In his questionnaire “the definition of a formal contract” was left deliberately open, because I wanted to know the firm’s own view... Most respondents appear to have interpreted formal contracts as written documents that included a two-way exchange of signatures” (Lyons, 1994: 262).

Indeed, most of the respondents in this research have the perception that signed contracts are enforceable while non-signed contracts are not. Or if they are enforceable, the legal cost and the time required would be very high to make them unenforceable. Furthermore, there is a prevalent opinion that the international fresh fruit trade is a rather informal business that does not rely on signed contracts but on man’s word and trust between both parties.

In the following, I first present the regulatory framework supporting the enforceability of international transactions of fresh fruit and establish the differences between a signed contract and non-signed contract.

6.2.3.1. The enforceability of international fresh fruit agreements

International trade contracts are governed by the United Nations Convention on Contracts for the International Sale of Goods (Vienna Convention of 1980 or CISG). This convention was established due to the recognition that “the adoption of uniform rules which govern contracts for the international sale of goods and take into account the different social, economic and legal systems would contribute to the removal of legal barriers in international trade” (CISG).

From a legal perspective a non-signed contract is enforceable before the authorities and the court due to the export-import documentation that constitutes proof of the transaction (interview with an associate of the main law firm for the Chilean fruit industry, international litigations CAIFL; see case below, and DRC, see subchapter 2.3, and ICC, 2012). This information is consistent with the *Lex Mercatoria* and the United Nations Convention on Contracts for the International Sale of Goods (Vienna Convention) which states that contracts “need not be concluded in or evidenced by writing and is not subject to any other requirement as to form. It may be proved by

any means, including witnesses” (Art. 11 CISG, 1980). However, legal experts agree that a signed contract improves planning and coordination, reduces misunderstandings and, in case of conflict, it is easier and less expensive to enforce them before the courts.

In the framework of PACA (U.S.A), the use of written contracts (including the amendments) is strongly recommended; however, oral contracts may be enforceable since the claim must be supported by documentary evidence such as “invoices, bills of lading, broker’s memoranda of sale, manifests, and accountings,” or any other evidence (PACA). This is applicable for the DRC.¹³ In Europe there is no such public/governmental regulatory framework to enforce specifically fruit and vegetable transactions. There is a private framework named COFREUROP,¹⁴ which is an industry voluntary standard that rules contractual import-export arrangements. This standard is enforced by a private mechanism: the International Arbitration Chamber for Fruits and Vegetables (CAIFL) and the Arbitration Chamber of Paris (Chambre Arbitrale de Paris) manage CAIFL arbitration proceedings.

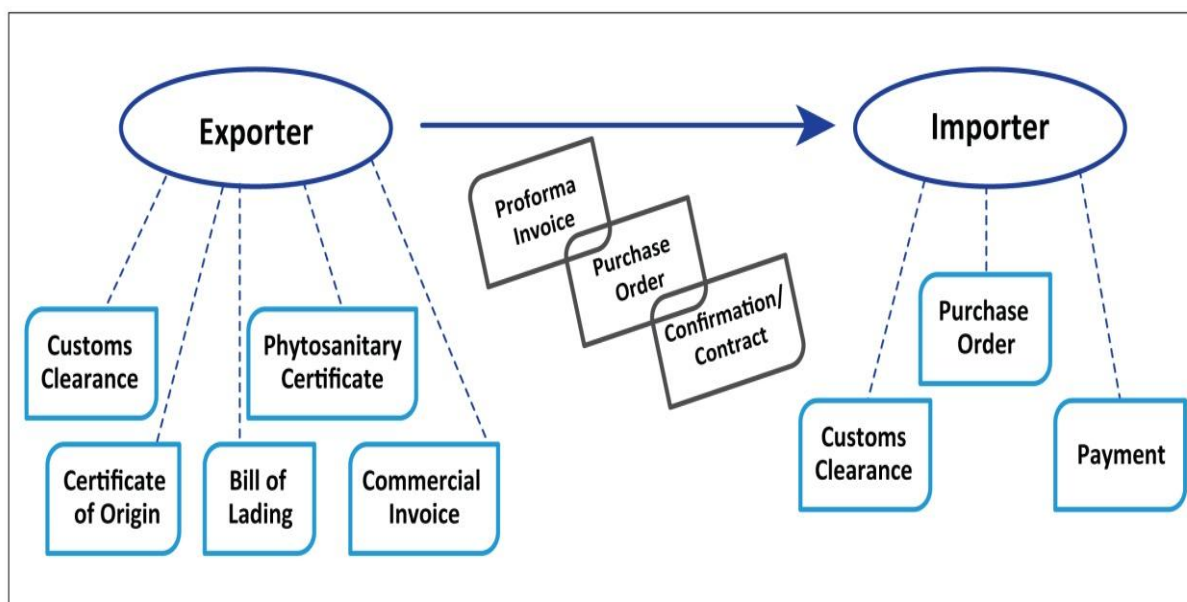
According to Lyons “legally enforceable contracts can include verbal agreements, while some written agreements may be so worded as to be meaningless in a court of law” (Lyons, 1994:262). In this case, “oral contracts, although they can be held legally binding, are notoriously hard to prove in court. An oral contract without the documents to back it up is virtually unenforceable. In most cases, PACA formal decisions (courts) give considerable weight to written agreements” (USDA, 2006).

Indeed, the international transactions of goods are backed by various official and private documents that seek to guarantee the legality of the operations. Figure 17 shows the documentation used for Chilean fresh fruit export-import which follows the international standards (illustrations in Annex 5):

¹³ The Agricultural Commodities Act (PACA) is a Federal Law, enforced by the U.S. Department of Agriculture that regulates interstate and foreign commerce in the U.S. (a similar regulation is in force in Canada which is complemented by the Dispute Resolution Corporation, DRC).

¹⁴ Common European Usages for the Domestic and International Sale of Eatable Fruits and Vegetables (COFREUROP).

Customs clearance: (a) containing the identification of the exporter and the importer; the products and varieties; (b) FOB value (an estimate for the case of consignment, exporters have a span of time for declaring the true value after the sale in the importing country); (c) the volume; (d) the modality of the agreement (whether firm sale, free consignment, guaranteed minimum, at least for the case of Chile customs); (d) payments; (f) Incoterm; (g) packing information, among other things. The issuing authority for customs clearance is the Chilean customs at the exporting side and customs of the importing country at entry).



Source: Adapted from ICC, 2012

Figure 17. Export-import documentation

The phytosanitary certificate is specific for agricultural products and is a sanitary obligation required to protect plant health in the importing country, which is issued by the *Servicio Agrícola y Ganadero* (Ministry of Agriculture of Chile).

The certificate of origin is a document that establishes the origin of the goods for determining: (i) the duty that will be applied or benefit from tariff reductions or exemptions according to preferences emerging from international trade agreements (if applicable); (ii) whether the products were legally exported and imported; (iii) it may be required by the banks for issuing letters of credit. For the case of fruit exports from

Chile, this certification is issued only for fresh fruit grown and harvested in this country.

The commercial invoice is a document required by customs for the estimation of duties and taxes, as well as for banks and insurance companies for financial or assurance proceedings. It contains the following information: (a) buyer and seller identification; (b) date, terms of sale and the Incoterm agreed; (c) the value of the products; (d) quantity, weight, volume of the shipment; (e) complete description of products; (f) type of packaging; (g) insurance, shipping and other charges (Business Dictionary; ICC, 2012).

The bill of lading is a document that evidences: (a) the contract of carriage by sea (for transportation by air it is named air waybill, for transportation by road is CMR waybill); (b) the taking over or loading of the goods by the carrier; (c) the identification of a named person responsible to receive the goods (or to order, or to bearer); (d) it constitutes a document of title. The goods can be transferable or sold during transit against the document; (e) it provides a proof of shipment; the seller can forward the document to the buyer for advance payments or final payment once the buyer confirms that the product meets the specification stated in the agreement. It is also used for customs, credit and insurance purposes. The document also contains the name and address of the consignee and consignor, the carrier; a description of the merchandise; weight and number of packages (Hamburg Rules; United Nations Convention on the Carriage of Good by Sea, 1978).

The packing list is a document containing a detailed description of the merchandise to verify the outgoing cargo. For its part, the importer issues a purchase order and the subsequent payments. He is in charge of customs proceedings upon arrival, if agreed in the Incoterms within the exporter-importer contract. The above is the standard documentation; there are also special requirements depending on the country-specific regulations and requirements by customers, such as product certification, organic certification, GlobalGAP, etc.

In summary, although there was a contract signed by both parties, it is clear that international transactions must be documented in detail and therefore we cannot refer to them as unwritten or oral contracts even in the case of the absence of a signed contract.

6.2.3.3. What is the difference between signed and non-signed contracts?

During this field research, I had access to some signed and non-signed contracts that allow us to attempt to outline the differences between both. Findings showed that a signed contract is structured in 11 to 19 clauses, which may be categorized into two components: **coordination** and **enforcement** (Menard, 2002). The **coordination clauses** (i) identify the parties (including bank account information for payments); (ii) establish the modality of contractual arrangements (firm sale, guarantee minimum, free consignment) determining the price mechanisms, and transfer of rights on the product; (iii) state the terms of payment, schedule of payments; (iv) detail the product, varieties, quality, size, quantity, prices (if applies), dates of delivery; (v) determine the responsibility of transportation payments, commissions, logistics, etc.; (vi) specify the type of freight and port of destination; (vii) indicate determination of the choice of Incoterms;¹⁵ (vii) delineate quality control and inspections: responsibilities, methods, procedures and deadlines.

The **enforcement clauses** specify (viii) the applicable jurisdiction, establish the laws and procedures, especially with regard to the country where the lawsuit would proceed in case of conflict; (ix) arbitration, establishing the type of arbitration, the number of arbitrators the location, the language of proceedings; (ix) monitoring, reporting, sales and price reports (daily or weekly); (x) trademark, establishes the ownership rights over the product's trademark; (xi) force majeure, that applies when the agreement is forced into cancellation due to circumstances beyond the control of

¹⁵ International Commercial Terms (INCOTERMS) International Chamber of Commerce.

the parties (weather, nature, strikes, etc.); (xii) duration of the contract, the usual period is one export campaign; (xiii) termination; (xiv) signature and legalization.

	Clauses	Signed	Non-Signed
Coordination	1. Identification of the parties	X	X
	2. Firm Sale or Guaranteed Minimum, or Free Consignment	X	X
	3. Terms of payments, payments schedule	X	X
	4. Planning: product, quality, size, quantity, etc	X	X ¹
	5. Definition of charges and commissions	X	X
	6. Type of freight and port of destination	X	X
	7. INCOTERM	X	X
	8. Quality control and inspections	X	X
Enforcement	9. Jurisdiction and arbitration	X	X ²
	10. Monitoring, reporting, sales and price reports	X	X
	11. Trademark	X	X ²
	12. Force majeure	X	
	13. Duration of the contract	X	X
	14. Termination	X	
	15. Signature and legalization	X	

¹ This provision is present in non-signed contracts (such as emails), however less detailed than in the signed contracts

² I found some exceptions of non-signed contracts including these clauses in the sale confirmation sent by the exporter

Table 30. Main differences between a signed and non-signed contract

In a **non-signed contract**, the parties negotiate and agree on the terms relating to the coordination clauses as in the signed contracts. In contrast, there is a lack of

definition of the enforcement terms, especially regarding the procedures in case of disputes; most of these agreements have no provisions on law and jurisdiction and arbitration. I found some exceptions regarding sales confirmations or commercial invoices where some exporters include provisions of jurisdiction and trademark protection. In summary, as shown in Table 30, a main difference between a signed and a non-signed contract refers to the enforcement provisions such as arbitration. Also it shows that at the coordination level, non-signed contracts tend to be less detailed regarding planning provisions, as regards quality specifications of products (see examples in Annex 6).

In absence of a signed contract, the greatest difficulty of the international transaction is not to prove that there was a transaction, because operations are extensively documented as shown above, but to prove that the transaction conducted corresponds to the terms agreed ex-ante by both of the parties. I will illustrate this point with an example (Box 1) of why it is important to: (i) differentiate “written” vs. “signed” contracts; (ii) differentiate that a document signed by the two parties to the transaction is more consistent than a document signed only by one party to the transaction (e.g. sales confirmation); (iii) how export-import documentation constitutes a proof of the transaction even if there is no two-way exchange of signatures. In the following I present a case of an international trade dispute regarding a fruit export-import transaction; I extracted the most relevant sections from the Arbitration Chamber verdict. This case shows the contradictions that might exist due to the fact that parties have not agreed ex-ante on certain aspects of the agreement, as in this illustration, on jurisdiction where the parties can refer the dispute to litigation.

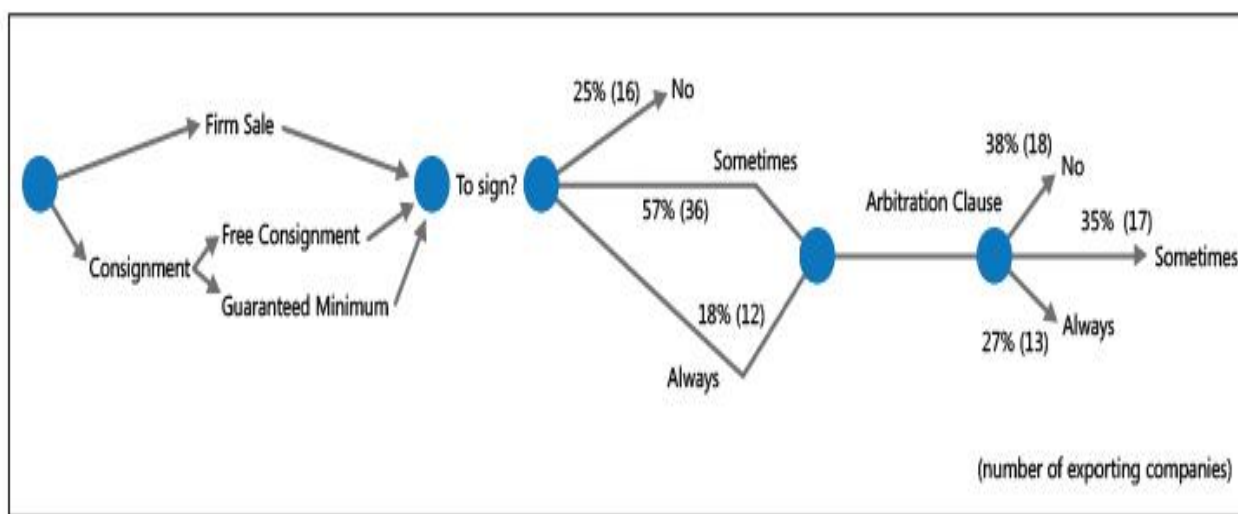
Box 1. Award in case No. 9971 (Chambre Arbitrale Internationale pour les Fruits et Légumes - CAIFL). Case of dispute between a French exporter and a German buyer regarding a sale of apricots delivered on June 11, 2007 (extracts from the award in italics, underlines by the author):

- 1. Four days after delivery the buyer informed the seller (exporter) that “it had been necessary to sort the apricots because some had rotted for lack of ventilation... [and] that the competent German authorities had carried out a sample control of the goods and found several defects.”*
- 2. “Seller replied by offering buyer a discount; buyer did not reply to this offer. Subsequently, buyer paid about a fourth of the invoice.”*
- 3. “When the balance remained unpaid, seller filed a request for arbitration at the Arbitration Chamber of Paris, which manages CAIFL arbitration proceedings.”*
- 4. The arbitrator filed in favor of seller because: (i) buyer failed to object to the quality of the goods within six hours of their receipt as provided for in the COFREUROP Conditions; (ii) that the German authorities examined the apricots four days ...after delivery, when it could not be expected that they were in the original condition.*
- 5. Buyer contested the jurisdiction of the Arbitral Tribunal because there are allegedly contradictory clauses. Contradictions on jurisdiction appeared in the export-import documentation (orders, sales confirmation/invoices, communications, e.g. faxes) exchanged between the exporter and the buyer that was presented as proof of the agreement reached by the parties. These jurisdictional contradictions were: (i) The Arbitral Tribunal notes that although the sale confirmation contains a written agreement reading ‘COFREUROP Strasbourg Arbitration Chamber (CAIFL arbitration) and also mentions the (ii) French state commercial court [Tribunal de commerce]; (ii) the letters on buyer’s stationery refer to a German civil court.*
- 5. Finally, the Arbitral Tribunal award was refused enforcement in Germany by the Munich Court of Appeal on November 23, 2009 and by the Federal Supreme Court on December 16, 2010.*

Having briefly defined the institutional framework for international transactions and some aspects of the enforceability of contracts, below I proceed to describe the main exporters contracting decisions and the reasons for not signing and afterward, the reasons for signing.

6.2.3.3. Exporter contracting decisions

A simplified process for the contracting decision is described in Figure 18: the first decision concerns the type of contract agreed: firm sale or consignment, whether free consignment or guaranteed minimum; the second decision is the option of signing a contract or not; the third decision concerns the content of the agreement. For purposes of this analysis I focus on the inclusion of an arbitration clause, since the inclusion of this clause is, as I have seen, a major difference. In the following I focus on the second and third decisions, signing or not, and including an arbitration clause. The first decision, regarding the choice of a firm sale or a consignment is discussed in the previous subchapter



Source: Elaboration of the author

Figure 18. Exporter contracting decision tree

6.2.3.4. Why do exporters not sign contracts?

Our research shows that 25% of firms never sign contracts, 18% always sign contracts and 57% sometimes sign contracts (Figure 18). In the following I will first explain why exporters do not sign contracts.

Among the reasons expressed by the exporters are: the need for flexibility to adjust to changing conditions; the cost and time required to elaborate and negotiate a contract; and the current commercial custom and usage of trade¹⁶ which is mostly coordinated through non-signed contracts, which is especially applicable to Europe.

Below I transcribe the assertions expressed by some of the interviewed exporters and importers.

Regarding the need of flexibility:

“I do not sign because I do not like to tie myself into a contract; I prefer that if today the market price is \$10, I will sell at \$10. By following up the market [information], if the market worsens I can decrease my export volume, rather than shipping 20 containers I can send 10. This [decision] obviously is taken in negotiation with the importer. I say: the United States is paying \$3 more than you: what would you do if you were a producer? Then I renegotiate and reach an agreement.” (CEO, producing-exporting company)

“I do not sign any contract; our word is enough, or I do confirm it via email; but I do not sign contracts. Not because we are crazy (N/A the importer here refers to a \$100,000 advance that he had made to import a scarce variety of grapes that sells well in France) but because I work with highly perishable products and the reality is that because of that I have to adapt all the time. Everything we plan is subject to change so we are making new decisions continuously. The goal for both parties is to find the best market for the products. A producer never knows how well or bad his products are going to be; the weather or labor strikes are some forces that can induce changes on the exporting season. In our business things never happen as planned. That is

¹⁶ “A usage of trade is any practice or method of dealing having such regularity of observance in a place, vocation or trade as to justify an expectation that it will be observed with respect to the transaction in question.” (UCC 1-205[2]; White & Summers 1972: 84), (cited by Lusch & Brown, 1996: 20).

the reason I do not enter into contracts. They take too long. By the time they are ready, they are already obsolete or the whole situation is changed and you have to start all over again. The contracts are the emails and the bill of lading. In my 20 years of experience in this industry, in all the companies where I've worked, I've seen once or twice an arbitration case. Generally, I manage to enter into agreements and if this does not work I risk losing the relationship. I have never utilized a lawyer against an exporter; I have used a lawyer in a disagreement with an insurer or a shipping company” (CEO and owner of a French importing company).

“[T]his is a business where decisions are made very quickly; there are high levels of competition, and therefore the exporter considers that if he requests the importer to sign a contract, he will lose his bargaining power, losing balance with other exporters who are trading without contracts and therefore operates at faster times (Legal advisor).

The importer at the Port of Hong Kong calls me and says: “The grapes I purchased for you at U.S.\$20 arrived in poor condition. You can come to verify it but the fruit is at the dock. (How can one tell if the product will not deteriorate more during the time required for selling it at the supermarket?) The system works like this for perishable products; and everything you write on paper will be thrown away for true or false reasons. You cannot spend thousands of dollars to go and check a few pallets of grapes. Therefore, there is nothing more to say except ‘file a complaint,’ and that’s how it works.” (Producer and associate in an exporting company)

The complexity of the fresh fruit trade affects the feasibility of writing and signing a contract, for “the propensity to write formal contracts does not depend uniquely on vulnerability to opportunism. There are other costs associated with market transactions. First, if a complex technology is involved in production and design of the input, or if the input is rapidly changing, it is much more difficult to try to specify

a sensible contract. Input complexity makes contracts lengthy, leaky, and expensive, so formal contracts¹⁷ are less likely to be written” (Lyons, 1994: 260).

“In this business there are many unforeseen events that happen in a minute: changing markets, prices rise and fall, [consequently] leaving everything written is difficult. I tell the lawyer to make a general contract; the emails are a tool for supporting documentation. This is a subject that I always discuss with the lawyer. I go back and forth on the contract draft, the revision of the exporter, the importer and the lawyer and the time passes...” (Commercial executive, producing-exporting company).

Arbitration is absent in non-signed contracts and mostly present in signed contracts. This agrees to some extent with the general assumption that signed contracts have the provision of arbitration, regardless of the incompleteness of the contracts (from the perspective of number of clauses, Schwartz & Watson (2012) refer to this as the complexity of the contract instead of the completeness), the parties resort to arbitration in the event of conflicts assigning decision rights to a third party, different from a law court, to ensure compliance of commitments (Brousseau & Glachant, 2002).

To enlarge on this, I explored whether or not a clause of arbitration was introduced in signed contracts, which could be a sign that the use of signed contracts had a function to countervail the risk of trading. These findings show that not all contracts and not even signed contracts have provisions for arbitration, since 27% of the respondents declared they always introduce a clause of arbitration and 35% do it sometimes (Figure 18).

I have observed that more complete contracts (relative to the number of clauses), mostly drawn up by lawyers, tend to incorporate an arbitration clause. This agrees with Schwartz & Watson (2012) who showed, in a 43,000 contract database analysis, that, first, not all signed contracts include an arbitration provision; and second, there is a positive relation between contract complexity, proxied by the length of the

¹⁷ As mentioned previously, formal contracts in the sense of Lyons are signed contracts.

contract, i.e. the number of words, and the selection of an arbitrator for dispute resolution. The results show that the probability that parties will use arbitration is lowest for short contracts and increases as contracts get longer.

However, there are also long contracts that are drafted by lawyers that do not include an arbitration clause. Why do exporters not systematically include an arbitration clause?

“I have 50 unsigned contracts. The lawyer sends the contract for us to forward to the importers. I used to ask the attorney to change the arbitration clause because I hardly get a contract signed because of it...” (Commercial executive, producing-exporting company)

Arbitration clauses require a definition concerning the jurisdiction and where the arbitration will take place: the exporting country, the importing country or a third country? The engagement to resolve a potential conflict overseas is not a minor decision, for if an arbitration clause is required, each party prefers their own country's jurisdiction. Therefore, this is a difficult clause to negotiate.

Another reason for not including an arbitration clause is the fact that most traders do not resort to arbitration. As shown in the preceding subchapter, in case of conflict only 7% of respondents declared to have resorted to an international arbitration chamber; 57% of respondents stated not knowing about the European Arbitration Chamber (I deliberately asked regarding this chamber) and 33% considered the high costs and delays as a disincentive for resorting to arbitration bodies and finally, 90% claimed never having recourse to a trial.

As a summary of this section, I can assert that non-signed contracts are legally enforceable, and that the main difference between non-signed and signed contracts refers to the enforcement provisions, especially arbitration. Regarding the reasons behind the choice of not signing a contract, these findings closely match with theory and empirical literature. According to Lumineau and Malhotra (2011), parties limit the use of contracts due to three main motivations: “(i) to reduce the costs associated with contract development, monitoring, and enforcement” (Williamson, 1985); (ii) to

allow for flexibility and adaptation during the implementation of the agreement (Bernheim & Whinston, 1998; Malhotra, 2009); and (iii) to allow the development of mutual trust and cooperative behavior” (Sitkin & Roth, 1993; Tenbrunsel & Messick, 1999; Malhotra & Murnighan, 2002). Out of these three reasons, I can confirm the first two.

Another question remains open, Why do a small proportion of exporters sign contracts? In other words, what are the factors that influence the decision of exporters to sign a contract? I asked this question to the exporters. In the following I attempt to interpret their responses.

6.2.3.5. Why do exporters sign contracts?

As Figure 18 previously showed, 12 firms declared that they always sign contracts (18%), and 36 firms asserted that they sign contracts sometimes (57%, which does not mean that most of their transactions are performed under signed contracts). To explain the reasons for signing contracts (always or sometimes), I proceed as follows: (i) I retake some of the explanatory variables, uncertainties, i.e. risk of country, time specificity, i.e. perishability, that proved to be of influence over the choice for the degree of contract completeness, as developed in Chapter 1, to verify whether these variables also influence the choice of formalizing a contract; (ii) I will build on an original database constructed during the exploratory (qualitative) and field survey (rank qualitative data) with respect to the factors that influence the choice of signing an export-import contract. The exploratory interviewees mentioned the following variables: (a) the entry channel to the importing country; (b) the trust; (c) the length of the relationship, i.e. long-term or new partner; and (d) requirements. In the following I will discuss in brief how literature has addressed these empirical variables and I formulate the hypothesis that guides this analysis.

6.2.3.5.1 Uncertainty

As mentioned previously, Williamson identifies two types of uncertainty: **environmental uncertainty** which is exogenous to the decision of the parties to a transaction and **behavioral uncertainty** that may originate from the risk of opportunism of the counterparties and consequently is endogenous to the parties (Williamson, 1996; Saussier & Yvrande-Billon, 2007). The challenge for firms is to reduce the adverse effects of uncertainty by ‘imposing plans, standard operating procedures, industry tradition, in an uncertainty-absorbing contracts,’ (Cyert and March, 1963:119) in other words, by adjusting the choice of governance, in this case the choice increases the level of contract formalization, accordingly with the type of uncertainty that affect the transaction.

- **Environmental uncertainty**

The first source of environmental uncertainty surrounding the international fruit trade is due to the nature of the industry. “[F]ormal contracts are difficult to design and implement given agriculture’s unique characteristics of seasonality and uncertainty” (Menard, 2004:9). When uncertainty is high, it is most likely that parties to transactions chose informal safeguards to protect the exchanges, while the choice for formal means of coordination increase when uncertainty is low, as formal safeguards as tolerance zone introduced in the contracts (Menard, 2000).

Consequently, building on this there are two types of uncertainty: (i) environmental, i.e. changes in the demand or in the markets, leading to form an organization according to the market entry channels, and trade requirements affecting firms’ decisions; (ii) behavioral, for when there is trust between partners the risk of opportunism decreases, then, partners face low behavioral uncertainty; when parties begin to do business and there are no signals to distrust the potential partner nor positive previous experiences to trust him, there is a moderate behavioral uncertainty; on the contrary, when parties receive signals generating distrust, then the behavioral uncertainty is high (Figure 19).

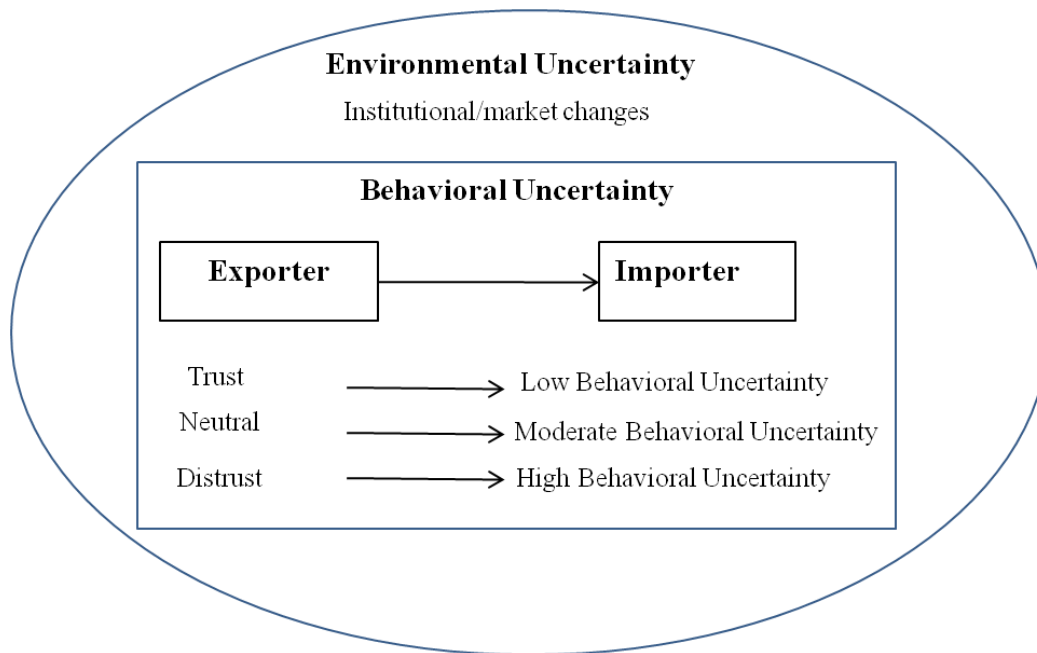


Figure 19. Environmental and behavioral uncertainty

- **Market entry channels**

Regarding the study of the entry modes to host markets, this has been analyzed by international business researchers. Those using the frame of the TCE have focused on the choice of alternative modes of governance: markets, hybrids (e.g. joint ventures), or hierarchy (Anderson & Gatignon, 1986; Menard, 1996; Oxley, 1997), the coordination to organize interdependencies between international agents, in particular multinationals (Hennart, 1993). The purpose of these studies is to explain how the choice between entry modes are effective for reducing transaction costs, increasing performance and managing risks of investments due to institutional uncertainties, such as environmental weakness, in the target markets. There is another branch of literature on international business, focusing on the value chain and the evolution of wholesale market functions to adapt to institutional environmental changes of consumer demand (e.g. quality and health concerns), the growing relevance of retailers (Cadilhon, et al., 2003) and the impact of these changes on the modes of governance within international supply chains (Gereffi, 1994; Gereffi et al., 2005; Reardon & Berdegúe, 2002; Reardon et al., 2007). I build on this idea by focusing

specifically its contribution regarding the inter-firm contracting level to enhance the understanding of the effect of alternative market entry channels on the choice for tighter forms of governance through the formalization of contracts.

Gereffi et al. (2005) in their study on the governance of the global supply chain of fresh produce exports from Kenya to the EU, especially the U.K., found that fresh produce trade changed when supermarkets gained more relevance in fresh and vegetable marketing. Since fruit and vegetables were strategic to attract consumers, supermarkets introduced new products under a competitive strategy of differentiation based on strict quality, labor, food safety and environmental standards. In order to guarantee the fulfillment of these standards, as well as a reliable year-round supply, supermarkets started developing tight interactions with U.K. importers and exporters instead of purchasing exclusively through the wholesale markets. This finding concords with Reardon et al. (2007) who assert that “supermarkets and/or their specialized wholesalers tend to move from spot markets to preferred supplier lists where there is greatest need for quality and consistency” (ibid: 419), which allow reducing the transaction costs involved in searching, negotiating and coordinating by establishing longer-term relations with suppliers (ibid). This major change resulted not only in a shift of the governance of import-export operations, from market to relational governance, also, supermarkets turned to the use of renewable annual contracts with suppliers that were regularly supervised and audited as a means of enforcement. (Dolan & Humphrey 2000; Gereffi et al., 2005). Based on these arguments, the first two hypotheses are:

Hypothesis 1a: The exporters access to the importing country through supermarkets is positively related to the contract formalization.

And conversely,

Hypothesis 1b: The exporters access to the importing country market through wholesalers is negatively related to the contract formalization.

- **Country risk**

As seen in the previous subchapter, the risk of the importing country is a key variable that influences the choice of more complete contracts to protect transactions. The current objective is to test whether it also influences the choice of contract formalization. According to Poppo & Zenger (2002), “well-specified contracts narrow the domain and severity of risk to which an exchange is exposed and thereby encourage cooperation and trust” (ibid: 708). In recent research on this matter, Zhou & Poppo (2010) build on Masten’s (1993) proposition that in high environmental uncertainty, contracts tend to include more explicit clauses to facilitate adjustments, to limit recurrent renegotiations, and to reduce costs through a formal joint planning process (Verbeke & Greidanus, 2009; Barthelemy & Quelin, 2006). Therefore, through signed contracts the contractors seek to limit opportunistic behavior, to ensure compliance, performance and to reduce uncertainty. Therefore:

Hypothesis 2: The risk of the importing country is positively related to contract formalization.

- **Requirements**

The decision to sign a contract may depend on requirements from the importing country, i.e. customs requirements, commercial policies, tax matters; from the high cost of credit in the exporting country that leads to inter-firm forms of funding (e.g. the pre-season payments), or due to standard procedures, as the policy of the exporting firm. As revealed in the exploratory interviews, some of the firms may (with or without the participation of lawyers) elaborate contracts to negotiate with the importers. Aulakh & Gencturk (2008), describe this, in some firms, as an “overall governance strategy... [where] numerous exporters spread across countries may have developed an overall strategy about the terms of the contract it establishes with the diverse importers and such an approach overrides safeguarding; adaptation and performance evaluation concerns of particular importers and host markets” and stressed the need to take it into consideration for future research (ibid:477). Therefore:

Hypothesis 3: Requirements emerging from the institutional environment or from firms are positively related to the contract formalization.

- **Behavioral uncertainty**

- **Low behavioral uncertainty: trust**

Williamson (1996) states that there are three types of trust: calculative trust, personal trust and institutional trust. Calculative trust is the consequence of the rational calculation of cost, benefits and risks; i.e. a party has interest to not behave opportunistically because its expectations of a future gain compared to a short-term gain. And he goes a step further, arguing that ‘because commercial relations are invariably calculative, the concept of calculated risk (rather than calculated trust) should be used to describe commercial transactions (Williamson, 1996: 97). Trust has diverse dimensions among them, the interpersonal and the organizational (Hosmer, 1995).

Sako (1992) makes a distinction between the competence trust which refers to the capability of the exchange partner to perform for mutual gain, and goodwill trust in which parties make the effort to behave honestly in compliance with open-ended commitments for mutual benefit (ibid: cited by Martino, 2010).

The importance of trust in commercial exchanges and the relation between trust and contracts is widely accepted (Lyons & Mehta 1997; Das & Teng 1998 cited by Klein et al., 2005, among others), including in coordinating export-import relationships to enhance performance (e.g. Aulakh & Gençtürk, 2008; Skarmeas et al., 2002). Trust and contracts have been considered as complements, since “well-specified contracts may actually promote more cooperative, long-term trusting ex-change relationships” (Poppo & Zenger, 2002: 708), or substitutes since trust functions as a safeguard to protect transactions in substitution of the use of formal contracts which are costly and complex to draft, monitor and enforce (Dyer & Singh, 1998; Macaulay, 1963; Palay, 1985). Levi (2000) asserts that when trust exists, the terms of the contract can be less

formalized. Based on these arguments and on preliminary findings from the exploratory phase:

Hypothesis 4: The trust between the exporter and the importer is negatively related to contract formalization.

- Moderate behavioral uncertainty: neutral (new partner)

The durability of commercial relationships is at the core of relational governance because the history of trade between parties, allow the development of behavioral norms, understanding, planning and monitoring where success of the relationship relies on the expectation of future cooperation (Macneil, 1978; Poppo & Zenger, 2002). This approach is embedded in the concept of relational governance; developed by Macneil (1978) to explain the repeated transactions occurring in the framework of personal involvement, unique and non-transferable between the counterparties based on long-term relationships.

The length of the relationship is also one of the factors influencing the choice on the degree of contract formalization (Aulakh & Gençtürk, 2008). Two periods can be distinguished: a longevity relationship already well-established, and the beginning of the relationship. When the relationship is developed over time, and the partners have invested time and effort into the relationship, the parties become more engaged and “the outcome of previous business episodes provides a framework for subsequent interaction. With increased relationship length, firms are more likely to have successfully weathered critical shakeout periods in their relationships” (Aulakh & Gençtürk, 2008: 463 citing Dwyer et al., 1987) which result in the decrease of internal uncertainty concerning the counterparty’s behavior and leads to a relational governance where informal norms (such as trust emerging from repeated interactions and familiarity) are prevalent rather than written rules, and contract formalization (Buchanan, 1992; Gulati,1995; Aulakh & Gençtürk, 2008). This coincides with Poppo & Zenger (2002): “The importance of contracts may thus decline with time, as

trust emerges in an exchange ... and patterns of cooperative behavior and reputation emerge” (ibid:722).

Conversely, at the beginning of an inter-firm relationship, parties face high levels of internal uncertainty due to the lack of knowledge and limit rationality to predict the counterparty future behavior “that incorporates the specific parameters of the relationship and provides each party with precise roles and expectations” (Aulakh & Gençtürk, 2008:462). Another consequence of the fear of opportunistic behavior is that the vulnerable party might require not only the use of a formal contract, but the introduction of a “risk premium” provision to cover themselves against opportunism (Lyons, 1994). Poppo & Zenger (2002) coincides with the relevance of “contracts [which] may perform a critical role in the early stages of an exchange” (ibid:722).

Given that trust and long-term relationships are linked, analysis shows that when parties start doing business together trust has not yet had time to develop. Therefore:

Hypothesis 5: Starting to do business with an importer is positively related to the degree of contract formalization.

- High behavioral uncertainty: distrust

Inspired by Levi (2000) who asserts that literature focuses more on the study of trust but neglects the effect of distrust, I added the analysis of distrust. Levi proposes that the starting focus of the analysis should not be trust, but the absence of trust or even distrust. Levi sustains her statement by arguing that trust is, in fact, a mechanism to counterbalance the existence of distrust. I considered this was a revealing assertion. During the exploratory phase, the word trust was frequently mentioned by the interviewees, while the word distrust was not, however, both exporters and importers referred often to the multiple risks they faced in this industry, among them, the risk of opportunistic behaviors of their counterpart. Therefore, according to Levi’s prediction that when there is distrust the terms of the contract can be more complete and formalized than when there is trust, a sixth hypothesis is formulated:

Hypothesis 6: The distrust between the exporter and the importer is positively related to the degree of contract formalization.

6.2.3.5.2. Time specificity

As previously mentioned, time specificity is one of the key determinants of agricultural contracting practices. Among the researchers addressing its role in the choice of formalizing a contract, Hueth B. et al. (2008), examine the interactions among explicit (written, formal contracts), and implicit contracting practices (“implicit understanding” and “informal involvement in farm-level decision making”), using a sample of 385 first-level intermediaries in California who produce, trade and/or process fruit, nut, and vegetable products. The authors classified these products more closely to investment life-cycle considerations¹⁸ (annual, tree, vine, and other). They also classified firms by two types: broker and processor. Their findings show that processors, rather than brokers, and firms who grow some portion of their farm input in house, as well as vine-crop producers, are significantly more likely to report the use of formal contracts” (ibid: 2).

Macchiavello & Morjariay (2010) in their study of Kenyan flower exports to the Netherlands surveyed 74 producer-exporters, among whom only 32 had written, and highly incomplete, contracts as “the perishable nature of flowers makes it impractical to write and enforce contracts on suppliers’ reliability. Upon receiving the flowers, the buyer could refuse payment and claim that the flowers sent were not of the appropriate variety and/or did not arrive in good condition while the seller could always claim otherwise” (ibid:10).

Although outside the agricultural industry, Lyons (1994) findings on the engineering industry substantiate the predictions that for complex or rapidly changing products, it is much more difficult to try to specify a contract, while on the contrary, “contracts are easier to write if the product is relatively simple and unchanging” (ibid: 263).

¹⁸ Hueth B. et al. (2008) classified traded products by four commodity groups: (i) annual (asparagus, broccoli, tomato, etc); (ii) tree (apple, apricot, avocado, etc.); (iii) vine (grape, kiwi, wine grape); and, (iv) other (alfalfa, strawberry, strawberry plant).

As for the case of the international trade of fruit, all these products are perishables, the degree of perishability varies from one species to another and even from one variety to another. This is especially important in long-distance trade and affects the marketing life-cycle in the overseas markets. For instance, berries are very highly perishable – less than two weeks of post-harvest life (except blueberries that have a 57-day post-harvest life)¹⁹ – and must be transported by air; kiwis can be stored for 3 to 4 months and therefore are mostly shipped by sea, while frozen fruit can be stored for 10 months – even though the focus of this analysis is on fresh fruit, some exporting companies may include in their portfolio frozen fruit and nuts. Therefore, *Hypothesis 7*: Less perishable products are positively related to the degree of contract formalization.

I identify the variables effect on the degree of contract formalization in Figure 20

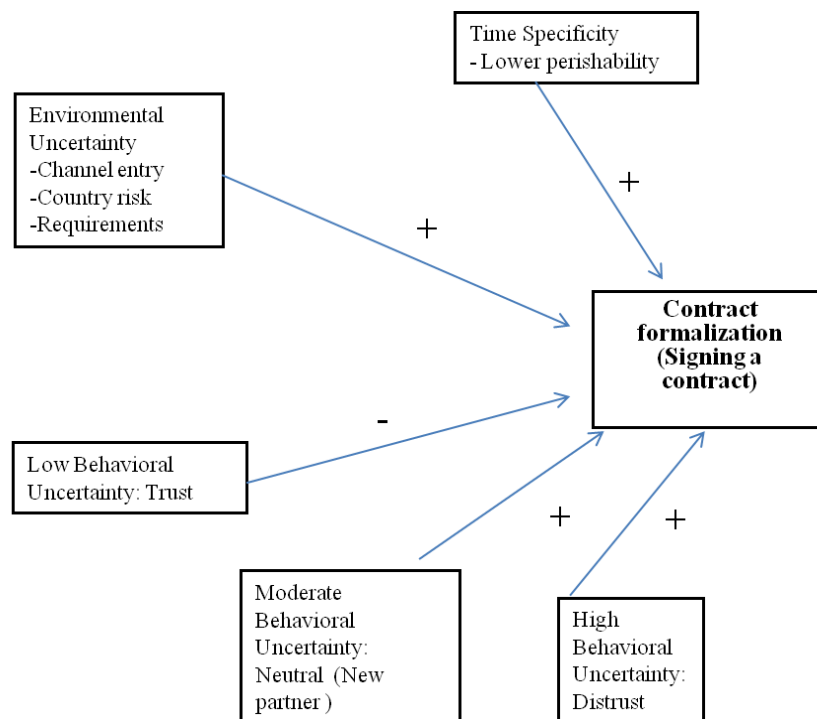


Figure 20. Model of determinants for signing a contract

¹⁹ According to the Blueberries Committee of Chile

6.2.4. Methodology

In this subchapter I resort to the information gathered through in-depth interviews at the exploratory phase, and to the data collected through the face-to-face questionnaire survey conducted with exporters. I also resort to external data to complement information about the complete product portfolio and market destination of the firms surveyed. In total, 65 exporting firms were surveyed; the purpose of this analysis is to find out the reasons for which exporting firms choose to sign contracts. Responses were analyzed through a non-parametric, Spearman's Rho bivariate correlation analysis, which is recommended for a qualitative scale analysis and for small samples. I also complemented the analysis with qualitative analysis and some descriptive statistics. For a description of data collection, see Chapter 5 of Methodology. Following, I present how each variable included in this analysis has been measured.

To respond to the question: What are the factors that influence the choice of signing an export contract? I incorporated in the questionnaire a sequence of single-item questions seeking to measure the influence of these factors on the choice of signing a contract. These questions positioned the respondent, the exporter, on alternative scenarios according to the importance of the studied factors relative to their diverse worldwide importers. The reason for this choice is that I attempted to capture the complexity of the manager's decisions who, in fact, deals with multiple clients. This is a different strategy from other works that seek to position the respondent in the scenario of dealing with the same contractor, mostly the leading one, the most important counterparty (Lyons, 1994; Aulakh & Gençtürk 2008; López-Bayón & González-Díaz, 2010; among others). In doing so, I contribute to filling a gap in literature as has been highlighted by Aulakh & Gençtürk (2008). "Future research needs to take into consideration individual contracts with independent importers within the context of overall governance strategy that an exporter has in its entire portfolio of foreign distributor relationships" (ibid: 467).

To complement the information collected from the questionnaire survey, I used external data to construct some indicators based on the Chilean customs database. As

previously explained, this database contains all the shipments departing from Chile by country of destination. This allowed having the complete list of the products exported by destination market of the firms surveyed.

6.2.4.1. Market entry channel

I asked the interviewee's two separate questions: (i) if the importer is a wholesaler, how probable is it that he will sign a contract? (Sign_WHL); (ii) and, if the importer is a supermarket, how probable is it to sign a contract? (Sign_SMKT) I asked the respondents to rate on a scale of 0-3 where 0=Not probable; 1=Slightly probable; 2=Moderately probable; 3=Very probable. For the non-parametric analysis I left them separated in order to distinguish the influence of each market entry channel.

Requirements. I captured this variable by three questions: (i) Do you sign contracts due to a company policy (of the exporting company)? (SIGN_COPOL); (ii) How probable is it that you will sign due to requirements of the importing country? (Sign_REQ); (iii) How probable is it that you will sign because of a preseason advance paid by the importer? (Sign_PSEAS). The interviewees were asked to choose from a scale 0=Not probable; 1=Slightly probable; 2=Moderately probable; 3=Very probable.

Trust. Respondents were asked: (i) When there is trust in the importer, how probable is it that you will sign a contract?; (ii) When there is a long term relationship with the importer, how probable is it that you will sign a contract? During the interviews, the exporters expressed the opinion that in long-term relationships trust was instilled which coincides with several researchers, including Lyons (1994) "one would expect [trust] to be built up over the years and to be increasing in the length of time the companies have been trading together" (ibid: 264). Consequently, I decided to measure the variable trust by these two items. I assessed the reliability of the items, which show a high level of reliability (Cronbach's Alpha=0.895) and then proceeded to calculate the average of both items into one variable (sign_trust).

In addition, the questionnaire survey included some items to measure the factors that exporters consider as signals of competence; trust regarding the importing companies and their sales managers. To determine which are these factors I first, reviewed several importers' Web pages which are an interesting source of information to identify which are the most used factors to attract their clients (the providers, i.e. exporters, producers; and the customers, i.e. retailers, wholesalers); then, I verified with some exporters whether the output list of factors was correct. Following their suggestion I added a question to measure the importance of the sales manager's years of experience on the target market. Then, during the field survey I asked the respondents to rate the factors signaling competence of a potential new client (importer): (i) the importing company does business with supermarkets; (ii) the importing company has a distribution network; (iii) the importing company has the infrastructure (warehouses, etc.); (iv) the size of the importing company (large size); (v) the years of presence in the market, (vi) the experience of the sales manager. The scale used was: 0=Not at all, 1=Low, 2=Moderate, 3=High. This information was used for descriptive analysis and was not included to construct a variable for the non-parametric analysis.

Also, to make the distinction between the competence of the sales manager and the competence of the importing company, another question was introduced: (i) Have you ever been in a situation in which the sales manager of an importing company, with whom you have had a lasting and trusting business relationship, quit the company to join (or establish) a new importing company? If the answer was yes, then I asked them to rank the choices he made in that situation: (i) to follow the sales manager to the new importing company; (ii) do not follow the sales manager and keep doing business with the importing company; (iii) stop doing business with both; or (iv) to keep doing business with both. Again, this information was used for descriptive analysis; it was not included to construct a variable for the non-parametric analysis.

6.2.4.2. Distrust

I asked the exporter: If you distrust the importer, do you sign a contract to protect the transaction? (Sign_DTrust) I measured the responses with the scale: 0=Not probable, 1=Slightly probable, 2= Moderately probable, 3=Very probable.

6.2.4.3. Dealing with a new partner (importer)

In order to find out what the choice is when the importer generates neither trust nor distrust because there has been no prior business experience with him, nor are there negative elements that might induce distrust, I asked the exporters: When starting to do business with an importer (for whom you are neutral) how probable is it that you will sign a contract? (Sign_NEW). Responses were registered in the scale: 0=Not probable, 1=Slightly probable, 2=Moderately probable, 3=Very probable.

6.2.4.4. Time specificity

To measure this variable in accordance with the perspective of sales managers in the fruit industry, I opted for a marketing life-cycle approach. I calculated the ratio of the exports by each firm and by degree of perishability. To do so, I extracted the entire exports from a Chilean customs database corresponding to the 2009–2010 campaign. I determined the level of perishability following specialized sources; I grouped the products by very high perishability, high perishability, and moderate perishability. Products such as grapes, apples, and pears were disaggregated by varieties since there are variations of the degree of perishability. (A detailed description of this indicator is explained in a previous subchapter).

6.2.4.5. Uncertainty

I defined this variable as the risk country (Risk_rt). Then, for each firm surveyed, I extracted its exhaustive export records in the Chilean customs database. Then, I calculated the ratio of exports destined to risk countries for each of the firms. As described in the previous subchapter, I used the risk country classification published

by the main credit insurance company (COFACE) serving the Chilean industry exports. This classification is based on the business climate (policy, economics) and record of payments for each enterprise.

6.2.4.6. Control variables

I included some control variables that may influence the choice of contract formalization. Since the firm size may affect the governance decisions (Poppo & Zenger, 2002; Lyons, 1994); then, I controlled for the value exported (in U.S. dollars) by firm and number of employees (SIZE). Also, according to Lyons (1994) the experience of management personnel in the market may engender trust relations with customers. Then I controlled for the interviewed manager his years of experience with the company (C_EXP_CO) and in the industry (CEO_Experience); also, I tested for the firm's years of presence in the market (Aulakh & Gençtürk 2008) (Co_Years); I also introduced as a control variable the ownership of the exported products – whether the products are grown by the exporting firms (Own_Products) or by a third party (Third_Products) – which, according to Hueth B. et al. (2008) findings on the Californian fruit and vegetable study, producing and trading firms who grow some portion of their agricultural portfolio are more likely to use formal contracts. These variables may influence the knowledge of the markets, the capacity to bear international trade hazards and consequently to opt for more or less risky contracting practices.

	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Sign Binary	0	1	.75	.054	.434	.19
SIGN_WHLR	0	3	.74	.123	.989	.98
SIGN_LTM	0	2	.55	.069	.560	.31
SIGN_SMKT	0	3	1.51	.182	1.470	2.16
SIGN_NEWM	0	3	.92	.141	1.136	1.29
Sign_Trust_t	1	3	1.58	.072	.583	.34
SIGN_TRUST	0	2	.58	.072	.583	.34
SIGN_DTRUST	0	3	.29	.095	.765	.59
SIGN_COPOL	0	3	.65	.154	1.243	1.54
SIGN_REQ	0	3	.71	.153	1.234	1.52
SIGN_PSEAS	0	3	.38	.121	.979	.96
Valid N 65						

Table 31: Descriptive statistics

6.2.5. The results

The Spearman Rho correlation results are presented here bellow (Table 32). They allow us to determine which variables influence the choice of signing a contract. I first start by analyzing the control variables results.

Results on Table 32 show that control variables are not correlated to the choice of signing a contract, except for the variable value of exports, which is significant and positive correlated to the dependent variable (to sign a contract). This corresponds with Lyons (1994) results that “large firms can more easily shoulder the burden of writing a formal contract, for instance, because they can spread the overhead of retaining specialist legal knowledge. Thus, the size of firms will be positively associated with the propensity to write formal contracts” (ibid: 260).

	<i>Spearman R</i>	<i>p-level</i>
Value Exports	0.401**	0.001
Size	0.092	0.468
C_EXP_CO	0.07	0.581
CEO_Experience	0.073	0.561
Co_Years	-0.052	0.678
Own_Products	-0.186	0.139
Third_Products	0.186	0.139

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Table 32. Spearman Rho correlation of the control variables on the choice of signing a contract

6.2.5.1. Environmental Uncertainty

6.2.5.1.1. Market entry channels

I confirmed the information found in the exploratory phase, the entry channels in the importing country affect the choice of contract. When the arrangement is settling directly with the supermarket or through a product manager dealing with the supermarket, there is a positive and significant correlation to the act of signing a contract SIGN_SMKT (.581, $p < 0.00$), thus Hypothesis 1a is supported (Table 33). On the other hand, when the importer is a wholesaler dealing primarily in wholesale markets the correlation with signing a contract is negative and statistically significant Sign WHL (-.476, $p < 0.00$), thus supporting Hypothesis 1b.

	<i>Spearman R</i>	<i>p-level</i>
Sign_SMKT	.581**	0.00
Sign_WHL (r)	-.476**	0.00
Sign_COPOL	.299*	0.015
Sign_REQ	.350**	0.004
Sign_PSEAS	.229	0.067
Sign_Trust (r)	-.542	0.00
Sign_NEW	.514**	0.00
Sign_DTrust	.257*	0.00
Very High Perishability	0.025	0.845
High Perishability	-0.096	0.445
Moderate Perishability	0.181	0.15
Risk_rt	-0.008	0.476

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Table 33. Spearman Rho correlations of institutional, transactional and relational variables on the choice of signing a contract

This finding confirms the arguments that quality and food safety regulations (among the most important regulations imposed on and by retailers to protect consumers' health and as competitive strategy of differentiation that led to new fees and services, i.e. marketing promotions, volume discounts, third-party food safety certifications and special packaging) have influenced a progressive change on the form of governance chosen by trading partners (Calvin & Cook, 2001; Gibbon, 2003; Reardon & Berdegué, 2002) including changes in exporter-retailers (Calvin & Cook, 2001). In the U.S., for instance, this fact has led to the growing use of long-term relationships or contracts, versus spot sales on the wholesale markets (ibid). Even when imports are not performed directly by supermarkets, importers (as product managers) are becoming more specialized to comply with requirements of particular buyers. An example from Europe:

“Supermarkets are not importing directly although they say they do. They buy from importers who receive the product from the producer [exporter]. For high-volume products, and short distances, such as strawberries and oranges from Spain or Italy, they may import directly. But when making purchases overseas, the risk is high due to market variability, complexity of handling and product quality issues. Supermarkets have tried to import directly but have withdrawn and prefer to transfer that risk to the importer” (German importing company)

6.2.5.1.2. Country Risk

According to Table 33 results, exporting to risky countries does not influence the choice of signing a contract, on the contrary, there is a negative correlation and it is not significant (-0.008 , $p > 0.476$). Thus hypothesis 2 is not supported. In fact, most of the respondents consider that a signed contract is not an efficient way for securing transactions. *“Someone who seeks to cheat will do it with or without a signed contract. A contract will not impede him to cheat.”*

This finding concords with Zhou & Popoo (2010) who found that when managers perceive the existence of a strong legal enforceability environment they are more prone to resort to explicit contracts. On the contrary, when the legal enforceability is weak they do not tend to use explicit contracts and rely mostly on relational means to protect their transactions.

6.2.5.1.3. Requirements

There is significant, positive but weak correlation between signing a contract because of the exporting company's policy SIGN_COPOL (.299, $p < 0.015$). There are companies that demand that a contract be signed for all its clients regardless of other considerations (trust, risk, etc.). The same is true of the correlation between signing a contract and requirements from the importer (mainly due to institutional matters as tax issues) SIGN_REQ (.350, $p < 0.004$), consequently I find reasonable support for Hypothesis 3 stating that requirements emerging from the institutional environment or from firms are positively related to contract formalization. These results support the assumption that the role of contracts has more to do with the need to fulfill an

institutional requirement rather than as a mechanism for protection. On the contrary, there is no correlation between the signature of a contract due to a preseason advance provided by the importer to the exporter SIGN_PSEAS (0.229, $p > 0.067$). This must be due the fact that Chilean exporting companies have other sources for financing the productive activities, which might not be the case for other exporting countries (According to interviews with importers, preseason advance payments are used more in, for instance, Argentina, and Central America countries, e.g. melons from Honduras).

6.2.5.1.4. Behavioral Uncertainty

- **Low behavioral uncertainty: trust**

The experience generated from this repetitive collaboration leads to the development of **trust**. There is an inverse relation between the choice of signing a contract and the presence of long-term business relations where trust has been installed. When the exporter trusts the importer, the correlation with the choice of signing a contract is negative and significant Sign_Trust (-.542, $p < 0.00$), thus Hypothesis 4 is supported. The trust between the exporter and the importer is negatively related to the contract formalization.

This supports the argument that trust is a substitute to signed contracts. As previously mentioned, one of the reasons given by Lumineau and Malhotra (2011) is that parties limit the use of contracts to “allow the development of mutual trust and cooperative behavior” (Sitkin & Roth, 1993; Tenbrunsel & Messick, 1999; Malhotra & Murnighan, 2002), as a means to safeguard transactions. Another element stated by Macaulay (1963), substantiates the perception that requiring a formal contract may signal distrust of the partner to the transaction. Even though, I did not gather overwhelming evidence of this perception (through the interviews of exporters and importers), the experience of the leading Chilean fruit industry legal advisor reveals some hints on this:

“When I recommend that an exporter sign contracts with importers, the exporter thinks that this would undermine the trust he has in the receiver [the importer] and therefore, has a natural tendency to reject contracts” (Chilean legal advisor).

Another element to take into consideration regarding the meaning of trust in this industry is that exporters separate two levels of trust: toward the enterprise as an organization, and trust in the person in charge of the business, the sales manager. Furthermore, they make a distinction regarding two factors for trust: **good faith** and **competence**, as stated by Sako (1992) who made the distinction between goodwill trust and competence trust. To illustrate this point, consider a usual situation: when the after-sale prices reported by the importer are lower than expected, the exporter takes into consideration the causes of the importer’s poor performance: (i) *force majeure* such as the fall of the market; (ii) bad faith; (ii) lack of professionalism. Exporters are more willing to renegotiate a price (and to accept a lower one) when they trust the importer’s good faith and competence.

Trust in this business is close to the calculative trust described by Williamson (1996). Exporters do not only rely on a man’s word; they compare the level of performance between importers. Furthermore, “both exporters and importers may follow systematic decision processes to select exchange partners” (Aulakh and Gençtürk, 2008:462 citing Liang and Parkhe, 1997).

- **Moderate behavioral uncertainty: neutral (new partner)**

When the exporter has no previous experience in transacting with an importer he is more likely to sign a contract SIGN_NEW (.514**, $p < 0.00$), which supports Hypothesis 5 that at the beginning of the exporter-importer relationship the possibility of signing a contract is positive and significant, then Hypothesis 5 is supported.

Doing business with a new importer is not a “blind date.” Besides studying the importer’s background, the exporters consider various factors that signal a good importing company profile. The most appreciated factor is an importing company that has a wide clientele (Figure 21) and, related to that, is having deep knowledge of the

market. Having a supermarket as a client is important but even more so, it suggests that traditional wholesaler-importers still have a relevant role. The competence of the sales manager, measured by his market experience when choosing a new importing company, ranked the second most important competence signal (Figure 21).

Factors Influencing the Choice of a New Importing Company

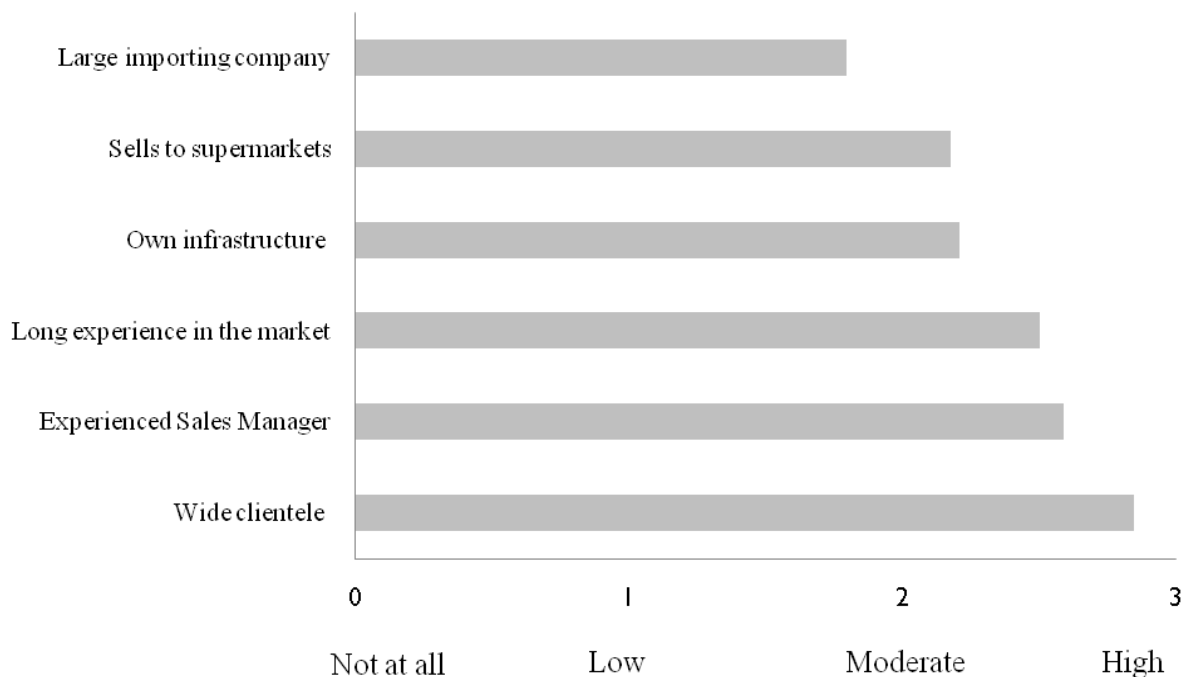


Figure 21. Factors influencing the choice of a new importing company

. I tried to reflect on the distinction between the level of trust in the sales manager and in the importing company. Thus the question: Have you ever been in a situation in which the sales manager of an importing company, with whom you have had a lasting and trusting business relationship, quit the company to join (or establish himself) a new importing company? Among the respondents, 88% stated that this situation had happened to them (Figure 22). In fact, the mobility of personnel from one company to another, or to start a new company, is quite high in the industry. I went a step further,

and asked if they had chosen to follow the sales manager or to keep doing business with the existing company? To this, 37% of the respondents affirmed to have followed the sales manager as first choice; the majority of the respondents revealed that keeping the relationship with the importing company was more important (60%), only 4% responded to have continued doing business with both “because in this industry, loyalty matters and we must choose.”

Some exporters expressed that loyalty to the importing company rather than to the person in charge of the sales, may be explained by two elements: (i) a calculative one, for a firm already positioned in the market can better bear the risks of the business; (ii) traditionally, importing firms are family enterprises, the relationship with the owner is more permanent than the relation with the personnel. This has started to change since new importing firms entering the market do not have strong family origins or identity. Furthermore, some exporters mentioned that some large importing firms, such as supermarkets, used to rotate the sales management personnel to limit too much familiarity with the exporter that could undermine the importing firm’s interests. This topic leads to another stream of analysis that I did not develop because it is beyond the focus of this thesis.

Have you faced the situation where the Sales Manager you trust, quit the Importing Company you deal with?

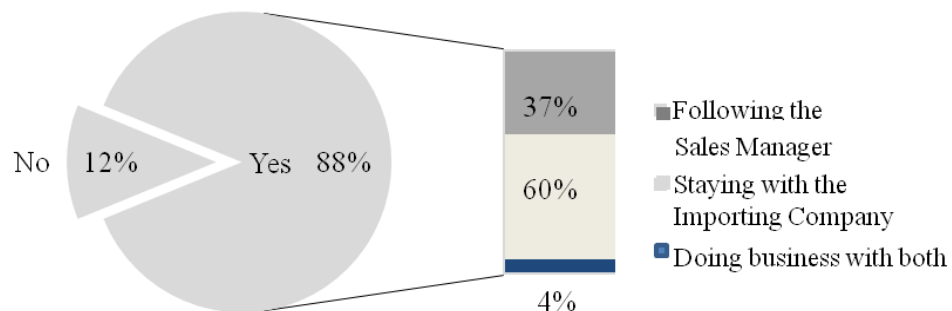


Figure 22. Differentiating levels of trust: individual and organizational

- **High behavioral uncertainty: distrust**

On the other extreme, when the exporter distrusts the importer, the variable SIGN_DTRUST (.257, $p < 0.00$), although weak, is positive and significant, thus there is support for Hypothesis 6 stating that distrust is positively related to the degree of contract formalization. However, it is less likely for the exporter to enter into a contract; 68% of the respondents explained that in case of distrust they preferred not to enter into a deal, “business is by itself too risky to add the risk of doing business with someone I do not trust.” This suggests that a signed contract is not considered a credible means to allow parties establishing safeguard clauses to control non-performance and become an incentive to fulfill engagements (Krishnan et al., 2006). Levi (2000) maintains that there are two results when there is distrust, “either no contracting or if bargaining has taken place and a contract results, the contract terms will be relatively complete” (ibid: 142-143), also according to Luo (2007) when distrust rules in weak legal enforcement environments, parties will not resort more to contracts. To enlarge on this, I insisted on the scenario of reaching a deal with a distrustful importer, and asked them if they would do business on consignment (which is a less complete contract), and 78.5% of the respondents asserted that they would not. I asked whether they would do business on firm sale (more complete contract), and 30.8% responded it was highly probable and 15.4% moderately probable. Furthermore, the respondents clarified that in this situation they would ask for a prepayment or a high advance of payment (80 or 90% of the value). In both cases, the remainder of respondents reaffirmed their initial position to not do business when distrust exists.

- **Time specificity**

Regarding **perishability** of the product, this shows no correlation with the act of signing a contract: Very highly perishable fruit (0.025, $p > 0.845$), highly perishable (-0.096 , $p > 0.445$), moderately perishable (0.181, $p > 0.15$), therefore Hypothesis 7 stating that less perishable products are positively related to contract formalization, is not supported. Regardless of the proportion of highly or very highly perishable

products in the company portfolio, the exporter would not be more prone to sign contracts.

The summary of hypotheses is shown in the following Table 32.

Hypotheses	Results
H1a: Exporter access to the importing country through supermarkets is positively related to contract formalization.	Supported
H1b: Exporter access to the importing country through wholesalers is negatively related to contract formalization.	Supported
H2: Risk of the importing country is positively related to contract formalization.	Not supported
H3: Requirements emerging from the institutional environment or from firms are positively related to contract formalization.	Supported
H4: Trust between exporter and importer is negatively related to contract formalization.	Supported
H5: Starting to do business with an importer is positively related to the degree of contract formalization.	Supported
H6: Distrust between exporter and importer is positively related to the degree of contract formalization.	Supported
H7: Less perishable products are positively related to the degree of contract formalization.	Not supported

Table 34. Summary of hypotheses

6.2.6. Discussion and Conclusions

In this subchapter I showed the most widespread contractual arrangements in Chilean fresh fruit exports were consignment (whether free consignment or guaranteed minimum price) and firm sales, which can be confirmed by signed or non-signed contracts. Non-signed contracts are the most widespread choice. Exporters and importers argue that uncertainty and the need of flexibility for adapting in changing circumstances are the main reasons for this choice.

Differences in contents between a signed contract and a non-signed contract remain mostly in the enforcement provisions, i.e. arbitration, which is with some exceptions, absent in a non-signed contract. From a legal perspective non-signed contracts may

be enforceable before courts due to the exporting documentation that shows proof of the transaction.

To resolve the conflicts, exporters (and importers) do not tend to resort to third parties, as courts or private arbitration chambers. On the contrary, they opt for bilateral negotiation. If no resolution is possible, especially in the presence of bad faith, they prefer to finish the relationship.

According to the Spearman correlation analysis of the exporting managers responses regarding the factors influencing the choice of signing contracts showed that: the time specificity variable defined as the perishability of the product shows no correlation with the act of signing a contract; environmental uncertainty linked to the risk of importing countries, does not influence the choice of signing a contract; on the contrary, there is a negative correlation. In fact, most of the respondents consider that a signed contract is not an efficient means for securing transactions; on the other hand, the market entry channel affects the choice of signing a contract. When the arrangement is to deal directly with a supermarket or through a product manager dealing with a supermarket, there is a positive and significant correlation to the use of a contract. On the contrary, when the importer is a wholesaler dealing primarily in wholesale markets the correlation with signing a contract is negative and statistically significant; concerning the requirements emerging from institutional constraints imposed by the importing countries, the importing firms or by the exporting firms, there is a positive and significant correlation between signing a contract, due to the exporting company's policy. There are companies that demand that a contract be signed with all his clients regardless of other considerations; however, the correlation coefficient is weak. The same is valid for the correlation between signing a contract and requirements from the importer (mainly due to institutional matters as tax issues). There is no significant correlation between signing a contract due to a pre-season advance payment provided by the importer to the exporter to fund the production process. These results support that the function of the contract have more to do with the need to fulfill an institutional requirement rather than a mechanism for protection.

Variables related to behavioral uncertainty had statistically significant results. When behavioral uncertainty is low, and the exporter trusts the importer, the correlation with the choice of signing a contract is negative. This supports the assumption that trust is a safeguard for protection that may substitute for recourse to formal contracts. When the behavioral uncertainty is moderate, and the exporter has no previous experience in transacting with the importer and there are no signals to distrust, the correlation is positive, therefore it is more likely that contracts will be signed. This agrees with widely published literature sustaining that contracts are more likely to be used at the beginning of a commercial relationship (Macneil, 1978; Lyons, 1994; Poppo & Zenger, 2002; Aulakh & Gençtürk, 2008).

On the other extreme, in presence of high levels of behavioral uncertainty, when the exporter distrusts the importer, the correlation with the choice of signing is positive, although weak, because it is less likely that the exporter will do business with a distrustful importer. Zhou & Poppo (2010) found that when there is distrust and the legal enforceability environment is weak, the relational means to protect transactions are not employed. This threatens the assumption that relational constraints would prevail (Bradach & Eccles, 1989 cited by Zhou & Poppo, 2010), instead of relational solutions. Zhou & Poppo (2010) advance that vertical integration may be necessary in the presence of distrust (ibid: 862). I agree with the assertion that a formal contract is not a remedy when the legal environment is weak, nor in the presence of distrust. However, I argue that the investment in integration is costly and highly vulnerable in imperfect legal environments; therefore, managers dealing with international transactions resort more frequently to less costly solutions than to integration, such as more complete contracts (firm sale) even if not signed, as shown in the previous subchapter. Also they protect the transaction using safeguards such as prepayments or high advance payments, besides other formal and informal mechanisms that I will address in the next subchapter. Another form of governance, to counterbalance risk and to enhance performance that I could observe during the field research is the emergence of new forms of hybrid coordination (from joint ventures to structure small-medium multinational type organizations). This type of organization is established between firms located in the importing markets, which are in charge of

dealing with the functions of sale and marketing, and producer/exporter firms located in various producing countries. Most of these types of organizations are difficult to identify through databases or business directories because they keep independent identity (different company names).

6.2.7. Contributions

From the theoretical point of view, this analysis contributes to the emerging literature on the degree of formalization within international business. Most of the empirical research on formal and informal inter-firm contracts focused on in-border transactions that are submitted to the same institutional settings. This could explain to some extent why empirical researchers have mostly simplified the definition of formal (written and legal enforceable) and informal (oral and non-legal enforceable) contracts, which are insufficient in the context of the international transactions of goods. It also contributes to the analysis of the limits of the use of contracts in weak institutional and economic environments.

From the managerial point of view, this analysis shows that, despite the general perception within the industry, that the fruit trade is a business where the practice is not to sign contracts. The results of the field survey suggest that this practice is shifting, mainly due to changes in market operators in the importing countries, especially supermarkets or other special buyers, and due to the increasing requirements and standards. In this sense, this study also contributes to the economic and management literature that has focused the analysis on the role of supermarkets, the effects of food safety requirements on the organization of procurement systems (Chabaud & Codron, 2005; Berdagué et al., 2005; Reardon et al., 2007) as well as considerations on the institutional framework, the public regulations and private standards and the food governance changes (Beck et al., 2007; Havinga, 2012; Rouvière & Caswell, 2012).

6.2.8. Limitations

This subchapter is mainly a descriptive approach that provides a wide understanding of the variables influencing the choice of signing a contract in all its complexity.

However, this approach does not allow addressing the analysis in greater depth for each variable. Furthermore, given the limitations of the non-parametric techniques used, the robustness of the results should be confirmed by more advanced statistical work in a larger sample.

Another limitation is that the analysis is placed predominately from the exporter's perspective, though one of the elements that justify this approach is that "formal contracts are more valuable to subcontractors than customers, because suppliers are more vulnerable to opportunistic behavior, customers may be less willing to offer contracts if they have alternative sources of supply" (Lyons, 1994: 266).

6.3. MECHANISMS OF ENFORCEMENT IN INTERNATIONAL TRADE OF PERISHABLE PRODUCTS: THE CASE OF THE CHILEAN EXPORTS OF FRESH FRUIT

This subchapter describes the external (formal and informal) mechanisms, as well as internal mechanisms (the contract) used by Chilean exporters to secure international fruit exports. Its construction follows North's approach (1991) and aims to give a global view of contractual practices and their evolution over time.

6.3.1. Introduction

Analysis of contract enforcement is fundamental for international trade. According to North (1991), two main problems have historically arisen in long-distance trade: the agency problem and contract enforcement. The agency problem was habitually solved by resorting to the informal institutions of trust and reputation. Although essential, informal institutions were not sufficient to enforce contracts in remote locations and with unknown traders, so this led to the development of formal institutions such as merchant law courts, arbitration, insurance, and contract innovations. These formal institutions allowed for the reduction of information costs and provided incentives to increase international transactions.

Institutional economics research on enforcement has analyzed the effectiveness and limits of formal and official institutions like courts (Williamson O. 1996, 2001; Schwartz et al 2003, 2010), self-enforcing agreements (Telser, 1980; Klein & Leffler, 1981), the role and limits of informal mechanisms (Greif ,1993; Milgrom, North & Weingast, 1990; Richman, 2005; Menard 2002; Dixit, 2003) and the complementarities of formal and informal enforcement institutions (Poppo & Zenger, 2002; Zhou & Popoo, 2010; Aulakh & Gençtürk, 2008; Mazé & Ménard, 2010; Masten & Prüfer, 2012).

In this subchapter, I present a descriptive analysis of the mechanisms that allow Chilean exporters of fresh fruit to face trade hazards. The exporters and importers face high levels of risk uncertainty inherent in international commerce, which are amplified when the transacted products are highly perishable as is the case of fresh

fruit trade, and potential losses difficult to measure (Barzel). In this case, uncertainty arises from uncontrolled factors of nature, as climate, variable results in production, exposure to damage or deterioration of quality during long-distance transportation; and external factors at destination markets such as price volatility, changes in demand, currency fluctuation and competition. Agreements between exporters and importers are normally negotiated weeks or months before the shipments, or even before the harvest. Furthermore, transportation delays from the departure to the arrival port, and to the final sale in the destination market, lead to high transaction costs. Asymmetry of information, on the other hand, arises from the type of coordination between the exporter and importer. Most frequently, exporters only have access to destination markets through independent commercial agents who are not obliged to disclose the identity of the buyer to which the merchandise is sold. In these circumstances of uncertainty and asymmetry of information, fruit trade contractors resort to incomplete contracts, which can be contracts of sale with fixed prices or contracts on consignment where prices are determined after the sale at the destination market.

Our findings show that, in the case of fresh fruit exports from Chile to the world, enforcement involves internal mechanisms to the contract, such as the degree of its completeness, the safeguards requested, the arbitration provisions and the monitoring and coordination. These internal mechanisms are complemented by external devices that can be informal like trust and reputation, and/or formal, as insurance, inspection services, arbitration and the choice of triangulation in the presence of weak legal enforcement environments, along with high levels of payment risks.

This subchapter is organized as follows. Section 6.3.2 develops the theoretical framework based on institutional economics. Section 6.3.3 presents the qualitative methodology and data collection through direct interviews. In section 6.3.4 I build primarily on North's description of the evolution of long-distance trade (1991) to describe the prevailing practices in the fruit export-import sector with emphasis on the exporter point of view. Section 6.3.5 concludes in the complementarities of

informal and formal institutions that make possible the evolution of international trade.

6.3.2. Theoretical Framework

As stated by North (1991), the main difficulties that historically arise in long-distance trade are the agency problem and contract enforcement. The agency problem, due to the difficulty of the principal (the merchandise owner) to monitor, verify and obtain a good performance of the agent (the party hired by the principal) to execute the task of selling the goods. The agency problem was traditionally solved by resorting to informal constraints as relational ties, norms of behavior and conventions. However, according to North, informal constraints are an essential, but not sufficient to support trade in an international scenario. Therefore, the contract enforcement problem was faced by the development of formal institutions: “Negotiation and enforcement in alien parts of the world entailed typically the development of standardized weights and measures, units of accounts, a medium of exchange, notaries, consuls, merchant law courts ... insurance” (North 1991: 100). The development of formal institutions reduced information costs and provided incentives for contract fulfillment in long-distance trade leading to the increase of international transactions (*ibid*). However, as recent research has shown, when formal legal institutions to enforce contracts are weak, managers may choose to rely on informal institutions to enforce fulfillment of commitments (Peng, 2003; Xin & Pearce, 1996 cited by Zhou & Poppo 2010).

The research on contract enforcement has focused the analysis on the effectiveness and limits of courts (Williamson, 1996, 2001; Schwartz et al., 2003, 2010), self-enforcing agreements (Telser, 1980; Klein & Leffler, 1981, Dixit, 2003), the role of informal mechanisms (Greif et al., 1990; Richman, 2005; Menard, 2002; Maze & Ménard, 2010), the substantiality of formal contracts and informal relational governance (Sitkin & Roth, 1993; Tenbrunsel & Messick, 1999; Malhotra & Murnighan, 2002 cited by Lumineau & Malhotra, 2011); as well as the complementarity of both formal and informal mechanisms (Poppo & Zenger, 2002; Zhou & Poppo, 2010; Aulakh & Gençtürk, 2008; Masten & Prüfer, 2012); and the

interactions between relational governance, contract (detailed contracts and centralized control) within a weak legal framework (Zhou & Xu, 2012).

The legal system enforces contracts and provides a set of rules and procedures for resolving disputes between parties. However the assumption that the “legal system enforces promises in a knowledgeable, sophisticated and low cost way” is unsupported (Williamson, 1983: 519). Contract enforcement goes beyond the legal sanction that ideally provides “compensation for injury suffered by B as a result of S’s failure ... on complying with the B-S agreement” (Macaulay, 1963: 63). In fact, most disputes that “could be brought to a court, are resolved by avoidance, self-help and the like” (Galanter, 1981: 2, cited by Williamson 2005).

Schwartz et al. (2003, 2010) reviews the analysis of legal enforcement, contract law and contract interpretation, and goes a step further from the normative approach of what official institutions (the State in Schwartz’ terms) must provide, to the positive view of what business firms need. “Firms want the state to enforce the contracts that they write, not the contracts that decision makers with a concern for fairness would prefer them to have written” (Schwartz & Scott, 2003: 82). Furthermore, they join Telser’s (1980) assertions regarding self-enforcing agreements, since they recognize that contracts are often self-enforcing, “when parties contemplate making a series of contracts, neither party would breach an early contract if the gains from one breach are lower than the expected profit stream from future contracts that breach would cause to vanish” and that “neither party will breach if the gains are exceeded by the reputational sanction the market will exact” (Schwartz et al. 2003: 6). However, self-enforcing is not sufficient for agreements in volatile markets or when parties invest in relation-specific assets, for in these cases the performance of one party could threaten the survival of the other party (Schwartz et al., 2003).

Greif (1992) examines the institutions that governed the exchanges enabling trade during the Commercial Revolution of medieval times: the Maghribis’ coalition, the political coalition, and the patron system. During the 11th century, Maghribis traders in the Mediterranean formed a social and commercial network that hedged opportunism behaviors of merchants that violated the group’s commercial codes by

reputation mechanisms; they provided information regarding cheating and imposed punishments against any agent who had cheated a coalition member. In the middle of the 12th century, a political coalition held a monopoly over Genoa's overseas trade, which controlled the agency relations between Genoese merchants and their agents. By the end of the 12th century, the monopoly was eliminated and a patron system based on a bilateral reputation was used, the merchant (patron) paid sufficient remuneration to the agent and conditioned future employment to good performance in the past.

Masten & Prüfer (2012) building on Dixit's (2003), show that informal multilateral enforcement institutions (in their terms, collective enforcement) are efficient when the contractors are close. In agreement with Dixit's findings, the greater the distance between the contracting parties the lesser the efficacy of the multilateral mechanisms. They also show that courts are more efficient in distant transactions and complement multilateral enforcement.

Mazé & Menard (2010), sustain the complementarities between informal and formal institutions and support the analysis of enforcement when the products transacted are "highly sensitive to the perishable nature" and there is a high possibility of fraud because of severe quality measurement problems as in agricultural products. In these circumstances, reputation and legal institutions are insufficient, while collective industry-specialized organizations and private rules appear to provide effective enforcement.

In the following I present the methodological approach for the analysis of this vast topic.

6.3.3. Methodology

In this subchapter I perform a qualitative analysis of the information gathered through recorded exploratory interviews, and through surveys (see part III for a detailed description of data collection). I also analyze secondary information to have a better

knowledge of the nature of the commercial disputes in the international fresh fruit and vegetables trade.

6.3.3.1. Data collection

I examine the exporter-importer business relationships of off-season fresh fruit international commerce, specifically those of the Chilean exporting firms as one of the southern hemisphere's leader. I performed an exploratory phase, consisting of 38 interviews with industry executives (exporting and importing firms) and key informants in Chile and in Europe. The exploratory survey in Chile was conducted in October 2010. I conducted 19 in-depth and semi-structured interviews with managers of exporting firms; three of the respondents were legal, inspection and insurance service providers. The exploratory survey in Europe was mainly carried on during the biggest international trade fair for fruit and vegetables, in Berlin in 2011. I interviewed 19 firm managers (importers and export-import) and 3 service providers (ports, marketing associations). Most of the managers interviewed have a wide knowledge of the industry, averaging 15 years of experience. Respondents showed a willingness to provide information; most of the respondents in Chile allowed themselves to be recorded (with two exceptions). The interviews were semi-structured. The key questions were: How do export-import companies do business in fresh fruit trade? Do they sign contracts? If not, why not? What is the difference in terms of enforceability? What are the most important clauses/terms in export-import arrangements? What are the factors that influence these arrangements? What are the mechanisms of enforcement? How do firms reduce risks and secure transactions?

Findings from this exploratory phase were used to build a survey questionnaire that was validated by managers and a group of academics. The data collection was performed through face-to-face interviews during June and July 2011. Previously a random selection of exporting firms from a directory containing the last available data on the export 2009-2010 campaign by the *Asociación de Exportadores de Fruta de Chile* (ASOEX) were contacted by phone from France by the person in charge of conducting the field interviews. All the appointments made taken personally with the

export manager or the CEO. The interviewer was the same person in all the appointments who presented the questions orally and completed the questionnaire. This reduced a lack of understanding and therefore reduced the risks of non-responses. In addition, personal interviews facilitated the confidence of respondents regarding the purpose of the research, its confidentiality and therefore their willingness to provide information. Thus, 65 exporting companies were interviewed. The respondents were commercial executives (62% of the cases) and CEO (38%).

I also resorted to the analysis of secondary information regarding one of the international arbitration systems used by some of the exporters I interviewed: the Fruit and Vegetable Dispute Resolution Corporation (DRC). I downloaded the 191 arbitrations cases within the period 2000 to 2011 which were available on the DRC Website. Only one dispute case in 2011 concerned Chile; however, I considered that the analysis of the causes of conflict are an example of what happens in the fruit trade, even though conflicts do not reach the stage of arbitration.²⁰ Therefore, I thoroughly studied the last four years corresponding to 44 cases and classified the cause of disputes, made a classification for grouping the main causes into four categories: (i) **disputes on contracts** referring to cases where there is confusion or insufficient evidence regarding the type of contract and terms agreed by the parties; (ii) **disputes on prices** due to misinterpretation of the ex-ante agreed prices or renegotiations because of unforeseen changes when the transaction is concluded; (iii) **failure to pay** when the buyer does not fulfill his financial obligations with the seller namely: late payment, partial payment or non-payment; and (iv) **quality issues** due to grade and condition of product. Details on these causes are further developed in the following.

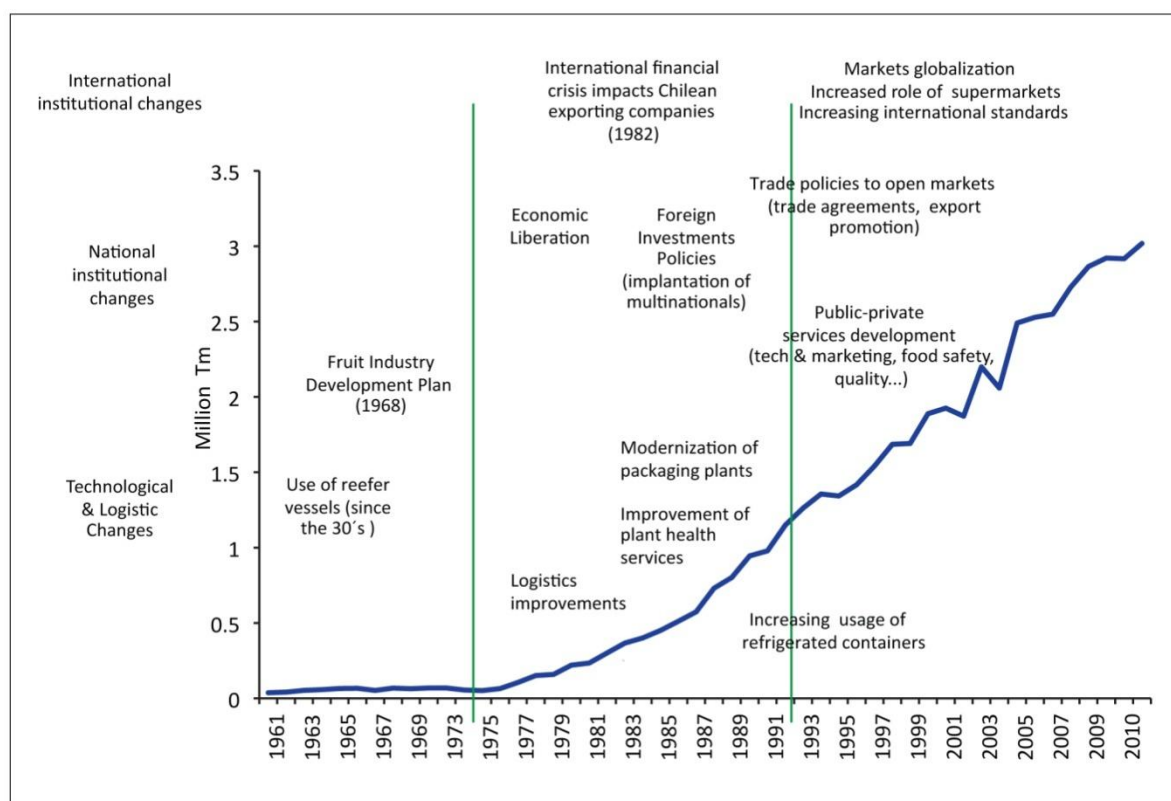
²⁰ DRC Process: (1) The claimant contacts a DRC trading assistance officer to explain the nature of the problem; 2) the DRC officer provides the firm with advice and encourages the firm to try to reach an amicable solution; 3) the claimant contacts the other party to the conflict and uses the DRC advice to reach a settlement; 4) if no settlement is achieved, the Claimant may move through mediation with the assistance of the DRC staff and recognized mediators; 5) if no resolution, the parties may choose formal arbitration. <http://www.fvdrc.com>

6.3.3.2. Empirical evidence

6.3.3.2.1 Institutional changes and Chilean Fruit Export Evolution

In 1961 Chilean fruit exports to the Northern Hemisphere accounted for less than 5% (Codron, 1992), in the 1990s this share was 25% and at present it accounts for 50% (Fernandez-Stark et al., 2011).

From 1961 to 2010 the evolution of fruit exports shows consistent expansion. The rates of growth for the 70s compared to the previous period were of 153.8%. The 80s is considered the boom of the Chilean fruit exports showing the highest growth rate (391.6%). From the 90s to the 2000s growth continued to have a good performance although at more moderate rates (116.6% for the 1991–2000 period and 58% for 2000–2010) which reflects a maturity of the industry. This expansion was possible thanks to a combination of institutional, technological and organizational changes that allowed Chile to seize the commercial opportunities arising from the increase of the demand for fresh and healthy products such as fruit (Figure 23).



Source: Elaboration of the author

Figure 23. Chile: key changes and evolution of fruit exports

Regarding policy changes, until 1974, Chile was one of the most protected economies in South America that rapidly opened to international competition (Kurtz, 2001). Structural reforms were implemented, as the reduction of the State's intervention coupled with the empowerment of the private sector especially those oriented to external markets. Neoliberal policies were applied as the liberation of land, labor and transport markets and policies for the export promotion were implemented, and as a drawback system to refund taxes to export products that used imported inputs (CEPAL, 2000). Port labor markets were liberalized, the public monopoly of the Seaports Administration was eliminated and port services (loading/discharging, handling, storage, among others) were privatized. The performance of cargo handling

capacity improved²¹ (Beato, 1996). The introduction of the use of bins, pallets and forklifts instead of what was common to the 60's when loading and stowage were done by hand, increased the efficiency of loading and unloading and reduced management costs (Codron, 1989; Espinoza, 1999).

Additionally, between 1975 and 1980 there were major technological changes as the privatization, modernization and expansion of plants for selection, packaging, cool chambers, the use of reefer containers and in 1985 the first fruit packing house with electronic selection lines and controlled atmosphere was installed. These allowed extending the shelf life of fruit, to improve the quality of products at arrival, and to expand the exports to far destination markets (Espinoza, 1999).

In 1980–1982, an international recession impacted Chile affecting its financial system. As a consequence, major Chilean export companies had credit difficulties causing bankruptcy. This situation combined with the new policy for foreign investment attraction, favored the entry of multinationals.²² After the 1982 financial crisis, the State started implementing “less orthodox policies,” for it supported the rescue of the private financial system and assumed a more active role in the development of the competitiveness of economic activities carried out by the private sector (CEPAL, 2000).

In the 80s, a process of trade liberation started by a unilateral tariff reduction for importations (Bull, 2008); in the 90s, Chile became a country with greater dynamism and continuity in its trade policy of opening new markets. The fruit industry private sector,²³ actively joined the official bodies in the trade agreements negotiation processes, in which, the fruit sector was clearly one of the biggest beneficiaries (Bull, 2008).

²¹ Capacity increased by 50% in 1986 (35 tons/hour/hatch) compared to 1979 (20 t/hour/hatch) and 150% in 1995 (40 tons/hour/hatch) compared to 1979. Port costs fell by 63% in 1986²¹ (U.S.\$0.2/box of fruit), compared to 1979 (U.S.\$0.6/box of fruit).

²² It should be noted that multinationals had previously functioned as importers of Chilean companies and that they kept most of the employees of Chilean companies (Espinoza, 1999; Gomez, 1994) as this allowed them to maintain the human specific assets and business relationships.

²³ As the Exporters' Association (ASOEX, created in 1935) and the Fruit Producers' Federation (FEDEFruta, created in 1985).

The 90s and 2000s were influenced by the effects of globalization, the increased buying power of the supermarket chains (Reardon et al., 2009), health, environmental and social concerns, and the multiplication of quality and food safety standards and plant health regulations (ASOEX, 2010; FEDEFruta, 2007). To face these challenges, non-refundable financial instruments were available through public institutions to promote productive and commercial activities and to improve the competitiveness and insertion in international markets. This period is characterized by the strengthening of public-private partnerships and the development of private services for information, especially market intelligence, quality control and certification services.

The expansion of Chilean exports was characterized by the diversification of destination markets. In 1964²⁴ Chile exported mainly to three major destinations, Europe (38% of exported volume), 37% to North America, and 25% to Latin America (Fig. 3). In 1978 exports expanded to the Middle East market (17%), in 1986 to the Far East (4%). Finally, in 2010–2011 exports to these 5 major markets are observed as well as the remarkable increase in exports to the Far East and Latin America. On the other hand, new players in the exporting activity appeared. From 1921 to 1950, one trading company dominated the exports; in 1960s one company exported 70%; at the beginning of 70s, 3 trading companies exported 65 %; in 1979 there were 40 exporting companies (Espinoza, 1999); in 1980s, 10 exporting companies 70% (Codron, 1989) and 200 exporting companies are registered (BCC, cited by Espinoza, 1999), in the 1990s, 10 companies exported 56% (Gomez, 1994), in the 2000s there were 450 exporting companies (ASOEX) and in 2010, 10 companies exported 39 % (ASOEX) and there were 747 exporting companies.

The growth of the Chilean fruit trade worldwide led to the increase of trade hazards due to the nature of the transacted products. As access to distant and risky destination

²⁴ It is necessary to specify that, due to the available information, figures from 1964 to 1991 concern three exported products: grapes, apples and pears; the share for these products are: Per. 1961–70 (57%) (In this period melons was an important exported product which disappeared during the following periods); Per. 1971–80 (88.4%); Per. 1981–90 (87.6%); Per. 1991–2000 (78.7%); Per. 2001–10 (72.8%). Source: Own calculations based on FAOSTAT.

markets increased, producers and exporters resorted to different informal and formal mechanisms; as North (1991) states, in order to lower the transaction costs, a number of institutional innovations were developed to facilitate trade, such as: innovation on contracts, mobility of capital instruments, information mechanisms, risk management instruments (e.g.insurance). In the following, I will refer to these.

6.3.3.2.2. Contract innovations: origin of the prevailing practices in the fruit export-import sector and evolution to the present

Even if the boom of the Chilean fruit industry is relatively recent, for the purpose of studying the origin of actual contractual practices, in the following I initially revisit the first Chilean fruit exports which can be traced in previous research back to the 1800s. Then I will refer in more detail to the contractual practices in the recent past and current practices identified through direct interviews with exporters.

Since 1832 the coastal trade from the Port of Valparaíso to Caldera (North of Chile), Callao (Peru) initially, and then the maritime route was expanded to Guayaquil (Ecuador), Panama and San Francisco (California, U.S.A), were developed by Chilean peddlers (“*pacotilleros*”) who rented spaces on deck boats and traded from port to port. At the beginning of the journey, the Chilean peddlers obtained supplies in Valparaíso, such as dried fruit and vegetables, grains and wine and marginally fresh produce, and then departed on their route to sell the merchandise. When returning, they would bring back bananas from Ecuador to sell in Chile. In 1921 these Chilean peddlers associated and constituted a commercial company that succeeded in exporting Ecuadorian bananas to the U.S. and Germany, and afterward, opened the German market to Chilean apples, and also exported Chilean fruit to the U.S.. The first export experience to Germany in 1928 reflects the importance of how building relationships facilitate trade

“...The manager of the Chilean Commercial Company started selling Ecuadorian bananas to Germany and established a close friendship with a leading German importer whom he invited to visit Chile to see the apple orchards. The importer (both with the manager of the commercial company)

visited the producers and their orchards and finally made an initial order of 100 thousand cases which was impossible to obtain as exportable capacity was limited to 30,000 cases, a quantity for which an agreement was established. The commercial company reached a deal (on consignment with guaranteed minimum) with producers to perform the first export of apples to Hamburg” (Espinoza, 1999:79).

In this citation we can observe the reference to the **consignment contract** that remains the most currently used nowadays. Under this type of contract, the exporter sends the goods to the importer who acts as commissioner and is in charge of selling the products at the destination market at the best possible price (free consignment). A variation of free consignment is the guaranteed minimum price where the parties agree on a minimum and maintain potential for price improvement after sale at the destination market (except when quality problems or market downfall occur at the time of arrival, which are common risks in the long-distance trade of fresh produce).

The first export to New York was in 1920, when a Chilean producer exported fresh table grapes on a consignment contract through a marketing company. Despite the poor packaging and transport conditions, the product was sold, nevertheless, and poor results the following year halted exports until 1925 when things restarted, this time through an agent in New York. In 1929, the same Chilean producer sent to London a person that he trusted and who knew the business to act as an agent in the U.K. market (Espinoza, 1999).

According to North, the **use of kin** in long-distance trade was used to solve the agency problem. That is, “a sedentary merchant would send a relative with the cargo to negotiate sale and obtain a return cargo. The costliness of measuring performance, the strength of kinship ties, and the price of defection all determined the outcome of such agreements ... A second problem consisted of contract negotiation and enforcement in alien parts of the world, where there is no easily available way to achieve agreement and enforce contracts. Enforcement means not only such enforcement of agreements but also protection of the goods” (North, 1991: 99–100).

During the interviews I found direct evidence of North's statement. The first experience of a Chilean fruit producer in exports to Europe in the late 60s reflects the exporting practices at the end of the 60s.

"I started exporting the same way as I used to sell in La Vega (N/A:²⁵ the traditional fruit and vegetable market in Santiago, Chile). I went to visit the daughter of a friend married to a Swiss man and proposed that this young man find clients for my fruit in the market of Basel. He contacted a wholesaler who had imported apples from Argentina. Then I proposed to the wholesaler: I will dispatch my fruit for you to sell. If you cannot sell it, you do not have to pay me, and you would owe me nothing (N/A: consignment contract). I took all the risks at the beginning and we did good business for twenty years... I also expanded to other countries in Europe... As a marketer of my own fruit, I was focused on achieving the best results in quality and compliance. The brand carried my own full name as a sign of commitment and reputation... I learned that the fruit business is a business of a man's word, it is a business of trust. You have to trust, however, on occasion, you also have to be tough enough to make some people pay... by insisting, even suing if necessary" (N/A: The interviewee indicated that in his 40 years of experience he had filed only one claim. This was in a court of Italy against an Italian importer and after a process of years he won the case and got paid.)

As shown, in early years Chilean trade was based mainly on the use of informal mechanisms, the relationship that the exporter-importer sustained was by kinship, friendship or strong personal ties enforcing incomplete contracts such as consignment. As trade has grown and new actors have emerged, contractual practices have evolved although enforcement still largely relies on informal mechanisms.

Exporting practices at present. A commercial executive with 20 years of experience in an exporting company mentioned a change in the use of contracts to counterbalance the risk of long distance trade:

²⁵ N/A: Note of the author.

“When our company began to export, we started with a reduced number of clients, most of them were family firms or small firms. A direct and tight relationship between the exporter and the importer used to develop. The agreements were negotiated annually and improved over the years leading to long-term commercial relations. This has been the way of contracting for the last 20 years. At the present time, with the rise of supermarkets and the emergence of foreign firms from distant and unknown markets, this form of contracting has begun to change. Risky destinations, less familiar importers, new participants with recent presence in the industry, and risky importers that you cannot tell if they will fail. Two things happened: (1) a strong growth of credit insurance. Before the business relation was secured by trust, nowadays it is also secured by the insurance company; and (2) use of the firm sale contract...”

In a firm sale contract the parties agree an ex-ante price²⁶ (fixed price or upon arrival price) for a given product. This is a contract mostly used in case of risky transactions; in these circumstances the exporters resort to more complete contracts instead of consignment. They also resort to advanced payments as safeguards to protect transactions. Safeguards are described by Williamson as “security features added into a contract in order to reduce hazards ... and to create confidence” (Williamson, 1996: 379). In this case, exporters require an advanced *payment against documents*,²⁷ which are in average, 42% of the merchandise value (50% advance payment was the most frequent answer of the 65 interviews). When the exporter considers that the importer is a risky partner, the advance payment increases up to an average of 85% (the most frequent answer is a prepayment of 100%) which shows that, the lower the trust in the firm, the higher the recourse to this type of safeguard.

²⁶ Price definition is based on: (i) past exporting campaigns; (ii) comparison among various importers' sales accounts to measure their performance; (iii) price, supply and demand information provided by market intelligence systems. These systems are mostly private. Among governmental information systems, the more relevant is the Agriculture USDA Market News Prices.

²⁷ Documents as bills of lading.

Another contract innovation mentioned by North is the *commenda*²⁸ contract. During medieval times, “the traveling party could ... create a second *commenda* in which he placed all or part of the goods in the hands of a third person who traveled to more distant markets” (Harris, 2009 citing Raymond & Lopez, 2001: 610). This description evokes some aspects of what I found in the field.

To the question, how do you avoid risk when doing business with risky or unknown importers or destinations? Some exporters uncovered another way to hedge high levels of risk, known as triangulation. At present, triangulation consists of using a third firm as intermediary, normally situated in a country different from the country of destination. This third firm agrees to a bilateral arrangement with the importer and on the other hand, reaches a distinct bilateral agreement with the exporter. The exporter ships the products directly to the importer and is paid by the third firm. (Figure 24) This contractual arrangement reduces transaction costs and allows risk sharing.

- The importer does not have to incur the costs of searching for, contracting with, supervising, and paying off different providers, because he deals directly with the third contractor who is responsible for fulfilling these tasks (for example, in case of multi-origin orders).
- The exporter does not have to incur the costs of searching for and dealing with an importer in an unknown, distant or risky country. By negotiating directly with a third party with which he usually has previous a good business experience, the risk of non-payment is reduced and, in case of product acceptance problems in the port of destination, the third party is responsible for inspection, renegotiation and dispute resolution.

²⁸ “The basic *commenda* was a bilateral contract involving only two parties, an investing party (called in Italy *commendator* or *stans*) and a traveling party (*tractor*). It is a predecessor of the limited partnership, an asymmetric multilateral contract. The *commenda* was an equity investment contract, specifying investments and payoffs. The investing party provided capital in the form of goods and cash that was used for the purchase of the trade goods and for travel-related costs. He was entitled to a share of the profit. The traveling party typically did not invest capital” (Harris, 2009:609).

- The third firm is able to sell multisource products without taking physical possession of the goods; also, since dealing with trustful exporters, the third party reduces the risk of the provider's failure to meet quality, handling and transportation requirements for good delivery.

Even if less mentioned during the interviews, a variation of the financial arrangement is that the exporter and the third party can also agree to enter into a joint venture, sharing the losses and gains arising out of the business.

In the field survey, 49% of exporters affirmed to have resorted to triangulation when dealing with risky countries or unknown importers, especially when located in faraway markets. A recurrent example of triangulation was the situation of opening new markets in Asian countries such as China and India, passing through a third-previously-known importer located in the U.S.A, the Netherlands, as the most frequent examples mentioned. I also found some cases of triangulation through the United Kingdom in which the parties involved have knowledge of the destination market and the importer. The choice of using the U.S. and the Netherlands as intermediary countries can be explained by the fact that these countries are relevant worldwide traders that have a strong commercial network to facilitate trade. This coincides with the findings of Williamson D. (2010) on his exhaustive analysis of the contracts used in long-distance trade in Venice 1190–1220 and Venetian Crete 1278–1400. Williamson D.'s findings show that when trade involved repeated transactions in high-flow commercial routes, the use of *commenda* contracts was more frequent than the use of debt contracts, because *commenda* contracts relied more heavily on informal enforcement mechanisms such as trust, while debt contracts were easier to enforce before courts.

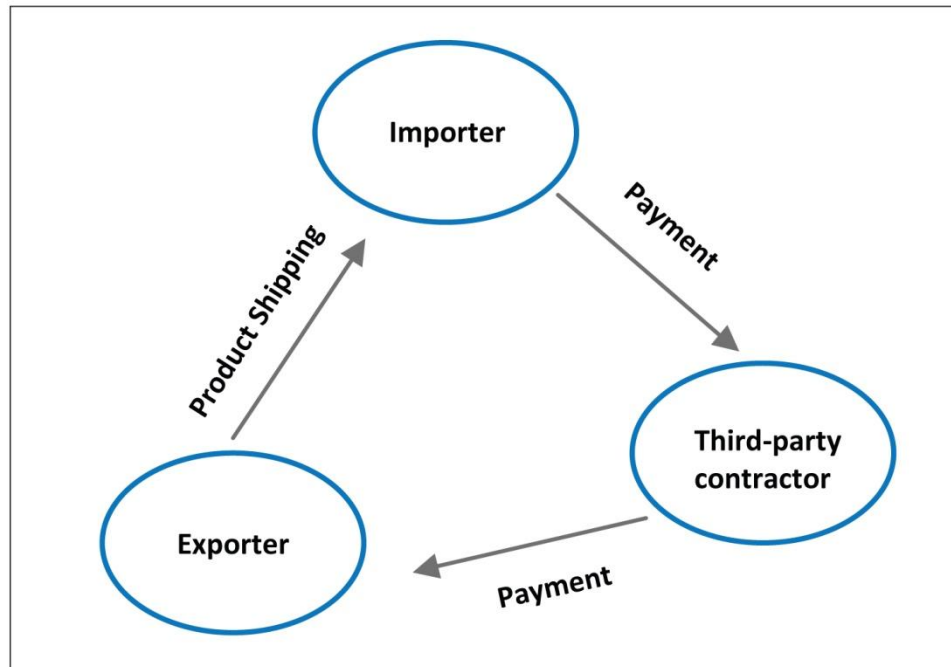


Figure 24. Contract triangulation

Previous extracts highlight the importance of **informal mechanisms as trust** to facilitate trade, and show that, even though **less utilized, formal mechanisms** “are complementary parts of a total system that work together to enforce honest behavior” (Milgrom, North & Weingast, 1990). “A mixture of voluntary and semi-coercive bodies, or at least bodies that effectively could cause ostracism of merchants that did not live up to agreements, enable long-distance trade to occur” (North, 1991:100). Besides trust, reputation also plays an important role for securing transactions. According to the interviews, exporters and importers consider that, at present, the international fruit business, even if open and highly competitive, is a network where participants exchange information regarding other companies’ behavior, not only between partners but also between competitors. In fact, an exporting company may inform a peer about an importer’s behavior or performance; and, on the other hand, an importer may recommend, or not, an exporter to his peer. Furthermore, exporters and importers participate in international fairs where, besides doing business, information flows, they also subscribe to specialized agencies that provide in-depth business and credit information on companies operating in the global produce

industry as the Blue Book and the Red Book.²⁹ Greif refers to the role of information networks: “A Maghribi merchant was associated with many Maghribi traders residing in different trade centers, and it was customary to reciprocate in the supply of trade-related information that was so crucial to business success” (Greif, 1993:529). In this context, **reputation** constitutes part of the intangible assets of a firm, which joins the “Klein and Leffler’s (1981) idea that in a free market, a seller of high quality goods treats its reputation as an asset that loses its value if they choose to supply goods of low quality” (cited by MacLeod, 2007).

6.3.3.3. The Formal institutions to protect transactions

As seen, technological changes improved the feasibility of exporting to far markets and new operators entered into the international fruit business. In these circumstances, besides informal mechanisms and contract adaptations, exporters resort to formal mechanisms such as insurance, inspections and arbitration to counterbalance risk inherent to long distance fresh fruit trade.

6.3.3.3.4. The insurances

Contracting **transport insurance** is a common practice in international trade. In fact, “by the fifteenth century naval insurance was established on a secure basis” (Roover 1945:198 cited by North 1991). In this case, the insurance (and the use of a thermograph to register temperature during the transportation (the highest risk of quality degradation is due to the change of temperature) is normally contracted by the exporters, except for the case of long-term relationships when exporters trust importers and the latter have a better insurance coverage or when both parties agree to share this cost. The responsibility of which party would be in charge of contracting this insurance is agreed during the negotiation of the contract and settled using the Incoterms.³⁰ The more common is FOB (*Free on Board*) and CIF (*Cost, Insurance &*

²⁹ <http://www.producebluebook.com> and www.rbc.com

³⁰ International Commercial Terms (INCOTERMS). International Chamber of Commerce.

Freight). FOB means that “the seller delivers when the goods pass the ship’s rail at the named port of shipment. This means that the buyer has to bear all costs and risks of loss of or damage to the goods from that point.”³¹ This is in theory. The usual practice in this case, is that having agreed on FOB, the exporter bears the risk of loss, and most of the time the costs, until the goods reach the destination market and the importer has received the product and given the approval. This may be explained by the fact that most exports are made on consignment (whether free consignment or guaranteed minimum), which implies that the owner of the merchandise is the exporter, until product is sold by the importer at the destination market. However, I observed that the issue regarding the transfer of risks is diffuse.

Trade credit insurance started to be used in Chilean fruit exports 10 years ago, which roughly corresponds to the acceleration of globalization and to the expansion to more risky destinations. This is an instrument to secure transactions against the risk of an importer’s non-payment. The insurance is based on the fact that exporters ship their goods without receiving, in exchange, full payment for it, in other words, exporters confer a credit to their customers.

The exporting companies that have the capacity to absorb the cost used to buy trade credit insurance. And 49% of respondents declared that they always take out a credit insurance policy, while 34% never use this insurance (Table 35). The insurance is especially useful to open new markets, to address those more distant, risky and unfamiliar, or to contract with new customers.

After the exporting firm applies for an insurance policy, the insurance company evaluates the portfolio of each of the exporter’s customer (the importers). The evaluation focuses on the importers: payment capacity, financial statements and the commercial record of behavior with other exporters. If the importing company complies with requirements it is accepted for insurance coverage to a limit that varies for each importer (insurance coverage is 85 to 90%). On the contrary, if the importing

³¹ INCOTERMS 2000 p.48

firm does not meet the requirements, the insurance coverage is rejected (for that specific importing firm).

Credit Insurance		
	Freq.	%
Never	22	33.85
Sometimes	11	16.92
Always	32	49.23

Table 35. The use of credit insurance

6.3.3.3.5 The inspections

Other institution innovations pointed out by North are the development of standards such as weights and measures that seek to lower the information costs. For its part, the measurement branch developed by Barzel highlights that the difficulty in measuring performance is due to the variability of the characteristics or value of the merchandise. Transactors have to be sure of the weight, quality and specific attributes of the product to be traded. The use of a third party for verification purposes converts an asymmetry of information situation into a more symmetric one; it may double inspections from buyer and seller, and this implies a double measurement cost (Barzel, 2005). In this case, exporters and importers protect themselves against claims by implementing various means: quality, handling and transportation standards, certifications, post-harvest inspections, port inspections and transport insurance policies. Despite these standards, quality is not completely measurable and should be evaluated by external experts to assess the quality, especially if arbitration proceedings are required to solve conflicts. Inspections take place in critical points such as packing facilities, port of departure, entry ports and finally, point of delivery. For the purpose of this analysis, I focus on the mechanisms used from the port of origin to the destination port.

Chilean fruit exports undergo two types of inspections: an obligatory official sanitary inspection at the departure port, which is performed by the *Servicio Agrícola y*

Ganadero (SAG - Ministry of Agriculture), and the voluntary private inspections performed normally at packing houses to verify the good condition of the fruit. Thus, 98.5% of the exporters (64 cases) declared that they performed these private inspections, among which 86.2% use their own inspection capacities and 12.3% hire third-party private services. Only one CEO declared that he did not inspect the product at origin because “he trusted the produce providers.”(Table 36)

All of the respondents declared that they performed inspections at destination; 48% of them affirmed resorting to private inspectors, which normally act as an independent third party and give transparency and security for both exporters and importers.³² The communication between the inspection service provider and the recruiter (the exporter or the importer) is fluid and must be timely.³³ In this way, 46% of the exporters declared that inspections are done directly by the importer, and that recourse to a third-party service provider applies in case of controversy; this third party might be official or private depending on destination legislation. In the case of large exporting companies, the inspection service is normally integrated within the firm.

	Inspections at Origin Port		Inspections at Destination Port	
	Freq.	%	Freq.	%
No				
Own's	56	86.15	4	6.15
Third's	8	12.31	31	47.69
Client's	-	-	30	46.15
Total	65	100	65	100

Source: Interviews to Chilean exporters

Table 36. The use of inspection services

³²The recruitment of these services is mostly done at the expense of the exporters; however it can also be charged to the importers, or to both parties, in which case they negotiate to share costs.

³³One of the key tasks of the inspection service at the arrival of the product is checking the thermograph to verify the variations of temperature in the containers during transport. The inspection service must send a report to the exporter or importer within 24 hours (actually they do it immediately by phone). Timing is crucial, since in case of problems there is only a span of 48 hours (after the arrival of cargo) to file a claim to the shipping company.

As seen, inspections of the transacted products are treated rigorously. This is understandable because of the fragile nature of fresh fruit and because of the risk of an operator's displaying opportunistic behavior. According to exporters, when they start getting a greater number of claims due to poor conditions at arrival that is a signal of poor conditions in the market:

“If the market is saturated, the receivers (the importers) are more strict in checking the fruit and claims arise; if the market is undersupplied or moving faster, receivers make less claims because the market is functioning well” (Producing-Exporting company). And from the receiver's point of view, *“one may find exporters who say: this happened to me; I was robbed. But, if you go into detail, the importer pays four to six thousand dollars freight, pays the customs fees and transport (N/A:³⁴ Depending on the conditions agreed in the contract); if there are quality or poor condition problems, the importer has to pay for the reclassification and repacking or even the destruction of the product (N/A: depending on the conditions and the responsibilities agreed in the contract), that is why importers prefer to do business on consignment (N/A: rather than firm sale), especially when the exporter is not serious or has no experience.”* (Interview with a German importing company, who coincidentally, at the time of the interview was in a dispute with a Peruvian exporter whose product had arrived too ripe and was therefore unmarketable. Transaction was on a firm sale contract, the cost of transportation by air and advance payment prepaid by the importer).

In summary, exporters and importers agree that quality is a major source of controversy between importers and exporters. In the following section I explore the means for dispute resolution and the main source of controversies.

³⁴ N/A Author's Note

6.3.3.3.6. Arbitration

As North stated, merchant law courts were among the formal institutions that traders developed to reduce the risks of commerce. In Chile there is a private Chamber of Commerce where most domestic, and marginally international, fruit trade disputes are settled. In Europe there is a private framework named Common European Usages for the Domestic and International Sale of Eatable Fruits and Vegetables (COFREUROP), which is a voluntary industry standard that rules contractual import-export arrangements. This standard is enforced by a private mechanism: the International Arbitration Chamber for Fruits and Vegetables. However, none of the exporters to Europe, or European importers interviewed in the exploratory phase acknowledged knowing COFREUROP. Furthermore, the survey shows that in cases of conflict, only 7% of respondents declared to have resorted to an International Arbitration Chamber; 57% of respondents stated not knowing about the European Arbitration Chamber and 33% had the perception that arbitration involves high costs and delays, which discourages the use of this kind of organization. When referring to arbitration, the relevant reference is the Northern American arbitration system, especially PACA and DRC. In the following I develop the functioning of these systems which, according to exporters, have the highest levels of enforceability since they are embedded in official laws and State bodies.

In the US, traders, importers and exporters to the U.S. are protected by the Agricultural Commodities Act (PACA), which is a federal law, enforced by the US Department of Agriculture that regulates interstate and foreign commerce in the U.S.. The PACA system provides methods of resolving disputes formally or informally, and has a trust that protects unpaid sellers (domestic or foreign), even in cases of bankruptcy of the buyer. When there is a violation of the rules, such as the non-payment of merchandise, the company, its officers, directors and shareholders, can have their license suspended or revoked.

The PACA institutional framework served as a model to develop the Fruit and Vegetable Dispute Resolution Corporation (DRC), which is a private, voluntary, non-profit organization of produce and transportation companies from U.S.A, Canada and

Mexico and from other countries dealing in North America. The DRC was established in February 2000 and designed within the framework of the North American Free Trade Agreement (NAFTA) to build on the existing system in the U.S.A and fill the institutional gap for arbitration in Canada and Mexico. There have been 1,300 disputes managed by the DRC from 2000–2010. Over 85 percent are resolved through direct negotiation between parties, or with assistance and informal mediation of the DRC staff; a minority of cases reach the arbitration stage (Gómez et al., 2012). Out of the 191 arbitration decisions that are available online over the 2000–2011 period, only one case in 2011 pertains to a dispute involving Chile. I analyzed the 44 cases available from 2009 to 2011 and made a classification for grouping the main causes of disputes into four categories: disputes over contracts (4 cases), disputes regarding prices (5 cases), failure to pay (10 cases) and quality issues (25 cases) (Figure 25). More details in Annex 4.

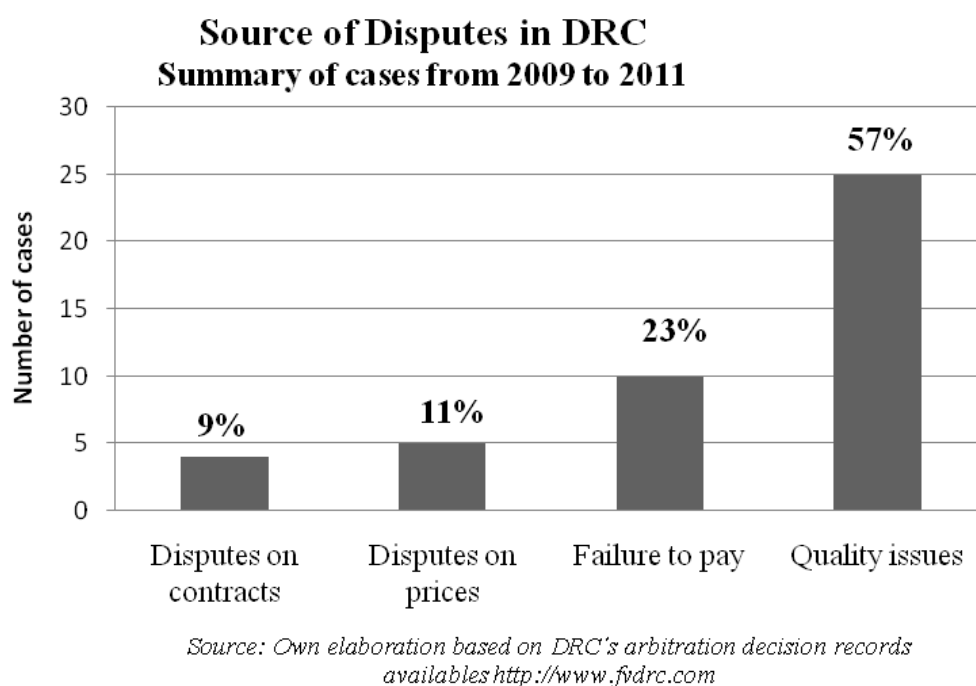


Figure 25. Source of disputes in DRC

- **Disputes on contracts**

This refers to cases where there is confusion or insufficient evidence regarding the type of contract agreed to by the parties (i.e. consignment and after-sale price or sale at a fixed price); or the terms agreed such as the rights of decisions on the product, for reselling the product to a third party, the decision to store, return or even dumping the product in case of total damage. Another source of conflict is the unilateral change of contract conditions that may happen when one party considers that the other has breached the contract. Under the rules of the DRC and PACA, in order to change a contract there must be a “meeting of the minds” between the parties and this change must be proven by written documentation (emails are acceptable), if not, the terms of the transaction would remain as the original agreement (e.g. DRC File No. 18552, 2009).

- **Disputes on prices**

These may appear due to different reasons, including misinterpretation of the ex-ante agreed prices, renegotiations because of unforeseen changes, unfavorable market conditions or proven quality issues. For example, a frequent case of disagreement on prices is when the product is rejected or received under protest by a receiver. In this case, the shipper normally requests the receiver, or a third party, to sell the product at the best available price (Gómez et al., 2012). In the three years analyzed I only found two inter-state cases where the product was returned to the shipper. The reason is simple, due to the perishable nature of the product it is not feasible to return fresh fruit to the port of departure. Often, the shipper may not consider that the final price obtained is fair, in which case the DRC determines whether or not the load was sold at a fair market price value using normally as reference the USDA Market News Prices. Another source of conflict is when an exporter expects its agent to only sell its fruit for prices no lower than a specific guaranteed sales price which should be clearly stated in the contract (DRC File No. 18666, 2011).

- **Failure to pay**

This situation may occur when the buyer does not fulfill his financial obligations with the seller, e.g. late payment, partial payment or non-payment. The most frequent charge for non-fulfillment is quality problems or changes in the initial agreements. Disputes also arise from balances owing from previous transactions. In the industry parties may arrive at arrangements that allow compensation of losses in the following year. *“What kind of help can you give us?” in the industry means, “Will you agree to reduce the price?”* (DRC File 18745, February 28, 2011). This coincides with an exporter interviewed: *“The receiver tells me: help me, the market was bad, and we agreed on the price”* or *“I will help you this year and you will compensate us next year”* (Chilean exporter). Or from the importer’s perspective: *“When the results have been unfavorable to the importer (commission agent), we agree with the exporter that next year we will reduce the prices (paid to the exporter) to compensate the previous losses. Long-term relationships allow these adjustments from one campaign to another”* (French importer).

It is worthwhile to mention that non-payment due to bankruptcy is not treated by the DRC because it has no instruments available³⁵ to protect sellers against insolvency of buyers. To my knowledge, only the *PACA Trust*³⁶ provides this protection for national and international companies selling in the U.S.. This explains the recourse to credit insurance to counterbalance insolvency risks.

³⁵ In December 2011, the U.S.–Canada Regulatory Cooperation Council (RCC) action plan on regulatory cooperation was released by President Obama and Prime Minister Harper in order to develop proposals for financial risk mitigation in Canada to protect Canadian and U.S. fruit and vegetable (among other sectors) suppliers, from buyers that default on their payment obligations. (ITA, 2012 International Trade Administration. Department of Commerce U.S.A <http://www.trade.gov/rcc/> downloaded October 2012)

³⁶ The PACA trust “is a remedy for produce sellers to obtain payment on undisputed amounts owed for produce sales in or to the U.S. The trust consists of a buyer’s produce-related assets, such as inventory and receivables. The trust allows a seller, which has preserved its trust rights, to have its lawyer file a case in court and obtain a freeze on the trust assets of a non-paying buyer by showing there is no dispute the money is owed, and the trust assets are being dissipated. Under the trust, produce suppliers are paid from the proceeds of their produce before any other creditor, including banks with security interests on produce-related assets”. <http://www.pacawebguide.com/trust.html>

- **Quality issues**

Such issues normally arise from two situations: divergences between the product's grade (standards) demanded and the product shipped (e.g. caliber divergences) which are less frequent; and, poor condition upon arrival (e.g. decay and bruising) due to deficiencies in transportation or shipment (damage due to temperature, inappropriate handling and delays). These issues might result in the rejection of the product or reception under protest, with the consequent loss of the merchandise's value and controversies regarding responsibilities and loss sharing. Parties must present evidence of whether there was a breach of contract regarding the warranty of suitable shipping conditions; whether there was a timely notification of poor arrival and an accurate measure of damages. Inspections and surveys from non-government services are accepted; however, they do not have the same weight as inspection certificates from the United States Department of Agriculture (USDA) and Canadian Food Inspection Agency (CFIA).

As stated by Mazé & Menard (2010), "quality measurement as a major source of litigations and distrust between farmers and agro-food firms is well documented (Fausti and Feuz 1995; Hobbs 1997). Since quality largely determines the existence and size of quasi-rents, measurement errors are a major source of potential hold-up problems among contracting parties" (Barzel, 1982; Klein, 1996; Mazé & Menard, 2010:144). Quality uncertainty also influences the choice of contract arrangements between the contracting parties. Fausti & Feuz (1995) demonstrate that the level of incomplete information regarding the quality of the transacted product (in their case, cattle) resulted in a variation of the level of charges on the purchase to offset the risk of the buyer. And explain the coexistence of multiple marketing channels (Fausti & Lange, 2011).

A final comment regarding recourse to the DRC and in general to the arbitration: Although this institutional framework exists, the number of member companies is low (in December 2011, membership rose to 1,400 companies, out of which 1,005 were from Canada, 358 from the U.S., 22 from Mexico and 18 from Chile a non-

NAFTA member³⁷). The membership disparity, especially for Mexico, may be partially explained by the persistence of a business culture relying on informal mechanisms to solve disputes (Gomez et al., 2012). As North asserts “traditions and customs may impede managers’ willingness to embrace new practices and institutions” (North, 2005 cited by Zhou & Popoo, 2010). On the other hand, 90% of the Chilean exporters interviewed during the survey claimed to never have recourse to a trial or arbitration. We can conclude that fresh fruit international contracts are mostly, although not entirely, self-enforcement agreements, in the sense of Tesler, “It is left to the judgment of the parties concerned to determine whether or not there has been a violation of the agreement. If one party violates the terms, the only recourse of the other is to terminate the agreement” (Telser, 1980:27). However, even if there are a low number of arbitrations, as described by Mazé & Menard (2010) in their analysis of the causes of litigation handled by a quasi-public agency, what matters is the activation of the reputation mechanisms preventing or lowering opportunistic behavior in the industry.

6.3.4. Conclusions

Like North, I attempted to frame the evolution of contractual practices. The beginnings of Chilean exports were governed by bilateral reputational and trust mechanisms that evolved to bilateral and multilateral informal mechanisms, recently complemented by formal mechanisms, including inspections, insurances, and arbitration.

³⁷ According to Góme. et al. (2012), the disparity of countries belonging to DRC is explained by the strength, weakness or absence of preexisting national dispute resolution systems. The U.S. already had a system that worked well and served as a model for the DRC, in these circumstances DRC functions as a complement for PACA, U.S. firms join DRC to have access to dispute resolution services when exporting to Canada. Canadian firms had a favorable disposition to join the DRC because there were gaps in the licensing and arbitration system of the Canadian Food Inspection Agency (CFIA). This system was limited to deal only with grade and condition disputes while payment issues were beyond its jurisdiction. In 1999 the Canadian government announced that membership in the DRC would meet the licensing requirement for legal operation in Canada. The case of Mexico is different, as prior to DRC there was no inspection service, no trade dispute system, weak grades and standards for fresh produce. Even acknowledging the need to strengthen the formal mechanisms, the country business culture continues to rely on informal mechanisms to solve disputes.

Literature on mechanisms of enforcement is converging in the recognition that enforcement of contracts goes beyond the legal dimension; and that the weakness, limits or absence of legal mechanisms are overcome by informal mechanisms, such as bilateral trust, and multilateral reputation (Poppo & Zenger, 2002; Zhou & Poppo, 2010; Aulakh & Gençtürk 2008; Mazé & Ménard, 2010; Masten & Prüfer, 2012).

In the case of difficulty in measuring products, transactors develop private industry institutions that, when embedded in favorable legal environment for enforcement, allow specialized knowledge, reduce transactional costs, activate reputation mechanisms and prevent the occurrence of opportunist behavior (Menard, 1996; Mazé & Menard, 2010). Therefore, the importance of formal and informal mechanisms is widely recognized, whether acting as alternative or complementary devices to secure transactions and to facilitate the development of trade.

6.3.5. Contributions

This study contributes to the analysis by adding the difficulty of enforcement in the context of international trade of perishable products. Indeed, exporters deal with several risks: the total or partial loss of product quality due to its perishability and the difficulty of handling these products in long-distance trade, as well as the risk of adverse selection of importer (the agency problem). This descriptive analysis shows that companies resort to multiple formal (official and/or private) and informal mechanisms, as trust and reputation, to lower trade hazards and to improve the international contract enforceability, which is consistent with institutional economics and the TCE.

A contribution of this research is the description of relatively new mechanisms, including the use of trade credit insurance, to reduce the risk of non-payment, recourse to alternative types of contracts to diminish risks, such as the contract of sale in this industry of consignment tradition; and the use of official and private inspections services (at origin and destination ports) to reduce the risk of the main cause of international disputes: quality issues. And, finally there is the use of a third transactor party, a *commenda*-like coordination, to counterbalance risks when dealing with unknown importers or when expanding to foreign countries in the world.

6.3.6. Limitations

The main limitation of this work is that the historical analysis is not deep enough. This is because initially, the historical perspective was not foreseen in the study. During the exploratory interviews, some exporters and other interviewees referred to the past to explain the present, as these persons noted that current practices are the result of a historical process. To interpret this unexpected information I resorted to North's lens of analysis. An interesting extension of this study would be to search the archives of the Valparaíso Chamber of Commerce to study the contractual details of commerce during the 1800s and 1900s.

7. GENERAL CONCLUSION

This doctoral thesis examined the contractual relations between Chilean fresh fruit exporters and off-season importers. The study was framed on the post-positivism philosophical paradigm and the theoretical approach of the New Institutional Economics (NEI) particularly Transaction Cost Economics (TCE) and Institutional Analysis (IA). The main research question was: How are exporter-importer contracts chosen for counterbalancing the hazards of international fruit trade? After an iterative empirical and theoretical analysis, this question was divided into four specific sub-questions: (i) What is the degree of completeness of each type of contract? (ii) What are the determinants of the choice of the degree of contract completeness? (iii) What is the degree of formalization of a contract? (iv) What are the mechanisms to enforce contracts?

To answer these questions a multistrand research design integrated by sequential and concurrent qualitative-quantitative mixed methods was used (Tashakkori & Teddlie, 2003). This approach allowed enhancing the knowledge of how firms resort to alternative contractual choices in order to face the increased hazards of international commerce emerging from complex transactions within environmental uncertainty of the alternative importing countries, as well as the behavioral uncertainty linked to the difficulty to measure and handle perishable products, the changing conditions from the time of harvest and transport to the time of arrival and sale in the market of destination; the risk of an adverse selection of the business partner, and the difficulty of contract enforceability in different environmental settings in foreign markets.

The answers to the doctoral research questions are:

To the main question: How are exporter-importer contracts chosen for counterbalancing the hazards of international fruit trade?

Chilean exporting firms resort to a range of complementary external and internal mechanisms to protect and organize transactions, as well as to enforce export-import agreements (Figure 25). The external mechanisms are informal, i.e. trust and

reputation, which might be complemented by formal mechanisms, i.e. inspection, trade credit insurance, arbitration. The internal mechanisms consist of the two basic types of contractual arrangements, firm sale and consignment. These contractual arrangements, which are backed by legal documentation required by the international regulations governing trade of goods, can be confirmed by signed or non-signed contracts.

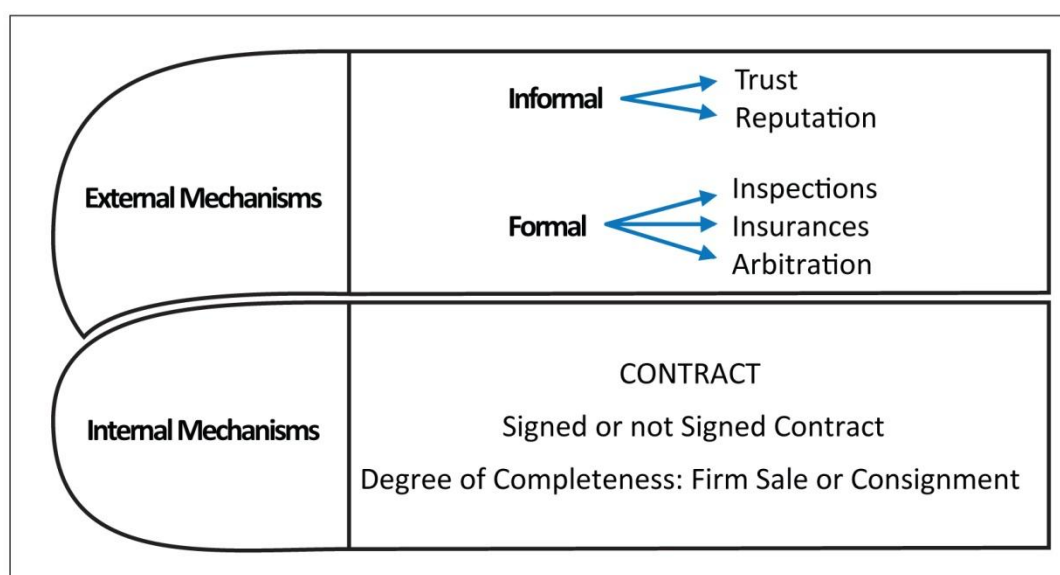


Figure 26. Contracting in international fruit trade: mechanisms for coordination and enforcement

First, regarding the question: (i) *What is the degree of completeness of each type of contract?* According to the TCE literature, contractual arrangements can be classified by their degree of completeness according to their price mechanisms, therefore: first, a firm sale with an ex-ante fixed price where the importer buys the product is a more complete contract; and, second, consignment, where price is not agreed ex-ante, for it is known after the sale at the destination market by the importer who acts as commissioner. A variation is the guaranteed minimum price where the parties agree on a minimum and maintain the potential for price improvement after the sale. Consignment is a less complete contract.

And, (ii) *What are the determinants of the choice of the degree of contract completeness?* The binomial logit estimates on the exhaustive Chilean custom database for 2009–2010 fruit exports showed that the choice of contracts varies across destination countries. Explanations for this are:

Fruit trade is marked by uncertainty. *Environmental uncertainty* explains the predominance of less complete contracts (consignment), involving 60% of the Chilean exports worldwide. However, in conditions of higher levels of uncertainty due to *importing country risks*, exports are less probable to be performed on consignment while the probability of resorting to a more complete contract (firm sale) increases. The type of *market entry channels* also influences this choice. In countries traditional importers predominate as brokers and wholesalers, exports are more likely to be transacted on consignment contract, e.g. as the U.S. and the Netherlands. In countries where there is more participation of supermarkets or importing companies supplying supermarkets, the probability to export on consignment decreases while the probability to export on firm sale increases, e.g. the U.K. The *regulations* and *norms* matter for the choice of contracts, e.g. specific legal framework for importing and interstate commerce as in Canada.

The *time specificity* measured by *degree of perishability*, *seasonality* and the mode of *transport* influence the choice of contract. Results showed that when product perishability is higher it is more likely to be exported on consignment, while the choice for consignment decreases for products with moderate or lower perishability. Seasonality influences the choice of contract since the probability of exporting on Consignment increases at the peak of the campaign due to the increase of produce in a short time span. On the contrary, in situations of shortage of supply, the exporting company would be in a favorable position to negotiate a more complete contract such as firm sale. Finally, the longer the product is in transit is, the higher the possibility of price variation at the destination market, and quality loss between the time of shipping the goods and the time of arrival and delivery. For these reasons, when the transport is by sea, the usual mode of contract is consignment and when the mode of

transportation is by air or road, it is more likely to be a firm sale. For more details see Subchapter 6.1.

Concerning question (iii) *What is the degree of formalization of a contract?*

Export-import arrangements whether firm sale, and consignment are confirmed by signed or non-signed contracts. Non-signed contracts that do not include two-way exchange of signatures (following Lyons, 1994) are legally enforceable because they are supported by extensive export documentation (bill of lading, commercial invoice, customs clearance, among others). Differences in content between a signed contract and a non-signed contract remain mostly in the enforcement provisions, i.e. arbitration, which is, with some exceptions, absent in a non-signed contract. However, to resolve the conflicts, exporters and importers do not tend to resort to third parties, such as courts or private arbitration chambers. On the contrary, they opt for bilateral informal negotiation. If no resolution is possible, especially in the presence of bad faith, they prefer to end the relationship.

Among the reasons explaining why exporters do not sign contracts are: the need for flexibility to adjust to changing conditions; the cost and time required to elaborate and negotiate a contract; and the current commercial custom and usage of trade which is mostly coordinated through non-signed contracts. On the other hand, factors influencing the choice to sign a contract are:

Environmental uncertainty. When exporting to risky countries marked by weak enforcement environments and political or economic instability, exporters do not choose to sign a contract because a signed contract is not considered an efficient means for securing transactions. The *market entry channel* in the importing country affects the choice of signing a contract; it is positively correlated when the exporter does business directly with the supermarket, and negatively when he does business with a traditional importer as a wholesaler. There is a positive and significant correlation between signing a contract, due to the *exporting company's policy* or due to *importing country's requirements* (this coincides with Aulackh & Gençtürk, 2008).

Behavioral uncertainty. The result was statistically significant. When the exporter trusts the importer, behavioral uncertainty is low and the correlation with the choice of signing a contract is negative. This supports the assumption that trust is a safeguard for protection that may substitute for recourse to signed contracts. When the exporter has no previous experience in transacting with the importer, trust is not instilled, neither does distrust exist; the behavioral uncertainty is moderate and he is more likely to sign contracts. On the other extreme, in the presence of high levels of behavioral uncertainty, when the exporter distrusts the importer, the correlation with the choice of signing is positive although weak because it is less likely for the exporter to do business with a distrustful importer.

A surprising finding is that when the risk of the transaction increases, due to the degree of *perishability* of the product and to the *risk of the importing country*, the likeliness of signing a contract is not significant. For more details see Subchapter 6.2.

Third, regarding the question: *What are the mechanisms to enforce contracts?*

Like North, I described the evolution of contractual practices. Chilean exports were traditionally governed by consignment contracts and informal mechanisms as trust to secure transactions. As trade has grown and new actors have emerged, institutional innovations have developed, namely: (i) contract innovations such as resorting to alternatives types of contracts to diminish risks, namely the contract of sale, the use of a third transactor party, a *commenda*-like coordination, to counterbalance risks when dealing with unknown importers or when expanding to foreign countries in the world; (ii) formal mechanisms innovations (such as *trade credit insurance* to reduce the risks of importer non-payments; *inspection services* at origin and destination ports) to reduce the risk of the main source of international disputes in this industry: the quality issues; and official or private *international arbitration* bodies. The choice of contracts and the formal mechanisms are complementary to informal mechanisms such as trust and reputation that allow a reduction in trade hazards and improve the international contract enforceability. For more details see subchapter 6.3.

7.1. Theoretical contributions of the doctoral thesis

This research contributes to the understanding of the role of environmental and behavioral uncertainty and time (temporal) specific assets, both variables essential in agriculture, and international trade of perishable products. It also contributes to the literature on the degree of formalization and on the enforcement of international contracts.

As for the effect of higher levels of uncertainty emerging from the *environmental uncertainty* in risky importing countries and the *behavioral uncertainty* in distrustful business partners, this does not lead to recourse to more formal signed contracts. This finding joins recent research by Zhou & Poppo (2010). Trust is of a calculative kind as Williamson (1996) states, since it emerges in the fruit trade business mostly from objective considerations of performance and competence. This trust embedded in long-term relationships is an effective safeguard for protection that may substitute for the use of signed contracts, and explains why the use of signed contracts decreases as the relationship evolves, which joins the stream of literature sustaining relational contracting (Macaulay, 1963; Macneil, 1978; Palay, 1985; Lyons, 1994; Poppo & Zenger, 2002; Aulakh & Gençtürk, 2008). However, in case of high levels of uncertainty, fruit exporters use prepayments as safeguards or high advance payments and the use of more complete contracts, such as the contract of sale in this industry of consignment tradition to protect transactions and reduce transaction costs (Williamson). Besides the external formal mechanisms like trade credit insurance, which is a relatively new mechanism to reduce the risk of non-payment, there is also the use of official and private inspection services (at origin and destination ports) to lower the risk of quality issues that is proving to be the main source of international inter-firm disputes. Finally, the use of triangulation through a third party contractor, which is a *commenda*-like coordination, to reduce the risks of dealing with unknown importers or when expanding commerce to foreign countries while reducing the cost of searching for, contracting out and monitoring importers. These means allowed enhancing the development of trade (North). Regarding the *commenda* contracts, to my knowledge this has been studied in the context of the medieval trade (North,

1991; Harris, 2009; Raymond & Lopez, 2001) while no recent studies have addressed the evolution and the use of this type of risk-sharing contracting practices at present.

Concerning product *perishability* to proxy time specificity, results showed that more perishable products are more likely to be exported using less complete contracts, i.e. consignment. This leads us to reject the hypothesis that the higher the asset specificity, the higher the degree of contract completeness (Saussier 2000; Ménard, 2002). This may be explained because high levels of perishability result in a short marketing cycle; consequently, once the product is harvested and dispatched, the possibility for storing is extremely limited and economic agents are more vulnerable to environmental and behavioral uncertainty. According to Poppo & Zenger (2002) the effect of asset specificity on contracts changes when there are high levels of uncertainty; in this situation, managers tend to use relational governance instead of more complete contracts or formal contracts. Ménard (2002) states that the degree of contract completeness decreases with uncertainty, which is consistent with the importers' assertion that short shelf-life fruits present higher price volatility and therefore, they cannot bear the risks of engaging ex-ante price provisions through more complete contracts (e.g. firm sale), "particularly because of the potential costs of being 'trapped' in a bad contract" (Saussier, 2000:193). Another relevant variable related to time specificity is the *seasonality* of the product. Results showed that the choice of contract may vary within a year due to demand and supply variations. According to the econometric results, it is more probable to use a less complete contract (consignment) at the peak of the campaign; on the contrary, in situations of shortage of supply, the exporting company would be in a favorable position to negotiate a more complete contract such as firm sale, which sustains the information provided by exporters within the exploratory and confirmatory phase of this research.

This research also attempts to draw attention to the excessive simplification of formal and informal contract concepts. Most literature addressing this topic has focused on in-border transactions that are submitted to the same institutional settings. This could explain to a certain extent why theoretical and empirical research has generally summarized the definition of formal (written and legally enforceable) and informal

(oral and non-legally enforceable). This simplified approach does not suffice to characterize export-import contracts backed by legal documentation. In this sense, I adhere to Lyons (1994) who is one of the rare empirical references to make a distinction between signed (formal) or non -signed contracts, as found in this thesis.

This study also contributes to the economic and management literature that has focused the analysis on the role of supermarkets, the effects of food safety requirements and on the changes of governance in the supply chains (Chabaud & Codron, 2005; Berdagué et al., 2005; Reardon et al., 2007; Beck et al., 2007; Havinga, 2012; Rouvière & Caswell, 2012).

7.2. Managerial implications

Considering that the inter-firm contractual practices of the international fruit and vegetable trade is not sufficiently documented, this research contributes to manager knowledge of contracting practices to mitigate trade hazards. Additionally, it provides strong evidence on the evolution that these practices are having in changing institutional environments, such as the emergence of increasing standards and regulations, the role of new practices among the market operators in the importing countries, especially supermarkets or other special buyers. But more importantly, this work contributes to the knowledge of new entrepreneurs beginning exporting activity, especially small- and medium- size enterprises that have more difficulties to bear the risk inherent in internationalization. This work may also be highly helpful to fruit producers who do not export directly because it provides information on how the export-import business works, the risks involved in international trade and its effects on the contractual practices which also affect the form of contracting between producers and the exporting firms.

Taking into consideration that Chile is a world reference in fruit industry development and that it serves as reference for other developing countries (Pavez, 2010), this doctoral research contributes to the understanding of the institutional Chilean fruit industry's evolution through the implementation of agricultural and commercial policies, plans and instruments that strengthen the entrepreneurial

capabilities at firm and collective levels; improving the logistic, commercial, sanitary and phytosanitary public-private services. Therefore, this study might be of benefit not only for decision makers at the private sector level, but also at the political level.

7.3. Limits

“There is a model, then regressions, followed by conclusions. In almost all cases it will be found that statistical results confirm the theory. Sometimes it does happen that some of the expected relationships are not statistically significant, but they will usually be found to be in the right direction. And when results are obtained that do not square with the theory, which occasionally happens, these results are not usually treated as invalidating theory but are left as something calling for further study.” Coase, 1994:26

It is inevitable to have in mind this citation when considering the limits of this thesis. Even though Coase's words concerned the epistemological approach in mainstream economics, specifically to Friedman's positivist paradigm, and even though this doctoral dissertation uses a post-positivist approach with mixed methods, the fact is that I built a model, then a regression, a non-parametric correlation, a descriptive analysis and all these, separately or together, were incomplete. As incomplete as contracts are and for the very same reasons: limited rationality and impossibility of anticipating and capturing all the variables explaining the phenomena. Consequently, I will unavoidably finish by calling for further study.

Limitations of this doctoral research are: First, the Chilean customs database, although exceptional, does not include the identity of the importer, therefore the dyad relationship was not included in the econometric analysis; second, a cross-sectional analysis does not allow observance of the evolution of contracting practices; third, the study is placed predominately from the exporter's perspective; fourth, relevant variables such as brand-specificity was not included in the econometric model due to lack of information.

Future research can be done to test how the evolution of the exporter-importer relationship affects the choice of contracts and the effect on performance. The consideration of other relevant variables that, according to the field survey, might affect the choice of contract, namely price volatility, variables related to behavioral uncertainty that could allow a more complete construction of the variable uncertainty; the importing country characteristics, as the distance, the cultural similarity or differences, which raise the coordination and monitoring costs in overseas markets (Masten, 2000); the study of a new generation of small- and medium-size multinational-type entities that has emerged to handle higher temporal specificity and high value products; and to delving into more detail the study of the evolution of contractual practices of commerce with an historical perspective; Finally, last but not the least, the impact of non-payments and bankruptcies.

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ANNEXES

ANNEX 1.

Diversité des stratégies et importance du relationnel dans les exportations de fruits et légumes du Chili

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Résumé / Abstract

L'étude a pour objectif d'examiner i) les profils et les trajectoires stratégiques des exportateurs chiliens de fruits et légumes et de ii) déterminer le poids du relationnel dans de telles transactions. De l'analyse d'une base de données contenant près de 800 000 transactions couvrant la période 1997-2007, ressortent deux résultats principaux : un renforcement des stratégies extrêmes de mono-spécialisation et de globalisation (diversification marché et produit) ; une prédominance des contrats relationnels dans les volumes exportés par le Chili.

Our paper aims to examine i) the strategic profiles of Chilean fresh produce exporters and their evolution, ii) the weight of repeated transactions in such international business. We use a trade database containing nearly 800 000 transactions and covering the period 1997-2007. Our main findings are two: first, strategies tend to globalize (product and market diversification), although mono-specialists remain the great majority; second, most volumes are transacted on a relational basis.

Titre Courant : Stratégies des exportateurs chiliens de fruits et légumes

Introduction

En 2009 le Chili s'est positionné au 16^{ème} rang mondial des exportateurs d'aliments et boissons pour un montant de 11 milliards de dollars [McShane (2011)], dont 3.1 milliard de dollars correspondent aux exportations de fruits [ODEPA (2011)]. Aujourd'hui près de 90% des exportations agricoles chiliennes s'orientent vers 58 pays avec lesquels des accords commerciaux ont été signés (27 traités, principalement avec l'Union Européenne et les USA) [Direcon (2011), Chilean Fresh Fruit Association (2010)].

Les exportations chiliennes de fruits et légumes (F&L) qui étaient caractérisées par une concentration sur quelques entreprises se sont progressivement réparties sur un nombre croissant d'acteurs : 70% des exportations étaient assurées par dix entreprises dans les années 80 [Codron (1989)], contre 38% en 2006 [Pavez (2009)]. Parmi ces grandes entreprises, les multinationales ont joué un rôle important dans le développement du secteur d'exportation chilien, à travers la génération d'économies d'échelle, la création de plates-formes logistiques et l'ouverture des marchés... [Murray (1999)]. Néanmoins leur part relative a diminué et si quatre multinationales ont accaparé 27% des exportations en 1999-2000 [CEPAL (2001)], elles ne représentent plus que 17,7% en 2006 et 12,7 % en 2010 [ASOEX (2010)].

Les stratégies d'exportation des entreprises chiliennes ont été très peu étudiées. L'article de Alvarez & Crespi [2000] est l'un des rares qui analyse leur évolution en utilisant les données micro-économiques d'un échantillon de 365 firmes exportatrices. Ils soulignent le poids important des instruments de promotion commerciale dans les performances des firmes. Toutefois, cette analyse est multi-sectorielle, et donc non spécifique au secteur des F&L.

Les déterminants des profils stratégiques des exportateurs et de leur trajectoire d'évolution font partie des questions classiques traitées en management international. En référence à des modèles établis (matrice d'Ansoff [1965] et modèle de

l'internationalisation d'Uppsala de Johanson et Vahlne [1977]), nous nous interrogeons dans cet article sur les tendances à la spécialisation ou à la diversification des stratégies des exportateurs. Etant donnés les liens étroits qui existent entre stratégie et mode de coordination, nous nous interrogeons par ailleurs, et à la lumière de la théorie des coûts de transaction, sur l'importance du facteur relationnel dans la gouvernance des transactions exportateur-importateur.

Trois questions principales sont abordées dans le cadre de cette recherche. La première concerne la vérification empirique du mouvement de globalisation des stratégies. A travers l'examen des stratégies de couverture géographique et des marchés de niche par les exportateurs chiliens, nous tenterons de mesurer les poids de quatre stratégies génériques construites à partir des critères de diversification marchés et produits, bien identifiés dans la littérature. La seconde question est relative aux trajectoires d'évolution des profils. Sur le plan théorique, cela revient à tester les hypothèses de l'internationalisation séquentielle du modèle d'Uppsala. Dans ce cadre, les stratégies spécialisées marché ou produit seront estimées par rapport à des stratégies extrêmes (mono spécialisation et diversification totale). Enfin, un troisième intérêt porte sur la question des poids respectifs des transactions répétées (dites relationnelles) et des transactions *spot* dans les échanges des exportateurs chiliens.

Pour ce faire, nous avons exploité la base de données Inglobo issue des informations des douanes chiliennes. Ces données couvrent la période 1996-2007 et représentent deux milliards de caisses de F&L soit environ 800.000 transactions réalisées entre 1500 exportateurs chiliens et 3400 importateurs dans le monde.

Notre article est structuré en trois parties distinctes. La première traitera des approches théoriques retenues pour traiter des trois questions décrites et des hypothèses qui leurs sont associées. La seconde partie portera sur une description du contexte des exportations chiliennes de F&L et une présentation de la base de données exploitée. Nous exposerons nos choix méthodologiques avant de présenter nos résultats. Ces derniers seront présentés et discutés dans une troisième et dernière partie. Enfin, nous conclurons sur les limites conceptuelles et méthodologiques de notre analyse comme autant de perspectives de recherche future.

1. Eléments théoriques sur les stratégies d'exportation

Les stratégies des exportateurs ont souvent été analysées en sciences de gestion en termes de choix du pays et du mode d'implantation, mais aussi en termes de *timing*, de rythme et d'ordre du processus d'internationalisation [Pan & Tse (2000)]. A cet effet, l'exportation constitue la première étape d'internationalisation dans de nombreux modèles théoriques. Pour le modèle d'Uppsala, le processus débute avec la phase de l'exportation sur des marchés proches «psychologiquement», avant de s'étendre à d'autres marchés par une démarche progressive d'accumulation de l'expérience et d'augmentation des engagements des entreprises [Johanson & Vahlne (1977)]. Pour la théorie des coûts de transaction, l'exportation représente l'étape qui précède les débuts de l'internalisation organisationnelle à travers la conclusion d'accords de représentation commerciale, de licence ou de franchise [Buckley & Casson (1998)]. Lorsque l'incertitude est forte et la fréquence élevée, ce qui est le cas pour les exportations de produits frais, la théorie prédit la nécessité de recourir à des mécanismes relationnels [Williamson (1985)].

1.1. Les analyses des couples « marchés-produits » et stratégies des exportateurs

En management, l'analyse des orientations stratégiques produit-marché constitue une des approches les plus anciennes. A travers une matrice simplifiée, Ansoff [1965] a pu déterminer quatre profils stratégiques selon la nouveauté du marché ou du produit. Ainsi, si ni le marché ni le produit ne sont nouveaux, on évoque une spécialisation ou une pénétration du marché. A l'inverse, si le marché est nouveau pour un produit existant, on parle de diversification marché ; inversement, on parle de diversification produit si ce dernier est nouveau mais destiné à un marché déjà existant. Si les deux caractéristiques (marché et produit) sont nouvelles pour l'entreprise, on évoque alors la diversification totale. Dans un autre registre, Porter [1993] a déterminé trois options stratégiques «génériques» pour les entreprises selon la taille de la cible

(champ concurrentiel) et les atouts de la firme (avantage concurrentiel) : la domination par les coûts, la différenciation et la focalisation.

Alors que la démarche de Porter [1993] renseigne sur un «portefeuille normatif» d'actions stratégiques selon les avantages de la firme et de sa cible, l'approche d'Ansoff [1965], plus descriptive s'inscrit dans une optique dynamique et vise à éclairer les profils des entreprises qui développent de nouveaux produits ou marchés. Nous utilisons cette approche matricielle binaire d'Ansoff [1965] qui oppose l'existant au nouveau, pour les produits et les marchés, pour construire une typologie des stratégies des exportateurs selon l'étendue des marchés couverts et la diversité des produits commercialisés. En combinant les deux matrices précédentes, nous nous proposons ici d'analyser les profils des exportateurs selon cette approche de couple «produit-marché» afin de distinguer quatre profils d'exportateurs. Ces derniers peuvent être visualisés dans la figure 1.

- Les *mono-spécialisés* : exportateurs d'un seul produit à destination d'un seul marché,.
- Les *diversifiés produit* exportateurs de nombreux produits mais spécialisés géographiquement ;
- Les *diversifiés marché* : exportateurs d'un seul produit mais avec une couverture géographique étendue.

Et enfin, les *globalisés* (ou totalement diversifiés selon la terminologie d'Ansoff [1965]) : exportateurs de nombreux produits à destination de plusieurs marchés.

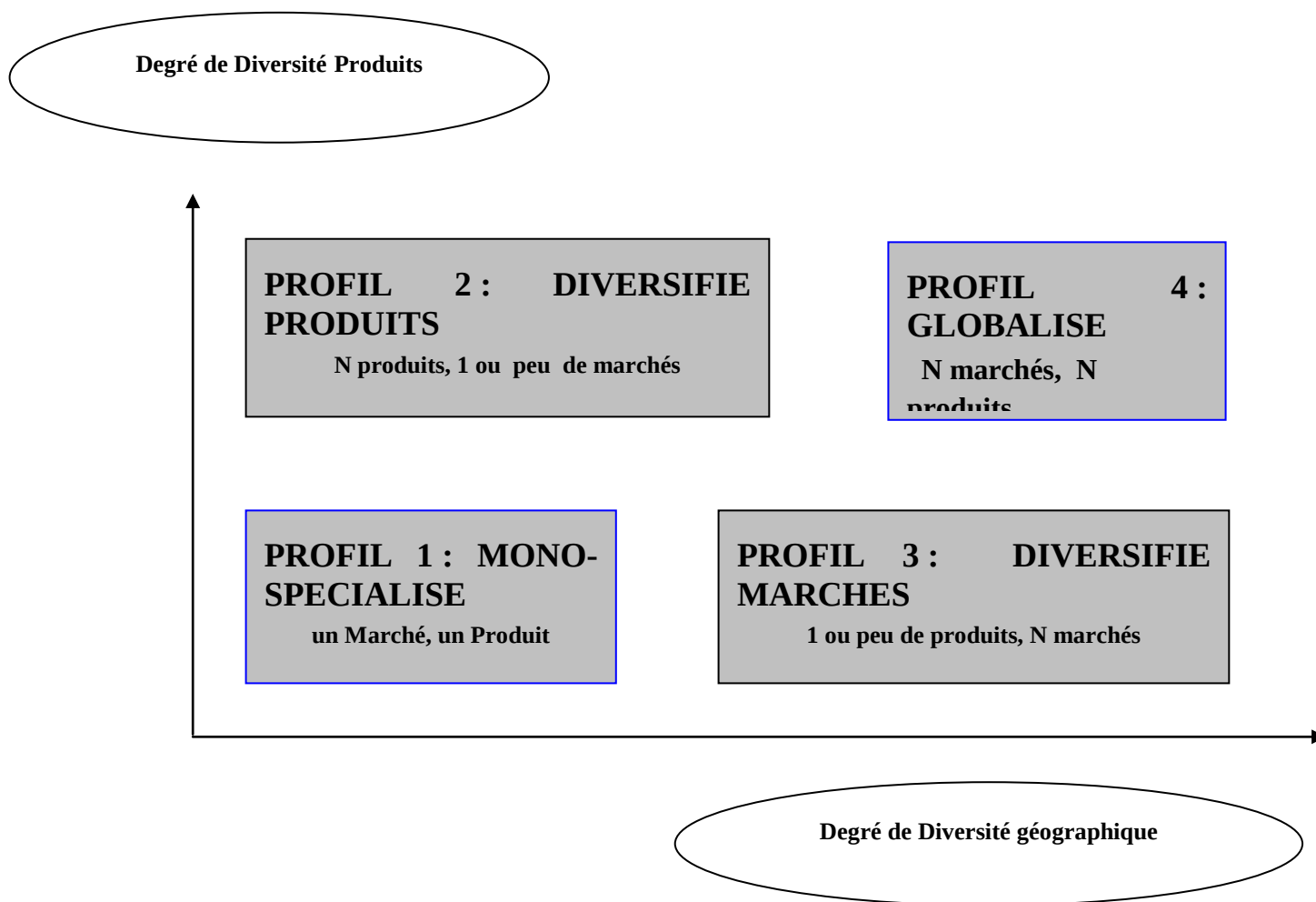


Figure 1 : Profils stratégiques des exportateurs selon les couples «Produits-Marchés»

Dans le contexte actuel d'ouverture accrue des marchés, de normalisation croissante des produits (normes sanitaires et environnementales), de rationalisation des transports maritimes (développement du container, réduction des coûts) et de renforcement de la concurrence entre les opérateurs à l'export, nous pouvons nous attendre à une évolution vers une globalisation des options stratégiques des exportateurs, notamment par l'intégration de nouveaux débouchés, la valorisation des petits marchés, l'extension des gammes de produits et/ou le développement de produits de niche. Notre première hypothèse renforce ce raisonnement.

H1. : Le profil des exportateurs globalisés se renforcera avec des firmes présentes sur l'ensemble des marchés et pour un portefeuille de produits plus important

1.2. Spécialisations, diversifications : un *continuum* ?

Une deuxième question souvent traitée en management international par le courant *behavioriste*, concerne les trajectoires d'évolution des profils stratégiques. Dans ce sens, le modèle d'Uppsala constitue une référence. Ainsi, selon Johanson & Wiedersheim-Paul [1975] et Johanson & Vahlne [1977], les entreprises s'ouvriraient à l'international par un processus incrémental et séquentiel. Elles privilégieraient ainsi les marchés proches afin d'accumuler de l'expérience spécifique au pays ou générique à l'activité export, avant de transformer leur mode d'implantation et de lancer leur expansion sur d'autres marchés. Cela est rendu possible par une diminution du risque perçu et une augmentation des engagements à l'international. Si nous appliquons ce raisonnement à nos quatre profils d'exportateurs, nous pouvons nous attendre à une évolution progressive et séquentielle des volumes exportés des acteurs du profil 1, vers ceux de la troisième catégorie (un marché et plusieurs produits), pour atteindre enfin le stade ultime d'exportateurs globalisés, multi-produits, multi-marchés.

Par ailleurs, et si nous reprenons les profils développés par Ansoff [1965], il est aisé de se rendre compte que les profils «diversification produit» et «diversification marché» (correspondants respectivement à nos profils P2 et P3) seront sur-représentés car ils correspondent à des développements produits sur des marchés existants ou des extensions géographiques sur des marchés que l'entreprise pense maîtriser. *A contrario*, les stratégies «extrêmes» des profils spécialisés plus fragiles, ou globalisés plus complexes (notés P1 et P4 respectivement) correspondraient plus à des profils d'entreprises spécialisées dans des segments de niches ou à l'inverse de grandes entreprises internationalisées. En combinant les apports des deux cadres d'analyse précédents, nous pouvons donc nous attendre à ce que ces deux stratégies

soient sous-représentées dans la répartition des profils des exportateurs. Dans ce sens, notre deuxième hypothèse sera :

H2. Il y a renforcement et répartition équilibrée des profils de diversifiés produit ou marché (P2 et P3) couplés à une diminution des profils des stratégies extrêmes (P1 et P4)

1.3. Contrats relationnels *versus* transactions spot

Au delà des profils stratégiques des exportateurs et de leur trajectoire d'évolution, la question des coordinations mérite d'être traitée. Nous avons choisi de la centrer sur l'arbitrage que doivent effectuer les exportateurs entre des transactions ponctuelles dites *spot* et celles basées sur l'antériorité et la répétition du lien commercial qu'on notera transactions répétées. Le choix du mode de coordination se fait en effet entre le prix ou le contrat complet qui gouverne la transaction *spot* et le contrat incomplet appuyé par la confiance bilatérale qui gouverne la transaction relationnelle [Poppo & Zenger (2002)]. Dans ce sens, il convient d'évaluer l'importance du facteur relationnel relativement aux transactions *spot*. En effet, la notion de contrat relationnel développée par Macneil [1978] précise que les parties s'impliquent personnellement, contrairement à ce qui existe dans un contrat transactionnel (*spot*). Elles ont un intérêt poussé et mutuel pour une coopération future, ce qui améliore la performance de la planification et de la coordination et réduit les comportements opportunistes et l'incertitude. Sur ce point, il faudrait notamment signaler que le choix stratégique d'opter pour du relationnel dépend fortement de facteurs liés aux spécificités du client et aux caractéristiques de sa relation avec un exportateur (quelque soit sa taille ou les volumes échangés). Le choix du relationnel dépend également de la nature des produits : plus le produit est complexe et difficile à maîtriser techniquement et à distribuer, plus il faut s'appuyer sur des contrats incomplets avec une forte dimension relationnelle. Enfin, l'antériorité et la qualité de la relation commerciale, le niveau de confiance, la réputation du client, revêtent dans ce sens une importance particulière [Zaheer & Venkatraman (1995)].

Notre troisième interrogation concerne l'évaluation de l'importance du facteur relationnel dans les transactions à l'international. Est-ce un facteur dominant ? Dans ce cas, quel est le rôle des transactions spot ?

Dans le prolongement des travaux de Brousseau et Codron [(1998)], nous soutenons dans ce travail que les transactions à l'international sont fortement ancrées dans le relationnel pour deux raisons : d'abord parce que la périssabilité et la complexité des produits, la fréquence élevée des envois, l'importance des volumes, les exigences de la logistique, les contraintes sanitaires dans les pays de destination, «obligent» les firmes à se coordonner étroitement et les incitent pour cela à nouer des relations suivies et à développer des relations de confiance ; ensuite, parce que les importations sont dominées par un nombre restreint d'acteurs de la filière F&L, souvent eux-mêmes spécialisés sur certains types de produits et certaines origines (fruits de contre-saison de l'hémisphère sud).

La prédominance du relationnel n'est pas pour autant synonyme d'exclusivité. Les opérateurs recourent parallèlement à des transactions *spot* pour des petits volumes qui ont pour objectif soit de satisfaire des marchés de niche soit de pallier des urgences commerciales. Même si elles sont nombreuses, ces transactions servent principalement de variables d'ajustement ou visent des cibles étroites. Ainsi, notre dernière hypothèse peut être formulée comme suit :

H3. : Les contrats relationnels correspondant à des transactions répétées dominant les volumes échangés. Les transactions *spot* sont importantes en nombre de contrats mais marginales en volumes échangés

2. Méthodologie et contexte de l'étude

2.1. Le contexte empirique : les exportations chiliennes de fruits et légumes

Le dynamisme du secteur des F&L au Chili est remarquable. En 1961, ce pays participait aux exportations de fruits de l'hémisphère sud pour moins de 5%, alors qu'actuellement elles s'élèvent à près de 60%. Le Chili est devenu le premier exportateur de fruits de l'hémisphère sud dès le milieu des années 80 [Codron

(1992)]. Il a gagné cette place de leader en sortant de la mono-exportation de pommes à destination de l'Europe : il a d'une part diversifié les produits de contre-saison et d'autre part investi de nouveaux marchés tels que l'Amérique du Nord et le Moyen-Orient [Codron (1992)]. Cette politique a été renforcée par la signature d'accords commerciaux, au cours des années 90. Les professionnels chiliens ont accompagné activement les instances gouvernementales dans ces négociations commerciales, au sein desquelles le secteur «fruit» a été clairement identifié comme l'un des grands bénéficiaires [Bull (2008)] : les fruits frais sont à l'origine de 35% des impacts positifs des accords commerciaux concernant le secteur de l'agriculture et de la pêche [Sepulveda (2008)].

Outre les conditions agro-écologiques et phytosanitaires, les capacités productives et organisationnelles, ce dynamisme s'explique aussi par les changements technologiques, la modernisation des transports, l'amélioration des services phytosanitaires, la conduite de la post-récolte et de la conservation des fruits frais, la modernisation des systèmes de distribution et l'entrée des multinationales dans cette activité d'exportation [Gomez & Goldfrank (1991) ; Codron (1992)].

2.2. Description de la démarche méthodologique et de la base de données exploitée

Les données mobilisées reposent sur les fichiers des douanes chiliennes et nous sont fournies par Inglobo. Cette base recense l'ensemble des exportations de F&L et identifie, pour chaque transaction, la date, l'exportateur, l'importateur, la destination, le produit et les volumes échangés. La période couverte va de la campagne 1996-97 à la campagne 2008-2009³⁸. Près de 800.000 transactions sont ainsi enregistrées et représentent plus de deux milliards de caisses exportées. Elles concernent 1489 exportateurs chiliens et 3390 importateurs dans le monde.

³⁸ Toutefois, pour des raisons de cohérence, nous restreignons notre période d'analyse à la période allant jusqu'à 2006-2007, et ce afin d'éliminer les éventuels effets liés à la crise économique de 2008.

Les données de la base Inglobo témoignent d'une forte expansion exportations chiliennes. On est passé d'environ 110 millions de caisses en 1996 à près de 220 millions de caisses en 2007 soit un doublement en une décennie. Nous avons identifié cinq grandes destinations et six catégories de produits. Les principales destinations sont l'Amérique du Nord (47%) et l'Europe (32%). L'Asie et l'Amérique Latine ne représentent chacune qu'environ 10% des volumes exportés et le Reste du monde moins de 1%. Sur la période considérée, on constate une stabilité de cette répartition géographique. La structuration des exportations fait apparaître deux catégories de produits dominants : le raisin et les fruits à pépins avec respectivement 50% et 20% des volumes exportés en moyenne sur la période considérée³⁹. Si le raisin et la pomme restent les produits dominants, le kiwi (7% des volumes) et l'avocat (5%) voient leurs poids croître au détriment du raisin. Les tendances décrites ici varient évidemment selon le produit et la destination considérés. Ainsi, le principal marché d'importation pour les fruits à pépin est l'Europe, alors que pour le raisin c'est l'Amérique du Nord.

L'accroissement des exportations chiliennes s'est accompagné d'une augmentation forte du nombre d'exportateurs. Sur la période étudiée, le nombre d'exportateurs qui était de 306 en 1996-97 a été multiplié par près de 1.7. Tous les acteurs ne sont pas présents sur toutes les campagnes. On observe la présence d'un groupe relativement stable au sein duquel 93 exportateurs (70% des volumes), sont pérennes et une trentaine d'autres présents de façon discontinue. Autour de ce noyau, on constate un *turn over* important des exportateurs avec de nombreuses entrées et sorties.

La forte augmentation du nombre d'exportateurs se traduit par une diminution du poids des exportateurs les plus importants. Pour la campagne 1996-97, 23 exportateurs, soit moins de 1% des acteurs, exportaient près de 75% des volumes ; pour la campagne 2006-07, ces 23 exportateurs ne représentent plus que 58.5% des volumes totaux. Ces mêmes chiffres pour l'exportateur n° 1 sont respectivement de 11% et de moins de 5%.

³⁹ L'unité considérée pour les volumes est la caisse. Le poids de la caisse varie en fonction des produits. Une caisse de pomme pèse 20kg alors qu'une caisse de fruits à noyau ou de raisin pèse 8kg.

Pour comprendre les stratégies des exportateurs chiliens, il faut considérer à la fois les produits et les marchés, et plus précisément le nombre de produits exportés vers différents marchés. On considère ici les six catégories de produits et les cinq destinations identifiées *supra*. On identifie les 4 stratégies retenues précédemment et explicitées dans la Figure 1 :

- On parlera de stratégie **globalisée** lorsque le nombre de catégories de produits et de destinations sont supérieurs à 3.⁴⁰
- Inversement, on parlera de stratégie de **mono-spécialisation** pour des exportateurs avec au maximum 3 catégories de produits et 3 destinations.
- A l'interface, on parlera de **diversification marché** (respectivement **diversification produit**) selon que le nombre de catégories de produits (respectivement de destinations) est égal ou inférieur à 3 pour un nombre de marchés (respectivement de produits) supérieur à 3.

Par ailleurs, dans la mesure où chaque exportateur a une stratégie qui lui est propre et qui influence la façon dont il se coordonne avec ses clients, nous considérons deux types d'unités d'analyse : l'exportateur seul (celui dont on étudie la stratégie, analysée au regard de ses échanges avec ses partenaires- importateurs) et le couple exportateur-importateur. Pour ce dernier, nous présenterons nos résultats à la fois pour le nombre de transactions et leurs volumes. Les interactions entre exportateur et importateur peuvent être de deux types : relationnelles ou spot. La notion de relationnel renvoie à une récurrence des échanges et non à des volumes. Tout couple exportateur / importateur qui a échangé au moins 3 campagnes consécutives, ou qui a échangé sur au moins 6 des 11 campagnes considérées, sera qualifié de relationnel⁴¹. Dans la mesure où cette définition repose sur un principe de durée, la notion de relationnel considérée ici n'a de sens que pour la dernière campagne. Par ailleurs, dans la mesure où un exportateur peut échanger avec plusieurs importateurs

⁴⁰ En 1996, près de 90% des exportations chiliennes étaient destinées à trois marchés (Europe, Amérique du nord, Amérique Latine) et concernaient trois produits (raisins, fruits à pépin, fruits à noyaux)

⁴¹ Du fait de notre construction, les exportateurs sortants en début de période, de même que les exportateurs entrants en fin de période seront considérés comme n'ayant que des échanges de type spot.

simultanément, ses interactions peuvent être *spot* avec certains importateurs et relationnelles avec d'autres.

Par souci de cohérence avec notre cadre théorique, notre démarche est à la fois descriptive et en statique comparative. Notre objectif n'est pas de déterminer des relations causales entre des variables prédéfinies, mais plutôt de construire et de décrire une typologie des stratégies des exportateurs. L'application au cas des F&L du Chili constitue dans ce sens une première recherche exploratoire, inscrite dans une démarche plus large visant à analyser la nature, les déterminants et la performance de la coordination des transactions commerciales internationales dans ce secteur.

Dans un premier temps, les exportateurs de notre base de données sont positionnés selon les quatre stratégies prédéfinies et cela à différentes périodes, afin de déterminer les trajectoires des profils retenus. Cela permet de vérifier la première hypothèse (globalisation des stratégies à l'exportation). Cette dynamique sera ensuite «quantifiée» pour vérifier le poids de chaque profil. Cela vise à tester la seconde hypothèse, à savoir une évolution progressive d'un profil mono spécialisé à celui d'exportateur globalisé. Enfin, un *focus* sur les couples exportateur-importateur permet de vérifier si les contrats relationnels dominent les exportations de F&L.

3. Résultats obtenus: interprétations et discussion

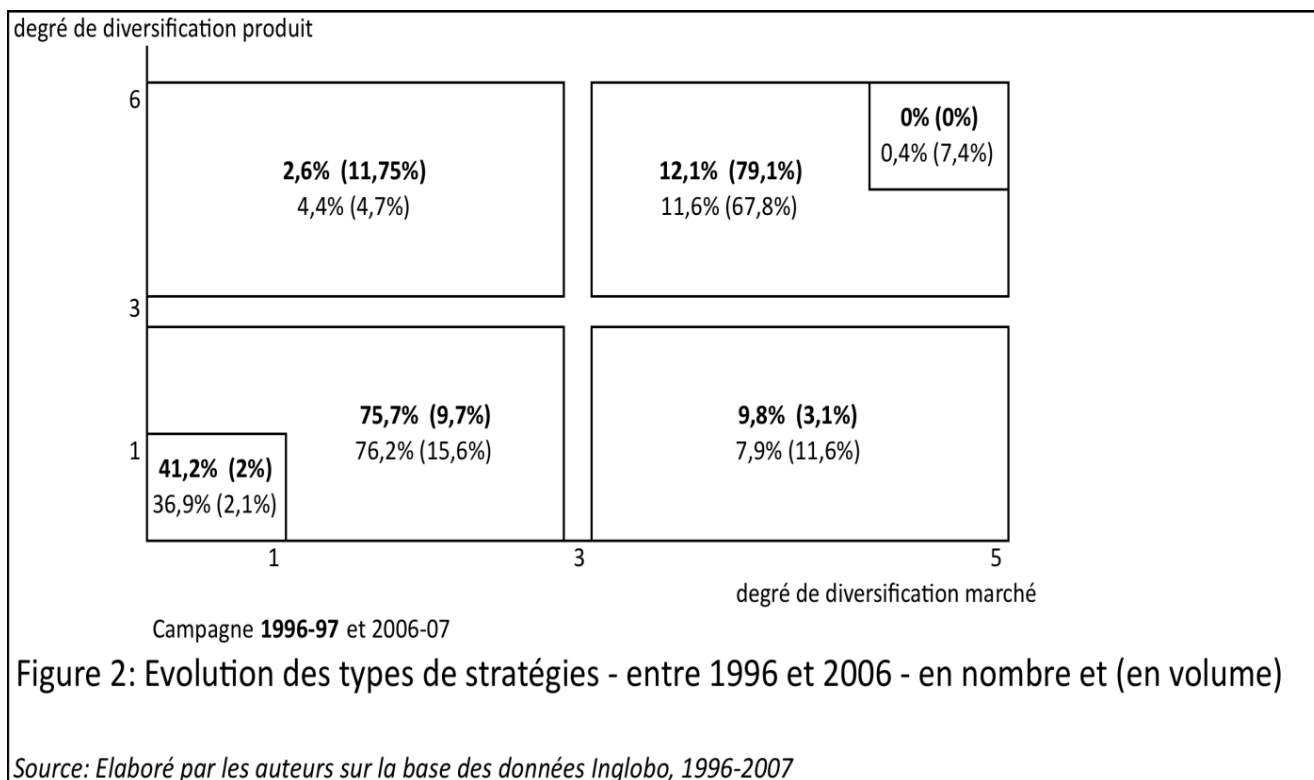
3.1. Analyse des couples «marchés-produits» et stratégies des exportateurs chiliens

Pour voir dans quelle mesure les stratégies des exportateurs ont évolué sur la période considérée, trois «photographies» sont réalisées. La première renvoie à l'état initial, la troisième renvoie à l'état final et la photographie intermédiaire correspond à une campagne considérée comme charnière. La campagne 2000-2001 correspond à la première campagne où l'on observe que certaines entreprises exportent simultanément vers les 5 destinations considérées. Avant cette campagne, le nombre maximum de destinations était de 4. La campagne 2000-2001 semble être une

campagne clef de l'internationalisation pour les exportateurs chiliens. L'explication peut se trouver dans les éléments suivants i) les effets de l'implémentation des accords commerciaux à la fin des années 90 et du début des années 2000⁴². ii) le processus de diversification de l'offre, notamment celle de l'avocat, des fruits rouges et des cerises, iii) l'impact de la stratégie de promotion commerciale chilienne [Alvarez & Crespi (2000)].

Sur la période considérée, la mono-spécialisation reste la stratégie dominante adoptée par les exportateurs chiliens. La mono-spécialisation peut être appréhendée au sens large ou au sens strict selon le seuil considéré. Au sens large, on qualifiera de mono-spécialisé tout exportateur qui exporte 3 produits au maximum vers au plus 3 destinations, alors qu'au sens strict les exportateurs n'échangent qu'un seul produit vers une seule destination. On constate que la monospécialisation est adoptée, de façon stable sur la période, par plus de 75% des exportateurs. Cette stabilité apparente dissimule en fait un recul de la mono-spécialisation au sens strict qui passe de 41.6% en 1996 à moins de 37% en 2006. A l'inverse, la stratégie globalisée (exportation de plus de 3 produits vers plus de 3 destinations) concerne environ 1 exportateur sur 8, proportion qui reste également stable sur la période étudiée. Aucune entreprise n'exportait sur l'ensemble des marchés avant l'année 2000. Elles sont 3% à le faire en 2006 (figure 2).

⁴² Depuis 1995, le Chili a obtenu l'accès préférentiel à de nombreux marchés à travers la signature d'accords commerciaux : 1996 Mercosur, 1997 Canada, 1998 Mexique, 1999 Costa Rica, 2000 El Salvador, 2002 Union Européenne, 2003 États-Unis - Corée, 2005 Chine, 2006 Nouvelle Zélande – Singapour - Brunei, 2007 Japon, 2008 Australie.



Cette reconfiguration émergente des stratégies des exportateurs chiliens peut avoir plusieurs explications. D'abord, la diversification totale des stratégies d'une partie des exportateurs peut être en partie expliquée par l'ouverture commerciale croissante du Chili à travers la signature des accords de libre échange dans les années 1990 et 2000, mais aussi par un accroissement de la concurrence entre les exportateurs, qui se tournent vers des marchés de faible taille ou avec une demande de produits spécifiques, négligés jusque là.

Ensuite, ce mouvement de globalisation des stratégies peut s'expliquer par une amélioration de la compétitivité des produits chiliens, résultant des adaptations en termes de normes sanitaires et de maîtrise logistique et technologique [Alvarez & Crespi (2000)]. Enfin, une explication alternative est certainement à chercher du côté des options stratégiques des importateurs, qui se «globalisent» également (centrales d'achat de la grande distribution notamment en Europe et en Amérique du Nord) et

peuvent influencer les stratégies des firmes exportatrices leaders (choix extrêmes des couples produits-marchés). Même si les exportateurs mono-spécialisés au sens large dominant encore les effectifs observés, l'émergence d'acteurs fortement diversifiés conforte ainsi notre première hypothèse. Nous observons bien l'option stratégique de diversification totale décrite par Ansoff [1965].

3.2. Prédominance des stratégies extrêmes et remise en cause des trajectoires

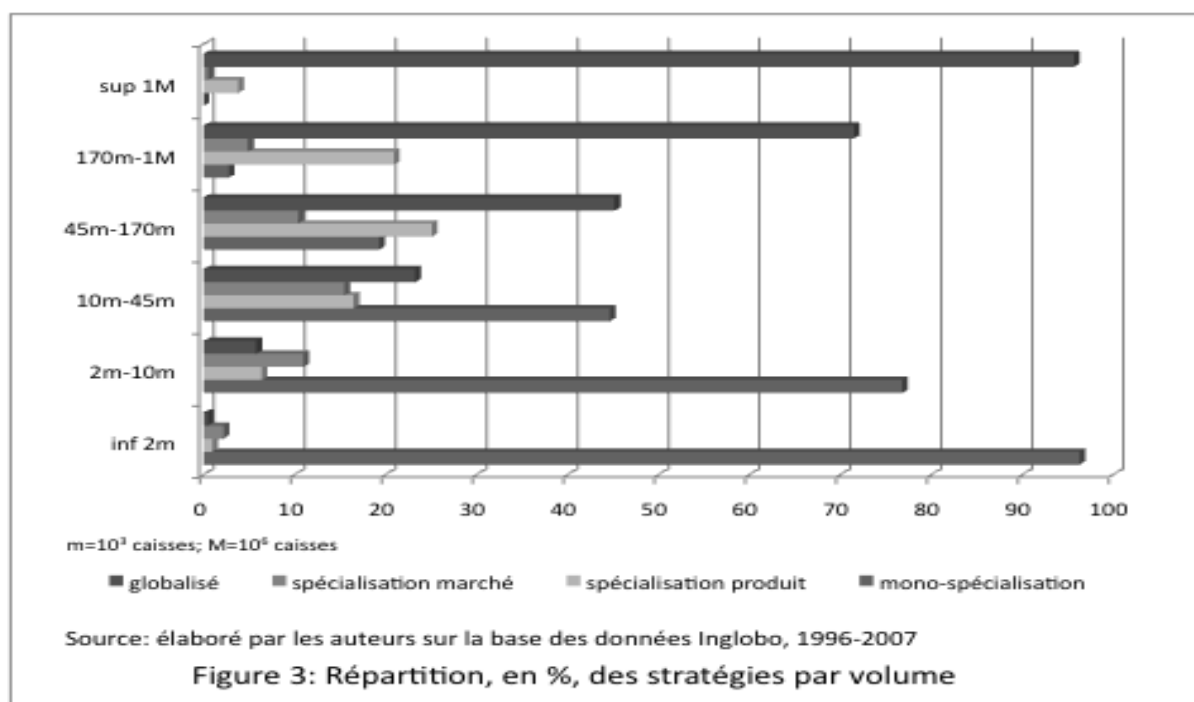
La stabilité des stratégies extrêmes, mono-spécialisation et globalisée, est concomitante d'un renforcement de la stratégie de diversification produit au détriment de la stratégie de diversification marché : les exportateurs chiliens diversifient la gamme des produits exportés mais tout en restant focalisés sur un petit nombre de destinations. Globalement, on observe que les exportateurs chiliens privilégient les stratégies extrêmes relativement aux stratégies de spécialisation - produit ou -marché. Ainsi, près de 9 exportateurs sur 10 adoptent une stratégie globalisée ou une stratégie de type mono-spécialisation.

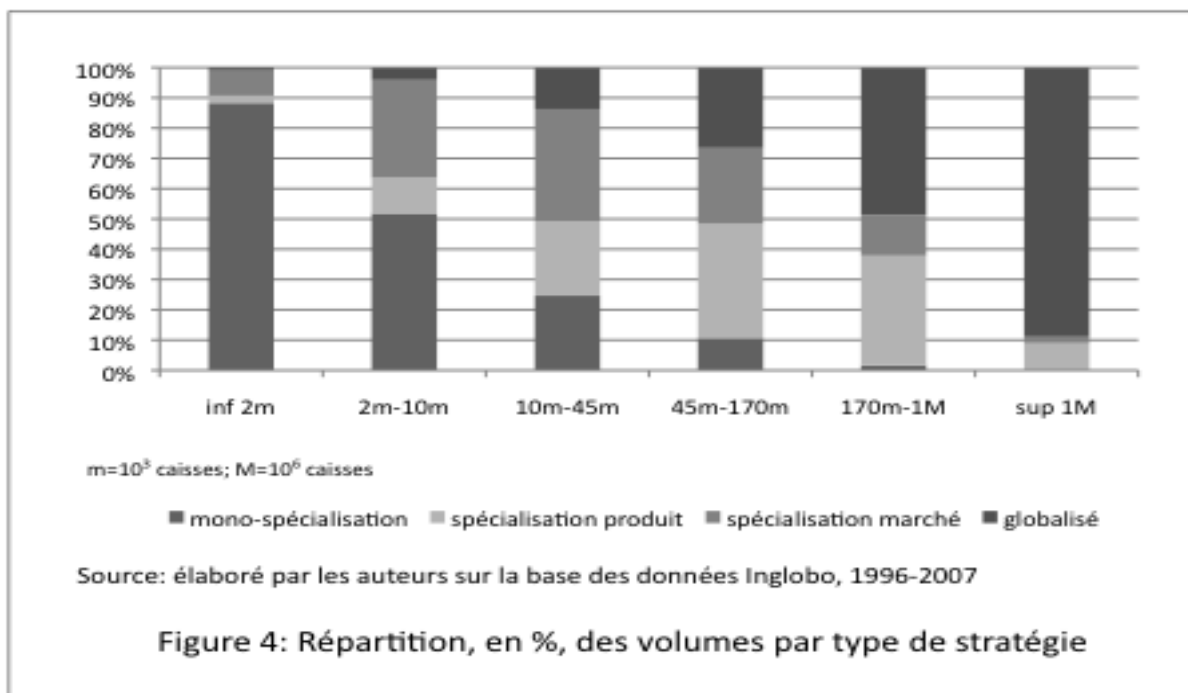
Cela va à l'encontre de notre seconde hypothèse et ne rejoint que faiblement les conclusions du modèle d'Uppsala quant à l'existence de stratégies prédéterminées à l'international. Ainsi, nous aurions dû observer une diminution des spécialisations mono marché, que ce soit pour un seul produit (mono-spécialisation) ou pour une large gamme de F&L (diversification produit) et une augmentation des diversifications géographiques des exportateurs (diversification marché).

En d'autres termes, le mouvement attendu était une diversification de plus en plus poussée mais progressive des marchés, par le biais d'un apprentissage et d'une meilleure perception des risques à l'international. Au contraire, nos résultats montrent une polarisation sur deux stratégies extrêmes : les exportateurs chiliens sont en grande partie, soit globalisés et fortement diversifiés, soit mono-spécialistes et focalisés sur un seul couple marché-produit.

Cela peut se justifier à la fois par le contexte de l'échange et les relations exportateur-importateur, mais aussi par les relations qu'entretiennent les exportateurs eux-mêmes avec leurs fournisseurs producteurs. Ainsi, il existe au Chili deux types d'entreprises d'exportation de F&L: celles qui commercialisent des produits d'entreprises tiers ; et celles qui exportent principalement leur propre production, souvent spécialisée et peu diversifiée.

Une seconde observation concerne la répartition des profils stratégiques selon les volumes échangés. Les figures 3 et 4 renseignent sur une prédominance des mono-spécialisés pour de faibles volume (96% pour des échanges inférieurs à 2000 caisses), alors que les gros volumes sont plutôt l'apanage des exportateurs globalisés (96% également pour les volumes supérieurs à un million de caisses). L'analyse de la répartition des volumes par type de stratégie conduit cependant à nuancer cette observation.





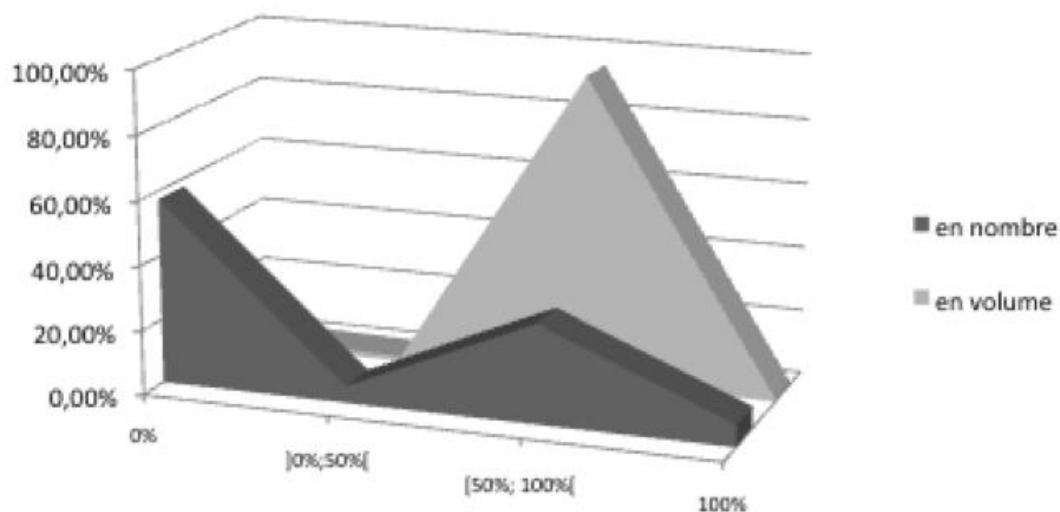
Ainsi, certains mono-spécialistes (marché-produit) exportent de grands volumes, même si cette proportion demeure faible (1,3% exportent des volumes entre 100 000 et un million de caisses). Cela peut correspondre à des spécialistes produit de niche, les groseilles par exemple, ou à des exportateurs spécialisés sur un grand marché, le raisin vers les Etats Unis. *A contrario*, certains exportateurs globalisés continuent à exporter de très petits volumes (3,4% exportent des volumes inférieurs à 10 000 caisses). Cela peut correspondre dans ce cas à des exportations complémentaires ou d'ajustement. L'analyse des modes de transport, des catégories de produits et des marchés de destination pourrait éclairer ce point.

3.3. Prédominance des transactions relationnelles dans les volumes échangés malgré la prépondérance en nombre des transactions «spot»

Les stratégies mises en œuvre par les exportateurs sont conditionnées par la nature des échanges qu'ils entretiennent avec les importateurs. Chaque importateur renvoie à

des spécificités qui lui sont propres. Il est alors indispensable de juxtaposer la stratégie générale des exportateurs avec leurs partenaires, et plus précisément avec le type de relation établie. En nombre de contrats, on observe que 1/3 des transactions réalisées en 2006-2007 s'effectuent dans un cadre relationnel (figure 5). Les échanges sont donc dominés, en nombre, par des contrats *spot* mais ces derniers ne portent que sur de faibles volumes (moins de 5%). Les volumes semblent donc conditionner la nature des relations⁴³ et on peut se demander dans quelle mesure ils conditionnent également la stratégie mise en œuvre par les exportateurs. Pour ce faire, nous avons identifié les transactions qui portent sur les plus petits volumes et celles qui portent sur les volumes les plus importants, en isolant les cas extrêmes : les volumes sont réalisés soit entièrement en relationnel, soit entièrement en *spot*. Pour les cas intermédiaires, la répartition considère les volumes exportés majoritairement [50% - 100%[, ou minoritairement]0% - 50%[, *via* des contrats relationnels (figure 5).

⁴³ La relation inverse, traitant de la nature du contrat (relationnel *versus* *spot*) et son effet sur l'augmentation des volumes échangés mériterait aussi une attention particulière.



Source: Elaboré par les auteurs sur la base des données Inglobo, 1996-2007

Figure 5: Poids des volumes réalisés via des contrats relationnels

Les plus grands exportateurs développent essentiellement des stratégies globalisées et réalisent des contrats relationnels pour les transactions portant sur les volumes les plus importants. Les contrats *spot* correspondent ainsi à des moyens d'ajustement et de complément de volume. Cela conforte ainsi notre troisième hypothèse. Là aussi, notre résultat (petits volumes échangés en spot *versus* grands volumes échangés dans un cadre relationnel) doit être nuancé. Ces deux optiques ne sont nullement exclusives mais plutôt complémentaires [Brousseau et Codron 1998]. On retrouverait ainsi le principe de dualité de Bradach et Eccles [1989]. Même si les pourcentages signalent une forte prédominance des contrats relationnels lorsqu'il s'agit d'échanges importants, cela ne signifie nullement que les exportateurs (notamment les gros) n'aient pas recours au contrat spot. Souvent d'ailleurs, ils adoptent simultanément ces

deux modes de coordination selon le type de produit, les spécificités du marché de destination et la nature du client.

Conclusion

Notre article avait pour objectif d'examiner les profils et les trajectoires stratégiques des exportateurs chiliens de F&L et de déterminer le poids du relationnel dans de telles transactions commerciales internationales. Pour cela, nous avons exploité une base de données issue des informations des douanes chiliennes, contenant près de 800 000 transactions et couvrant la période 1997 à 2007 et correspondant à un volume échangé de deux milliards de caisses. L'intérêt pour le Chili est motivé à la fois par le poids croissant de ce pays dans les échanges de F&L, mais aussi par la vague d'ouverture commerciale des années 90.

Notre analyse a permis de mettre en exergue trois résultats principaux : d'abord, une confirmation du mouvement de globalisation des stratégies des firmes ; ensuite une polarisation des échanges sur des stratégies de mono-spécialisation ou de diversification totale ; et enfin une prédominance des contrats relationnels en termes de volumes exportés. Notre analyse conforte l'approche matricielle d'Ansoff [1965], mais remet en cause partiellement le schéma séquentiel à l'international du modèle d'Uppsala avec l'identification d'une étape supplémentaire caractérisée par la diversification produits sur un même marché.

Les spécificités du contexte nous conduisent cependant à nuancer les résultats obtenus et ouvrent des perspectives de recherche intéressantes. La relative importance du profil «globalisé» correspond dans le cas chilien à des grandes firmes multinationales implantées dès les années 1980, à la faveur d'une politique nationale très favorable aux investisseurs étrangers. L'évolution des firmes locales vers un profil globalisé qui emprunte les étapes «spécialisation produits» puis «spécialisation marchés», est certes amorcée (3% des entreprises en 2007) mais encore très modeste. Les mono-spécialisées (peu de produits sur peu de marchés) dominent encore le paysage chilien.

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ANNEX 2.

Effects of the transaction characteristics on the side of dependence in a context of vertical coordination: the case of fresh produce exports from Chile to Europe

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ABSTRACT

While organization theories acknowledge the influence of specific assets on dependence and increasingly represent the latter as a structure of mutual dependence (dependence of A on B and dependence of B on A), there is, to the best of our knowledge, no empirical test concerning the impact of specific assets on a structure of dependence. Our paper aims to fill

this gap. It is all the more original in that it considers a case study where dependence changes sides according to the characteristics of the transaction. We examine the dependence between Chilean exporters and European importers when trading fresh produce. Such dependence originates with the need for just-in-time coordination and compliance with a compelling demand in a context of high price uncertainty.

Using a unique dataset from international trade in fresh produce between Chile and the rest of the world, we justify the use of a concentration sales ratio as a proxy for dependence and test the influence of a variety of specific assets on the side of dependence by using both categorical and dimensional approaches. Original findings show that certain transaction attributes have a strong influence on the side of dependence. In particular, the higher the frequency and the level of specific assets such as volume, niche varieties and joint sales with other products, in the transaction, the greater the likelihood of a higher ratio of dependence for the importer rather than the exporter. Conversely, in the event of low levels of specific assets and less frequent operations, dependence tends to be greater on the side of the exporter.

Key words: dependence, asset specificity, Transaction Costs Theory, Resource Dependence Theory, fruit and vegetables, international trade.

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I. Introduction

Business practitioners widely acknowledge the role of dependence on the governance of a transaction, while a more narrow literature has identified the sources of dependence – in particular asset specificity (AS) – and tested the role of AS as the main driver of dependence. However, there are three gaps in the literature. First, there are a very small number of case studies with dependence changing sides according to the transaction characteristics. While the side of dependence does not make sense in a context of horizontal coordination, it is implicitly considered as stable in most vertical coordination cases. Currently, food systems are increasingly represented as being buyer-driven, with seller dependence on the buyer. However in vertical coordination, there may be cases where dependence is not always on the same side, cases of transactions along the chain that are not systematically buyer-driven. Our case study, which deals with transactions between international intermediaries, is one such case.

Second, there is a paucity of literature linking the side of dependence with AS. While Transaction Cost Economics (TCE) and Resource Development Theory (RDT) have clearly identified AS as a major source of dependence, they have overlooked the differential impact of AS on dependence considered as a structure of bilateral or mutual dependence with two components: the dependence of A on B and the dependence of B on A. In this paper, we raise the empirical question of this differential impact, and in particular of whether asset specificity may have an influence on the side of dependence: although dependence is mutual, one party is often more dependent than the other.

Third, only very few cases use behavioural criteria as proxies of dependence. Actually, dependence is usually measured as belief. As our case study features a high level of time specificity, we argue that we can approximate dependence by means of concentration sales ratios. By using a unique database of individual transactions, we can compute such ratios and represent a structure of dependence with two ratios relative to A and B; by doing so we avoid a common bias already addressed in the literature deriving from the subjective nature of data (Kim and Hsieh 2003).

Our paper uses a case study to offer an insight into these three gaps in the literature and to identify the transactional characteristics which may explain the side of dependence. The case in point deals with Chilean grape exports by sea to Europe. The dependence in question is between Chilean exporters and European importers. Data for analysis are taken from the EXIMFRUIT database which provides a detailed description of the yearly individual exporter-importer transactions.

We proceed as follows: in section 1 we review the transactional economics and managerial literature and draw on our expertise of the food system to specify the notion of dependence, highlight some cases where a change in the side of dependence may make sense, infer a possible relationship between transactional characteristics and the side of dependence and examine some methodological issues regarding dependence measurement. Section 2 introduces certain contextual elements, describes exports from Chile to Europe, presents the database and specifies the transaction attributes and the type of dependence which may exist in the transactions between exporters and importers. In section 3 we proceed to the analysis, presenting the model to test the relation of causality between transactional characteristics and dependence and commenting on the main results. The final section is dedicated to discussion and conclusions/recommendations. We also identify a range of opportunities for further research in the empirical, theoretical and managerial fields.

II. Theoretical aspects on dependence

II.1 What is dependence?

One of the seminal works on dependence is attributed to Emerson (1962), who states that social relations usually involve ties of mutual dependence between the parties and present differences in the power balance – or imbalance – and accordingly differences in the levels of dependence. Such notions of dependence apply to social, economic, organizational and commercial situations and have been taken into account in the formulation of different theories applied to business, in particular RDT and TCE.

In transactional economics, Williamson (1996) cites Emerson's definition of dependence as "the need to acquire resources which creates dependencies between organizations. How important and how scarce these resources are, determine the nature and extent of organizational dependency" (Williamson 1996). TCE argues that such a bilateral dependency, originating in transactions, depends on the characteristics of the transaction, in particular on the specific assets invested in the transaction (Williamson 1985) or the difficulty in measuring the good that is traded (Barzel 1982). Using a different scope, RDT starts from the observation that a scarce resource, controlled by a small number of organizations, creates a situation of dependence for a firm without that resource, although it is essential to its functioning and good performance, and may lead this firm to buy out or to enter into a long-term contract with a firm owning the resource (Pfeffer and Salancik 1978). In other words, it states that the importance of the good to a specific firm may create a situation of imbalance in the relationship. A few recent RDT studies have focused on the notion of interdependence by taking the dependence of the two parties into account, thereby recognizing that one firm's dependence on another is relative to the second firm's dependence on the first (Buchanan 1992; Kumar, Scheer and Steenkamp 1995). RDT scholars have thus been led to define a structure of interdependence with two dimensions: asymmetry (also called power imbalance) and magnitude (also called joint dependence).

Both theories, which mostly focus on the effect of dependence on governance and the contractual and non-contractual mechanisms to avoid dependence, are therefore led to discriminate between asymmetry and magnitude in order to evaluate the impact of dependence on governance. In RDT for instance, most of the references are used to consider the possibility of a power imbalance in the bilateral dependence (Antia and Frazier 2001; Kim and Hsieh 2003; Kim and Hoskisson 2004; Laaksonen and Kulmala 2008) and to evaluate the role of power imbalance in the choice of governance. An increasing number of authors also consider that joint dependence may arise as part of a firm's strategy to achieve performance goals (Buchanan 1992; Lusch and Brown 1996; Casciaro and Piskorky 2005; Gulati and Stych 2007; Aulackh and Gençtürk 2008). In short, both theories recognize the flipside effect of joint dependence which may work both as a source of power or opportunism for the dominant player, which must be channelled by means of safeguarding, and as a source of value creation, when asymmetry is weak and mutual cooperation not costly (Pfeffer and Salancik 1978; Williamson 1985).

II.2 The sign of dependence may be a relevant characteristic of dependence

In addition to magnitude and asymmetry, there is a third dimension that may be worth considering in vertical coordination. It is the side of dependence which locates the power imbalance either on the seller side or the buyer side. While the side of dependence does not make sense in horizontal coordination situations such as joint ventures, it may be relevant in some cases of vertical coordination.

However, cases where power imbalance changes sides depending on the characteristics of the transaction would appear to be very unusual. Empirical evidence in the food sector seems to support this hypothesis. In modern food chains with high structure concentration of the

downstream levels, whenever transactions are governed by contractual mechanisms, power seems to be increasingly located on the buyer side. Most case studies with a transactional commitment of both parties confirm that the buyer is increasingly the dominant player; this is true irrespective of the level of the chain, in particular for transactions between retailers and their suppliers. This is true whatever the hybrid form governing the vertical transaction as put forward by Menard (2011) which ranks among the most usual forms, subcontracting, supply chains... Gereffi and al (2005) encapsulated this statement by qualifying most global value chains as buyer-driven.

While dependence created by specific investments seems to be clearly on the side of the party who invests, it may be critical to consider situations where specific assets are committed by both parties and thus mitigate the risk of hold-up through a double hostage mechanism (Williamson, 1985). This is the case, for instance, in developing countries when traders buying products from small farmers provide them with credit as advance payments. Modern players in developed countries are also concerned by cross investment transactions when, for instance, supermarkets or large industrial firms invest upstream to secure volumes or improve the quality of their purchases. In most cases, however, dependence remains on the seller side and there is no need to consider the side of dependence.

Cases where dependence changes sides according to transaction characteristics are quite unusual. Our case study of the international trade of fresh produce between exporters and importers is one of them. In this case, the parties to a transaction are intermediaries which operate upstream of supermarket and wholesale buyers. Changing side dependence is pinpointed by importers who acknowledge situations where they have less bargaining power than exporters. Evidence of such phenomena is confirmed by a database of individual transactions which allows dependence to be approximated by calculating concentration ratios of sales and purchases. High perishability and the difficulty in anticipating the lead price at supermarket level which will decide the income of players in the chain are among the main factors that create high bilateral dependence between intermediaries along the chain and the conditions for a change in the side of dependence, as will be shown later.

II.3 Can we predict the sign of dependence?

In TCE, dependence is conditional on uncertainty and is created when specific assets are invested in the transaction. By definition, it is closely linked to the switching costs associated with termination and replacement and to the opportunity costs associated with the value that would be lost if the relationship ended. Given the difficulty in directly measuring such termination and opportunity costs, Williamson suggests the use of proxies such as asset specificity to approximate them and predicts a rise in bilateral dependence as specificity increases. However, empirical tests of this relationship are few and far between (see the recent literature survey by Macher and Richman, 2008). One such test is the study by Joskow (1987) of coal burning electricity plants and their contracts with coal mines. To explain the role of asset specificity in determining annual contract quantities and the duration of the contract, Joskow examines the possible impact of variables measuring plant "dependence". However, his results do not verify the hypothesis of a higher commitment when a plant relies on a single supplier for a large proportion of its requirements. His conclusion is that dependence on a single supplier becomes a potential contractual problem only to the extent that the other asset specificity characteristics are active.

While the bulk of RDT literature deals with the impact of dependence on governance, there are only a small number of studies concerning the sources of dependence. Frazier, Gill, and Kale (1989) distinguish three main approaches: the "sales and profit" approach (El Ansary and Stern 1972), the "role performance" approach (Frazier 1983) and the "transaction specific investments" approach derived from TCT (Heide and John 1988; Kumar, Scheer and Steenkamp 1995). The last two references provide empirical tests of the link between specific

assets and dependence. Heide and John (1988) show that agents with specific assets invested in a relationship with a principal are all the more dependent as specific assets are high, but may reduce dependence by introducing offsetting investments. Kumar, Scheer and Steenkamp (1995) indicate that a firm's dependence on a partner may arise due to substantial relationship-specific investments made by the firm and/or the inability to replace the partner firm easily (because of the cost involved or the lack of alternative partners).

As well as being scarce, RDT literature linking asset specificity to dependence is based on a limited definition of dependence: in the two aforementioned papers, dependence is not considered as a mutual dependence but as the dependence of one player on another (dependence of A on B but not of B on A). Given this lack of empirical literature, no directional hypothesis can be put forward on whether and how asset specificity or other transaction attributes such as frequency influence the side of dependence.

II.4 How to predict the side of dependence: methodological issues

RDT, which performs empirical tests with dependence represented as a structure, provides useful methodological insights for measuring dependence (belief vs. behavioural measures) and for predicting the side of dependence (categorical vs dimensional approach).

Dependence is most often measured on a Likert scale reflecting the perception of dependence from the point of view of only one party involved in the transaction (see Frazier 1999 for a survey of the literature). An alternative for avoiding or mitigating this bias is to use “behaviour” rather than “belief” data to take advantage of the objective and continuous (not discrete) nature of some proxies of dependence (defined as replaceability). To our knowledge, Joskow (1987), Heide and John (1988) and Casciaro and Piskorky (2005) are among the very few authors to have done so. In his paper on contracts between electric plants and coal mines, Joskow uses the ratio of contract quantity over plant capacity to represent plant “dependence” on the mine. Heide and John use the concentration of exchange measured as a fraction of the total agency commissions accounted for by the largest principal as a proxy for the dependence of an agent on his largest principal. In our paper, we use a database of individual transactions between exporters and importers, documenting all characteristics including the traded volume to calculate a concentration sales/purchase ratio. We will provide further justification for the use of such a proxy for a structure of dependence.

To represent a structure of dependence, we will refer to Kim and Hsieh (2003) who indicate that two approaches have been used to measure it. One approach categorizes dependence as low or high and creates a 2-by-2 matrix (Buchanan 1992). The other approach uses two continuous variables to characterize dependence: magnitude and asymmetry (Kumar, Scheer and Steenkamp 1995; Lusch and Brown 1996; Casciaro and Piskorky 2005). As indicated by Kim and Hsieh (2003), while the categorical approach is somewhat approximate, the dimensional approach introduces a bias since perceptions of dependence are generally measured on a Likert scale by questioning one party of the transaction. Consequently, the dependence of this party and the dependence of the other party carry different connotations, cannot thus be considered on the same continuum and must be seen as qualitatively distinct phenomena. By using a quantitative and objective measure of dependence, we eliminate such a bias. In our paper, we use both approaches and compare the results.

III. Main features of our case study:

III.1 The Chilean fresh produce export sector

Fresh produce exports represent one of Chile's main sources of currency along with wine, farmed fish, forestry products and copper. Chile exports worldwide and ranks first among the out-of-season fruit exporters of the southern hemisphere. The main destination markets are North America (42% of the total), Europe (32%), Asia (14%) and Latin America (11%) (ASOEX, 2010).

Products are, for the most part, transported to the northern hemisphere by conventional reefer vessels or by container lines. It takes three weeks to reach the major North Sea ports in Europe whereas only two weeks are required to reach the United States. Regulations at the border of the European Union depend on the degree of perishability. When the product can be stored for more than six months (which is the case for kiwis, apples and some varieties of pears), Chilean exports compete with produce from the northern hemisphere. Regulations are then implemented at the borders to protect the incomes of European producers. When products are more perishable (grapes, stone fruits), there is no need to protect European growers since the only competitors are other countries in the southern hemisphere.

Exporters and importers usually act as intermediaries in the supply chain of Chilean fresh fruit delivered to supermarkets and wholesalers in the importing countries. While the number of exporters in 2006 totalled more than 500, the top ten companies accounted for 40% of fruit and vegetable exports. These top ten are modern multi-product and multi-origin/destination firms which manage turnovers totalling several hundred million euros a year.

Our case study deals with the export of grapes to Europe. Grapes are the leading fresh produce exported by Chile accounting for about 40% of the total volume, while grape exports to Europe represent about 30% of the total volume exported by Chile. 200 exporters were involved in grape exports to Europe (in the year 2006/2007), accounting for a total volume of 29.1 million boxes. Sixteen of these firms each exported at least 500,000 boxes of grapes, accounting for 50% of the exports of this product to Europe while 113 exporters each exported fewer than 50,000 boxes, together accounting for only 6% of the total volume. On the other side of the transaction, of the 425 European importers which received fresh produce from Chile in the year 2006/2007, 233 of them received grapes from a Chilean exporter. 7% of them each imported at least 500,000 boxes of grapes, accounting for 46 % of the imports of this product in Europe while 58% of importers each imported fewer than 50,000 boxes, together accounting for only 7% of the total volume.

III.2. A value chain with high transaction costs

Long-distance fruit and vegetable transactions are characterised by a high level of uncertainty affecting the trading parties. A first type of uncertainty is common to all fresh produce, resulting on the one hand from the characteristics of the product (perishability, instability of certain characteristics) and the production process (high fluctuation of yield and quality due in particular to climatic and pest hazards) and on the other hand from the complexity of demand in rich countries (a combination of stringent safety and organoleptic requirements making consumer behaviour difficult to predict). A major consequence of such uncertainty is the volatility of prices which change almost every day and the need for just-in-time coordination (and time-specific investments) along the entire marketing chain. Market-based or cooperation-based approaches are the two basic means of dealing with such uncertainty. Although a combination of both approaches may prove more efficient than one or other approach individually (Brousseau & Codron, 1998), cooperation tends to be the predominant practice for marketing channels targeting demanding consumers (which is the case of most European supermarket chains). While the outcome of cooperation in terms of quality and service is satisfactory, it is accompanied by high coordination costs.

A second source of uncertainty is specific to long-distance shipments of fresh produce and primarily derives from the extreme difficulty in predicting the price when the goods are loaded onto the ship, that is to say three or four weeks before arrival and sale at the destination. Rather than fixing a price before loading, which would put the buyer at high risk

and would thus result in a low price to the seller, exporters are better off entrusting their goods to an importer and waiting for the price to be set at the wholesale or retail level⁴⁴. According to experts, most international fresh fruit transactions are performed on consignment. The flipside of this system is that it creates high information asymmetry for the exporter. Although the importer has a mandate from the exporter to sell at the best price possible, his legal status of “agent”, obtained for technical (and historical) reasons, makes him an independent actor who may sell on his own without being obliged to reveal the exact price obtained from his buyer/customer. As a result, exporters are left with strong asymmetry of information concerning the price and conditions. In both cases (direct sales to supermarkets or selling through an agent), high behavioural uncertainty exists resulting from ex-post price determination – the buyer having the possibility of fixing a lower price and thus holding-up the seller⁴⁵.

Importers are also exposed to the risk of opportunism on the part of their partner. More often than not committed to marketing agreements or contracts with their customers, in particular with supermarkets, importers must secure their supply chain to comply with their customers’ requirements. Most exporter/importer transactions are thus performed under marketing agreements or, less frequently, formal contracts with high specific investments translating into a high percentage of shipped volume under reservation which may be considered as either site-specific investments or time specific-investments (Pirrong, 1993). Such governance turns the spot market into a narrow window for adjustment (less than 7/8% according to our estimations⁴⁶). Since volume reservation is usually contracted under private clauses and not legal clauses, some flexibility may, however, be negotiated between partners of the vertical transaction. As a result, small quantities may be subtracted or added, through ex-post negotiation in the on-going transaction, to the total volume reserved by a given partner and shifted to another partner. The same adjustment mechanisms work for importers of Chilean fresh produce with regard to fresh produce imported from other southern hemisphere countries, which may to some extent serve as substitutes. Two other types of flexibility may be obtained through customer/supplier portfolio diversification and through marginal adjustments which may be achieved between importers, within a rationale of cooptation. However, the resulting flexibility remains limited and does not succeed in drastically reducing importer dependence and exposure to opportunism from their partner suppliers.

The bottom line of all these transaction costs, which derive either from the nature of fresh produce or from long distance trade, is dependence between exporters and importers and a low capacity to replace a defaulting partner at short notice during the exporting season. As previously highlighted, such dependence is increased with portfolio specialisation or concentration of sales/purchases on a limited number of partners. An exporter has the choice of spreading his traded volume by using a large number of importers with relatively low

⁴⁴ Direct sales to supermarkets are increasing but still represent a minor market share. In most cases, the exporter entrusts the goods to an importer and the price declared by the importer as obtained from his customer is used as the basis for calculating the exporter’s return price.

⁴⁵ To be credible, the agreement needs security or safeguarding for the seller. In our case, most agreements are based on a long-term relationship which protects against opportunism on the part of the buyer. We call these relational contracts, although the legal part of the contract is for the most part absent.

⁴⁶ According to our database, about 15% of total volume is shipped with the mention “to order” which means either that there is not yet a customer or that the company does not want to reveal the name of the customer (for strategic purposes). Experts consider that the balance between the two possibilities is roughly fifty-fifty, which means that the resulting spot market is only 7 or 8%.

dependence on his clientele or by concentrating the volume to be exported on a single importer or a small number of importers while accepting a relatively high dependence on his clientele. Similarly, an importer has the choice of being supplied by a large number of exporters or to focus on a small number of exporters. While the median Chilean grape exporter deals with 3 European importers, twenty five per cent of exporters have only one customer and twenty five per cent more than 6 customers, with a maximum of 30. On the importers' side, the range is narrower: while the median European importer of Chilean grapes deals with 2 Chilean suppliers of grapes, 40% have only one customer and 25% have more than 4 suppliers, with a maximum of 105. The degree of dependence which is used in our analysis refers to volume. The average degree of dependence is around 20% for exporters and 26% for importers, with a range stretching from 2% to 100% for both exporters and importers (Inglobo).

The above argument justifies the use of a concentration ratio of sales/purchases for a given partner as a proxy of dependence. It has value on the European market of Chilean grapes. We assume that the relevant markets for analysing dependence are the European Union for exporters and Chile for importers. First and foremost, this means that the switching costs of Chilean exporters within the European market are much lower than those between the European Union and other world markets, a fact which is quite obvious since a vast majority of the vessels are planned for a given destination and rarely change their course. The relevance of Chile as a distinct market for European importers is less clear since there may be a shift of products between two origins. However, as already shown, there is little room for manoeuvre at short notice, whatever the origin. These two assumptions have been confirmed by experts within the industry.

III.3 Main sources of transaction costs and dependence

Let us now consider the transaction attributes brought to the fore by Williamson (1985) which create dependence, namely exogenous and behavioural uncertainty, asset specificity and frequency. For each attribute, we specify whether there may be some significant variation between the transactions examined in our case study.

Time-specificity and site-specificity are the main characteristics of grape transactions between Chilean exporters and European importers. Time-specificity is invested to cope with the high level of uncertainty generated primarily by fresh produce perishability, climatic and pest hazards and demanding and volatile consumer behaviour, while site-specificity is typical of long-distance trade and sea transport constraints and results from the need to reserve most of the volumes a long time in advance and at very least at loading, three or four weeks before lead prices are set at the retail level. Given the focus of our case study on a single product (grapes from Chile) and a single destination (Europe), we may consider uncertainty, time-specificity and site-specificity as similar for all transactions.

Apart from time- and site-specificity, variation in transaction characteristics exists, resulting from frequency and three specific assets: dedicated volume, innovative or declining varieties of grapes and joint sales of grapes with other products. First, transactions differ in the number of shipments during one season, the season being the usual duration of an agreement and thus our unit of analysis. The number of shipments, which may vary from 1 or 2 shipments to more than 50, is what Williamson calls frequency. According to TCE, the effect of frequency is ambiguous since it improves knowledge and coordination between the trading parties while at the same time increasing the odds for opportunist behaviour. Second, dedicated volume is the absolute number of boxes traded over one year between the two parties to the transaction. It may be considered as a specific asset, more precisely as a dedicated asset following Joskow's definition (1987) since volumes that have been contracted may not be easy to reallocate to another partner in the event of a breach of contract, as highlighted above.

Consequently, we may consider that the higher the volume contracted between two parties, the more difficult it is to replace and thus the more specific the dedicated asset involved in the transaction. Third, the number of grape varieties under contract is a significant proxy for asset-specificity as well. Actually, all transactions include the six major varieties⁴⁷ but only some of them include other varieties that are declining or innovative and only sell easily on consumer niche markets. The latter may thus be considered as specific assets since they can be less readily redeployed than the major varieties and their number serves a measure of the level of such asset-specificity. Finally, the number of species which differs greatly between transactions may also be considered as a source of dependence, since closer coordination is required when grape transactions are conducted simultaneously with other product transactions. Asset specificity relative to joint sales of grapes with other species is measured by the number of other species within the transaction.

In summary, we can say that the main features of the long-distance fresh produce trade are a high level of uncertainty, of time specificity and of site specificity which together tend to develop dependence between the parties to the transaction. Secondary characteristics, such frequency, volume, grape variety diversification and the inclusion of products other than grapes in the same transaction, may, however, differentiate dependence along its three characteristics (magnitude, asymmetry and side). As previously highlighted, the TCE or RDT literature does not provide any clear insight concerning the detailed impact of transaction attributes on dependence considered as a structure. Apart from a vague prediction that dependence increases with asset specificity, there is no prediction relating to the differentiated impact on the two components of a structure of dependence and on the side of dependence. Our analysis aims to fill this gap and focuses in particular on the side of dependence.

IV. Analysis

IV.1 Methods

Database and measures

The source of the data used in this research is Inglobo, a private Chilean company which has been collecting data on export transactions for more than twelve years with the support of the Chilean fresh produce industry. This database, called Eximfruit, is a list of lines that describe an operation between an exporter and an importer. More particularly, each line contains the following variables: the identity of the firms, dates of shipments, species and variety (778 in total), volume and geographic destination (20 zones, i.e. North Europe, South Europe, UK, Middle East, Far East, USA, Central America among others). For this analysis we focus on trade between Chile and Europe which is the second destination after the USA for Chilean fresh produce. Over the period 2006/2007 studied, Europe and the USA accounted for 33% and 45% respectively of the total volume of fresh produce exported by Chile.

Our unit of analysis is the transaction obtained by regrouping all the operations of a crop-year performed between an exporter and an importer, irrespective of the product, provided that grapes are included in the transaction. This regrouping is legitimate since all operations

⁴⁷ Chile exports 42 varieties of grape throughout the world but only 13 to Europe. The limited set of varieties sold to Europe can be explained by issues concerning resistance to long-distance transport and consumer preferences. Six main varieties account for 92% of the volumes: four red or black varieties (Red Globe, Ribier, Flame and Crimson), representing 55% of the volumes, and two white varieties (Thompson and Sugraone) accounting for 37% of the volumes. All of these are seedless, except the Ribier variety.

performed during a crop year are governed by the same contract or marketing agreement. To simplify, we dropped the exclusive transactions with 100% dependence on each side. Such transactions may be considered as hierarchical transactions performed within the same firm, even though the names of the two firms are different. Our sample contains 192 exporters, 233 importers and 872 exporter-importer dyads.

As previously argued, the transaction attributes under analysis are frequency and three specific assets: dedicated volume, grape varietal diversification and joint sales of products other than grapes. The frequency variable was constructed using the number of shipments between the dyad exporter-importer as a proxy. Dedicated volume is the quantity of grapes traded between the dyad (in number of boxes); in our model this variable is referred to as volume. Grape varietal diversification is the number of innovative and declining – or scarce – varieties which are traded in niche markets – in our model this is referred to as the number of varieties. Joint sales are represented by the number of other products beside grapes which are handled within a dyad (number of species).

To measure dependence, we calculate the ratio of an importer i and an exporter j , where the degree of dependence of exporter j is given by total sales to importer i divided by total sales of j to Europe while the degree of dependence of importer i is given by total purchases from exporter j divided by total purchases from Chile. These two degrees are considered jointly to identify the structure of dependence both in the categorical and the dimensional approach.

- *Categorical approach*

In the categorical approach, we determine categories of structures of dependence by considering thresholds dividing exporters and importers into two classes of dependence (low and high). Different thresholds have been examined, ranging between 15% and 30%. The categories are the four cells of the 2-by-2 matrix of low and high dependence of both the exporter and the importer. They are defined as follows: (i) bilateral dependence (high and high), (ii) unilateral exporter dependence (high and low) (iii) unilateral importer dependence (low and high) and (iv) non-dependence (low and low).

If we examine the bilateral dependence and non-dependence categories, we clearly observe that the higher the threshold considered, the lower the number of dyads in bilateral dependence and the higher the number of dyads in non-dependence (Table 1). Thus, for a threshold of 15% for both the importer and the exporter, fewer than 15% of the dyads are in bilateral dependence and more than 40% are in the non-dependence category. For a threshold of 30% fewer than 5% of the dyads are in bilateral dependence and fewer than 55% in non-dependence. In situations of unilateral dependence, the shares of dyads are relatively stable irrespective of the thresholds.

Insert table 1 about here

- *Dimensional approach*

In order to take the importance of the dyad dependence into account, we consider the magnitude of the relationship. Magnitude is obtained by adding the concentration ratios of both the exporter and the importer. Thus, the measure of magnitude reflects an aggregate degree of dependence. Magnitude can reflect different concentration ratios observed for exporters and importers: a compensation effect may appear. For instance, three dyads with an exporter-importer concentration ratio of 30%-30% for the first dyad, 50%-10% for the second and 10%-50% for the third will all have the same magnitude.

To assess the asymmetry observed in the dependence between the exporter and importer, we define a measure of asymmetry. This measure is the difference between the concentration ratio of the exporter and the concentration ratio of the importer. By using such a variable, we can test for both the power imbalance and the side of dependence. If we consider the same

example as above, the first dyad will demonstrate an asymmetry measure of 0, the second of 40 and the third of -40. Thus, the asymmetry measure reflects the gap between two concentration ratios indicating whether the exporter is more dependent than the importer (asymmetry is positive) or conversely if the importer is more dependent than the exporter (asymmetry is negative). This measure is the most suitable to take account of the asymmetry sign.

IV.2 Correlation analysis

With the aim of gaining an initial insight into the relationship between the transaction attributes and dependence, we first run two correlation analyses, one taking into consideration the variable dependence as defined by the categorical approach and the second considering a structure of dependence as measured in the dimensional approach.

- *Categorical approach*

The results (Table 2) show that the variable volume is positively related to the two ratios of dependence. The larger the volume traded by the dyad, the higher the degree of dependence for the exporter and the importer. However this effect is much greater for the importer.

The other three explanatory variables – number of varieties, number of species and frequency – are negatively related with the concentration ratio observed for the exporter (exporter dependence) and positively related with the concentration ratio of the importer (importer dependence). In other words, the greater the number of varieties and species traded and the higher the frequency, the higher the dependence of the importer and the lower the dependence of the exporter.

- *Dimensional approach*

Regarding the dimensional approach, we observe that the asymmetry and magnitude measures are negatively linked: the greater the magnitude of the dependence, the lower the asymmetry.

Insert Table 2 about here

The correlation matrix also indicates that asymmetry is negatively linked to frequency, to the number of species and varieties and to the volumes traded, while magnitude is negatively correlated to the same variables except volume (Table 2). In other words, the greater the frequency and the higher the number of varieties or the number of species traded, the lower the asymmetry and the magnitude of a structure of dependence. Volume is the only variable which exerts a different effect on these measures, demonstrating a positive correlation with magnitude and a negative correlation with asymmetry: the greater the volume traded, the higher the magnitude of dependence and the lower its asymmetry.

IV.3 Model specification

Two models were implemented to take account of the nature of the dependent variable. The first model, associated with the categorical variable, is a non-ordered model. The second, associated with continuous variables, is a linear model. As for the independent variables, we retained frequency and the three asset specificity variables (volume, number of varieties and number of species). Each model is presented below.

- *Categorical approach*

The structure of dependence is defined as a polytomous non-ordered variable. Thus, there is an arbitrary definition of responses. A multinomial logit model takes into account the

specificities of such a discrete unordered variable, whereas another model would not lead to efficient estimates of causal factors (Thiold, 1969; Nerlove and Press, 1973).

The structure of dependence is split into four categories: bilateral dependence, unilateral exporter dependence, unilateral importer dependence and non-dependence. Thus, the probability for a dyad i to choose j , which is one of the four categories k , is:

$$p_{ij} = \frac{\exp(\mathbf{x}_i \beta_j)}{\sum_{k=1}^4 \exp(\mathbf{x}_i \beta_k)}$$

where $\mathbf{X}$ is the matrix of exogenous variables.

A key property of such models is that:

$$\frac{p_{ij}}{p_{im}} = \frac{\exp(\mathbf{x}_i \beta_j)}{\exp(\mathbf{x}_i \beta_m)} = \exp[\mathbf{x}_i (\beta_j - \beta_m)]$$

for all alternatives j and m . The reference considered in our study is the fourth category: non-dependence.

- Dimensional approach

The focus of our analysis is now on magnitude and asymmetry while the exporter-importer dyad is the unit of analysis. In both cases, the dependent variable is continuous. These two key measures of dependence are simultaneously observed for each dyad. Because of the autonomy requirement of each equation, we cannot implement simultaneous equation models. Indeed, to implement such models, “neither equation can stand on its own and neither has a causal interpretation” (Maddala, 1989). This means that unobservable factors must not be correlated with observables factors. These assumptions lead to one linear model being implemented for magnitude and another for asymmetry, the first one including the asymmetry measure and the second the magnitude measure.

Two models are implemented. The first one considers the magnitude measure while the second considers the asymmetry measure. Each model has the same structure defined as follows:

$$y_i = \beta_0 + \beta_1 \text{frequency}_i + \beta_2 \text{varieties}_i + \beta_3 \text{species}_i + \beta_4 \text{volumes}_i + \beta_5 z_i + \varepsilon_i$$

where Y is the magnitude measure and z the asymmetry measure in the first model, and inversely in the second model.

We have controlled for both autocorrelation and homoscedasticity.

IV.4 Results

- Categorical approach

The multinomial model highlights the specificities of each categorical response considered (Table 3). To understand the factors influencing dependence between an exporter and an importer, results will be read considering each category compared to the reference, established as a situation of non-dependence. Our model takes a diversity of thresholds into account, ranging from 15 to 30% for both exporter and importer. Variables are declared significant at 10% and we report only the sign of the relationship. Moreover, we mention only the results referring to the extreme thresholds: 15% and 30%.

Insert Table 3 about here

Comparing the two extreme forms of dependence (bilateral and non-dependence) highlights the importance of frequency, number of species and number of varieties. More precisely, the greater the importance of these variables in a relation, the lower the probability of being a bilateral dependent dyad compared to being a non-dependent dyad. The bilateral dependence is thus based on a specific trade characterized by few species, few varieties and quite infrequent transactions. Our results also underline that volumes traded are not a key factor in understanding whether the structure of interdependence is non-dependent or bilateral dependent. In others words, volumes traded are similar between these two extreme categories.

The focus on unilateral exporter and importer dependence, compared to non-dependence, illustrates one common result. Indeed, the greater the volumes traded, the higher the probability of being in a situation of unilateral dependence. Conversely, results are quite the opposite when we consider frequency and varietal diversification. They emphasise that the higher the frequency of operations and the number of varieties involved in the trade, the more dyads are likely to be importer dependent and conversely, the lower the frequency and the number of varieties, the more dyads are likely to be exporter dependent. Results are not so contrasted when we deal with the fourth variable of asset specificity, namely species diversification. While an increase in species diversification raises the likelihood of importer dependence, there is no clear effect in the event of a decrease in species diversification.

All these results are quite stable regarding the thresholds tested, except in the case of varietal diversification when comparing the situation of unilateral exporter dependence (to the reference that is to be non-dependent) where the result is only valid above a threshold of exporter dependence that may vary between 15 and 30%.

- *Dimensional approach*

Previous results have highlighted the interaction between the two concentration ratios observed for exporters on the one hand and for importers on the other. This initial analysis should be completed by an analysis in terms of magnitude and asymmetry. The last measure is considered in relative terms. The aim of the models adopted is not to predict the level of magnitude or the level of asymmetry correctly but to identify key factors impacting such measures (Table 4).

The factors considered offer a much better understanding of the asymmetry measure than for the magnitude (R^2 are respectively 34.92% for the measure of asymmetry and 10.73% for the measure of magnitude). Considering the weak R^2 score of magnitude, the diversity of concentration ratios that may reflect a same level of magnitude and the priority given in our analysis to the side of dependence, we decided to focus solely on the model with asymmetry as a variable to explain.

Insert Table 4 about here

Our results highlights the fact that the frequency, the number of varieties, the number of species and volume all have a negative impact on asymmetry. The results of the dimensional approach concerning the first three variables, confirm the previous findings from the categorical approach, namely that frequency, varietal diversification, and to a lesser extent joint-sales of other products have an influence on the side of dependence. Importer dependence is increased when the number of niche market varieties, other products sold jointly with grapes and shipments increase. Conversely, exporter dependence is increased

when transactions are mostly performed with standard varieties of grapes shipped occasionally and without tie-in sales of other products.

In short, the effect of the transaction attributes on the side of dependence can be interpreted as follows: the greater the frequency and the diversification of varieties and products in the transaction, the greater the likelihood of a higher ratio of dependence for the importer rather than the exporter. In fact, when an exporter ships a wide range of varieties and products on a regular basis, he adds value to the transaction, a value that is generated by the specific assets invested; in order to protect the value thus created, the exporter would, according to the results of the study, tend to work with a “dependent” importer, who agrees to accept an asymmetric dependence structure favouring the exporter. For his part, the exporter may have a relatively diversified portfolio of clients and be in a situation of reduced dependence relative to his partner in terms of concentration ratios.

Conversely, in the event of low levels of specific assets and low frequency operations, the dependence tends to be greater on the side of the exporter. In this case, the exporter sends standard varieties on an irregular or occasional basis without supplementing the supply with other products besides grapes. It does not add special value to the transaction. The only added value that the exporter may provide is an accurate just-on-time coordination (time-specificity) and the compliance of the volumes scheduled (one might assume that the schedules are highly variable from one contract to another). This situation allows the exporters to adjust to contingencies without committing too much to the importer. From the importer’s perspective, since the exporter’s service is minimal, there is no reason to make him a preferred supplier. His strategy is not then to concentrate his procurement on this type of provider. In this case, the resulting structure of dependence will favour the importer.

The influence of volume on asymmetry in the dimensional approach offers new insights relative to the categorical approach. Our results show a negative correlation between magnitude and asymmetry (Figure 1). This means that dyads contract higher volumes when the importer is dependent on his supplier (negative asymmetry) than when the exporter is dependent on his buyer (positive asymmetry). The first case, with greater importer dependence, corresponds to the situation where added value generated by high frequency and specific assets (variety, species, and volume) is created by the exporter. The fact that magnitude and thus joint-cooperation is higher than in the other case (no specific assets invested) is coherent with the core prediction of TCT of increased dependence when specific assets are invested. An additional argument for this difference in magnitude between negative and positive asymmetry is that importers have more room for manoeuvre than exporters to make adjustments at short notice, primarily due to the fact that importers have the possibility of sourcing, even marginally, from other Southern origins.

Insert Figure 1 about here

The negative correlation between magnitude and asymmetry also means that symmetric dependence would be encountered for intermediate levels of magnitude. Two interpretations may be given to explain a lower magnitude of symmetric dependence compared to asymmetric dependence in favour of the exporter. First, symmetric dependence includes situations where concentration ratios are low and where no specific assets are invested. Consequently, the average magnitude is not representative of the situations of high bilateral dependence where specific assets are invested. Second, symmetric dependence as defined with concentration ratios is only a proxy for true dependence. As mechanisms other than portfolio diversification or specialisation are at work, such as built-in contractual mechanisms, relational mechanisms and other safeguards to protect the party with specific assets against the potential risk of opportunism on the part of his partner, there is no reason for the equilibrium of concentration ratios.

V. Conclusion

This article is a case study that examines both theoretically and empirically how transaction attributes may affect the side of dependence (dependence of the buyer or dependence of the seller) in a vertical relationship. Although most supply chains do not feature any easy change in the side of dependence when contracting is required, there are some cases such as contracting between intermediaries in a long-distance fresh produce supply chain where the side of dependence is not stable. Our case study is one such example. It deals with individual exporter/importer transactions of fresh produce shipped by sea from Chile to Europe.

In the long-distance trade of perishable products oriented towards demanding retailers and consumers, time and site specificity are so high that the spot market is narrow and opportunities for adjustment at short notice very limited. As a result, we observe high dependence on the part of both exporters and importers and such dependence may be approximated through sale/purchase concentration ratios.

Concentration ratios which are calculated for all individual transactions and in every transaction for each partner (exporter and importer) reveal that power imbalance (asymmetry) in the relationship may change sides and be either on the side of the seller (exporter) or on the side of the buyer (importer). Drawing on RDT and TCE conceptualization which considers dependence as a structure and identifies asset specificity as a main source of dependence, we test for a link between transaction attributes and the characteristics of dependence (magnitude, asymmetry and side of dependence). By limiting our case study to one product (grapes), one crop year (2006/2007) and one destination (Europe), we control for numerous factors which would otherwise be sources of variation.

Our findings are interesting with regard to the side of dependence. First, the results of the dimensional and categorical approaches are convergent. Second, they offer an insight into the way transaction attributes influence the side of dependence. Dependence is on the side of the importer when value is added to the transaction by the exporter through frequent shipments and investment in specific assets (varietal diversification, high volume and, to a lesser extent, joint-sales of other products) while dependence is more on the side of the exporter when no value is added to the transaction. Third, our model of the dimensional approach reveals a negative correlation between magnitude and asymmetry, which means that joint-cooperation (magnitude) is higher when asymmetry is negative, which is the case of high levels of frequency and specific assets. This finding is coherent with the core prediction of TCT of an increase in dependence when specific assets are invested.

V.1 Limitations

The limitations concern the empirical and theoretical uses of dependence. In empirical tests, concentration sales/purchases ratios must be used with caution as a proxy for dependence. While conceptually there is a clear link between asset specificity, dependence and governance of the transaction, empirical literature testing these links is scarce, in particular between asset specificity and dependence. The reason for this is the difficulty experienced in approximating dependence. When dependence is implemented as a variable, it is most often measured by scaling opinions/declarations on a Likert scale. Our case study is one of the very few cases where dependence is approximated by means of an objective indicator. The choice here was to use concentration sales/purchases ratios as proxies and to justify them with high time-site specificity and marginal opportunities for adjustment at short notice. Demanding conditions are thus required to use an objective, non-belief indicator to approximate dependence. Papers which have used a concentration ratio without applying these conditions

have failed to demonstrate an influence of such a ratio on the governance structure⁴⁸. The reason for this failure is most likely the bad quality of the proxy for dependence as defined by the theory.

From a theoretical point of view, we must stress that dependence is a transaction-specific concept and not a firm specific concept. In our case study, this transaction specificity has three consequences. First, dependence is relative to a given market where redeployability is possible. It would not make sense to measure the concentration ratio which approximates dependence over the world market. Because of perishability and long distance shipping constraints, the relevant markets where adjustments are possible at short notice are regional markets such as Europe or North America, hence our decision to focus on Europe. Consequently, an exporter may be dependent on its main customer in Europe but independent of its main customer in North America while the same is true for a European importer with regard to products of different origins in the southern hemisphere (Chile and South Africa for instance).

Second, dependence is relative to a given period of time. Since the transaction is usually governed by a short term contract with a life span of a single “crop year”, dependence may change every year.

Third, in our analysis dependence has been measured for a given product, which means that it may vary from one product to another transacted with the same partner within the same period.

Fourth, dependence is relative to a given partner. Thus it may co-exist in a given period of time and within the same relevant market, with independence from another partner.

Emerson highlights these different points when he states that dependence is an attribute of a relation rather than a person – or a firm in our case – and is not observable in every interaction between the parties. The fact that dependence can be temporal is sustained by Heide and John (1988) who found that parties of a principal-agency dyad attempt to balance dependence by engaging in offsetting investments which enhance the replaceability of their partner. The parties involved in a dyad may deliberately accept a situation of dependence when choosing to favour a supplier or a client due to a commercial strategy. Indeed, in conditions of high uncertainty, firms search for stable and consistent contracts/transactions and long-term business relations. This alters the perception of dependence as a hazard; on the contrary, it can be instrumental in the firm’s capacity to improve its performance (Buchanan, 1992). Furthermore, firms complement this strategy with other transactions in which the firm will not be dependent.

V.2 Perspectives

A possible direction for future work is to consolidate our findings by including more products, more countries and more years, which is possible thanks to our database. It would lead us to explore the stability of dependence of a given firm on a given partner and the portfolio strategy of a given firm that may be reflected in the diversity of concentration ratios. Interesting managerial and academic perspectives arise from this initial exploration of the effects of transactional attributes on dependence. From a managerial point of view, the knowledge of the concentration ratios (own dependence and partner’s dependence) facilitates a better selection of business partners and may facilitate the choice of contracts, the safeguards and the allocation of assets in a transaction.

⁴⁸ This is the case, for instance, of the study conducted by Joskow (1987) of contracts between coal mines and electricity plants. While the duration of contract is strongly influenced by a series of asset specificities (site, equipment, volume as a dedicated asset), there is no significant influence of the plant “dependence” as measured by a sales concentration ratio on a specific contract.

From an academic point of view, our findings may be useful in a wider perspective where the goal is to explain the choice of governance. Dependence is one of the variables, along with transactional and relational variables, which influence the choice of governance. The following papers illustrate the role of dependence. In Aulakh and Gençtürk (2008) who studied the degree of contract formalization in importer-exporter relationships, exporter dependence is positively related to the degree of contract formalization. In a longitudinal case study by Klein et al. (2005), contracts under asymmetric dependence include more clauses for safeguarding while, in Poppo and Zenger (2002) contracts have to be complemented by other mechanisms like double hostages and trust.

The endogeneity point merits further discussion. Indeed it is not clear whether there is causality or correlation between dependence approximated by a sales/concentration ratio and specific assets. Echoing Sykuta (2005), who questions the exogeneity of the specific assets when considering the econometric model explaining the choice of governance, it is important to incorporate the variable of dependence in this challenging discussion and to clarify whether dependence derives from the choice of specific assets or is decided simultaneously with the latter.

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Table 1. Distribution of the importer-exporter dyads depending on the threshold

			Exporter dependence ratio			
			15%	30%	15%	30%
Importer dependence ratio	15%	bilateral dependence	131	73	150%	8.3%
		unilateral exporter dependence	255	313	29.2%	35.8%
		unilateral importer dependence	173	119	19.8%	13.6%
		non-dependence	313	367	35.8%	41.9%
		Total	872	872	100%	100%
	30%	bilateral dependence	83	43	9.5%	4.9%
		unilateral exporter dependence	170	210	19.4%	24.0%
		unilateral importer dependence	221	149	25.3%	17.0%
		non-dependence	398	470	4.5%	53.7%
		Total	872	872	100%	100%

Table2. Correlation between the transaction characteristics and the dependence of the exporter-importer dyad

	exporter concentration ratio	importer concentration ratio	magnitude	asymmetry	volume	number of varieties	number of species	frequency
exporter concentration ratio	1.000	-0.111	0.60203	0.69907	0.006	-0.523	-0.381	-0.433
importer concentration ratio	-0.111	1.000	0.72661	-0.78832	0.107	0.249	0.220	0.195
Magnitude	0.60203	0.72661	1.000	-0.150	0.090	-0.162	-0.086	-0.143
Asymmetry	0.69907	-0.78832	-0.150	1.000	-0.073	-0.503	-0.394	-0.408

Table 3. Determinants of the structure of interdependence – multinomial logit model

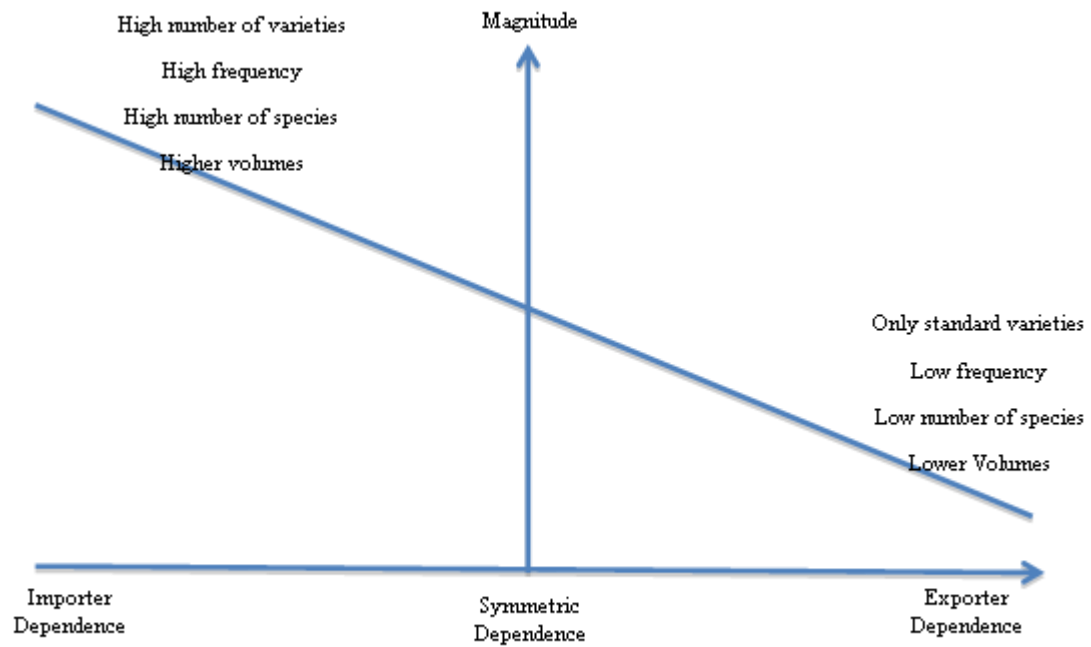
Importer dependence ratio		15%		30%	
Exporter dependence ratio		15%	30%	15%	30%
bilateral dependence	Intercept	+	+	+	+
	volumes				
	species	-	-	-	-
	varieties	-	-	-	-
	frequency	-	-	-	-
unilateral importer dependence	Intercept	-	-	-	-
	volumes	+	+	+	+
	species	+	+	+	+
	varieties	+	+	+	+
	frequency	+	+	+	+
unilateral exporter dependence	Intercept				
	volumes	+	+	+	+
	species				
	varieties		-		-
	frequency	-	-	-	-

non-dependence is the reference

Table 4. Determinants of the magnitude and asymmetry measures – linear model

	magnitude measure	asymmetry measure
Intercept	70.68473*** (4.01632)	65.65518*** (3.86425)
magnitude measure		-0.26746*** (0.03110)
asymmetry measure	-0.29420*** (0.03421)	
frequency	-0.13284** (0.05467)	-0.18722*** (0.05192)
number of varieties	-2.95550*** (0.63769)	-5.36213*** (0.58793)
number of species	-1.93491** (0.96630)	-5.78725*** (0.90229)
volumes	0.00079206** (0.00038252)	-0.00069493* (0.00036487)
R2	0.1073	0.3492
Number of observation	872	

Figure 1: Links between transaction attributes and dependence (asymmetry and magnitude)



ANNEX 3.

Interview guides and questionnaire

Interview guide: exporters and key informants/Guía de entrevista: exportadores e informantes clave en Chile

Fuente:.....Ciudad: Tel:.....

Email /Web: Fecha:

I. GENERALES

Entrevistado

- Que puesto ocupa en la empresa?
- Cuanto tiempo lleva ocupando este puesto?
- Cuáles son las actividades que desempeña?

Empresa:

- Figura jurídica de la empresa
- Especialización, diferenciación de producto, concentración en países, concentración por tipo de clientes

Estrategia comercial

1. La empresa exporta directamente?
 - Exporta solamente productos propios? cuales y hacia qué países?
 - Exporta productos de terceros? (cuales y en qué porcentaje)
 - Hay alguna variación en los acuerdos a los que llega con los importadores dependiendo si el producto exportado es propio o de terceros?
 - La empresa exporta a través de una compañía?

II. ASPECTOS RELACIONALES

2. Relaciones con los proveedores
 - Cuál es su relación con los proveedores de frutas? (invierten en la producción, etc)
 - Años de relaciones con proveedores
 - Como la relación de los proveedores influye su relación con los importadores?

- Qué factores influyen en el tipo de contrato/acuerdo alcanzado con el importador: Si la producción es propia o de terceros?
- Sobre las certificaciones calidad, sanidad e inocuidad, como estas afectan en la relación?
- Como los sistemas de trazabilidad afectan sus relaciones comerciales? alguna diferencia del efecto de legislación en Europa por ejemplo entre UK y Francia?

3. Relación con los clientes

- ¿Qué tipo de clientes? (importador, mayorista, agente, broker, catering, supermercado, etc)
- Certificaciones especiales, marcas
- ¿Privilegia las relaciones de largo plazo con los clientes?
- ¿Maneja una cartera de clientes variada? es decir, clientes de largo plazo y clientes ocasionales o mercado spot ?
- ¿Algún comentario sobre las exportaciones to order (a la orden)?
- ¿Conoce el comprador final (un eslabon antes del consumidor final)
- ¿Cómo influye su tipo de cliente en el tipo de acuerdo contractual?

4. Cartera de clientes

- Su empresa fija un límite de la concentración de la cartera de exportación en un solo cliente?
- En qué porcentaje? se calcula por producto, por el total o por mercado?
- Que implica tener alta concentración en pocos clientes?
 - Dependencia?
 - Fuertes relaciones?
 - Elevados niveles de desempeño?

5. Respecto al rol de la reputación, que entiende por reputación y como funciona en el marco de las relaciones comerciales. ¿Cómo mediría la reputación?
6. Respecto a la confianza. ¿Qué entiende por confianza a nivel inter-empresa e interpersonal, como la mediría y como se materializa en las relaciones comerciales?
7. Que entiende por acuerdo?, ¿Qué entiende por contrato?
8. Hay diferencia entre el tipo de acuerdo/contrato cuando una relación comercial empieza? por qué? precisar previsiones tomadas
- 9.Cuál es la evolución de los acuerdos/contrato después de transacciones repetidas? (historial de relación)

III. CONTRATACION

10. Para Usted cual es la diferencia entre un acuerdo de exportación o un contrato de exportación. ¿Cuál es el tipo de acuerdo/contrato establecido para asegurar la relación comercial?
11. ¿Cuáles son los aspectos clave que se negocian en cada contrato puede mencionar 10 factores que influyen en la variación del tipo de acuerdo/contrato?
12. ¿Considera los acuerdos/contratos ejecutables legalmente? Si, No, ¿por qué?
13. ¿Conoce los contratos estipulados por COFREUROP? Sales on commission; Sales contract; Joint Sales. Cuales son los tipos utilizados en Chile?
14. ¿Conoce/comente sobre los mecanismos de precios estipulados en COFREUROP (Minimum price, Price after sale, Price upon arrival) Cuales son los mecanismos utilizados en Chile?
15. ¿Alcanza contratos/acuerdos específicos según:
 - El cliente (prolongación de la relación, experiencias previas, confianza, reputación)
 - Pais (UK, France, Holland, Germany) (cual diría que es la diferencia a nivel de contratación/acuerdos entre USA y Europa?)
 - Tipo de canal (distribuidor, importador, bróker, agente –pagado por el exportador-, supermercado, implantación directa, catering)
 - Inversiones específicas (marca, certificación, variedad nueva, localización, campaña promocional)
 - Producto (percepción, estabilidad/incertidumbre del mercado, producto nuevo, competencia)
 - Riesgo/incertidumbre (volatilidad precios, cambios en la demanda) que previsiones toma para garantizar el contrato? (Garantías, avance de crédito, cláusula de arbitraje?)
16. Monitoreo y ajuste
 - Cuáles son los procedimientos de monitoreo y ajuste?
 - Firma un contrato al principio de la campaña? o cada que periodo de tiempo?
 - Mecanismos solución de conflictos, cambio de planes.
 - Ha tenido controversias?, Como las ha solucionado?
 - Sistemas de inspección (calidad, sanidad, inocuidad en la cadena hasta el puerto de destino)

Interview Guide: Importers

Description of the respondent

- Name of the Firm:
- Respondent:.....
- Position:
- Countries of origin of imports:.....

1. What participation do Chilean fruit producers have in your company portfolio of suppliers?
2. What are the contractual practices in fruit import-export business?
Does most aspects of your agreements are specified in a signed contract?
Do most of your agreements are specified by email, fax and/or verbally?
Do you complement both signed contracts and non signed agreements?
3. How does the buyer influence the modality of contracting with the exporter?
4. If a buyer (e.g. wholesaler, supermarket, special retailer, food service...) signs a contract with your company, do you sign a contract with your provider (the exporter)?
5. What kind of agreement do you tend to use?: sales contract, joint sales (profits and losses shared between importer & exporter), Guarantee Minimum, Free Consignment?
6. What are the factors that influence the choice of these agreements?
The country of origin. Which and why?
The country of destination. Which and why?
The type of product. Which and why?
The volatility of the importing market. Why?
The scarcity of the product. Why?
7. Does the length of the relationship with the exporter have an influence on the choice of agreements and the way to do import-export business?
8. Does trust between the parties have an influence on the choice of agreements and the way to do business?
9. 6. Does reputation of the exporter and reputation of the importer have influence on the choice of agreements and the way to do business?

10. How the advance payment varies?
- When the exporter is a long term partner?
 - When dealing with a new exporter partner?
11. Importers take several risks, how do you protect the transactions?
- Information tracking on buyers/sellers previous commercial behavior?
 - Contracting a trade credit insurance ?
 - Contracting a third party inspection service in arrivals ports?
 - Own inspection service?
 - Introducing an Arbitrage Clause in the agreement?
 - Other
12. In case of conflicts/disputes, how do you resolve it?
- Chamber of arbitration, Court resolution, other?
13. What do you do in case of lack or failure of supply, or when an exporter fails to comply with the agreement?

Questionnaire Survey: Chilean Exporters / Cuestionario para exportadores Chilenos de fruta

Variables de Control

1. Cargo del encuestado: Gerente: ____ Ejecutivo Comercial: ____

Número de años de experiencia: En la compañía: ____ En el sector: ____

2. Años de antigüedad de la empresa: ____ Número de empleados: ____

Las frutas que exporta su Empresa son: Fruta Propia: ____ % Fruta de Terceros ____ %

Volumen total exportado campaña 2009-10: ____ Ventas anuales (aprox.): ____

Descripción del uso de diferentes modalidades de contratación

3. ¿En la última campaña de exportación, qué modalidad de contratación utilizó su Empresa? Indique el porcentaje Aproximado. En caso de no poder dar el porcentaje, otorgue un numero en orden de importancia siendo: 1 menos importante, 2: medianamente, 3: Mas importante).

Venta en firme ____ % Libre consignación ____ % Precio Mínimo Garantizado ____ %

4. Por favor marque en la celda correspondiente la modalidad de contratación más frecuente por país

Zona	VF	MG	LC
Reino Unido			
Holanda			
Alemania			
Francia			
España			
Italia			
Rusia –Países del Este			
Países Escandinavos			

Uncertainty- Incertidumbre

Por favor indique en qué circunstancias, su empresa exporta bajo uno de los tres tipos de contratación: (Marque la casilla de su elección).

5. Indique qué modalidad de exportación es más probable usar, cuando el riesgo del país importador es:

	1. Bajo	2. Moderado	3. Alto
Venta en firme	☐	☐	☐
Precio Mínimo Garantizado	☐	☐	☐
Libre consignación	☐	☐	☐

6. Indique que modalidad de exportar es más probable usar cuando la oferta en el mercado es:

	1. Baja	2. Moderada	3. Alta
Venta en firme	☐	☐	☐
Precio Mínimo Garantizado	☐	☐	☐
Libre consignación	☐	☐	☐

7. Cuando el mercado del producto no es maduro (mercado en crecimiento y menos competidores), es más probable realizar una exportación en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

8. Indique que modalidad de exportar es más probable usar cuando la volatilidad del precio es:

	1. Baja	2. Moderada	3. Alta
Venta en firme	☐	☐	☐

Precio Mínimo Garantizado	☐	☐	☐
Libre consignación	☐	☐	☐

Especificidad de los Activos/Asset Specificity

9. Si intercambia una proporción importante de su oferta exportable con 1 solo importador en un país, es más probable que use:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

10. Cuando ha desarrollado una marca conjunta con el importador es más probable realizar una exportación en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

11. Cuando utiliza embalajes, etiqueta específica al importador es más probable realizar una exportación en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

12. Cuando el importador le exige niveles de residuos inferiores a la norma europea es más probable realizar una exportación en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

13. Cuando el importador le exige GlobalGap es más probable realizar una exportación en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

14. Cuando el producto es especial (alta calidad, variedad especial) es más probable realizar una exportación en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

15. Cuando la exportación se realiza por avión es más probable realizarla en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

16. Cuando la exportación se realiza por barco es más probable realizar una exportación en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

17. Cuando el producto es muy perecedero por barco es más probable realizar una exportación en:

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

18. Según el PRODUCTO es más probable optar por: (Marque en la casilla)

	1. Venta en firme	2. Libre consignación	3. Mínimo Garantizado	4. No influye
Manzana	☐	☐	☐	☐
Uva	☐	☐	☐	☐
Palta	☐	☐	☐	☐
Kiwi	☐	☐	☐	☐
Pera	☐	☐	☐	☐
Nectarin	☐	☐	☐	☐
Ciruela	☐	☐	☐	☐
Cerezas (avión)	☐	☐	☐	☐
Cerezas (barco)	☐	☐	☐	☐
Berries	☐	☐	☐	☐
Naranjas	☐	☐	☐	☐
Otros	☐	☐	☐	☐

Institutional variables /Variables Institucionales

La influencia del tipo de cliente:

19. Cuando se exporta directamente a un supermercado la probabilidad de utilizar las siguientes modalidades es:

	1. Poco probable	2. Moderadamente	3. Altamente
Venta en firme	☐	☐	☐
Precio Mínimo Garantizado	☐	☐	☐

Libre consignación ☐ ☐ ☐

20. Cuando se exporta a través de un importador-mayorista es más probable utilizar:

1. Poco probable

2. Moderadamente

3. Altamente

Venta en firme

☐
☐
☐

Precio Mínimo Garantizado

☐
☐
☐

Libre consignación

☐
☐
☐

. Formalización del contrato

21. ¿Firma contrato? Si ☐ A veces ☐ Nunca ☐ . (En caso de No salte a la pregunta 24.)

22. Marque todos los factores que influyen en la decisión de firmar un contrato

Marque una casilla por fila. (0= Not probable 1=Slightly probable 2= Moderately probable 3=Very probable)

	0	1	2	3
Si el importador es mayorista, que tan probable es firmar?				
Si el importador es un supermercado, que tan probable es firmar?				
Si es un importador de larga data, que tan probable es firmar?				
Si tiene confianza con el importador, que tan probable es firmar?				
Si esta comenzando a hacer negocio con un importador, que tan probable es firmar?				
Si desconfía de un importador, que tan probable es firmar?				
Si depende de un importador en un país, que tan probable es firmar?				
Si el importador requiere firmar debido a un Adelanto de pago pre-cosecha				
Si el importador requiere firmar debido a requerimientos en el país importador				
Si Ud. (el exportador) requiere firmar debido a política de la empresa				

23. Que tan frecuente es firmar un contrato según país importador?

Marque la casilla de su elección

Zona	0=Nunca	1 = A veces	2. Muy a menudo	3 .Siempre
Reino Unido				
Holanda				
Alemania				
Francia				
España				
Italia				
Rusia –Países del Este				
Países Escandinavos				

24. ¿El tipo de cliente del importador (Tiendas especializadas, Food Service, Supermercado) influye en la forma de contratación de su empresa con el importador? :

Si ☐ A veces ☐ No Sabe ☐

Safeguards/Salvaguadas

25. Los exportadores asumen muchos riesgos, ¿cómo protege sus transacciones? Por favor marque las opciones que considere apropiadas. Una por línea. (Escala 1= Jamás, 2 = A veces, 3 = Siempre)

	1	2	3
Tomar un seguro de crédito			
Inspección de un producto en el puerto de embarque			
Inspección de un producto en el puerto de arribo			
Tomar seguro de tasa de cambio			
Introducir un acuerdo sobre arbitraje			
Triangular con un recibidor en un país intermedio			

	0	1	2
Tomar un seguro de crédito			
Tomar seguro de tasa de cambio			
Introducir un acuerdo sobre arbitraje			
Triangular con un recibidor en un país intermedio			

1= Propio 2=Terceros 3= Inspección del Importador

0=No

	0	1	2	3
Inspección de un producto en el puerto de embarque				
Inspección de un producto en el puerto de arribo				

26. Respecto a los adelantos de pago

Un adelanto de pago normal puede estar en el orden de:

1. Inferior a 30% ☐ 2. Entre 30- 50% ☐ 3. 50-70%☐ 4. 70-90% ☐ 5. Prepaid ☐

Cuando la transacción es de alto riesgo es mas probable solicitar un adelanto

1. Inferior a 30% ☐ 2. Entre 30- 50% ☐ 3. 50-70%☐ 4. 70-90% ☐ 5. Prepaid ☐

Cuando ha trabajado muchos años con el importador el adelanto de pago se:

Reduce ☐ No se reduce ☐ No aplica ☐

Cuando el importador hace un adelanto de pago previo a la cosecha es más probable optar por

Venta en firme ☐ Libre consignación ☐ Precio Mínimo Garantizado ☐

27 . En caso de conflicto/disputa, su empresa recurre a:

Marque la casilla de su elección, una por línea. (Escala: 1= Jamás, 2 = A veces, 3 = Muy a menudo 4 = Siempre)

	1	2	3	4
Juicio				
Cámara Arbitral				
Si luego de una negociación no hay solución, rompe la relación				

28. Cuáles son los principales obstáculos para recurrir a una cámara arbitral? (Marque en la casilla)

No se conoce su funcionalidad	
Costo elevado	
Demora en los procesos	

Confianza

29. ¿Qué factores influyen en la elección de comenzar una relación comercial con un nuevo importador?

Marque la casilla de su elección, una por línea. 0= No influye 1= Poco, 2=Moderada, 3=Alta

	1	2	3
La empresa importadora trabaja con supermercados			
La empresa importadora cuenta con una amplia red de clientes			
La empresa importadora cuenta con infraestructura (almacenes, etc)			
El tamaño de la empresa importadora -gran tamaño			
Los años de antigüedad de la empresa			
La experiencia del ejecutivo comercial			

30. Recuerde si se le ha presentado la situación que el ejecutivo comercial con quien trabajaba y tenía confianza, deja la empresa importadora. Ordene de la elección que tomó:

Si__ No__

Seguir al ejecutivo comercial a su nueva empresa importadora ____

No seguir al ejecutivo comercial y mantenerse con la empresa ____

Cambiar de empresa y de ejecutivo__

Seguir haciendo negocio con ambos ____

31. Si el importador **NO** le inspira confianza, que es más **probable** que Usted decidiría? Marque la casilla de su elección, una por línea. (1= Bajamente probable, 2=Moderadamente, 3=Altamente probable)

	1	2	3
No hacer negocio			
Hacer negocio bajo VF			
Hacer negocio bajo MG			
Hacer negocio bajo LC			
Hacer negocio solicitando firmar contrato			
Hacer negocio solicitando carta de crédito			
Otro			

Reputación

32. Si considera que el importador es de bajo riesgo (tiene capacidad pago, reputación de cumplimiento) que es más probable que Usted decidiría? Marque la casilla de su elección, una por línea. 1= Poco probable, 3=Moderadamente, 4=Altamente

	1	2	3
Hacer negocio bajo VF			
Hacer negocio bajo MG			
Hacer negocio bajo LC			
Solicitar un adelanto de pago más bajo			
Otro			

33. Si no tiene referencias sobre el importador? que es más probable que Usted decidiría? Marque la casilla de su elección, una por línea. 1= Poco probable, 3=Moderadamente, 4=Altamente

	1	2	3
Hacer negocio bajo VF			
Hacer negocio bajo MG			
Hacer negocio bajo LC			
Solicitar un adelanto de pago más alto			

Frecuencia

34. Cómo evoluciona la forma de contratación?

- Al inicio de la relación es probable que opte por:

VF ☐ MG ☐ LC ☐

- Después de unos años es probable que evolucione a:

VF ☐ MG ☐ LC ☐

- ¿El tipo de contratación con el mismo importador puede variar de año a año?

Si ☐ No ☐

- ¿El tipo de contratación con el mismo importador puede variar dentro de la misma campaña?

Si ☐ No ☐

- *Muchas gracias por su participación-*

La información es confidencial, la identidad de los entrevistados y de sus empresas se mantendrá anónima.

ANNEX 4.

Fruit and vegetable Dispute Resolution Corporation (DRC) arbitration decisions

YEAR	DRC File n°	CLAIM	DESCRIPTION	CONTRACT	COUNTRIES	PRODUCTS
2011	18666	Dispute on prices	Prices for the sales were insufficient to cover the advance payments. The Receiver argues that prices were low due to poor market conditions and overstock of fruit. The Shipper claims that Receiver's failed to inform about market condition and failed to send marketing reports showing prices, inventory or performance information as Shipper's agent	Marketing Agreement: Free Consignment	Chile vs USA	Cherries, Apples
2011	18745	Quality issues	The Shipper was notified by the Receiver that there were condition and quality problems with the fruit after it was delivered Receiver's customers. The Shipper informed that he was unable to sell the product because the price was going down and asking for Shipper to agree to reduce the price. Receiver failed to obtain a timely federal inspection showing that there was a breach of the warranty of suitable shipping condition.	Sale memoranda. Fixed Price	MEX vs CAN	Minneola Tangelos (from PER)
2011	18729	Quality issues	The product suffered from a shortened shelf life due to temperature failures in transportation. Receiver claims a breach in the warranty of suitable shipping condition	Ns	USA vs CAN	Cherries
2011	18755	Failure to pay	Receiver's failed to show reasonable cause for failing to pay the shipments and the Shipper has proven acceptable proof of delivery and acceptance of the product.	Ns	USA vs CAN	Organic apples
2011	18718	Quality issues	The product was deemed to be outside specification and rejected. The cargo was loaded at a high temperature by the company -owner of the product- that contracted the transportation service.	Transportation contract	CAN vs CAN	Bagged salads
2011	18767	Quality issues	The Receiver's received the product "under protest" and shipped to its customer who rejected it due to poor quality. Receiver proposed to return the product. The Shipper refused. The Receiver paid 50% less than the fixed price, however since he accepted the product is liable for the full purchase price.	Fixed Price	CAN vs CAN	Asparagus
2011	18771	Dispute on contract	There is no proof of a contract. The type of agreement whether consignment or sale at a fixed price is not clear. The Receiver dumped and donated a part of the lot without providing evidence of an Official Inspection (CFIA dump certificate) substantiating the product had no commercial value.	In controversy	CAN vs CAN	Oranges (from ARG)
2011	18800	Quality issues	Product received Under Protest. Products were loaded at shipping point without proper precooling. And products were not handled correctly (beans and yams should not have been shipped together)	Ns	USA vs CAN	Green beans, Yams
2011	18793	Quality issues	CFIA official inspection disclosed 22 percent average defects on the product. Receiver's customer reported a net loss. Shipper claims Receiver's failure to provide a detailed account of sales.	Oral and written (contract ns)	USA vs CAN	Cantaloupes (from GTM)
2011	18805	Quality issues	Transportation company claims for payment, Respondent argues that freeze damage due to temperature in transit caused Receiver's customer rejection of the product.	Transportation contract	CAN vs CAN	Peppers, cucumbers
2011	18768	Quality issues	There are three issues in controversy: whether there was a breach of contract regarding the warranty of suitable shipping condition; whether there were a prompt and proper accounting demonstrating the damages and/or actual value of the goods; and the measure of damages.	Fixed Price	USA vs CAN	Grapes
2011	18717	Quality issues	Rejection due to high temperature transportation and resaled by the Receiver to a third without consent of the Shipper	Fixed Price	USA vs CAN	Cabbage

YEAR	DRC File No.	CLAIM	DESCRIPTION	CONTRACT	COUNTRIES	PRODUCTS
2010	18655	Dispute on contract	The transaction presented product shipments mistakes and confusion of the nature of the contract whether sale or consignment	Sale and Consignment	BRA vs CAN	Citrus
2010	18642	Failure to pay	Buyer did not fulfilled their financial obligations on the transactions	Sale, Fixed Price	CAN vs CAN	Mangoes, pinneaples
2010	18668	Failure to pay	Unpaid invoices	Sale, Fixed Price	CAN vs CAN	Onions
2010	18650	Quality issues	Breach of contract for a specific delivery time. Loss of the whole load due to delay in delivery.	Transportation contract	CAN vs CAN	Watermelons
2010	18709	Dispute on prices	Dispute on the price agreed by the parties. Price on invoices do not match to prices on the Purchase Order	Purchase order	CAN vs CAN	Onions
2010	18591	Quality issues	Tardy shipment at incorrect temperature for a product shipped from China to Vancouver	ns	CAN vs CAN	ns products from CHN
2010	18735	Quality issues	The product was delivered with 22% of defects	Consignment	CAN vs USA	Cantaloupes
2010	18713	Quality issues	The Receiver failed to notify the Shipper within 8 hours of arrival, to obtain a recognized inspection, to maintain proper holding conditions, to maintain identity of the lot.	Sale	CAN vs CAN	Onions
2010	18626	Failure to pay	Claimant is seeking full payment, respondent denies owing. The product exceeded the maximum percentage of allowable defects, and thus failed to meet good arrival guidelines	Sale	USA vs CAN	Nectarines
2010	18635	Quality issues	Product failed to make good delivery. The Shipper breached the warranty of suitable shipping condition, the Receiver failed to notify of the breach. Therefore, the Shipper is not entitled to a full measure of damages.	Changed from Sale to Consignment	USA vs CAN	Cherries
2010	18654	Dispute on prices	Part of the load was dumped due to condition defects at arrival. Claimant accept this, but consider that the sales prices for the rest of the load reported by the Receiver are too low.	Sale, Fixed Price	USA vs CAN	Lemons (from MEX)
2010	18656	Quality issues	Poor condition at arrival. Sale on FOB, product carrying was under Receiver 's responsabilitiy.	Sale, Fixed Price	USA vs CAN	Asparagus (from PER)
2010	18572	Quality issues	Poor condition at arrival. Parties dispute the responsibility of damages	Consignment	USA vs CAN	Strawberries
2010	18692	Dispute on prices	Inspections at shipping and arrival points certificate a difference between berry size contracted (XL) and the product shipped (size L), Parties diverge on the price renegotiation.	Memorandum of Sale	USA vs CAN	Grapes (from PER)
2010	18741	Failure to pay	Shipper alleges the full invoice amount remains due and unpaid, Receiver is entitled to recover its damages resulting from a breach in quality	ns	USA vs CAN	Lettuce
2010	18719	Quality issues	Rejection due to high temperature transportation, product had to be repacked and resaled. Losses of almost 50%	Transportation contract	USA vs CAN	Blueberries
2010	18731	Dispute on prices	The warranty of suitable shipping condition was breached by Shipper. Receiver initially rejected the load but subsequently agreed to handle the load for the Shipper's account (consignment). Shipper did not accept the extremely low prices	Changed from Sale to Consignment	USA vs CAN	Onions

ns=not specified; ARG=Argentina; CAN=Canada; CHN=China; GTM=Guatemala; MEX=Mexico; PER=Perú; USA=United States of America

Source: Own elaboration based on DRC's arbitration decision records <http://www.fvdrc.com>. Downloaded on July and September 2012

YEAR	DRC File No.	CLAIM	DESCRIPTION	CONTRACT	COUNTRIES	PRODUCTS
2009	18446	Failure to pay	Parties reached a binding settlement agreement during the course of the arbitration process. Respondent paid to claimant to settle the account.	ns	CAN vs CAN	ns
2009	18503	Failure to pay	Receiver did not pay the invoices arguing poor condition at arrival, however non official inspection was performed	ns	CAN vs CAN	Potatoes
2009	18502	Dispute on contract	The Receiver claims that the parties entered into an oral contract and requires payment for damages. The Shipper denies and failed to deliver the container	Oral contract	CAN vs CAN	Lemons (from ARG)
2009	18487	Quality issues	Poor condition at arrival, lack of traceability, controversy on damage responsibility	Consignment	CAN vs CAN	Potatoes
2009	18532	Quality issues	Quality defects at arrival. Inspection rejected by the Shipper due to delay of 2 days after reception of the product. No dump certificate was provided.	Consignment	CAN vs CAN	Cucumbers
2009	18529	Quality issues	Poor condition product upon arrival. Product was rejected by Receiver's Customer. Receiver returned the load to the Shipper and charged for storage & trucking. Shipper marketed the load and denies problems with quality	Memorandum of Sale. Fixed Price	CAN vs CAN	Clementines
2009	18605	Failure to pay	Claimant is demanding the remaining payment owned on 3 shipments	ns	CAN vs CAN	Pears
2009	18549	Quality issues	The transport company claims the payment for the transportation of a load. The Shipper alleges that the transportation company is responsible for the poor arrival condition of the product.	Transportation contract	CAN vs CAN	Cauliflower
2009	18571	Quality issues	Product was rejected by Receiver's Customer. Receiver returned the load to the Shipper and argues that Shipper accepted the quality problems on a phone conversation unsupported by documentation and denied by the opposing party	Sale, Fixed Price	CAN vs CAN	Asparagus
2009	18463	Failure to pay	The Shipper claims for full payment. The Receiver argues that this transaction would be closed within the context of amount owing from a previous shipment. The arbitrator do not find acceptable written documentation not a sworn statement, that there such agreement	Sale, Fixed Price	USA vs CAN	Mixed vegetables
2009	18475	Dispute on contract	There is no evidence of the type of contract the parties agreed and dispute on the price settlement. Therefore the arbitrator resorted to PACA Law "when there are no detailed accountings of the buyer's sales in "Open" or "Price After Sales" transactions, it is customary to calculate the amount due based on market prices reported by the USDA's Market News Service".	In controversy	USA vs USA	Mixed vegetables
2009	18552	Quality issues	The product arrived with condition problems. Receiver decided to change from sale contract to consignment. Shipper did not accept	Changed from Sale to Consignment	USA vs CAN	Broccoli
2009	18540	Failure to pay	The Receiver made a partial payment and unsuccessfully tried to prove (with no written evidence) a change in the agreement	Sale, Fixed Price	USA vs CAN	Cantaloupe
2009	18558	Quality issues	Quality and condition of the product did not met good arrival guidelines. Lot numbers from an earlier load ended up being inspected making the inspection inadmissible as evidence of the condition of the lot in dispute.	Sale, Fixed Price	USA vs CAN	Green peppers
2009	18587	Quality issues	Inspection at arrival revealed product condition problems. There is no evidence of a clear rejection of the product by the Receiver. Shipper seeks a fair payment after an allowance of money for decay.	Sale, Fixed Price	USA vs CAN	Onions

ANNEX 5.

Export Documentation

5.1. Customs Clearance (Chilean customs)

5.2. Bill of Lading

5.3. Phytosanitary Certificate

5.4. Certificate of Origin

5.5. Commercial Invoice

5.6. Packing List

5.1. Customs Clearance (Chilean customs)

[illegible]

5.2. Bill of Lading

5.3. Phytosanitary Certificate



GOBIERNO DE CHILE
MINISTERIO DE AGRICULTURA
SAG

CERTIFICADO FITOSANITARIO PHYTOSANITARY CERTIFICATE

SERVICIO AGRICOLA Y GANADERO
ORGANIZACION DE PROTECCION FITOSANITARIA DE CHILE
PLANT PROTECTION ORGANIZATION OF CHILE

Nº 0000354962

1. A : ORGANIZACION (ES) DE PROTECCION FITOSANITARIA DE / To : Plant Protection Organization (s) of

ESTADOS UNIDOS

DESCRIPCION DEL ENVIO / DESCRIPTION OF CONSIGNMENT

2. NOMBRE Y DIRECCION DEL EXPORTADOR (A) / Name and address of Exporter EXPORTADORA		3. NOMBRE Y DIRECCION DECLARADOS DEL DESTINATARIO (A) / Declared name and address of consignee
4. NUMERO Y DESCRIPCION DE BULTOS / Number and description of packages 1920, CAJAS	5. NOMBRE DEL PRODUCTO Y CANTIDAD DECLARADA / Name of produce and declared quantity PALTAS FRESCAS, 21504KG NETOS	6. NOMBRE BOTANICO DEL PRODUCTO / Botanical name of produce PERSEA AMERICANA
7. MEDIO DE TRANSPORTE DECLARADO / Declared means of conveyance ESTHER SCHULTE	8. LUGAR DE ORIGEN / Place of origin V REGION: SAN FELIPE DE ACONCAGUA ; REGION METROPOLITANA: MELIPILLA	9. PUNTO DE ENTRADA DECLARADO / Declared point of entry PHILADELPHIA
10. MARCAS DISTINTIVAS / Distinguishing marks MMAU104677-8 SEAL USDA 2298734		

11. Por la presente se certifica que las plantas, productos vegetales u otros artículos reglamentados descritos aquí se han inspeccionado y/o sometido a análisis de acuerdo con los procedimientos oficiales adecuados y se considera que están libres de plagas cuarentenarias especificadas por la parte contratante importadora y que cumplen los requisitos fitosanitarios vigentes de la parte contratante importadora, incluidos los relativos a las plagas no cuarentenarias reglamentarias.
This is to certify that the plants, plant products or other regulated articles described herein have been inspected and/or tested according to appropriate official procedures and are considered to be free from the quarantine pest specified by the importing contracting party and to conform with the current phytosanitary requirement of the importing contracting party, including those for regulated non-quarantine pest.

DECLARACION ADICIONAL / ADDITIONAL DECLARATION

PALTAS FRESCAS: "INSPECTED BY USDA-APHIS/SAG IN CHILE"
"THE FRUIT IN THIS CONSIGNMENT COMES FROM AN AREA THAT IS NOT UNDER QUARANTINE FOR MEDITERRANEAN FRUIT FLY (CERATITIS CAPITATA)".

TRATAMIENTO DE DESINFESTACION / DISINFESTATION AND/OR DISINFECTION TREATMENT

12. FECHA / Date XXXX		13. TRATAMIENTO / Treatment XXXX	
14. PRODUCTO (Ingrédients Actives) / Chemical (Active ingredient) XXXX	15. CONCENTRACION / Concentration XXXX	16. DURACION Y TEMPERATURA / Duration and temperature XXXX	
17. INFORMACION ADICIONAL / Additional Information XXXX			

18. NOMBRE OFICIAL AUTORIZADO (A) / Name of authorized officer

1 A 1 F

ORIGINAL



5.4. Certificate of Origin

United States - Chile Free Trade Agreement
CERTIFICATE OF ORIGIN
(Instructions on reverse)

Tratado de Libre Comercio Chile - Estados Unidos
CERTIFICADO DE ORIGEN
(Instrucciones al reverso)

1 Exporter's Name, Address and Tax Identification Number: Nombre, dirección y Número de Rol Único Tributario del exportador: EXPORTADORA RUT:		2 Blanket Period: Período que cubre: <table border="1"> <tr> <td>From</td> <td>D</td> <td>M</td> <td>Y - A</td> <td>To</td> <td>D</td> <td>M</td> <td>Y - A</td> </tr> <tr> <td>De</td> <td>28</td> <td>08</td> <td>2010</td> <td>A</td> <td>28</td> <td>08</td> <td>2011</td> </tr> </table>		From	D	M	Y - A	To	D	M	Y - A	De	28	08	2010	A	28	08	2011
From	D	M	Y - A	To	D	M	Y - A												
De	28	08	2010	A	28	08	2011												
3 Producer's Name, Address and Tax Identification Number: Nombre, dirección y Número de Rol Único Tributario del productor: A DISPOSICIÓN DE LA ADUANA		4 Importer's Name, Address and Tax Identification Number: Nombre, dirección y Número de Rol Único Tributario del importador: .L.C.																	
5 Description of Good(s) - Descripción del (os) bien (es)		6 HS Tariff Classification Clasificación Arancelaria	7 Preference Criterion Criterio para trato preferencial	8 Producer Productor	9 RVC VCR	10 Country of Origin País de origen													
1,920 CASES FRESH AVOCADOS		0804.4010	A	NO(1)	"NO"	"CL"													
11 I certify that: - The information on this document is true and accurate and I assume the responsibility for proving such representations. I understand that I am liable for any false statements or material omissions made on or in connection with this document; - I agree to maintain, and present upon request, documentation necessary to support this Certificate, and to inform, in writing, all persons to whom the Certificate was given of any changes that would affect the accuracy or validity of this Certificate; - The goods originated in the territory of one or more of the Parties, and comply with the origin requirements specified for those goods in the United States-Chile Free Trade Agreement, and unless specifically exempted in Article 4.11 of Annex 4.1, there has been no further production or any other operation outside the territories of the Parties; and This Certificate consists of _____ pages, including all attachments Este Certificado se compone de _____ hojas incluyendo todos sus anexos. Authorized Signature - Firma autorizada: _____ Company - Empresa: _____ Name - Nombre: _____ Title - Cargo: _____ COMERCIO EXTERIOR Date - Fecha: _____ Telephone - Teléfono: _____ FAX - Fax: _____ 1 9 2010 (56-032) 2171030																			
12. Observaciones																			



GOBIERNO DE CHILE
SERVICIO NACIONAL DE ADUANAS

NEXO VI
SOLICITUD DE CERTIFICADO DE CIRCULACIÓN DE MERCANCÍAS

1. Exportador (nombre, dirección completa y país)	EUR.1 N°. A 000.000	
	Véanse las notas del reverso antes de rellenar e impreso	
3. Destinatario (nombre, dirección completa y país) (opcional)	2. Certificado utilizado en los intercambios preferenciales entre y (indíquese el país, grupo de países o territorios correspondientes)	
	4. País, grupo de países o territorio de donde se consideran originarios los productos	5. País, grupo de países o territorio de destino
6. Información relativa al transporte (opcional)	7. Observaciones	
8) . Número de orden; marcas y numeración; número y naturaleza de los bultos (4) ; Descripción de las mercancías (5)	9. Masa bruta (kg) u otra medida (litros, m3, etc.)	10. Facturas (opcional)

(4) Si la mercancía no está embalada, indíquese el número de artículos o declárese "a granel", según sea el caso.



GOBIERNO DE CHILE
SERVICIO NACIONAL DE ADUANAS

13. SOLICITUD DE CONTROL, con destino a:	14. RESULTADO DEL CONTROL
	El control efectuado ha mostrado que este certificado (x): Fue expedido por la aduana o por la autoridad gubernamental competente indicada y que la información en él contenida es exacta ? No cumple las condiciones de autenticidad y exactitud requeridas (véanse notas adjuntas)?
Se solicita el control de la autenticidad y de la regularidad del presente certificado (lugar y fecha) Sello (Firma)	 (lugar y fecha) Sello (Firma) (*) Márquese con una X el cuadro que corresponda.

NOTAS

1. El certificado no deberá llevar raspaduras ni correcciones superpuestas. Cualquier modificación deberá hacerse tachando los datos erróneos y añadiendo, en su caso, los correctos. Tales modificaciones deberán ser rubricadas por la persona que cumplimentó el certificado y visadas por las autoridades aduaneras o por la autoridad gubernamental competente del país o territorio de expedición.
2. No deberán quedar renglones vacíos entre los distintos artículos indicados en el certificado y cada artículo irá precedido de un número de orden. Se trazará una línea horizontal inmediatamente después del último artículo. Los espacios no utilizados deberán rayarse de forma que resulte imposible cualquier añadido posterior.
3. Las mercancías deberán describirse de conformidad con la práctica comercial y de manera suficientemente detallada para permitir que sean identificadas.

5.5. Commercial Invoice

EXPORTADORA V

COMMERCIAL INVOICE

Santiago - Chile

N° 1082

Exp. N° 1082

Fecha/Date 28/08/2010

Cliente / Customer			
Direccion / Address			
Medio de Transporte Means of transportation	ESTHER SCHULTE	Pto. Embarque Loading Port	SAN ANTONIO
Conocimiento N° Bill of Lading N°	552140717	Fecha Date	28/08/2010
Peso neto Net Weight	21.504,00 KG.	Peso Bruto Gross Weight	22.848,00 KG.
Vencimiento Payment Due		Marcas Marks	
Pto. de Destino Discharge port			
Informe de Exp. N° Export License N°			
Volumen Volume			
Condiciones de Venta Sales Terms			
Cantidad Quantity / Units	Descripcion de la Mercaderia Description of Goods	Precio Unitario Unit Price US\$	Total Amount in US\$
1,920	Cases Fresh Avocados Variety: Hass	XX	XX
1,920	Total Cases MMAU 104677-8	Total CFR US\$	XX
	Country of Origin: Chile Are: Forty-eight thousand 00/100 US Dollars		

RECIBIDOR

5.6. Packing List

ANNEX 6.

Samples of Inter-firm agreements

6.1. Export-import agreements confirmed by e-mail

6.1.1. Special order (between long-term business partners)

6.1.2. Purchase order

6.2. Signed Contracts

6.2.1. Consignment (Guaranteed Minimum)

6.2.2. Sales Contract (Firm sale)

6.2.3. Free Consignment

6.3. Complementary documentation to whether signed or not signed contracts

6.3.1 Sales Account (Free consignment)

6.3.2 Pro forma invoice

6.1. Export-import agreements confirmed by e-mail

6.1.1. Special order (between long-term business partners).

Content:

Identification of the parties (confidential)

Product description

Shipping and arrival dates

Volume

Price

Contractual arrangement (Guaranteed Minimum)

Incoterm (CIF)

Destination

De:

Date: lun. 27/09/2010 17:45

À:

Cc:

Objet : cal 26 10k - llegada S44

Como lo conversamos hoy te confirmo el pedido especial siguiente :

- caja 10k cal 26
- salida S40 para llegada S44 en
- volumen 1 contenedor
- precio MG 13€ CIF rotterdam/Amberes

Saludos,

Shipper Instructions & Purchase Order

S.A., Inc.
XXXX

Saint Petersburg, Rusia
Tel XXX
Fax XXX
Mob XXXX
Skype:
Contacto: NN

DATE April 20 , 2010
ORDER NUM
SRS. XXX
DIRECTION XXX
PHONE XXX
PORT OF
DESTINY XXX
FREIGHT Collect
SURVEYOR Decofruit **
CLAUSULE
OF SALES F.O.B. Chile
TRADE CONDITION: Seller agrees to sell the fruit to Buyer subject to a Fixed Price basis (***)
TERM OF PAYMENT 50% against original documents by fax or e.mail
Balance 3 weeks after arrival on destination
SHIPMENT Week of April 26th

Order hereby puts record that the buyer, S.A., Inc.
carries out a supply and shows its will to acquire products indicated in the picture next
becoming responsible for all the damages that can cause their intempestiva retractacion ,

"SELLER shall install a temperature recorder either a strip chart recorder or an electronic device in order to control the temperature and monitor the cold chain during transportation. Each temperature recorder will be appropriately identified by a serial number and shall fulfill the conditions established by SELLER.

Check that temperature was adequate during the ocean or air freight transportation according to the instructions established by SELLER. A copy of the inspection certificate and the data from the temperature recorders shall be forwarded to the SELLER via fax within the 24 following hours to the referred inspection.

In case of: (i) delay at the arrival; (ii) during the inspection the BUYER detected some fruit with condition problems; or, (iii) the monitor recorders shows breakdowns on the temperature cold chain, BUYER shall immediately inform to the SELLER according to SELLER instructions and present a writing claim against the Shipping line, their agents, the Sea or Air Company or any other responsible, specifying the general nature of such loss or damage, within 48 hours since the merchandise has been put at the disposal of the BUYER, its agents or representatives. A copy of that claim shall be forwarded to the SELLER at the same day. The parties agreed that any claim presented after this time will be considered as an invalid claim".

** Decofruit will be the only organism authorized by the parties to carry out the examination of condition and quality of the fruit, reports lacking any validity expressed by another different entity.

Dispute resolution, in the event of any dispute arising out of or in connection with the present contract, any of the parties shall request from the other to start, in a first stage, a direct negotiation process (DNP) in order to solve such dispute between themselves and only in a second stage the DNP may consider including their respective attorneys. It is understood that direct negotiation process fails, when parties do not reach an agreement in a term of 20 days, or any other agreed, since one party requests the other to start the negotiation according to the provisions of the contract herein. If such negotiation fails such dispute shall be resolved by arbitration according to the Rules of International Commercial Arbitration Procedure of the Arbitration and Mediation Center of the Santiago Chamber of Commerce in effect at the time of its initiation, by one arbitrator appointed in accordance with the said Rules of Arbitration and any such decision shall be executed pursuant to the New York Convention 1958. It is important to be acknowledged that no remedy of appeal shall be admitted against the arbitrator's award.
(a) The number of arbitrators shall be one.
(b) The place of arbitration shall be Santiago, Chile.
(c) The language(s) to be used in the arbitral proceedings shall be English.

Governing Law. This Agreement shall be governed by and construed in descending order according with the UNCITRAL law, Unidroit Principles and Lex Mercatoria in effect on the date of this contract.

CANTIDAD	DESCRIPCIÓN	VALOR UNITARIO *** FOB CHILE (Per case)	TOTAL
2,280	Cases Grapes Red Globe , cat-1 Cal 23 mm	US\$ 10,84	

COMPANY SIGNATURE

6.1.2. Purchase order

Content:

Identification of the parties (confidential)

Product description

Schedule

Volume

Price

Term of payment

Contractual arrangement (Firm sale)

Incoterm (FOB)

Destination

Arbitration & Surveyor

6.2. Signed Contracts

6.2.1. Consignment (Guaranteed Minimum)

Content:

Identification of the parties: The agent (importer) and the exporter (confidential)

Product Description

Schedule (see the annex to the contract)

Volume

Price (Guarantee Minimum, details in the annex to the contract)

Term of payment

Contractual arrangement (Firm sale)

Incoterm

Destination

Arbitration & Surveyor

Force Majeur & Termination

FRESH FRUIT MARKETING AGREEMENT

This Agreement is made and entered into this _____ 2009, by and between xxxxx., hereinafter ("EXPORTER"), represented by Mr. xxxxxx with legal address at xxxxxxx, Chile, and xxxxxx, with legal address at xxxx, hereinafter ("AGENT"), represented by Mr. _____, with same legal address. The parties agreed on the following terms:

1. **Trade Conditions.** EXPORTER hereby appoints xxxxxx as its AGENT to handle, distribute and market on a Minimum Guaranteed basis on behalf of EXPORTER. EXPORTER agrees to deliver the Fresh Fruit on a FOB condition (Incoterm 2000) Shipping Departure (Either Valparaiso, San Antonio, or any other agreed by parties and A.M.B airport for air transportation).
2. **Minimum Guaranteed Price.** Final liquidation proceeds shall be not less than the minimum guaranteed price agreed upon both parties for season 2009/2010 established in "Exhibit C".
3. **Freight terms.** Prepaid.
4. **Payment.** As an advance payment, AGENT shall pay EXPORTER the amounts of 5 to 8 Euros per box according to the "Exhibit D".
5. **Final liquidation.** Upon the completion of sales, AGENT will remit a final sales report and final account sale to EXPORTER. The AGENT is hereby authorized to deduct the expenses described in the "Exhibit B" herein. Payment of the proceeds shall be paid to xxxxxx. in Euros on or before 30 days after acceptance by xxxxxx costumers and remitted via wire transfer according to the bank account and information set in "Exhibit A."
6. **Invoicing and Collections.** AGENT shall issue all invoices to customers for fruit sold, make all collections and receive all payments, and it is authorized to take in its own name all steps that in its judgments are necessary to enforce collections. AGENT assumes the entire credit risk of its sales of the Products.
7. **Reporting.** AGENT will send preferably a daily or at least a weekly sales report detailing the sales and prices for each variety and size of the Fresh Fruit and the remaining

11.3. In case of; (i) delay at the arrival; (ii) during the inspection the AGENT detected some fruit with condition problems; or, (iii) the monitor recorders shows breakdowns on the temperature cold chain, AGENT shall immediately inform to the EXPORTER according to the instructions set in "Exhibit E" and present a writing claim against the Shipping line, their agents, the Air Company or any other responsible, specifying the general nature of such loss or damage ,within 72 hours since the merchandise has been put at the disposal of the AGENT, its agents or representatives. A copy of that claim shall be forwarded to the EXPORTER at the same day. The parties agreed that any claim presented after this time will be considered as an invalid claim.

12. **Trademark.** The AGENT hereby acknowledges that EXPORTER is the owner of the trademarks xxxxxxxx" or any other agreed. Each party acknowledges and agrees that nothing contained in this Agreement or occurring hereunder shall grant or convey to any party any interest whatsoever in any trademark, trade name or copyright owned or used by the other party. AGENT hereby agrees not to use any trademark owned or licensed by EXPORTER without the prior written consent of EXPORTER.

13. **Termination of the Agreement.** The current term of this Agreement, shall be from _____ through and including _____. Notwithstanding with the later, any of the parties may terminate it by written notice sent a minimum of 30 calendar days in advance by certified letter. No indemnity shall be payable to the non-terminating party. In the event that Fresh Fruit is in journey to market destination or an existing stock of Fruit is pending to be sold, AGENT shall make available immediately to EXPORTER the Fresh Fruit and all commercial documentation including but not limited to Bill of Lading (B/L) that allow EXPORTER himself or through a representative to offer Fresh Fruit shipment consigned in the B/L for sale, cession or delivery. AGENT will be responsible for all damages caused by its delay in transferring all documents specially the B/L to the parties indicated by EXPORTER.

14. **Force Majeure.** The rights and obligations of the parties hereunder shall be suspended during any period that an event of Force Majeure has occurred and is continuing.

15. **Arbitration.** In the event of any dispute arising out of or in connection with the present contract, any of the parties shall request from the other to start, in a first stage, a

AGENT

IN WITNESS HEREOF, the parties have hereunto set their hand

For AGENT

Name: Mr.
Title: General Manager.
Date_____

For: EXPORTER

Name:
Title: General Manager.
Date: _____

EXHIBIT A

WIRE TRANSFER INSTRUCTIONS

Beneficiary	xxxx

EXHIBIT C
MINIMUM GUARANTIED PRICES

EXHIBIT E
INSURANCE COMPANY PROCEDURE

The information below, regarding temperature records, is what it is necessary to know to retrieve the TR (Temperature recording) reading for our records, which is especially necessary in case we have problems with the arrival condition.

Temperature recorder (TR) loaded in Full Container

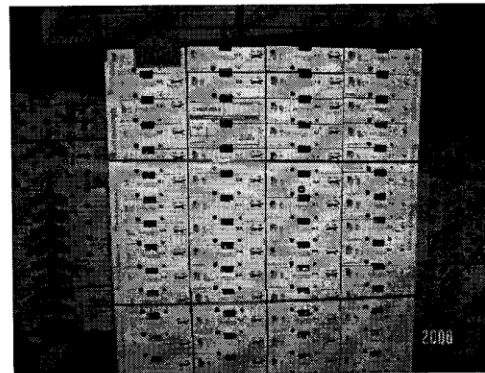
If the load arrives in full containers (FCL-FCL), our customers should take the TR out no later than 48 hours after the fruit has been put at the disposal of the AGENT, it's agents or representatives, and upload the reading of the TR onto website.

Temperature recorder (TR) loaded by plane

If the load arrives by plane, you should take TR out not later than 48 hours after the fruit has been put at the disposal of the AGENT, it's agents or representatives, uploading the reading of such TR into website;

Notes:

- The pallets that contain TR are marked "TR" with color adhesive.



- The definitive house packing list that we send will indicate those pallets having TR.
- In all cases, you must have the software & wires required to read the TR and consequently upload this reading into Sensitech website, if not please contact us.
- The optimum temperature for Stone Fruit, Grapes and Kiwis is within the range of -0,5°C & +0,5°C.

6.2.2. Firm Sale (Sale Contract)

Content:

Identification of the parties: The buyer (importer) and the exporter (confidential)

Product Description

Dates & Volume

Price (details in annex)

Term of payment

Contractual arrangement (Firm sale)

Incoterm

Destination

Arbitration & Surveyor

Force Majeure & Termination

Annex to the contract not included

FRESH FRUIT SALES CONTRACT

This Agreement is made and entered into this _____ 2009, by and between xxxxx., hereinafter ("EXPORTER"), represented by Mr. xxxxxx with legal address at xxxxxxx, Chile, and _____, with legal address at _____, hereinafter ("BUYER"), represented by Mr. _____, with same legal address. The parties agreed on the following terms:

1. **Trade Conditions.** EXPORTER hereby appoints _____ as its BUYER on a FIRM SALE. EXPORTER agrees to deliver the Fresh Fruit on a FOB condition (Incoterm 2000) Shipping Departure (Either Valparaiso, San Antonio, or any other agreed by parties and A.M.B airport for air transportation).
2. **FIXED Price.** Price agreed upon both parties for season 2009/2010 established in "Exhibit C".
3. **Freight terms.** Prepaid.
4. **Payment.** As an advance payment, BUYER shall pay EXPORTER the amounts of (Euros per box according to the "Exhibit D"). Payment of the proceeds shall be paid to xxxxxx. in Euros on or before ____ days after acceptance and remitted via wire transfer according to the bank account and information set in "Exhibit A."
5. **Insurance Policy.** The EXPORTER shall obtain insurance coverage, which shall have warehouse in Chile-to-destination port coverage.
6. **Quality Inspection and Notice of Loss, Damage or Delay.**
 - 6.1. EXPORTER shall install a temperature recorder either a strip chart recorder or an electronic device in order to control the temperature and monitor the cold chain during transportation. Each temperature recorder will be appropriately identified by a serial number and shall fulfill the conditions set in "Exhibit E".
 - 6.2. After every shipment arrives, within 72 hours since the merchandise has been put at the disposal of the BUYER, its agents or representatives, BUYER shall have all fruit

inspected by their respective Quality Control Company and check that temperature was adequate during the ocean or air freight transportation according the instructions set in "Exhibit E". A copy of the inspection certificate and the data from the temperature recorders shall be forwarded to the EXPORTER via fax within the 24 following hours to the referred inspection.

6.3. In case of; (i) delay at the arrival; (ii) during the inspection the BUYER detected some fruit with condition problems; or, (iii) the monitor recorders shows breakdowns on the temperature cold chain, BUYER shall immediately inform to the EXPORTER according to the instructions set in "Exhibit E" and present a writing claim against the Shipping line, their agents, the Air Company or any other responsible, specifying the general nature of such loss or damage ,within 72 hours since the merchandise has been put at the disposal of the BUYER, its agents or representatives. A copy of that claim shall be forwarded to the EXPORTER at the same day. The parties agreed that any claim presented after this time will be considered as an invalid claim.

7. **Trademark.** The BUYER hereby acknowledges that EXPORTER is the owner of the trademarks xxxxxxx" or any other agreed. Each party acknowledges and agrees that nothing contained in this Agreement or occurring hereunder shall grant or convey to any party any interest whatsoever in any trademark, trade name or copyright owned or used by the other party. BUYER hereby agrees not to use any trademark owned or licensed by EXPORTER without the prior written consent of EXPORTER.

8. **Termination of the Agreement.** The current term of this Agreement, shall be from _____ through and including _____. Notwithstanding with the later, any of the parties may terminate it by written notice sent a minimum of 30 calendar days in advance by certified letter. No indemnity shall be payable to the non-terminating party.

9. **Force Majeure.** The rights and obligations of the parties hereunder shall be suspended during any period that an event of Force Majeure has occurred and is continuing.

10. **Arbitration.** In the event of any dispute arising out of or in connection with the present contract, any of the parties shall request from the other to start, in a first stage, a direct negotiation process (DNP) in order to solve such dispute between themselves and

only in a second stage the DNP may consider including their respective attorneys. It is understood that direct negotiation process fails, when parties do not reach an agreement in a term of 20 days, or any other agreed, since one party requests the other to start the negotiation according notifying section and the provisions of the contract herein. If such negotiation fails such dispute shall be resolved by arbitration administered by the International Arbitration Chamber for Fruits and Vegetables in accordance with its published rules and procedures in effect at the time of its initiation, by one arbitrator appointed in accordance with the said Rules of Arbitration and any such decision shall be executed pursuant to the New York Convention 1958. It is important to be acknowledge that no remedy of appeal shall be admitted against the arbitrator's award.

(a) The number of arbitrators shall be one.

(b) The place of arbitration shall be Santiago Chile.

(c) The language(s) to be used in the arbitral proceedings shall be Spanish.

11. **Governing Law.** This Agreement shall be governed by and construed in descending order according with the COFREUROP rules, the Vienna Convention of 1980 for International Sale of Goods, Unidroit Principles and Lex Mercatoria in effect on the date of this contract.

12. **Incorporation of Attachments.** Each party agrees all Attachments and referenced in this Agreement are hereby incorporated into this Agreement.

13. **Notice and contact information.** All notice given according to this agreement shall be sent **in writing** to the parties address below.

EXPORTER xxxxx

BUYER XXX

IN WITNESS HEREOF, the parties have hereunto set their hand

For BUYER

For: EXPORTER

Name: Mr.

Name:

Title: General Manager.

Title: General Manager.

Date_____

Date: _____

6.2.3. Free Consignment

Content:

Main clauses as precedent samples

This case is an example of a signed contract that does not include an arbitration clause.

Guaranteed Minimum

Firm Sale (Sale Contract)

Free Consignment

ACUERDO DE COMERCIALIZACIÓN

ENTRE

Y

En Barcelona, a 22 de Febrero del 2010,

Acuerdo para la temporada 2010 entre
domiciliada en Barcelona, España, con CIF
representada por su Director Comercial Don
N.I.E. , y EXPORTADORA A , domiciliada en
del Santiago de Chile, Chile, con R.U.T
representada por su Don , con
Documento

1. Términos de compra-venta: EXPORTADORA
acuerda entregar la fruta a
Según los términos de la Libre Consignación

Moneda utilizada: EUR

2. Comisión: se cobrará una comisión de
% del precio de venta, comisión que quedará reflejada en la liquidación.

3. Pagos: pagará:

Adelanto de €/kn para la fruta de hueso y uvas,

€/kn para manzanas y peras,

€/kn para el kiwi,

El adelanto se emitirá a la llegada de la fruta y después de control de calidad.

En todos los casos el último pago será después de recepción de factura final en base a la liquidación final.

4. Volúmenes:

Se irán pactando a lo largo de la temporada.

5. Documentación: EXPORTADORA

deberá:

- emitir y enviar la documentación conforme a lo informado en Anexo 1 o 1bis según el caso.

- enviar el detalle del envío en archivo Excel según el modelo informado en Anexo 2

6. Calidad:

EXPORTADORA

deberá instalar al menos un termógrafo por contenedor para los envíos marítimos.

EXPORTADORA

deberá respetar las indicaciones recogidas

en el Anexo 3 y 3bis.

Toda la fruta será inspeccionada a la llegada por la firma según lo informado en anexo 4El coste de este servicio será recogido en la liquidación final.

7. Seguro Marítimo:

EXPORTADORA

deberá contratar un Seguro Marítimo

cuya cobertura comprenda desde almacén de depósito en el lugar de embarque hasta el almacén final de destino, e informará a

de la póliza de seguro contratada.

8. Reportes:

enviará a EXPORTADORA un informe semanal de ventas (ver modelo en anexo 5).

9. Liquidación Final:

emitirá liquidación final donde se descontarán todos los gastos soportados incluido euros/palet en concepto de manipulación (ver modelo en anexo 6).

10. Incorporación de los Anexos: Ambas partes acuerdan expresamente que todos los anexos respecto de los cuales se hace referencia en el presente contrato se encuentran incorporados y forman parte del mismo.

Además se incorporan los anexos 7, 8 no mencionados anteriormente que hacen referencia a información general de las dos partes.

11. Terminación del acuerdo: El presente contrato tendrá vigencia y regirá desde el 22 de Febrero del 2010 hasta e incluyendo el día 31 de Diciembre del 2010.

Por: _____

Nombre: Sr. _____

Por: EXP. _____

Nombre: Sr. _____

ANEXO 1

EMISION DE LA DOCUMENTACION MARÍTIMA

- **La factura comercial tiene que:**
 - ser emitida a nombre de: _____
 - reflejar: Nº de cajas, precio unitario, importe, peso bruto y peso neto por caja, condiciones de venta
- **Bill of Lading, Certificado de Origen, Certificado Fitosanitario:**
 - consignee y notify address: _____
 - los pesos deben ser conformes a los mencionados en la factura comercial

Les haremos responsables de cualquier desavenencia y gasto incurrido debido a una documentación incorrecta, inexacta, incompleta o tardía.

La documentación original deberá ser enviada a:

- Factura comercial: en todos los casos a | _____
- Bill of Lading, Certificado de Origen, Certificado Fitosanitario:
 - Embarques a Barcelona: _____
 - Embarques a Sagunto/Valencia: _____
 - Embarques a Tarragona: _____
 - Embarques a Algeciras: _____
 - Embarques a Tenerife: _____
 - Embarques a Vigo/Marin: _____
 - Embarques a Rotterdam: _____

Para otros destinos se informará en su momento.

Copia de toda la documentación debe ser adelantada por e-mail a su contacto del departamento Documentación que encontrará en el anexo 7, así como el nº de guía courier con la que viajan los originales.

Para cualquier aclaración que sea necesaria consulten a su contacto del departamento Documentación.

ANEXO 1BIS

EMISION DE LA DOCUMENTACION AEREA

- **La factura comercial tiene que:**

- ser emitida a nombre de:

- reflejar: Nº de cajas, precio unitario, importe, peso bruto y peso neto por caja, condiciones de venta

- **Air Way Bill, Certificado de Origen, Certificado Fitosanitario:**

- consignee:

- notify address:

Envíos a Madrid:

Envíos a Barcelona:

- los pesos deben ser conformes a los mencionados en la factura comercial

Les haremos responsables de cualquier desavenencia y gasto incurrido debido a una documentación incorrecta, inexacta, incompleta o tardía.

La documentación original deberá ser enviada a:

- Factura comercial: en todos los casos a:

- Air Way Bill, Certificado de Origen, Certificado Fitosanitario:

Embarques a Madrid:

Embarques a Barcelona:

Para otros destinos se informará en su momento.

Copia de toda la documentación debe ser adelantada por e-mail a su contacto del departamento Documentación que encontrará en el anexo 7.

Para cualquier aclaración que sea necesaria consulten a su contacto del departamento Documentación.

ANEXO 2

DETALLE DEL ENVÍO - PACKING LIST

[illegible]

ANEXO 3

PAUTAS DE CALIDAD

A - REQUERIMIENTOS DE SEGURIDAD ALIMENTARIA

1. Cumplimiento de los Límites Máximos de Residuos para España, que podemos obtener de la siguiente página web. http://ec.europa.eu/sanco_pesticides/public/index.cfm
2. Certificado de productos libres de OMG (Organismos Modificados Genéticamente). Modelo en Anexo 3bis.
3. En el caso de contener sulfitos o cualquier otro tipo de alérgeno, es necesario hacer referencia en el etiquetado.
4. Copia de los distintos certificados de calidad disponibles GLOBAL GAP, HACCP, ISO, etc.
5. Los Palets y Cajas de madera deben estar tratados fitosanitariamente, cumpliendo la normativa internacional para medidas fitosanitarias NIMF nº 15.
6. Cumplimiento de la legislación europea para la comercialización.

B - REQUERIMIENTOS DE ETIQUETADO

1. Todas las cajas deben ir etiquetadas con la siguiente información:
 1. Denominación de venta del producto, (especie y/o variedad)
 2. Categoría
 3. Calibre
 4. País de origen o procedencia
 5. Cantidad neta, si procede
 6. Identificación del envasador o exportador
 7. Identificación del importador o la empresa representante en la U.E. y en todos los casos la dirección
2. Todos los palets deben ir identificados con una etiqueta en cada uno de los 4 lados:
Debe ser una etiqueta adhesiva pegada aproximadamente a 1,5m del suelo con los siguientes datos:
 1. Denominación de venta del producto, (especie y/o variedad)
 2. Categoría
 3. Calibre
 4. El lugar de origen o procedencia
 5. Cantidad neta, si procede.

ANEXO 3

6. Identificación del envasador o exportador
7. Identificación del importador o la empresa representante en la U.E. (Unión Europea)
8. Código de barras SSCC en formato EAN128.

C - REQUERIMIENTOS DE PALETIZADO

1. La mercancía debe ir correctamente paletizada y flejada.
2. NO utilizar palets tipo "yugo", de cartón ni de madera de baja calidad.
3. NO confeccionar palets MIXTOS de varios calibres o variedades.

En el caso de incumplir estos procedimientos se procederá a la facturación de los costes producidos.

Re-paletizado € por Palet + € por paleta de madera usada.

Re-etiquetado € por palet

D – PAUTAS DE TRANSPORTE

1. Evitar que se transporten cajas sueltas o palets deformados que puedan provocar daños mecánicos al producto.
2. Fijar correctamente la carga para evitar caídas o movimientos bruscos durante el viaje que puedan provocar daños mecánicos al producto.
3. Se debe pre-enfriar la caja o contenedor antes de su carga.
4. No superar la altura máxima permitida de la carga para facilitar una correcta ventilación.
5. El equipo de refrigeración debe garantizar que la mercancía se encuentra a la temperatura óptima para cada producto
6. La caja del camión o contenedor debe estar exenta de olores extraños
7. No está permitido transportar productos no compatibles con cargas alimentarias.
8. No está permitido transportar productos incompatibles que acarreen problemas de maduración avanzada.
9. En el caso de cargas mixtas de producto compatible y solo por un periodo máximo de 4 días, la temperatura de transporte será la del producto más alto.

ANEXO 3 BIS

(devolver completado y sellado)

**Certificado libre de Organismos Modificados Genéticamente
(OMG).**

EXPORTADORA

Chile

Por la presente certificamos que todos los productos
comercializados a _____ no
proceden, ni contienen OMG.

EN Santiago,

FECHA: 22-02-2010

FIRMA

SELLO

ANEXO 4

CONTROL DE CALIDAD

El Control de Calidad se sistematizó al sentir la necesidad de protegernos nosotros como clientes y también Ustedes como proveedores. Por ese motivo hemos decidido que el control tenía que hacerlo una empresa independiente. La empresa a la que hemos recurrido es _____, líder en servicios de control de calidad en el mundo, con 19 años de experiencia al servicio de la industria frutícola.

A la llegada de la mercancía, los inspectores diagnostican la calidad y condición de frutas y verduras. Luego de la inspección, elaboran el respectivo informe de calidad que es enviado tanto a _____ como a Ustedes.

La fruta debe llegar en perfectas condiciones, tanto de calidad como de condición. La escala que trabaja _____ es:

Calidad	Condición
A : Muy bueno	1 : Muy Bueno
A- : Bueno	1,5 : Bueno
B: Regular	2: Regular
B- : Malo	2,5: Malo
C: No conforme	3: No conforme

Los controles que salgan con resultados A2; A-2; B1, y B1,5 implicarán decidir de mutuo acuerdo el destino de la fruta y las condiciones comerciales aplicables.

Los controles que salgan con resultados de A2,5; A3, A-2,5; A-3; B2; B2,5; B3; B-2,5; B-3; C1; C1,5; C2; C2,5; C3 suspenderán automáticamente los acuerdos comerciales previos.

_____ repercutirá en la liquidación del proveedor el coste de la inspección de _____.

La persona de contacto en _____ es _____ para cualquier consulta.

Tel. _____

CC

ANEXO 5

INFORME DE VENTA SEMANAL

CAJAS VENDIDAS DURANTE EL PERIODO		PRECIO DE VENTA POR CAJA		IMPORTE FACTURADO DE LA SEMANA		CAJAS VENDIDAS EN LOS PERIODOS ANTERIORES		IMPORTE FACTURADO EN LOS PERIODOS ANTERIORES	
Ped.	Material	Unidad	Cid. unid.	Cid. som.	Preo. vta. Imp. sem.	Cid. ant.	T. imp. on	Tol. clif. Tol. imp.	Tol. prom. Tol. sem.
10	107673	UVA SUZURONE L 4400 10 TREE 4.5K CL	3710	272	272	0	0	272	0.00
20	117414	UVA SUZURONE XL 10 10 TREE 4.5K CL	3710	1.632	138	1.496	1.496	1.632	0.00
30	107900	UVA SUZURONE AL 11 10 TREE 4.5K CL	3710	4.352	544	3.808	3.808	4.352	0.00
40	117488	NECTAR AUGUST RED 28 10 TREE 4.5K CL	3710	120	0	120	120	120	0.00
50	101779	NECTAR AUGUST RED 32 10 TREE 4.5K CL	3710	544	164	380	380	544	0.00
60	105780	NECTAR AUGUST RED 38 10 TREE 4.5K CL	3710	1.360	72	1.287	1.287	1.360	0.00
70	105781	NECTAR AUGUST RED 40 10 TREE 4.5K CL	3710	1.632	0	852	852	1.632	0.00
80	105780	NECTAR AUGUST RED 44 10 TREE 4.5K CL	3710	1.36	0	136	136	1.36	0.00
90	102286	CIR LARRY ANN 30 10 TREE 4.5K CL	3710	408	0	408	408	408	0.00
100	102285	CIR LARRY ANN 40 10 TREE 4.5K CL	3710	816	176	640	640	816	0.00
110	102272	CIR LARRY ANN 44 10 TREE 4.5K CL	3710	544	0	544	544	544	0.00
120	102273	CIR LARRY ANN 48 10 TREE 4.5K CL	3710	1.360	18	1.342	1.342	1.360	0.00
				12.488	1.383	11.113		12.488	0

AGUA SANTA
BARCO
CONT.
PISA
SEMANA

77

ANEXO 6

LIQUIDACION FINAL

EXPORTADOR

IMPORTE DE LA COMISIÓN

IMPORTE DE LA COMISIÓN

IMPORTE DE LA COMISIÓN

IMPORTE DE LA COMISIÓN

IMPORTE DE LA COMISIÓN

IMPORTE DE LA COMISIÓN

IMPORTE DE LA COMISIÓN

GASTOS SOPORTADOS AGRUPADOS POR CONCEPTOS									
Países	Dir-Km	Pre Eto	Ventn	Comislin	Arancel Pate	Descarga	Transporte	Comex.Fin	Calidad Cuos
CIR B. AMBER 048 4A CM 1 G	CL	BITO							Compu Eir Com Eir Bto
CIR B. AMBER 072 5A CG 1 C	CL	BITO							
CIR B. AMBER 068 5A CG 1 C	CL	BITO							
CIR B. AMBER 064 5A CG 1 C	CL	BITO							
CIR B. AMBER 060 3A CM 1 G	CL	BITO							
CIR B. AMBER 056 4A CM 1 G	CL	BITO							
CIR B. AMBER 052 4A CM 1 G	CL	BITO							
CIR B. AMBER 048 5A CM 1 G	CL	BITO							
CIR B. AMBER 044 5A CM 1 G	CL	BITO							
CIR B. AMBER 040 3A CM 1 G	CL	BITO							
CIR B. AMBER 036 4A CM 1 G	CL	BITO							
CIR B. AMBER 032 4A CM 1 G	CL	BITO							
CIR B. AMBER 028 4A CM 1 G	CL	BITO							
CIR B. AMBER 024 5A CG 1 G	CL	BITO							
CIR B. AMBER 020 4A CM 1 G	CL	BITO							
CIR B. AMBER 016 4A CM 1 G	CL	BITO							
CIR B. AMBER 012 4A CM 1 G	CL	BITO							
CIR B. AMBER 008 4A CM 1 G	CL	BITO							
CIR B. AMBER 004 4A CM 1 G	CL	BITO							
CIR B. AMBER 000 4A CM 1 G	CL	BITO							

6.3. Complementary documentation to whether signed or not signed contracts

6.3.1. Sales Account (Free consignment). This applies for all Free consignment arrangements whether signed or not

Telefoon +31(
 Telefax +31(
 K.v.K. Rotterdam
 ADLAMPD
 Internet
 E-mail

Comercial
 SANTIAGO DE CHILE
 Chili

Sales Account

Lot/invoice	28143	Carrier	Arimar B.V.
Lot	1	Departure date	11/09/2010
Comission	7,00	ETA	13/09/2010
Supplier ref		Tranport ref	MSC Bremen
Container Number	CRSU6027031	VAT Supplier	CL
Date of Account sale			

Quantity	Article	Country	Size	Qual	Mark	Returnable	Price	Total	Remark	
600	Kiwi Green MA	CL	30	1		Karton 50 x 30	11,00	6.600,00	Poor arrival	
480	Kiwi Green MA	CL	33	1		Karton 50 x 30	10,75	5.160,00		
720	Kiwi Green MA	CL	36	1		Karton 50 x 30	10,25	7.380,00		
360	Kiwi Green MA	CL	39	1		Karton 50 x 30	10,00	3.600,00		
240	Kiwi Green MA	CL	42	1		Karton 50 x 30	10,00	2.400,00		
								25.140,00		
2.400										
								Comission 7,00 %	1.759,80	-

<u>Costs</u>		
Seafreight	4.842,40	
Documents	35,00	
Handling	260,00	
Transport	291,96	
Discharging Harbour	275,20	
Custom clearance	50,00	
Residu analyses costs	48,00	
PD costs	50,00	
Survey	80,00	
5.932,56	5.932,56	-

<u>Costs</u>		
Advance payment	12.000,00	
12.000,00	12.000,00	-
EUR	5.447,64	

6.3.2 Pro forma invoice

PROFORMA Nº 274											
FECHA DATE 19-MAYO-2010 IMPORTADOR/DISTRIBUIDOR IMPORTER/DISTRIBUTOR S SUPERMERCADOS	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> PUERTO EMBARQUE PORT OF LOADING LOS ANDES - CHILE </td> <td style="width: 50%; text-align: center;"> PUERTO ENTRADA PORT OF ENTRY SÃO BORJA - BRASIL </td> </tr> <tr> <td style="text-align: center;"> COTIZACION QUOTATION 234 </td> <td style="text-align: center;"> ORDEN DE COMPRA PURCHASE ORDER 0 </td> </tr> <tr> <td style="text-align: center;"> VIA TRANSPORTE TRANSPORT MEANS TERRESTRE </td> <td style="text-align: center;"> FORMA DE PAGO PAYMENT TERMS 10 DIAS CONTRA DATA CRT. </td> </tr> <tr> <td style="text-align: center;"> CLAUSULA VENTA SALES CONDITIONS CPT </td> <td style="text-align: center;"> MONEDA CURRENCY DOLAR </td> </tr> </table>			PUERTO EMBARQUE PORT OF LOADING LOS ANDES - CHILE	PUERTO ENTRADA PORT OF ENTRY SÃO BORJA - BRASIL	COTIZACION QUOTATION 234	ORDEN DE COMPRA PURCHASE ORDER 0	VIA TRANSPORTE TRANSPORT MEANS TERRESTRE	FORMA DE PAGO PAYMENT TERMS 10 DIAS CONTRA DATA CRT.	CLAUSULA VENTA SALES CONDITIONS CPT	MONEDA CURRENCY DOLAR
PUERTO EMBARQUE PORT OF LOADING LOS ANDES - CHILE	PUERTO ENTRADA PORT OF ENTRY SÃO BORJA - BRASIL										
COTIZACION QUOTATION 234	ORDEN DE COMPRA PURCHASE ORDER 0										
VIA TRANSPORTE TRANSPORT MEANS TERRESTRE	FORMA DE PAGO PAYMENT TERMS 10 DIAS CONTRA DATA CRT.										
CLAUSULA VENTA SALES CONDITIONS CPT	MONEDA CURRENCY DOLAR										
Ver en Kilos Ver por Precio											
CANTIDAD (QUANTITY)	DESCRIPCION DE LA MERCADERIA (GOODS DESCRIPTION)	PRECIO UNITARIO (UNITED PRICE)	SUB-TOTAL								
500,0 Vtos.	0701900000 BATATA FRESCA CHILENA FORMATO: GRANEL-SACO CAT.-VAR.: COMERCIAL - 19.00000 CALIBRES: FORA DO PADRAO <i>Ver Etiqueta</i> PESO: 50,0 Kg. Neto. 50,2 Kg. Bruto.	US 24,00	US 12.000,00								
TOTAL PIEZAS (TOTAL PIECES)	PRE-PAID / CHILE /SÃO BORJA - BRASIL	FCA	US 12.000,00								
500,0 Vtos.	PAIS DE ORIGEN - ADQUISICION - PROCEDENCIA: CHILE FRUTA FRESCA DE ORIGEN CHILENO. 'FRUTA DESTINADA AO CONSUMO DA MESA IN-NATURA' MARCA: F A. KG. NETO 25.000,0 Kg. KG. BRUTO 25.100,0 Kg. 'A PISO'	FLETE	US 6.500,00								
		TOTAL CPT.	US 18.500,00								
ESTADO OPERAÇÃO TEMPO DA VIAGEM / SEMANA											
PORTO ORIGEM: LOS ANDES - CHILE		05/06/2010 23									
PORTO ENTRADA: SÃO BORJA - BRASIL		09/06/2010 24									
INTERNAÇÃO: SÃO BORJA - BRASIL		11/06/2010 24									
NOTIFICADO: C.D. WMS-PORTO ALEGRE-BRASIL		13/06/2010 24									
DESCARGA: C.D. WMS-PORTO ALEGRE-BRASIL		14/06/2010 25									
OBSERVACIONES: PAPA LAVADA & CEPILLADA SIN TOLERANCIA DE RESTOS DE TIERRA.											
DATOS BANCARIOS:											
BANCO: BA SWIFT: BCF DIRECCION: AV											

ANNEX 7.

Introduction Général, Conclusion Général et

Résumés des Chapitres en Français

1. INTRODUCTION GÉNÉRAL

Les exportateurs et les importateurs sont confrontés à des risques élevés inhérents au commerce international qui sont amplifiées lorsque les produits négociés sont très périssables et difficiles à mesurer, comme c'est le cas du commerce des fruits frais. Cette recherche analyse le cas du commerce international des fruits hors saison, du point de vue des entreprises exportatrices chiliennes. Le Chili est l'un des leaders de l'hémisphère sud dans le commerce des fruits puisqu'elle représente 50% des exportations et dispose d'une stratégie d'exportation ouverte, très concurrentielle et diversifiée. Cette recherche examine le type de contrats choisis par les exportateurs et les importateurs pour gérer les risques dans le commerce international de produits frais ainsi que les déterminants qui expliquent leur choix contractuel. Elle utilise le cadre théorique de la Nouvelle Économie Institutionnelle (NEI) et en particulier la théorie des coûts de transaction (TCE) d'Oliver E. Williamson et l'Analyse Institutionnelle (IA) de Douglass C. North. Le TCE donne une base appropriée pour expliquer les efforts d'économie des agents pour organiser et sécuriser les transactions. Cette théorie identifie comment les attributs des transactions, c'est à dire la fréquence, l'incertitude entourant l'échange et le niveau de spécificité des actifs des biens échangés, influencent le choix des formes alternatives de gouvernance (Williamson, 1996). Les contributions théoriques de North concernant l'Analyse Institutionnelle sont essentielles à la compréhension des pratiques contractuelles des entreprises, même au-delà du contrat lui-même. L'optique de cette analyse facilite l'interprétation de la gouvernance exportateur-importateur, à travers l'étude des institutions (règles) formelles et informelles qui encadrent les échanges commerciaux résultant d'une évolution historique. En utilisant la théorie du TCE ainsi que l'AI, nous pouvons avoir une vue plus complète sur comment des différents types de contrats peuvent constituer un moyen de contrebalancer les risques du commerce international des fruits.

Il y a peu des recherches empiriques qui portent sur le choix des contrats dans différents environnements institutionnels comme le cas des transactions d'exportation et d'importation. Cependant, on constate qu'ils présentent un intérêt croissant dans la littérature sur le commerce international qui utilise largement les principes de la TCE et la l'IA comme cadre analytique. Ce courant de recherche se concentre sur les mécanismes de gouvernance, le degré de formalisation du contrat et les déterminants de la performance (Aulakh & Gençtürk, 2008; Mysen, 2013; Burkert et al, 2012). Du point de vue empirique, il existe une abondante littérature concernant les contrats internationaux, mettant

principalement l'accent sur les pratiques générales du commerce et l'utilisation des modèles de contrat: approvisionnement de marchandises à long terme, accord de fabrication, distribution de marchandises, d'agent international, vente, distribution, représentant des ventes, joint venture, alliance stratégique, franchise, licences, fourniture internationale de services entre autres (CPI, 2012; ITC, 2010; Paveau, J., & Duphil, F. 2007, l'IICA, 2007). Même si cette littérature est dans une certaine mesure applicable aux produits frais, elle ne permet pas de comprendre la complexité des contrats interentreprises internationaux de produits périssables. Il y a peu de recherches sur le rôle des contrats interentreprises dans le commerce international des fruits ainsi que sur le rôle des mécanismes contractuels et non contractuels utilisés par les entreprises pour réduire le niveau de risques. Afin de découvrir la diversité de ces arrangements interentreprises et les facteurs qui influencent le choix, dans cette recherche, j'ai posé les questions dans l'ordre suivant: quels sont les types d'arrangements contractuels? Quels sont les éléments qui déterminent le choix de signer ou non un contrat? Quels sont les mécanismes qui sécurisent les transactions? Quels sont les éléments qui permettent de choisir les arrangements contractuels?

Pour répondre à ces questions, j'ai utilisé une méthodologie *multistrand* intégrant des méthodes qualitatives et quantitatives (Tashakkori et Teddlie, 2003). J'ai effectué une analyse des informations recueillies lors de 39 entretiens directs et approfondis avec les exportateurs, les importateurs et les fournisseurs de services (ports, certification, conseils juridiques, entre autres) et une enquête auprès de 65 entreprises d'exportation chiliennes. J'ai également analysé une base de données exhaustive des douanes chiliennes, pour la période 2009/2010 qui correspond à la campagne d'exportation au moment de l'enquête de terrain. Cette base de données enregistre 170370 expéditions de fruit du Chili vers toutes les destinations mondiales y compris une description détaillée (contrat, produit, variété). A l'aide d'une méthode qualitative j'ai aussi analysé 44 cas d'arbitrage international impliquant le commerce des fruits et légumes, ce qui a permis de révéler les principales sources de controverse entre les parties du contrat.

Les résultats montrent que: (i) les innovations institutionnelles et organisationnelles ont favorisé la croissance du commerce de fruits, (ii) les exportateurs (et les importateurs) ont adaptés divers moyens pour contrebalancer les risques du commerce des produits périssables et complexes à longue distance; ces mécanismes sont externes comme les inspections formelles, les assurances, les arbitrages et informels comme la confiance et la réputation; ils sont également internes comme les contrats eux-mêmes comme un mécanisme interne de coordination entre les exportateurs et les importateurs. En ce qui concerne les types de contrats, les résultats montrent que: (i) dans le cadre de transactions internationales, les parties supportent les transactions par des moyens oraux et écrits et cette documentation est juridiquement valable, (ii) l'utilisation de contrats signés est plus importante qu'on ne le croit dans l'industrie, mais leur rôle est plus orienté vers la réponse aux besoins de la coordination ou le respect des exigences institutionnelles, plutôt que vers la réduction des risques, (iii) les

contrats signés ne sont pas utilisés pour compenser les incertitudes de l'environnement, l'exportation vers des pays à risques, ou l'incertitude du comportement lorsqu'il s'agit d'un client douteux.

Qu'elles soient signées ou non, toutes les exportations de fruits chiliens sont négociés avec deux principaux types de contrats qui diffèrent selon les mécanismes de prix: (i) consignment (*consignment*) qui est un contrat moins complet parce que le prix n'est pas décidé ex-ante, (ii) vente ferme (*firm sale*) où les parties fixent un prix ex-ante ce qui fait de ce type d'accord, un contrat plus complet. Les estimations du modèle logit binomial montrent que le choix des contrats varie selon les pays de destination, ce qui s'explique par des facteurs institutionnels. Des niveaux élevés d'incertitude liés au risque des pays importateurs augmentent la probabilité de recourir à un contrat plus complet (vente ferme) plutôt qu'à un contrat moins complet (consignment). Les estimations de saisonnalité montrent que la probabilité d'exporter en consignment augmente lors du pic de la saison d'exportation. D'autre part, dans les situations de pénurie de produit, l'entreprise exportatrice serait dans une position favorable pour négocier un contrat plus complet. Lorsque des niveaux de périssabilité s'accroissent, les exportations en consignment augmentent. En revanche, pour des produits moins périssables tels que les fruits secs, fruits surgelés et noix, la probabilité de choisir un contrat en consignment diminue.

Cette recherche présente toutefois quelques limitations. Tout d'abord, elle se place principalement par rapport à l'exportateur et plus spécifiquement l'exportateur chilien, même si les entrevues prennent en compte le point de vue des importateurs. Ensuite, l'identité de la dyade d'exportateur et d'importateur n'est pas observable dans la base de données des douanes consultée pour l'analyse économétrique. Enfin, j'ai effectué une analyse transversale qui ne permet pas d'observer l'évolution des pratiques contractuelles.

Ce document est organisé en sept chapitres. Après cette introduction, le chapitre 2 décrit le contexte empirique de la thèse. Il est organisé en deux parties. La section 2.1 aborde les changements institutionnels dans le secteur des fruits chiliens en utilisant une perspective historique; la section 2.2 décrit le cadre institutionnel actuel pour les transactions internationales de biens en mettant l'accent sur les produits frais. Le chapitre 3 identifie les principaux problèmes qui affectent l'organisation de transactions exportateur-importateur, ce qui conduit à la formulation de questions de recherche empiriques. Le chapitre 4 développe le cadre théorique utilisé dans cette étude pour répondre à ces questions. Il fournit des éléments généraux de la nouvelle économie institutionnelle mettant l'accent sur l'économie des coûts de transaction (TCE) et l'analyse institutionnelle (IA). Le chapitre 5 décrit la méthodologie générale appliquée dans cette étude. Dans le chapitre 6, les résultats et les analyses sont présentés en trois parties, formatées comme des essais. La section 6.1 développe l'analyse des facteurs qui influencent le choix des contrats en fonction du degré de complétude; la section 6.2 porte sur la question du degré de formalisation quant à la signature ou la non signature des contrats; la section 6.3 explore les mécanismes formels et

informels pour protéger et faire respecter les transactions internationales de produits frais. Le chapitre 7 correspond à la conclusion générale de la thèse. Enfin, ce document comprend sept annexes: les annexes 1 et 2 contiennent deux articles cosignés élaborés dans le cadre de la recherche doctorale. Le premier article traite de la question des stratégies d'exportation au niveau de l'entreprise, le choix des spécialisations ou la diversification et le choix de la gouvernance entre le relationnel et les transactions *spot* (annexe 1). Le deuxième article analyse la dépendance exportateur-importateur et les facteurs transactionnels qui influent sur cette situation (annexe 2). L'annexe 3 présente les guides d'interviews et le questionnaire d'enquête utilisé dans ce travail. L'annexe 4 fournit des détails sur 44 arbitrages internationaux concernant les fruits frais et les différends commerciaux sur les légumes. L'annexe 5 présente les documents d'exportation utilisés par les exportateurs chiliens pour les ventes internationales. L'annexe 6 fournit quelques exemples de contrats d'import-export. Enfin, l'annexe 7 présente la traduction de l'introduction, conclusion et résumés des chapitres en français.

2. CONTEXTE

2.1. Les changements institutionnels dans les exportations de fruits chiliens

Cette partie vise à permettre une meilleure compréhension de l'évolution institutionnelle et du développement du commerce et de l'industrie d'exportation de fruits frais du Chili. J'ai d'abord présenté la situation actuelle, puis j'ai décrits les principaux événements historiques de l'industrie des fruits du Chili en utilisant une approche inspirée de celle de North (1991). Cette information constitue la base d'étude des pratiques contractuelles actuelles en 6.1.

Comment le Chili a-t-il atteint cette position dans le commerce international et quels sont les facteurs qui ont permis au pays d'atteindre cette performance? J'ai tenté de répondre en partie à ces questions dans la description historique qui suit.

2.3. Cadre institutionnel pour le commerce international des fruits

Les opérations d'import-export sont intégrées dans les sphères nationales et internationales des institutions publiques et le secteur privé, les règlements et les normes. Ces institutions se concentrent sur les aspects juridiques liés à l'échange commercial lui-même, et les règlements auxquels les entreprises doivent se conformer pour les produits en cause, par exemple, la qualité, les questions sanitaires et phytosanitaires, sociales et environnementales.

Les échanges internationaux de marchandises impliquent une succession de contrats: (1) les contrats d'import-export entre les entreprises pour la transaction elle-même, (2) les contrats collatéraux effectués par l'une des parties de la transaction avec des acteurs tiers de la chaîne d'approvisionnement, à savoir les transporteurs, les assureurs, les banques, etc., (3)

les règles connexes aux produits qui conduit à une sorte de contrat collatéral pour l'inspection et la certification sur les questions liées aux règlements tarifaires, aux mesures sanitaires et phytosanitaires, à la qualité, aux aspects sociaux, et aux questions environnementales (Fig. 3).

Afin de stimuler l'industrie des fruits chiliens et saisir les opportunités du marché international, le Chili a fait des efforts considérables pour (i) diversifier ses marchés d'exportation et son panier de produits, (ii) renforcer les capacités entrepreneuriales à un niveau collectif ferme, (iii) améliorer la logistique, les services commerciaux et les services publics-privés sanitaires et phytosanitaires, (iv) appliquer et respecter la législation internationale: ainsi, les entreprises opèrent dans un réseau d'institutions qui encadrent les transactions internationales. Cependant, les entreprises sont confrontées à des risques considérables. Comment réduire ces risques qui seront détaillés dans la section suivante?

3. ÉNONCE DU PROBLEME ET QUESTIONS DE RECHERCHE

Malgré le succès de la commercialisation des fruits du Chili, tel que présenté dans le chapitre 2, ce secteur agricole comporte des risques liés à la nature des produits. Les risques inhérents au commerce international ajoutent davantage de complexité dans l'entreprise. Dans cette section, sont présentées l'unité d'analyse, les risques, et les questions de la recherche empirique de l'étude.

En somme, les parties d'une transaction doivent faire face à l'incertitude liée à la qualité et les caractéristiques spécifiques du produit traité ainsi que l'incertitude des marchés internationaux. Elles sont également exposées à l'opportunisme et la manipulation de l'information en raison de la complexité liée à la mesure des attributs de fruits frais et à la capacité limitée des agents d'anticiper l'état du produit à un stade ultérieur de la chaîne de commercialisation. Les exportateurs et les importateurs sont également exposés à des changements de conditions économiques, politiques et institutionnelles de la scène internationale et aux risques de la faiblesse de l'environnement institutionnel qui pourrait affecter l'application des termes des accords. Après avoir défini le risque du commerce international des denrées périssables, les questions de recherche sont formulées. A la lumière du contexte décrit ci-dessus, l'objectif de cette thèse est d'étudier les relations contractuelles entre les exportateurs et les importateurs de fruits frais chiliens, avec un accent particulier sur leur rôle pour atténuer les risques émergents du commerce international. Par conséquent, la question de recherche principale est formulée comme suit: comment sont choisis les contrats exportateur-importateur pour contrebalancer les aléas du commerce international des fruits?

Cette question est divisée en quatre sous-questions spécifiques:

- 1) Afin d'avoir une meilleure connaissance de la diversité des modalités d'import-export, il convient de savoir: quels sont les types d'arrangements contractuels?
- 2) Pour identifier clairement et expliquer les facteurs que les entrepreneurs prennent en considération au moment de décider du type d'arrangement à utiliser, il faut préciser: quels sont les déterminants pour le choix des arrangements contractuels?
- 3) Pour avoir une meilleure compréhension du rôle des contrats et le degré de formalisation des opérations d'import-export (compréhension de formalisation comme l'acte de signer un contrat), il faut chercher à répondre à la question: qu'est ce qui détermine le choix de signer ou ne pas signer un contrat?
- 4) Enfin, pour identifier d'autres mécanismes contractuels et non contractuels pour réduire le risque d'opérations d'import-export, il convient de voir : quels sont les mécanismes employés pour sécuriser les transactions?

Dans ce qui suit, le cadre qui permet l'interprétation de ce questionnaire en termes théoriques est discuté, ainsi que la manière dont ce cadre théorique fournit les éléments pour répondre à ces questions.

4. LE CADRE THEORIQUE

Le but de cette section est de fournir une base pour le cadre théorique de ce travail. Cette étude est basée sur la nouvelle économie institutionnelle (NEI), en particulier l'économie des coûts de transaction (TCE) et l'analyse institutionnelle (IA). Elle ne cherche pas à donner une revue exhaustive des différentes approches pour étudier les contrats, ni à approfondir la connaissance du TCE ni celle de l'IA. Dans cette section, la revue de la littérature des deux branches se concentre sur sa pertinence pour l'analyse des contrats interentreprises. L'intérêt est (a) d'identifier les principales caractéristiques de ces arrangements, (b) découvrir les variables qui influencent le choix des différents types de contrats, et (c) identifier les moyens institutionnels et organisationnels pour l'exécution des contrats.

Une analyse de la gouvernance permet de comprendre comment sont arrangés les contrats utilisés par les exportateurs et les importateurs pour organiser les transactions de manière plus efficace. Ils réduisent les coûts de transaction en planifiant les opérations d'import-export, prennent des dispositions qui permettent aux parties d'avoir, d'une part, une flexibilité suffisante pour s'adapter au sein de l'évolution de l'environnement et la complexité de l'entreprise, tout en générant, ex-ante, les dispositions nécessaires pour assurer une allocation efficace des risques et des avantages, et d'autre part, d'atténuer les risques de comportement opportuniste, voire les risques de *hold-up* (Williamson 1975). Au niveau de l'analyse de la gouvernance, les attributs des transactions sont identifiés, c'est-à-

dire la fréquence, l'incertitude et la spécificité des actifs, qui influencent le choix des contrats dans les transactions internationales de fruits frais. Les deux derniers types d'attributs, en particulier les attributs d'incertitude sont ciblés, car déduction faite de la discussion empirique dans la section précédente, ils constituent une source importante de risques. Sont intégrés dans l'analyse, le rôle des attributs relationnels (la confiance, la méfiance, la réputation) qui peuvent influencer le choix des contrats.

Comme l'affirme Williamson (1996), les relations contractuelles au niveau de la gouvernance sont influencées par le niveau institutionnel et, par conséquent, ce niveau d'analyse est inclus pour pouvoir comprendre comment les parties se chargent des coûts de transaction, en particulier ceux de la mesure des biens, la protection des droits de propriété et l'exécution des contrats (North, 2005). Par conséquent, sont prise en considération les variables environnementales institutionnelles telles que les règlements, les normes, l'arbitrage, l'assurance, parmi celles qui fournissent la crédibilité des milieux d'affaires pouvant influencer le choix d'arrangements contractuels spécifiques.

5. METHODOLOGIE

Cette étude est basée sur le paradigme philosophique post-positivisme qui englobe les hypothèses du réalisme critique, de l'objectivisme et du multiplisme critique (Guba et Lincoln, 1994:108). Les questions de recherche sont traitées en utilisant un dispositif multi-méthodes, *multistrand*, intégrant des méthodes mixtes qualitatives et quantitatives (Tashakkori et Teddlie, 2003). Les données empiriques analysées dans les trois sous-chapitres de résultats ont été recueillies au moyen d'un processus de recherche en trois étapes: (i) dans la première phase correspondant à l'étude exploratoire, 39 entretiens semi-directifs ont été menés auprès des gestionnaires d'import-export et des fournisseurs de services pour identifier et décrire les pratiques contractuelles dans le commerce international des fruits, en mettant l'accent sur la perspective des exportateurs chiliens. Les données recueillies ont été analysées en utilisant les méthodes qualitatives du chapitre 3; (ii) dans la deuxième phase relative à l'étude de confirmation, 65 questionnaires d'enquête ont été remplis en présence de gestionnaires d'exportations chiliennes. Les données recueillies ont été analysées à l'aide de méthodes statistiques descriptives et non paramétriques dans le sous-chapitre 6.2 et ont servi à compléter l'analyse dans les sous-chapitres 6.1 et 6.3, (iii) dans une troisième phase, les résultats des phases 1 et 2 ont été triangulées avec un ensemble de données provenant des douanes chiliennes, contenant toutes les expéditions à l'exportation (N = 170370) ainsi que les contrats exportateur-importateur associés. Une analyse par régression logistique a été réalisée dans le sous-chapitre 6.1. En outre, 44 cas d'arbitrage international ont été analysés à l'aide d'une méthode qualitative utilisée dans le sous-chapitre 6.3. Cette conception de la recherche multi-méthodes augmente la puissance

des inférences et la fiabilité des résultats, fournissant de nouvelles explications du phénomène (Creswell et al. 2003, Tashakkori et Teddlie, 2003).

6. RESULTATS

6.1. DEGRÉ DE COMPLETUE DES CONTRATS DEVANT L'INCERTITUDE DE L'ENVIRONNEMENT : LE COMMERCE INTERNATIONAL DES PRODUITS PERISSABLES

Ce sous-chapitre examine le type de contrat - en fonction de son degré de complétude - choisi par les exportateurs et les importateurs pour faire face aux aléas du commerce international des fruits et des déterminants qui expliquent le choix des contrats.

La littérature économique et managériale a mis en évidence de vastes preuves empiriques et théoriques sur l'explication du choix des contrats interentreprises selon le degré de complétude (Joskow, 1988; Crocker et Reynolds, 1993; Saussier, 2000). En ce qui concerne l'analyse de la contractualisation dans le secteur agricole, la recherche a porté sur l'effet des coûts de transaction et le partage des risques sur les contrats fonciers (Cheung, 1969), le travail agricole, le métayage et l'intégration (Allen & Lueck, 2005), les contrats agricoles pour les produits orientés à l'export (Jaffee, 1992), les formes hybrides de gouvernance et les mécanismes privée de exécution des contrats comme dans le système d'étiquetage de l'industrie de la volaille française (Menard, 1996), l'utilisation des marques collectives pour signaler la qualité (Menard & Raynaud, 2010). Cette littérature se concentre principalement sur les contrats interentreprises, à l'intérieur du même environnement institutionnel. A ma connaissance, il y a peu de littérature sur le choix des contrats interentreprises dans un environnement internationale, bien qu'elle soit en augmentation.

Le commerce international des fruits frais présente un niveau de risque élevé en raison de la nature des produits (leur nature périssable) et des difficultés à contrôler et mesurer les attributs engagés (la qualité). L'incertitude est la question clé dans le commerce de fruits frais qui est affecté par l'incertitude externe telle que la volatilité des prix, la pression de la concurrence des autres pays exportateurs, les fluctuations de la demande, les niveaux de risque "pays" et l'incertitude interne telles que la possibilité de faire une sélection défavorable de partenaire commercial, le risque de comportements opportunistes et le défaut de paiement en cas d'insolvabilité ou de faillite.

Je recours aux conclusions de la phase exploratoire et l'enquête de terrain qui nous a permis d'analyser par une régression logistique une base exhaustive de données de douane chilienne pour la période 2009-2010. Ce sous-chapitre analyse comment l'usage de la vente ferme (contrat plus complet), et de consignment (contrat moins complet) varie selon la région de

destination, le risque du pays importateur et le type de produit traité (notamment en raison de sa nature périssable et de la saisonnalité).

Les estimations logit binomial montrent que le choix des contrats varie selon les pays de destination, ce qui s'explique par des facteurs institutionnels. Des niveaux élevés d'incertitude dus au risque des pays importateurs augmentent la probabilité de recourir à un contrat plus complet (vente ferme, avec prix fixe ex-ante) plutôt qu'à un contrat moins complet (consignation avec prix ex-post). Les estimations de la saisonnalité montrent que la probabilité d'exporter en consignation augmente pendant le pic de la campagne ; au contraire dans des situations de pénurie de l'offre, l'entreprise exportatrice serait dans une position favorable pour négocier un contrat plus complet. Le degré de périssabilité du produit est également statistiquement significatif. Les résultats économétriques montrent que lorsqu'il existe des niveaux plus élevés de périssabilité, il est plus probable d'exporter en consignation, et inversement pour des produits moins périssables tels que les fruits secs, fruits congelés et noix, la probabilité de choisir des contrats de consignation diminue.

Cette étude présente un certain nombre de limites. Elle n'inclut pas toutes les variables qui pourraient avoir une incidence sur le choix du contrat, à savoir: la volatilité du marché qui pourrait permettre une construction plus complète des variables liées à l'incertitude, ainsi que les variables relationnelles, car l'identité des importateurs n'est pas observable dans la base de données.

Cette recherche contribue à la connaissance du choix des contrats interentreprises dans le commerce de grande incertitude et de longue distance. Elle contribue également à l'analyse du rôle des variables environnementales sur le choix des contrats. A ma connaissance, des recherches antérieures concernent davantage l'impact de l'environnement institutionnel sur le degré de formalisation du contrat (par exemple, les contrats écrits ou signés et informels) que l'effet de l'incertitude environnemental sur l'analyse du degré de complétude du contrat.

6.2. LE CHOIX DE LA SIGNATURE D'UN CONTRAT (OU NON) DANS LE COMMERCE INTERNATIONAL DES FRUITS FRAIS

Ce sous-chapitre analyse le rôle des contrats et les facteurs qui influent sur la décision des gérants d'entreprises de les signer ou non. Un point de vue dominant des acteurs du commerce international des fruits frais, est que la contractualisation est essentiellement informelle. Mais que veulent dire les acteurs par informel? Une affirmation récurrente est que le "commerce des fruits frais est un négoce de parole et de confiance" donc, pas de contrats signés pour sauvegarder la transaction. Étant donné que les exportations de fruits frais ont atteint un montant non négligeable de 3,1 milliards de dollars (ODEPA, 2011) et que la plupart des exportations sont négociés à crédit (Aisen et al., 2012: 9), il est surprenant que les marchés aient tendance à être largement informels. Par conséquent, la motivation de

ce sous-chapitre est de comprendre comment un commerce aussi important que celui des exportations de fruits frais, peut reposer sur des contrats informels, sachant qu'il gère des produits périssables très complexes et qu'il est exposé aux risques du commerce de longue distance.

Le contrat est un concept complexe en théorie comme en pratique. Il est aussi la notion de contrat formel et informel. Qu'est-ce qu'un contrat? Qu'est-ce qui fait un contrat formel ou informel? Williamson (1991) illustre la différence entre le formel comme par exemple "accords écrits" et informels comme "amendements oraux" (ibid.: 271). La plupart de la littérature, y compris celle de Williamson, se réfère à un contrat quand il est exécutoire par une cour de justice. Palay (1985, 156) donne une définition claire de l'informel : accords conclus en dehors des canaux officiels. Il se réfère aux contrats officiels de fret ferroviaire. L'importance accordée par les entrepreneurs aux contrats signés a été décrit par Lyons (1994). La plupart des concepts récents associent des contrats formels et des contrats écrits ou explicites (Lusch & Brown, 1996 Aulakh & Gencturk, 2008). Dans ce cas, les contrats formels explicites ou écrits ne sont pas suffisants pour caractériser les accords d'import-export, puisque ces opérations sont soutenues par la communication écrite et la documentation formelle nécessaire pour le transit international des marchandises, qui sont juridiquement contraignantes. Pourquoi donc les pratiques contractuelles dans le commerce des fruits sont-elles considérées par les opérateurs comme majoritairement informelles?

Notre étude montre que les exportateurs considèrent qu'un contrat formel est un document signé par les deux parties de la transaction, qui sont l'exportateur et l'importateur, ce qui rejoint les conclusions de Lyon (1994). Ce résultat nous conduit à la question suivante: "Quels sont les facteurs qui influencent la décision des entrepreneurs de signer ou de ne pas signer un contrat?" Pour y répondre, une analyse qualitative et non paramétrique des entretiens individuels approfondis a été faite avec 40 exportateurs et importateurs, complétée par l'analyse non-paramétrique de l'enquête conduite avec 65 exportateurs de fruits, chiliens.

Nos résultats montrent que la décision de ne pas signer un contrat est déterminée principalement par le coût de rédaction et la négociation d'un document qui doit être toujours incomplet en raison de la difficulté d'anticiper le marché et les conditions du produit plusieurs semaines ou mois avant la conclusion de la vente dans le pays importateur. Ce résultat est cohérent avec la littérature. D'autre part, la décision de signer un contrat dépend, entre autres choses, des facteurs institutionnels, tels que les exigences juridiques ou administratives, et des relations et de la confiance. En ce qui concerne les facteurs relationnels, il existe un rapport inverse entre le choix de signer un contrat et la présence de relations d'affaires à long terme où la confiance est installée. Toutefois, lorsqu'à la place de la confiance, s'installe la méfiance, l'utilisation du contrat n'est pas le principal moyen de contrebalancer le risque de la transaction. Dans le même sens, lorsque les exportateurs traitent avec les pays importateurs à risque, un contrat signé ne semble pas être le meilleur

outil. Par conséquent, le rôle du contrat est plus proche d'un moyen d'améliorer la planification et la coordination de la transaction que d'un mécanisme de protection.

6.3. MECANISMES D'EXECUTION (*ENFORCEMENT*) DANS LE COMMERCE INTERNATIONAL DES PRODUITS PERISSABLES: LE CAS DES EXPORTATIONS CHILIENNES DE FRUITS FRAIS

Ce sous-chapitre décrit les mécanismes externes (formel et informel), ainsi que des mécanismes internes (le contrat) utilisés par les exportateurs chiliens pour sécuriser les exportations internationales de fruits. Sa construction suit l'approche du North (1991) et vise à donner une vue d'ensemble des pratiques contractuelles et leur évolution au fil du temps.

L'analyse de l'exécution des contrats est un élément fondamental pour le commerce international. Selon North (1991), deux problèmes principaux ont toujours surgi dans le commerce à longue distance: le problème de l'agence et de l'exécution du contrat. Le problème de l'agence était habituellement résolu par le recours aux institutions informelles telles que la confiance et la réputation. Comme les institutions informelles essentielles n'étaient pas suffisantes pour faire respecter les contrats dans des sites éloignés et avec les commerçants inconnus, des institutions formelles ont été créées, telles que les tribunaux de commerce, l'arbitrage, les assurances et les innovations de contrat. Ces institutions formelles ont permis de réduire des coûts d'information et incité à accroître les transactions internationales.

Les recherches économiques institutionnelles sur l'application des règles ont porté sur l'efficacité et les limites des institutions formelles et officielles comme les tribunaux (Williamson, 1996 ; 2001; Schwartz et al, 2003 ; 2010), les accords d'application automatique (Telser, 1980; Klein et Leffler, 1981), le rôle et les limites des mécanismes informels (Greif, 1993; Milgrom et al., 1990; Richman, 2005; Menard 2002; Dixit, 2003) et la complémentarité des institutions d'applications formelles et informelles (Poppo & Zenger, 2002; Zhou & Popoo 2010; Aulakh & Gençtürk 2008; Mazé & Ménard, 2010; Masten & Prüfer, 2012).

Une analyse institutionnelle historique des exportations de fruits frais du Chili vers le monde montre qu'auparavant, les exportateurs chiliens s'appuyaient sur des institutions informelles telles que les relations de confiance et les liens familiaux, pour accéder aux marchés internationaux. Au fur et à mesure que les exportations se sont diversifiées, les destinations et le nombre de participants ont augmenté, de nouveaux types d'opérateurs tels que les supermarchés sont apparus et l'usage d'institutions plus formelles, d'assurances de commerce et d'inspections, s'est développé. Comme le préconisait North, les contrats ont également évolué; l'usage de contrats plus complets a pris de l'importance, la contractualisation via la triangulation commerciale (contrat type *commenda*) a permis d'atteindre des destinations

éloignées et inconnues. La complémentarité des institutions formelles et informelles a rendu possible l'évolution du commerce international.

7. CONCLUSION GÉNÉRALE

Cette thèse de doctorat a examiné les relations contractuelles entre les exportateurs chiliens de fruits frais et les importateurs de contre-saison. L'étude a été conçue sur le paradigme philosophique post-positivisme et l'approche théorique de la nouvelle économie institutionnelle (NEI), en particulier de l'économie des coûts de transaction (TCE) et de l'analyse institutionnelle (IA). La principale question de recherche était: comment sont choisis les contrats exportateur-importateur pour contrebalancer les aléas du commerce international des fruits?

Après une analyse théorique et empirique itérative, cette question a été divisée en quatre sous-questions spécifiques: (i) quel est le degré de complétude de chaque type de contrat? (ii) quels sont les déterminants du choix du degré de complétude du contrat? (iii) quel est le degré de formalisation d'un contrat? (iv) quels sont les mécanismes employés pour sécuriser les transactions?

Pour répondre à ces questions, une multi-méthode intégrant des méthodes mixtes qualitatives et quantitatives séquentielles et simultanées a été utilisée (Tashakkori et Teddlie, 2003). Cette approche a permis d'améliorer les connaissances sur la façon dont les entreprises recourent à des choix contractuels alternatifs pour faire face à l'augmentation des risques du commerce international. Ces risques sont issus de transactions complexes dans de contextes à forte incertitude environnemental des pays importateurs, ainsi que de l'incertitude comportementale liée à la difficulté de mesurer et de manipuler des produits périssables, des conditions variables depuis la récolte jusqu'à l'arrivée et la vente sur le marché de destination, du risque d'une sélection défavorable du partenaire d'affaires et de la difficulté d'exécuter des contrats dans différents contextes environnementaux de marchés étrangers.

Les réponses aux questions de recherche doctorale sont exposées ci-après:

i) Comment les contrats exportateur-importateur sont-ils choisis pour contrebalancer les risques du commerce international des fruits?

Les entreprises exportatrices chiliennes ont recours à toute une gamme de mécanismes internes et externes complémentaires pour protéger et organiser les opérations et faire respecter les accords d'import-export. Les mécanismes externes sont informels, à savoir la confiance et la réputation, qui pourraient être complétés par des mécanismes formels, à savoir l'inspection, l'assurance-crédit commerciale et l'arbitrage. Les mécanismes internes

sont constitués de deux types d'arrangements contractuels: vente ferme et consignation. Ces arrangements contractuels qui sont soutenues par une documentation requise par les règles internationales régissant le commerce des marchandises, peuvent être confirmés par des contrats signés ou non signés.

Tout d'abord, examinons la sous-question (i) : quel est le degré de complétude de chaque type de contrat? Selon la littérature de TCE, les arrangements contractuels peuvent être classés selon leur degré de complétude en fonction de leurs mécanismes de prix, donc: premièrement, une vente à un prix fixé ex-ante (vente ferme) où l'importateur achète le produit est un contrat plus complet, deuxièmement, la consignation où le prix n'est pas fixé ex-ante, car il n'est connu qu'après la vente sur le marché de destination par l'importateur lui-même qui agit à titre d'agent commercial, est un contrat moins complet. Une variante du contrat de consignation est le prix minimum garanti, où les parties s'entendent sur un minimum et sur le maintien du potentiel d'amélioration des prix après la vente.

Puis la sous-question (ii) : quels sont les déterminants du choix du degré de complétude du contrat? Les estimations logit binomial sur la base des données personnalisées exhaustives chiliennes, relatives aux exportations de fruits de 2009 à 2010, ont montré que le choix des contrats varie selon les pays de destination. Les explications sont les suivantes:

- Le commerce des fruits est marqué par l'incertitude. L'incertitude de l'environnement explique la prédominance des contrats moins complets (en consignation), avec la participation de 60% des envois chiliennes dans le monde entier. Cependant, dans des conditions de hauts niveaux d'incertitude liés à l'importation dans des pays à risque, les exportations en consignation sont moindres alors que la probabilité de recourir à un contrat plus complet (vente ferme) augmente. Le type de canaux d'entrée sur le marché influe également sur ce choix. Dans les pays où les courtiers et les grossistes prédominent en tant qu'importateurs traditionnels, les exportations sont plus probables d'être traitées avec un contrat en consignation par exemple, comme aux Etats-Unis et aux Pays-Bas. Dans les pays où il ya une plus grande participation des supermarchés ou des entreprises importatrices qui fournissent les supermarchés, au Royaume-Uni par exemple, la probabilité d'exporter en consignation diminue alors que la probabilité d'exporter sur des contrats de vente augmente.

- La spécificité temporelle mesurée par le degré de périssabilité, la saisonnalité et le mode de transport influencent le choix du contrat. Les résultats ont montré que lorsque la périssabilité du produit est élevée, il est plus probable d'exporter en consignation, alors que le choix de la consignation diminue pour les produits avec périssabilité modérée ou faible. La saisonnalité influe sur le choix du contrat puisque la probabilité d'exporter en consignation augmente au moment du pic de production. Au contraire, dans les situations de pénurie de l'offre, l'entreprise exportatrice serait dans une position favorable pour négocier un contrat plus complet (vente ferme). Enfin, plus le transit du produit est élevé, plus la possibilité de variation des prix sur le marché de destination est grand ainsi que la perte de qualité entre le

moment de l'expédition des marchandises et celui de l'arrivée et de la livraison. Pour ces raisons, si le transport se fait par mer, le mode habituel de contrat est la consignation et lorsque le mode de transport se fait par avion, il est plus probable qu'il soit en vente ferme. Pour plus de détails, voir le sous-chapitre 6.1.

S'agissant de la question (iii) Quel est le degré de formalisation d'un contrat?

Les arrangements d'import-export pour les ventes fermes et en consignation sont confirmés par des contrats signés ou non signés. Les contrats qui ne comprennent pas l'échange bidirectionnel de signatures (Lyons, 1994), ont force de loi parce qu'elles sont soutenues par une documentation d'exportation (facture commerciale, dédouanement, entre autres). Les différences de contenu entre un contrat signé et un contrat non signé restent en général dans les dispositions de type légal tel que la juridiction, l'arbitrage, qui est, à quelques exceptions près, absent d'un contrat non signé. Cependant, pour résoudre les conflits, les exportateurs et les importateurs ont tendance à ne pas recourir à des tiers, comme des tribunaux ou des chambres d'arbitrage privé. Au contraire, ils optent pour des négociations bilatérales informelles. Si aucune solution n'est possible, surtout en cas de mauvaise foi, ils préfèrent mettre fin à la relation.

Parmi les raisons expliquant pourquoi les exportateurs ne signent pas de contrat, on peut citer: le besoin de flexibilité pour s'adapter aux conditions changeantes, le coût et le temps requis pour élaborer et négocier un contrat, les habitudes commerciales actuelles et l'usage du commerce principalement associé à des contrats non signés. D'autre part, les facteurs qui influencent le choix de signer un contrat sont les suivants:

- L'incertitude de l'environnement. Lors de l'exportation vers les pays à risque, marqués par de faibles environnements d'application de la loi et d'instabilité politique ou économique, les exportateurs choisissent de ne pas signer un contrat car un contrat signé n'est pas considéré comme un moyen efficace pour sécuriser les transactions.

- Le canal d'entrée sur le marché dans le pays importateur influe sur le choix de signer un contrat. Il est corrélé positivement lorsque l'exportateur fait directement affaire avec le supermarché, et négativement quand il fait affaire avec un importateur traditionnel tel qu'un grossiste. En accord avec Aulackh & Gençtürk (2008), il existe une corrélation positive et significative entre un contrat signé en raison de la politique de l'entreprise exportatrice et un contrat signé en raison de l'importation des exigences du pays.

- L'incertitude comportementale. Le résultat est statistiquement significatif. Lorsque l'exportateur fait confiance à l'importateur, l'incertitude comportementale est faible et la corrélation avec le choix de signer un contrat est négative. Cela confirme l'hypothèse que la confiance est une garantie de protection qui peut remplacer le recours aux contrats signés. Lorsque l'exportateur n'a pas d'expérience dans des transactions avec l'importateur, la confiance n'est pas établie, ni même la méfiance, l'incertitude comportementale est modérée

et la signature de contrats est assez probable. À l’opposé, en présence de niveaux élevés d’incertitude comportementale, lorsque l’exportateur se méfie de l’importateur, la corrélation avec le choix de la signature est positif bien que faible, car il est moins probable pour l’exportateur de faire affaire avec un importateur non fiable.

- Un résultat surprenant, concerne l’augmentation du risque de la transaction, en raison du degré de caractère périssable du produit et du risque lié au pays importateur : la probabilité de la signature d’un contrat n’est pas significative. Pour plus de détails, voir le sous-chapitre 6.2.

Pour ce qui concerne la dernière question: quels sont les mécanismes pour faire respecter les contrats?

A la manière de North, l’évolution des pratiques contractuelles a été décrite. Les exportations chiliennes étaient traditionnellement régies par des contrats de consignation et des mécanismes informels tels que la confiance, pour sécuriser les transactions. Alors que le commerce s’est renforcé et que de nouveaux acteurs ont fait leur apparition, les innovations institutionnelles ont développé: (i) les innovations du marché, tels que le recours à des contrats de type alternatif pour diminuer les risques, à savoir le contrat de vente, l’utilisation d’un agent tiers, le recours au contrat *commenda* pour contrebalancer le risque lorsqu’on traite avec des importateurs inconnus, (ii) les mécanismes d’innovations formelles (l’assurance de crédit commercial pour les non-paiements, ainsi que les services d’inspection aux ports) destinés à réduire le risque lié à la qualité qui est la principale source de conflits internationaux dans ce secteur et les organismes officiels ou privés d’arbitrage international. Le choix des marchés et des mécanismes formels sont complémentaires aux mécanismes informels qui permettent de réduire les risques commerciaux et d’améliorer le caractère exécutoire des contrats internationaux. Pour plus de détails, voir le sous-chapitre 6.3.

7.1. Apports théoriques de la thèse de doctorat

Cette recherche contribue à la compréhension du rôle de l’incertitude environnementale, comportementale et temporelle des actifs spécifiques, à la fois des variables essentielles en agriculture et en commerce international des produits périssables. Elle contribue également à la littérature sur le degré de formalisation et sur l’exécution des contrats internationaux.

La hausse des niveaux d’incertitude émanant de l’incertitude de l’environnement dans les pays importateurs à risque et de l’incertitude du comportement de certains partenaires commerciaux plutôt méfiants, ne conduit pas à recourir à davantage de signatures de contrats formels. Cette constatation rejoint les recherches récentes de Zou et Poppo (2010). La confiance est de nature calculatoire comme le déclare Williamson (1996), car elle émerge dans le secteur du commerce de fruits principalement à partir de considérations objectives de la performance et de la compétence. Cette confiance intégrée aux relations à long terme est une garantie efficace de protection qui peut se substituer à l’utilisation de contrats signés, et

explique pourquoi l'utilisation de contrats signés diminue à mesure que la relation évolue. Cette notion rejoint le courant de la littérature soutenant les contrats relationnels (Macaulay, 1963; Macneil, 1978; Palay, 1985; Lyon, 1994; Poppo & Zenger, 2002; Aulakh & Gençtürk, 2008). Toutefois, en cas de niveaux élevés d'incertitude, les exportateurs de fruits utilisent des remboursements anticipés comme garantie ou des versements d'acomptes ainsi que des contrats plus complets, tels que les contrats de vente dans pour protéger les transactions et réduire les coûts de transaction (Williamson). Outre les mécanismes formels externes comme l'assurance-crédit commerciale qui est un mécanisme relativement nouveau pour réduire le risque de non-paiement, il y a aussi l'utilisation des services publics et privés d'inspection (dans les ports d'origine et de destination) afin de réduire le risque de problèmes de qualité qui se révèlent être la principale source de conflits interentreprises internationales. Enfin, il y a l'utilisation de la triangulation par un entrepreneur tiers, qui est une coordination type *commenda*, pour réduire le risque de traiter avec les importateurs ou destinations inconnus tout en réduisant le coût de recherche, control et coordination. Ces moyens ont permis d'améliorer le développement des échanges (North). En ce qui concerne les contrats *commenda*, il ont, semble t-il, été étudiés dans le cadre du commerce médiéval (North, 1991; Harris, 2009; Raymond & Lopez, 2001) alors qu'aucune étude récente n'a porté sur l'évolution et l'utilisation de ce type de pratique de contrat à risque partagé.

Concernant la spécificité temporelle mesurée par la périssabilité des produits, les résultats ont montré qu'il est plus probable que les produits plus périssables soient exportés en utilisant des contrats moins complets, c'est à dire en consignment. Ceci nous conduit à rejeter l'hypothèse indiquant que plus la spécificité des actifs est élevée, plus le degré de complétude du contrat est grand (Saussier, 2000; Ménard, 2002). Cela peut s'expliquer par le fait que la forte périssabilité génère un cycle de commercialisation court. Par conséquent, une fois que le produit est récolté puis expédié, les possibilités de stockage sont extrêmement limitées et les agents économiques sont plus vulnérables face à l'incertitude de l'environnement et du comportement. Selon Poppo & Zenger (2002) l'effet de la spécificité des actifs sur les contrats, change lorsque les niveaux d'incertitude sont élevés. Dans cette situation, les gestionnaires ont tendance à utiliser la gouvernance relationnelle au lieu de contrats plus complets ou des contrats formels. Ménard (2002) affirme que le degré de complétude du contrat diminue avec l'incertitude, ce qui est cohérent avec l'affirmation des importateurs que la courte durée de vie des fruits génère une haute volatilité de prix et qu'ils ne peuvent donc pas supporter les risques d'un engagement sur les prix ex-ante par des contrats plus complets (par exemple la vente de l'entreprise). Une autre variable pertinente liée à la durée, est la saisonnalité du produit. Les résultats ont montré que le choix du contrat peut varier au cours d'une année en raison de la demande et des variations de l'offre. Selon les résultats économétriques, il est plus probable d'utiliser un contrat moins complet (en consignment) au moment du pic de production et inversement, dans des situations de pénurie de l'offre, l'entreprise exportatrice serait dans une position favorable pour négocier un contrat plus complet comme une vente ferme, ce que confirment les informations

fournies par les exportateurs lors de la phase exploratoire et confirmatoire de cette recherche.

Cette recherche vise également à attirer l'attention sur la simplification excessive des concepts de contrats formels et informels. La plupart des ouvrages abordant ce sujet ont mis l'accent sur les transactions dans le même pays qui sont soumis aux mêmes contextes institutionnels. Cela pourrait expliquer dans une certaine mesure pourquoi les recherches théoriques et empiriques ont généralement résumé la définition de formel (écrit et exécutoire) et informels (orale et non-exécutoire). Cette approche simplifiée ne suffit pas à caractériser les contrats d'import-export soutenus par des documents juridiques. En ce sens, Lyon (1994) a fait la distinction entre les contrats signés et les contrats non signés, que l'on trouve dans cette thèse.

Cette étude contribue également à la littérature économique et de gestion qui a concentré l'analyse sur le rôle des supermarchés, les effets des exigences en matière de sécurité sanitaire des aliments et sur les changements de la gouvernance dans les chaînes d'approvisionnement (Chabaud et Codron, 2005; Berdagué et al, 2005 ; Reardon et al, 2007; Beck et al, 2007; Havinga, 2012; Rouvière et Caswell, 2012).

7.2. Implications managériales

Considérant que les pratiques contractuelles des entreprises internationales de fruits et légumes, ne sont pas suffisamment documentées, cette recherche contribue à la connaissance des pratiques contractuelles pour atténuer les risques commerciaux. En outre, elle fournit des preuves solides sur l'évolution que ces pratiques présentes dans des environnements institutionnels changeants, tels que l'émergence de l'augmentation des normes et réglementations, le rôle des nouvelles pratiques entre les opérateurs de marché dans les pays importateurs, notamment les supermarchés ou autres acheteurs particuliers. Mais ce travail contribue en plus à la connaissance de nouveaux entrepreneurs qui débutent dans l'exportation, en particulier les petites et moyennes entreprises qui ont plus de difficultés à supporter le risque inhérent à l'internationalisation. Ce travail peut aussi être très utile aux producteurs de fruits qui n'exportent pas directement, car il fournit des informations sur la façon dont fonctionnent les affaires d'import-export, les risques encourus dans le commerce international et ses effets sur les pratiques contractuelles qui affectent également la forme des contrats entre producteurs et entreprises exportatrices.

Sachant que le Chili est une référence mondiale dans le développement de la filière des fruits et qu'il sert de référence pour d'autres pays en développement (Pavez, 2010), cette recherche doctorale contribue à la compréhension de l'évolution de la structure institutionnelle du secteur chilien des fruits par le biais de la mise en œuvre des politiques agricoles et commerciales, des plans et des instruments qui renforcent les capacités

entrepreneuriales au niveau collectif et l'amélioration des services publics-privés logistiques, commerciaux, sanitaires et phytosanitaires. Par conséquent, cette étude pourrait être bénéfique non seulement pour les décideurs au niveau du secteur privé, mais aussi pour le pouvoir publiques.

7.3. Limites

“There is a model, then regressions, followed by conclusions. In almost all cases it will be found that statistical results confirm the theory. Sometimes it does happen that some of the expected relationships are not statistically significant, but they will usually be found to be in the right direction. And when results are obtained that do not square with the theory, which occasionally happens, these results are not usually treated as invalidating theory but are left as something calling for further study.”

Coase, 1994:26

Il est inévitable d'avoir à l'esprit cette citation lorsqu'on considère les limites de cette thèse. Même si les termes utilisés par Coase concernent l'approche épistémologique de la théorie économique dominante, en particulier le paradigme positiviste de Friedman. Même si cette thèse utilise une approche post-positiviste avec des méthodes mixtes, le fait est qu'un modèle a été construit, puis une régression, une corrélation non-paramétrique, une analyse descriptive et tous, séparément ou ensemble, étaient incomplets, aussi incomplets que le sont les contrats et pour les mêmes raisons: la rationalité limitée et l'impossibilité d'anticiper et de saisir toutes les variables qui expliquent les phénomènes. Par conséquent, je vais inévitablement finir par appeler un complément d'étude.

Les limites de cette recherche doctorale sont tout d'abord dépendantes de la base de données des douanes chiliennes. Bien qu'exceptionnelle, cette base ne contient pas l'identité de l'importateur, donc la relation dyadique n'a pas été incluse dans l'analyse économétrique. Ensuite, l'analyse transversale ne permet pas d'évaluer l'évolution des pratiques contractuelles. En troisième lieu, l'étude se situe principalement du point de vue de l'exportateur. Enfin, les variables pertinentes telles que l'utilisation de la marque de l'importateur, un fort actif spécifique, n'a pas été incluse dans le modèle économétrique en raison du manque d'information.

Les recherches futures pourraient tester l'influence de l'évolution de la relation exportateur-importateur sur le choix des contrats et sur la performance. D'autres variables pertinentes qui, selon l'enquête de terrain, influeraient sur le choix du contrat, pourraient être prises en compte, à savoir la volatilité des prix, les variables liées à l'incertitude du comportement qui

permettraient une construction plus complète de la variable incertitude, les caractéristiques des pays importateurs, comme la distance , la similitude ou de différences culturelles, qui augmenterait les coûts de la coordination et de la surveillance (Masten, 2000). D'autres études pourraient porter sur la nouvelle génération de petites et moyennes entreprises de types multinationaux qui ont émergé pour traiter la spécificité temporelle des produits très périssables de haute valeur commerciale (e.g les fruits rouges). Enfin, il faudrait aborder en détail l'étude de l'évolution des pratiques contractuelles de commerce avec une perspective historique et également l'impact des non-paiements et des faillites.