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**Title: Country of origin and its effect on consumers'
purchase intention of Norwegian salted and dried cod:
A study of the Brazilian market.**

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Ålesund, December 2018, Juliana Costa Figueira Pinto.

Abstract

Purpose: The aim of this study is to assess what are the drivers of the purchase intention of salted and dried cod for Brazilian consumers, and how country of origin affects the purchase intention of Norwegian salted and dried cod for Brazilian consumers. Additionally, this study also investigates whether Brazilian consumers can differentiate Norwegian salted and dried cod from the others.

Design/methodology/approach: Data collection was triangulated through the use of quantitative consumer survey and qualitative in-depth interviews with consumers and other agents in the distribution chain.

Findings: Qualitative results show that quality and price are the two main drivers of purchase intention for Brazilian consumers of salted and dried cod in general, and that product features, such as color and thickness, are also imperative for the consumers when assessing quality. Quantitative results support these findings, given that results show that only the product features impacts the purchase intention of salted and dried cod in general for Brazilian final consumers. Findings also indicate that the majority of the Brazilian final consumers cannot differentiate the Norwegian salted and dried cod from the others. Qualitative results also show that only high-class consumers or those who have knowledge of salted and dried cod give importance to the origin of the product. Quantitative results corroborate this premise, given that, from the sample that could differentiate the Norwegian salted and dried cod from the others, only product category image was shown to have a significant positive effect on purchase intention. Furthermore, qualitative findings highly suggest that retailers care more about the origin than final consumers, and clearly vindicate that the salted and dried cod market in Brazil is seasonal, with a larger demand during Christmas and Easter. It can be also inferred from the results that the consumers with knowledge associate Norwegian salted and dried cod with quality.

Research limitations: Limitations of this study relates to the small sample size used to assess the second research question in the quantitative analysis, the non-normally distributed errors of the data used for some regression analysis, as well as the randomness and generalizability of the quantitative data. Another limitation is the fact that the survey was concentrated in the Southeast region, and that three of the segments of qualitative informants are not a fair representation of their respective populations.

Practical implications: A segmentation of the marketing strategies towards Brazilian consumers should be made. Marketing strategies should also target other special dates besides Christmas and Easter, such as Mother's Day. Exporters should provide information to the consumers about the different species. Lastly, Norwegian companies must start to consider how to deliver more convenient products to the Brazilian market for an affordable price.

Keywords: Salted and dried cod, Norwegian salted and dried cod, Brazilian market, country of origin, purchase intention.

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1. Introduction

Brazil is an attractive market for exporters, being the world's 5th most populated country (United Nations, 2017) and its 8th largest economy when it comes to nominal Gross Domestic Product and Purchase Power Parity (International Monetary Fund, 2017). Cod is one of the main fish products that Brazil imports. From the different types of cod products, the salted and dried cod is the most common. Brazil is the 2nd largest importer of the Norwegian salted and dried fish, in both quantity and value. Norway is the leading exporter of salted and dried cod to Brazil, followed by Portugal and China (Camargo Neto et al., 2016). However, there has been a recent fall in the volume of exports. This can be explained by the large downturn in the Brazilian economy and resultant weak currency. Yet, exports from Norway are falling more dramatically than the market (Johnsen, 2017). Norway has lost its market share of 100% in 1989-90 to almost half in 2014 (Camargo Neto et al., 2016).

According to Egeness et al. (2015), the Norwegian industry has been losing market share due to the development of value added products in the Brazilian market. Since these products require more work force, the countries with lower labor costs have a competitive advantage. The products that most challenge the Norwegian salted and dried cod in the Brazilian market are more convenient and affordable products, such as the frozen desalted cod, mainly produced by Portugal and China. The other reason for the fall may be the Norwegian exporters' lack adaptation to development. According to scientist Ingelinn E. Pleym (Johnsen, 2017 para. 6) the concern lies in the fact that Norwegian exporters may be reacting traditionally, which means "most are sitting on the fence waiting for the market to pick up again, as they have done many times before". But Pleym believes that Norwegian exporters steer their own opportunities for participation in the Brazilian market. She highlights that shares of the Brazilian market are willing to spend a great deal on unique products.

Previous studies show that country of origin has a considerable influence on product evaluation and purchase intention (e.g. Hui & Zhou, 2002; Wang & Yang, 2008; Diamantopoulos et al., 2011; Rezvani et al., 2012). If the country of origin acts as an extrinsic cue, it leads to higher influence on consumer product evaluation regardless of the consumers' level of familiarity with the product (Laroche et al., 2005). The study of the effect of the country of origin attribute of the Norwegian salted and dried cod on Brazilian customers, therefore, becomes imperative since this is the second biggest market for the Norwegian exporters. In order to apply the correct strategy and retrieve market share, the exporters must have a deeper insight into the Brazilian market.

Most researchers have previously conducted studies regarding the Brazilian market focusing on importers, suppliers and market opportunities (Camargo Neto et al., 2016; Lopane, 2014a). This study aims to fill this gap and focus on both sellers and consumers to get a different angle and a deeper insight into the market. The purpose of this thesis is to investigate the drivers of purchase intention of salted and dried cod for Brazilian consumers, especially when it comes to the Norwegian product. Therefore, this master thesis aims to answer the following research questions: (1) What are the drivers of the purchase intention of salted and dried cod for Brazilian consumers? (2) How does country of origin affect the purchase intention of Norwegian salted and dried cod for Brazilian consumers? (3) Can Brazilian consumers differentiate Norwegian salted and dried cod from the others?

This thesis is divided in six chapters. This first chapter presents the statement and justification of the research questions. The second chapter presents a short description of the Brazilian's context, salted and dried cod, its labelling rules, as well as the Brazilian market of this product. The third chapter provides the theoretical framework on which the research model and the hypotheses were based on. The fourth chapter describes the employed set of methods used in this study. The fifth chapter presents the findings of the qualitative and quantitative analyses. The sixth chapter provides the discussion of these findings, while the seventh chapter presents the concluding remarks.

2. The Context

2.1 Brazil

Brazil is the largest country in South America, and the 5th largest country in the world by area and population. It has a total area of 8,515,770 sq km, with a coastline of 7,491 km bordering the Atlantic Ocean. Due to its size, it borders almost all of the countries in South America, with the exception of Ecuador and Chile (Sawe, 2017; Central Intelligence Agency, 2018).

2.1.1 A brief history

On the 22nd day of April of 1500, Brazil was discovered by thirteen Portuguese caravels led by Pedro Álvares de Cabral, who aimed to go to India in order to acquire spices, which were very profitable in Europe. This was a period of the great navigations, when Portugal and Spain explored the sea in search of new land and trades. A few years before Brazil's discovery, for instance, Christopher Columbus discovered the America while navigating for Spain, a fact that broadened the expectations of the explorers (História do Brasil, 2018).

After more than three centuries under the Portuguese rule, Brazil peacefully gained its independence in 1822, sustaining a monarchical system of government until the abolition of slavery in 1888 and the proclamation of the republic by the military in 1889. Hereafter, Brazil was politically dominated by coffee exporters until the populist leader Getúlio Vargas rose to power in 1930. The country was ruled by the populist and military government for more than half a century until 1985, when the military regime peacefully yielded power to civilian rulers (Central Intelligence Agency, 2018).

Nowadays, Brazil continues to seek industrial and agricultural growth, as well as the development of its interior. Through the exploration of vast natural resources and a large labor pool, Brazil is the leading economic power and regional leader of the South American continent. Furthermore, Brazil is also part of the group named "BRICS". Created by the economist Jim O'Neill in 200, this term was used to refer to the leading emerging economies: Brazil, Russia, India and China. He claimed that these rising countries would be the pillars of a new finance system and global governance. In 2010, South Africa joined the group, founding the "BRICS", with a capital "s". Due to the initiative of Brazil and Russia, this group became a common concept in the international relations and gained political significance (Stuenkel, 2017).

The fact that the country successfully overcame a period of global financial recession in the end of the 20th century led to the view of Brazil as one of the world's strongest emerging markets and a helper of the global growth. In addition, the granting of the 2014 FIFA World Cup and the 2016 Summer Olympic Games in Rio de Janeiro, the firsts to be held in South America, was seen as a representation of the country's climb. However, in the period of 2013 to 2016, the country was overwhelmed by a declining economy with high unemployment and inflation rates. The recession was only defeated in 2017. In addition, a political scandal resulted on the impeachment of the former President Dilma Rousseff in May of 2016, what means that her vice President, Michel Temer, will act as President until 1st of January of 2019 (Central Intelligence Agency, 2018).

2.1.2 Economic scenario

Brazil is the 8th largest economy in the world when it comes to nominal Gross Domestic Product and Purchase Power Parity (International Monetary Fund, 2017). Given its continental size and the availability of abundant natural resources, Brazil has a relatively diversified and large economy. In 2016, Brazil was estimated to be the 7th richest country in terms of natural resources,

with approximately 21,8 trillion of dollars' worth of commodities (Anthony, 2016). The country is the world's biggest producer of coffee, sugar cane and orange, apart from being one of the biggest producers of soy. In addition, Brazil has the biggest commercial herd of cattle in the world and is the 4th biggest exporter of timber. However, the portion of agriculture in the Gross Domestic Product (GDP) is relatively weak, subtly above 5%. The sector, nevertheless, represents 40% of the exportations (Banco Santander, 2017).

The industrial sector is also prominent. The exploration of its mineral wealth allows Brazil to be the 2nd biggest iron exporter in the world, and one of the main producers of aluminum and coal. Aligned with the fact that Brazil is also an oil producer, the country has the goal of becoming self-sufficient when it comes to energy in the near future. In addition, the country has been steadily growing the textile, aeronautical, pharmaceutical, automobilist, steel and chemical sectors. The industrial sector as a whole, however, has been facing a downturn since the past years. Governmental actions, such as the *Brasil Maior* plan, are trying to remediate the progressive slowdown of the sector, that currently represents almost a quarter of the GDP (Banco Santander, 2017). The tertiary sector, on the other hand, is increasing and represents more than 70% of the GDP, employing close to three quarters of the active population. In addition, Brazil has invested in the last years in the production of high value-added services, mainly in the aeronautical and telecommunications sectors (Banco Santander, 2017).

The World Bank (2018d) claims that Brazil's economic and social progress from 2003 and 2014 raised 29 million people out of poverty, with the income level of the poorest 40% of the Brazilians raising 7.1% in real terms on average. But the deep recession is undeniable. According to the World Bank, the crisis is a result of the decrease in commodity prices and an inability to make the necessary policy modifications, combined with the political crisis faced by the country, which has contributed to undermine the confidence of consumers and investors. Inflation is also a problem. In December of 2015, the inflation rate reached the peak of 10.7%, exceeding the upper limit of the government's target band. This happened due to the combination of the pass-through of exchange rate depreciation and the rearrangement of regulated prices.

The former Vice President Michel Temer took office as the new President of Brazil after the impeachment of Dilma Rousseff on August of 2016. The new ruler claimed he would pursue several fiscal adjustment measures, as well as a reform agenda in order to rebuild confidence and motivate investment (World Bank, 2018d). These actions are the right path to restore economic growth, according to Barbosa Filho (2017), who claims that Brazil will only be able to resume its growth once it solves the fiscal problem in order to increase long-term GDP growth. The author argues that the Brazilian economy requires productivity-enhancing policies, and that the crisis of 2014-2017 is a result of a combination of economic policies that reduced Brazil's potential economic growth and of a fiscal crisis that led to unsustainable growth of public sector debt.

In 2017, the economy has already appeared to recover. According to the Brazilian Institute of Geography and Statistics (IBGE), the GDP in 2017 was of 6,6 trillion BRL in total, 1% bigger than in 2016. The increase is due to the expansion of 0.9% in the added value of the basic prices and the expansion of 1.3% in the taxes over net products of subsidies. The GDP per capita increased in 0.2% in real terms, reaching the value of 31,587 BRL (Agência Notícias IBGE, 2018a).

Currently, due to lack of support and enough votes in Congress, the government canceled the pensions reforms needed to aim the stabilization of the increasing public debt/GDP ratio. However, a steady consumer-led economic recovery is being supported by lower inflation and interest rates (The Economist Intelligence Unit, 2018). There is still the risk of the uncertainty of the outcome of the October 2018 presidential election, but The Economist Intelligence Unit supposes that a centrist

candidate is likely to win and continue the more sounder and market-oriented policies initiated by the Temer government.

2.1.3 Demographics

Brazil is the 5th most populated country in the world according to the projections published in The World Population Prospects (United Nations, 2017). Estimations made by IBGE indicated that Brazil had 207,7 million habitants by the end of 2017, and a population growth rate of 0.77% from 2016 to 2017, slightly lower than the 2015/2016 rate of 0.80% (Agência Notícias IBGE, 2017). Estimations made by the World Bank (2018a, b and c) indicates that in the year of 2016, 22.136% of the total Brazilian population was aged between 0 and 14 years old, while 69.616% of the Brazilians were between 15 and 64 years old, and 8.247% were older than 64. According to Sawe (2017), the population is made up of several ethnical groups, the largest one being the white Brazilians, that compose 47.73% of the population, followed by the Combined European, Native, and African Ancestry (43.13%), African-Brazilians (7.61%), Asian Brazilians (1.09%) and the Indigenous Brazilians (0.43%).

According to the Brazilian National Survey by Household Sample (PNAD), in the year of 2015 most part of the Brazilian population, 84.72% to be exact, lived in urban areas. The Southeast region is the one with most people living in urban areas (93.14%), while the Northeast is the one with the biggest percentage of people living in country areas (26.88%) (IBGE, 2018a). According to Sousa (2017), the Roman Catholic Christianity remains the dominant religion in Brazil, as a legacy of the enforcement of the Catholicism during the Portuguese colonial rule. Brazil has the prominence of being the largest Roman Catholic country in the world, with 64.6% of people practicing this religion.

In 2017, the Brazilian average income per month per capita was of BRL 2,112 for those who had some income (from all sources), and the top 10% of those with highest income held 43,3% of the country's income, while the bottom 10% held only 0,7% of this income (Agência Notícias IBGE, 2018b). When it comes to the unemployment rate, the last quarter of 2017 surprised the market expectations with a rate of 11.8%. It is the lowest rate since October of 2016. However, the average from 2012 until 2017 is of 8.99, with the peak of 13.7% in March of 2017 and a record low of 6.2% in December of 2013. The minimum wage remains unchanged in 2018 at 954 BRL per month. The average from 1994 until 2018 is of 394.85 BRL per month, with the highest value being the current one, and the lowest being of 64.79 BRL per month in August of 1994 (Trading Economics, 2018a; Trading Economics, 2018b).

The IBGE (2017) published in the Synthesis of Social Indicators (SIS 2017) a structural analysis of the results of the National Survey by Household Sample (PNAD). The data indicates that 25.4% of the Brazilian population lived in a situation of extreme poverty in 2016, according to the criteria used by the World Bank for developing countries, which defines as poor those who earn less than US\$ 5.5 per day. This amount corresponds to a household income *per capita* of 387 BRL per month, considering the purchasing power parity. The situation is more extreme when it comes to the 7,4 million household residents where African- Brazilian or Combined European, Native, and African Ancestry women live without a partner and with children up to 14 years old. From this group, 64% of the residents were under the poverty line criteria determined by the World Bank.

2.1.4 Food and culture

Traditionally, the meal system in Brazil is described by institutions (schools, hospitals, companies) and by representations (books, cooking magazines, nutritionists, among others) as being

composed by six meals during the day: breakfast, morning snack, lunch, afternoon snack, dinner and night snack (or supper) (Barbosa, 2007).

The results of a survey made by Barbosa (2007) shows that 44% of the respondents claimed to consume only three meals per day, while 40% claimed to ingest four. These three or four meals would be separated in three subsystems: the weekly meals, the weekend meals, and the ritual meals (includes holidays, weddings and birthdays for instance). The first meal is the breakfast, when the respondents claimed to consume light food, such as black coffee, roll bread and milk. Then it comes the lunch, considered by the respondents as the most important meal of the day when it comes to substance. The majority of 94% declared to consume rice and beans with some kind of red meat, chicken, salad, pasta, verdure and vegetables. Concerning the other sources of protein, fish was only mentioned by 12.1% of them, a small amount if we consider the Brazilian geography with an extensive coast line. The third meal would be the dinner, that 91% of the respondents claimed to ingest on a daily basis, with a similar consumption as in the lunch meal. The afternoon snack is included for the respondents that claimed to have four meals per day.

Barbosa (2007) remarks the logic of food consumption for Brazilians, for whom it is common to eat several different types of food at the same time, keeping them separated at the plate and letting the combination of the flavors occur during the ingestion. The author also highlights the fact that there is a high level of informality during the meals, and little concern with the presentation of the food. Also, the choice of what is going to be consumed is made by women according to 70% of the respondents in the survey.

Regarding the consumption of fish, a survey made by Sartori and Amancio (2015) shows that the regions that consume more fish are the North and Northeast ones, with the quantity ingested per capita of 38,1 kg and 14,6 kg respectively. The consumption is reduced in the other regions, with the Southeast having the per capita value of 5,5 kg, the South of 3,1 kg and the Centrum-West of 3,4 kg. And the results found by Levy et al. (2012) show that the presence of fish in the Northern households is ten times greater than in the houses from the South and Centrum-West regions.

From the fish products imported by Brazil, cod is one of the main ones. There are numerous types of imported cod products. The most common one is the salted and dried cod followed by the dried cod, the salted cod and less frequently, the smoked cod (Camargo Neto et al., 2016). According to Bjørndal (2011), Portugal is the main international market for salted and dried cod, followed by Brazil.

The habit of eating salted and dried cod came to Brazil with the Portuguese in the beginning of the XVI century. They were used to consume it due to the fact that they needed unperishable products that could endure the long navigations. In addition, the consumption of this type of fish has always been strictly related to the religion, since the Portuguese also brought to Brazil the catholic religious practices that did not allow the consumption of meat during several festive cycles, such as the Lent, Holy Week, Christmas and Corpus Christi. Nowadays, Brazil is one of the main importers of salted and dried cod in the world (Lopane, 2014a).

Traditionally, this product is consumed mainly by higher income families, and with a bigger demand during Easter and Christmas (Camargo Neto, 2014). Figure 2.1 shows the seasonality of the salted and dried cod consumption in Brazil, where the importations are higher from January to March, and from October to December. According to Lopane (2014b), *bacalhau* (the word in Portuguese for salted and dried cod) was considered a cheap product, but the scarcity of this product lead to its price increase, what shifted the consumption to higher income groups and restricted to religious holydays.

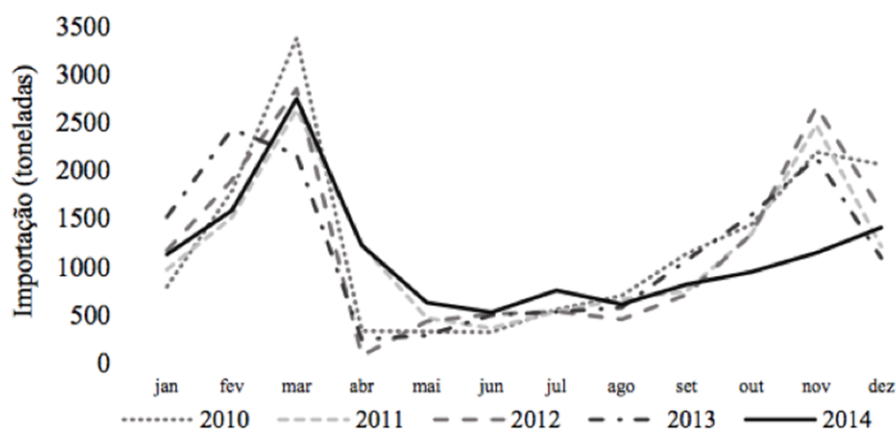


Figure 2.1. Importation of salted and dried cod by month (2010 – 2014). Reprinted from Brasil (2015b), cited in “A demanda brasileira por bacalhau seco e salgado – de 1989 a 2014” by R. P. Camargo Neto & P. R. Abdallah, (2016). XI Iberian Conference on Rural Studies, Vila Real, Portugal, 2016.

According to the research made by the Norwegian Seafood Council in 2016, Brazilian consumers claimed to prefer salmon over salted and dried cod in general. The survey also shows that Brazilians prefer to eat *bacalhau* for lunch home in weekends (21% of the respondents). Only 8% claimed to prefer to eat it for dinner at home during weekends, and 14% stated to prefer to it out in restaurants (Fjørtoft & Nystrand, 2017). According to Lopane (2014b), the consumption of salted and dried cod, on a daily basis, has been increasing mainly due to its availability in restaurants and due to the growing tendency of consumers eating out.

Tradition and health concerns are the main reasons that Brazilians consumers choose to purchase *bacalhau*, according to consumer surveys. The most important attributes that Brazilian consumers take in consideration when buying this product are the (low) price, color (which should be light) and the thickness of the fish. In addition, most consumers buy salted and dried fish in supermarkets or local markets (Lopane, 2014b).

When it comes to the food distribution in Brazil, different market actors interact in order to bring exported products to the final consumer. The agents are the ones who connect the producers to the importers, representing the producers in Brazil. The importers may have several products in their portfolio, and given the fact that their knowledge about the products may differ, they tend to rely on the agents to explain the products’ attributes to the buyers. The final actor are the retailers, that are consisted mainly of supermarkets and small independent neighborhood stores. Even though the retail sector in Brazil is not as concentrated as in western markets, there is a high level of internationalization. The largest supermarkets are foreign –owned, such as Carrefour, Walmart Brasil and *Pão de Açúcar* (Innovation Norway, 2017).

2.2 Fisheries and markets for fish products in Brazil

2.2.1 Fisheries in Brazil

Fisheries in Brazil is undertaken along 8,400 km of the marine coastline, in extensive river basins and in several reservoirs (FAO, 2013). The fishery is one of the oldest economics activities in Brazil, and it was originated in the colonial era. The government has always imposed a fisheries administration, alongside with laws, decrees and regulations. The peak was the creation of the special governmental body of SUDEPE in 1962, which stands for *Superintendência do Desenvolvimento da Pesca* (Superintendence of the Development of Fisheries) (Giulietti & Assunção, 1995).

In Brazil, two main fish production systems co-exist: the industrial and the artisanal fisheries. The former is defined as the fish harvesting made by company-owned boats, the latter is described as independent fish harvesters who depend financially on fishing and can work on a part or full-time basis. The industrial fishing activity use high social and technical division of labor, and they usually sell their harvests to processing companies and large markets. The artisanal fishers use labor and knowledge intensive fishing techniques, and they hire family or community employees, usually on a sharing basis, to do the fishing in coastal habitats (Vasconcellos et al., 2011). The industrial fisheries are concentrated on the southern states in the coastline of Brazil, whilst the artisanal fishers are mainly condensed in the northern and northeastern states (FAO, 2013).

The contribution of the fisheries and aquaculture combined to the Brazilian GDP is of only a little more than 0.5 %, what implies a low significance in the national economy (FAO, 2010). According to Barone et al., (2017, p. 417), “along the last ten years fish and fishery product trade in Brazil has been on a downward trajectory turning a profit of US\$ 98.6 million in 2005 into a loss of US\$ 1.25 billion by 2014.”. Excessive fishing efforts is one of the reasons for the shrinkage of productivity, given that several coastal fishery resources are fully exploited or over-exploited (FAO, 2013).

The report of the Food and Agriculture Organization of the United Nations from 2013 shows that the total harvest in Brazil was stable at around 800 000 tones in the last years prior to the publication. The marine capture production reached its peak at 586 000 tones in 2009, and inland waters capture production reached peak of 261 000 tones in 2008. Also, in 2011 Brazil became the 4th largest producer in the Latin American and Caribbean region in relation to capture production. From the total capture fisheries, the small-scale ones contributed around 50 – 60% (FAO, 2013). The production and marketing of seafood involves more than five million Brazilians approximately, and creates over USD 2.7 billion of products and services per year (FAO, 2010).

Approximately, one third of the fish landings come from inland fisheries, with the majority of more than 60% coming from artisanal fisheries, who are more than 90% of the employment in the capture sector. In 2011, the total number of fishers involved in full time fishing activities was of 875 700, with 64% being for the marine and 36% for inland fisheries. The fishing fleet was of over 60 000 vessels, with mostly of them having less than 12 meters in length and one third being motorized (FAO, 2013). The new report of FAO, called the State of World Fisheries and Aquaculture claims that Brazil will register a growth of 104% in the production of fisheries and aquaculture in 2025 due to investments made in the sector in the last years. This growth will be the biggest in the region, followed by Mexico (54,2%) and Argentina (53,9%) (FAO, 2016).

The fact that Brazil not only has a coastline of more than 8 thousand km, but also 12% of the available fresh water in the world, makes it a favorable place for the fishing activity and also for the aquaculture. According to the Municipal Livestock Research made by the Brazilian Institute of Geography and Statistics (IBGE), the national production of fish produced by aquaculture totalized 507, 12 thousand tones in 2016, 4.4% more than in 2015. The most produced specie was tilapia (239,09 thousand tones), followed by shrimp (52,12 thousand tones) and oysters, scallops and mussels (20,83 thousand tones) (IBGE, 2018b).

However, Brazil is also a large importer of seafood. According to Barone et al. (2017, p. 418), “the increasing Brazilian domestic demand for seafood has been met mainly by imports, increasing by 8% in 2014 alone, more than half of international purchases (assessed by weight) coming from Chile, China and Vietnam”. In addition, the total value of the Brazilian imports was more than five times larger than the exports value in the years of 2010, 2011 and 2012 (FAO, 2013).

The value in dollars of fisheries imported in 2016 and in 2015 was almost three times greater than the value in dollars exported (Seafood Brasil, 2017). Figure 2.2 shows the quantity of the Brazilian fishery and aquaculture production, as well as the quantity of the imports and exports and the demand for fish and fishery products from 1978 to 2013. From 1990 on, the fisheries production remained below the average production of the previous years, and the aquaculture production was necessary in order to reach the demand level, what also influenced the relationship between exports and imports in an inversely proportional way. The exception was in 2013, when both fisheries and aquaculture production reached their peak. However, the demand curve was still not met (Barone et al., 2017).

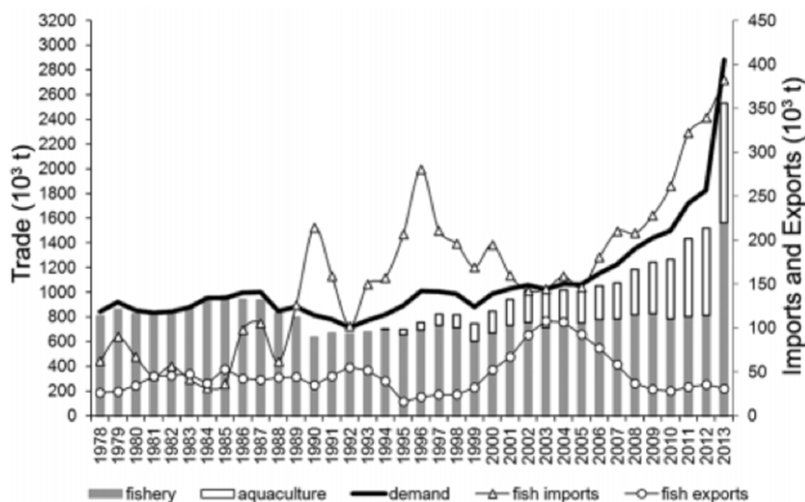


Figure 2.2. Quantity of Brazil's fishing, imports, exports and demand for fish and fishery products from 1978 to 2013. Reprinted from Aliceweb; IBAMA (2003, 2004, 2007a, 2007b) and MPA (2010, 2011, 2013, 2014), cited in R. S. C. Barone, E. K. Lorenz, D. Y. Sonoda & J. E. P. Cyrino, (2017). Fish and fishery products trade in Brazil, 2005 to 2015: A review of available data and trends. *Sci. agric.*, 74(5), 417-424. DOI: <http://dx.doi.org/10.1590/1678-992x-2016-0300>.

2.2.2 Salted and dried cod

The cod species are from both saltwater and freshwater. The Atlantic cod (*Gadus morhua*) can be found on the North American coast (from New England to Labrador), on the coast of Ireland, in the North Sea, in the Norwegian Sea and in the Barents Sea. The Pacific cod (*Gadus macrocephalus*) is mainly found in the coastal areas of the Yellow Sea, from the Bering Strait to Los Angeles. And the Greenland cod (*Gadus ogac*) is usually seen in the northwest and Arctic areas. Over 90% of Norway's cod harvest come from the Barents Sea, where the world's largest cod population lives. The fishing is done 365 days a year, thanks to sustainable practices. In the beginning of the year the harvest is done in the Barents Sea and coastal areas, and then it is moved to locations on the Polar front, as the Bear Island. The most intense period of fisheries is during the spawning time from January to April (Norwegian Seafood Council, 2018a).

The salted and dried cod, called in Portuguese as *bacalhau*, is made with different species of white fish. The Brazilian law claims that the only two species that are considered *bacalhau* are the Atlantic cod (*Gadus morhua*) and the Pacific cod (*Gadus macrocephalus*). The other species must be called cod-like fish (*tipo bacalhau*), and are usually from an inferior quality. These species are consisted of: saithe (*Pollachius virens*), ling (*Molva molva*), tusk (*Brosme brosme*), haddock (*Melanogrammus aeglefinus*) and Alaska pollock (recently changed from *Theragra chalcogramma* to *Gadus chalcogrammus* according to Coulson et al., 2006; Teletchea et al., 2006; Carr and Marshall, 2008). There are three main products in the Brazilian market: the salted and dried cod, mostly made

from the Atlantic cod, the Pacific cod, saithe, ling and tusk; frozen desalted and dried cod, mostly made from Atlantic and Pacific cod; and the shredded cod, which is mostly made from Alaska pollock and saithe. The products with the highest quality are called *imperial*, followed by *universal* and *popular* (Northern Fish, 2014; Lopane, 2014b).

The Norwegian tradition of drying fish comes from the Viking era, but the salting process only began in the 15th century, being developed by the Basque and the Portuguese. It was spread around Europe given its preservation method, that kept the fish fresh for a longer period. The salted and dried cod also became popular in Catholic countries given the tradition initiated in the Middle Ages of eating fish instead of meat during Lent, as ordered by the Pope. This has enabled Norwegians to export salted and dried cod to Catholic countries for many years, making of Norway the largest supplier in the world nowadays. The name in Norwegian for salted and dried cod (*klippfisk*), refers to the tradition process of drying the fish on flat rocks by the seaside. Nowadays, more modern methods of leaving the cod to dry are used. The product is usually salted and matured for 10 to 20 days, depending on the preference of the market, and then dried indoor in tunnels. The length of time it takes for the cod to dry will differ according to its size and level of saltiness, varying from two to seven days. The fish will be done when it reaches a level of water content of around 40-50%, and it is stored then at a low temperature between 0-5°C (Torske & Skram, 2016; Norwegian Seafood Council, 2018b).

Studies have shown that the salted and dried cod has a good stability in terms of shelf life. According to the senior scientist Grete Lorentzen, the *bacalhau* made from cod can be kept for at least two years at a temperature of four degrees or lower. Lorentzen also highlights the fact that high temperature reduces significantly the shelf life of the product. Other factors also influence its preservation, such as the relative humidity, the moisture content of the fish, the bacteria content and the packaging method. If stored at 30 degrees with a relative humidity of 80%, the salted and dried cod can be preserved for 17 days. If, however, the humidity level is of 60%, the storage time is increased to at least 21 days (Nofima, 2015). Another important attribute of the *klippfisk* is the fact that after soaking the product, the weight is expected to increase at least by 20%, depending on the quality of the fish (Northern Fish, 2015). Also, the nutritional benefits of the salted and dried cod are greater than for fresh cod. For example, that the protein level for salted and dried fish is almost the double as in the fresh cod, and the Calcium level is three times greater (Cod export AS, 2018).

2.2.3 Labelling of salted and dried cod

In Brazil, the regulation (Instrução Normativa nº 22/2005) set by the Ministry of Agriculture, Livestock and Food Supply (DIPOA), demands that all product of animal origin must be labeled with: (1) Information on the name of the product; (2) List of ingredients; (3) Liquid content; (4) Origin identification; (5) Name and address of the producer; (6) Category of the establishment, according to the official classification when registering it in DIPOA; (7) National Register of Legal Entity (CNPJ); (8) Conservation of the product; (9) Commercial brand of the product; (10) Batch identification; (11) Fabrication date; (12) Expiration date; (13) Product composition; (14) Register number at DIPOA; and (15) preparation and use instructions, when necessary. Regarding the origin identification, the name (business name) of the manufacturer, producer, fractionator or owner of the brand must be informed in the label, along with the complete address and the expressions “Produced in...”, “Product from...” or “Industry from...”. Thus, for this present study, it is considered as Norwegian salted and dried cod only the products produced in Norway.

2.2.4 The salted and dried cod market in Brazil

Cod is one of the main fish products that Brazil imports. From the different types of cod products, the salted and dried cod is the most common, followed by dried cod, salted cod and the smoked cod (Camargo Neto et al., 2016). The southeast region has the highest consumption expenditure per capita for the *bacalhau*, according to the Brazilian household survey from 1987, 1995, 2002 and 2008 (Brazil, 2016 cited in Camargo Neto et al., 2016). The states of São Paulo and Rio de Janeiro are the main importers, with more than 50% of the imports (Aliceweb, 2016 cited in Camargo Neto et al., 2016). Part of the imports is redistributed to the other regions given the importance of the ports in these states (Barroso & Wiefels, 2010; Neiva et al., 2010).

Brazil is the second largest importer of the Norwegian salted and dried fish, in relation to both quantity and value. The Norwegian firms export *bacalhau* made of cod, saithe, ling and tusk. When it comes to value, the salted and dried cod has been the largest product, while the *bacalhau* of saithe has been the largest in terms of quantity (Camargo Neto et al., 2016). According to Egeness et al. (2015), the Brazilian market for *klippfisk* has more than doubled in the last years, while the Norwegian amount of exports has been stable. The changes in the market in Brazil are mainly associated to changes of market shares. The Norwegian industry has been losing market share due to the development of value added products in the Brazilian market. Since these products require more work force, the countries with lower labor costs have a competitive advantage.

The main factors that explain the changes in the Brazilian market are the higher number of value added and seafood products in the market, a bigger demand for product development, higher level of competition, investment in marketing strategies, increased proportion of “modern supermarkets” including grocery stores, larger retail chains acquiring larger share of the grocery retail market, higher demand for the economic optimization of the distribution from the wholesale to the final consumer, and a higher purchasing power among the population (Egeness et al., 2015). Brazilian customers’ purchasing power has increased in the past two decades, excluding the last recent years given the economic crisis, what has changed the food consumption habits of Brazilians in favor of more processed food (ready meals) (Lopane, 2014b).

The study made by Camargo Neto et al. (2016, p. 1) shows that the Brazilian market is characterized by a significant elasticity of income-consumption, what indicates “that changes in household wages imply significant changes in the consumption of salted & dried cod – a fact that has implications both for the volume of Brazilian imports as well as for the fishing economy as a whole”. The report made by Egeness et al. (2015) shows that imports of the Norwegian salted and dried cod have been increasing, while the imports of saithe *bacalhau* have been decreasing due to the fact that the price difference between these two types of products has been decreasing. Brazilian consumers usually prefer the legit *bacalhau* made of the original cod, but the high price made them choose the cheaper option of the saithe *bacalhau*.

The Brazilian market has been demanding a greater variety in the way the cod is processed (Camargo Neto et al., 2016). The products that most challenge the Norwegian salted and dried cod in the Brazilian market are the frozen diluted cod and the salted and shredded Alaska pollock. Portugal is the largest producer of the former, while China is the largest producer of the latter. The salted and shredded Alaska pollock is also the main competitor of the salted and dried saithe (Egeness et al., 2015). Attributes such as lower cost, lighter color and convenience are the reasons why the former has been stealing the latter’s market share in the Brazilian market. The Alaska pollock, for instance, demands less rehydration time than the saithe *bacalhau*, given that its pieces are smaller. Other factors for the decline of the exports of salted and dried saithe to Brazil from Norway in recent years are the lower quotas and reduced landings of saithe, as well as the reduced prices of cod (Camargo Neto et

al., 2016). The ling and tusk's exports are also turning into marginal products in Brazil (Egeness et al., 2015). The prices of the saithe, ling and tusk *bacalhau* are similar. In 2014, the exports of tusk declined while the exports of ling increased. "A large proportion of this change can probably be attributed to changes in the availability of raw material. The volume of exports of ling can be explained by a lower export price" (Camargo Neto et al., 2016, p. 5).

Brazilians consumers usually associate *bacalhau* with Norway and Portugal, but they have little knowledge of the different species and products. Brazilians buy this product in several formats, and have been increasingly purchasing more fillets, shredded and desalted *klippfisk*. Most of the desalted and dried cod comes from Portugal and is often produced from the Norwegian salted cod (Fjørtoft & Nystrand, 2017). Convenience and affordability has led to the expansion of these new products in the market. The supply of the frozen desalted and dried cod and the salted cod has increased substantially in five years with Portugal as the main producer: from almost zero to 7,500 tonnes. They are easier and faster to prepare than the salted and dried cod, and since the majority of these products come from Norwegian salted and dried fish, this new demand has created a new niche for the Norwegian producers. The Portuguese has developed its fish processing industry in recent decades, becoming an important exporter to numerous countries (Egeness et al., 2015; Bjørndal et al., 2016b).

The pre-sliced and packaged products of the fully salted and dried cod are also a competition. This type of product is being supplied mostly by Portuguese and Chinese exporters, but some supermarkets also prepare it. There are some Portuguese firms that are specialized in the production of the pre-sliced *bacalhau* that is quicker to pack in store than the traditional whole *klippfisk*. The fact that the Norwegian companies do not have such products in their portfolio are one of the reasons for why the demand has not increased as fast as predicted. It appears that the Portuguese has been increasing their market share also for the whole salted and dried cod, which can be partially owed to the fact that they offer packaged products (Egeness et al., 2015; Bjørndal et al., 2016a; Bjørndal et al., 2016b). The other reason for the Norwegian fall in market share may be the Norwegian exporters' lack adaptation to development. According to scientist Ingelinn E. Pleym, the concern lies in the fact that Norwegian exporters may be reacting traditionally and just "waiting for the market to pick up again, as they have done many times before. Moreover, some exporters only produce salted and dried cod when it is most profitable, and change to other productions when the market is low" (Johnsen, 2017, para. 6).

Norway is the leading exporter of salted and dried cod to Brazil, followed by Portugal and China. The latter has just recently entered the market and still has a moderate significance when it comes to export volume. Figure 2.3 shows the quantity exported by these three main exporters to Brazil from 1989 to 2015. Together, these three countries export more than 90% of the imports. The other countries that export small volume of *bacalhau* are Iceland, Spain, the United Kingdom and the United States. Norway was the only exporter in the first two years of the data series. Portugal became a supplier for the Brazilian market in 1991 and increased their market share from 10% in 2000 to 40-41% in 2013-14. China entered the market in 2008, reaching their peak of volume exported in 2013 with a market share of 7%, which decreased to 6% in 2014. Norway lost its market share of 100% in 1989-90 to almost half in 2014, what can be due "to the opening of the Brazilian market and the shift to a floating exchange rate in this period". Norwegian exports went from 6,000 tonnes in 1989 to 17,000 tonnes in 1998, dropping to 4,000 in 2002. In 2014 the volume exported increased to 7,000 tonnes. "The reason for the development in imports between 1992 and 1998 may be related to Brazil's economic stabilisation, the increase in purchasing power and the favourable exchange rate as will be discussed further below" (Camargo Neto et al., 2016, p. 6).

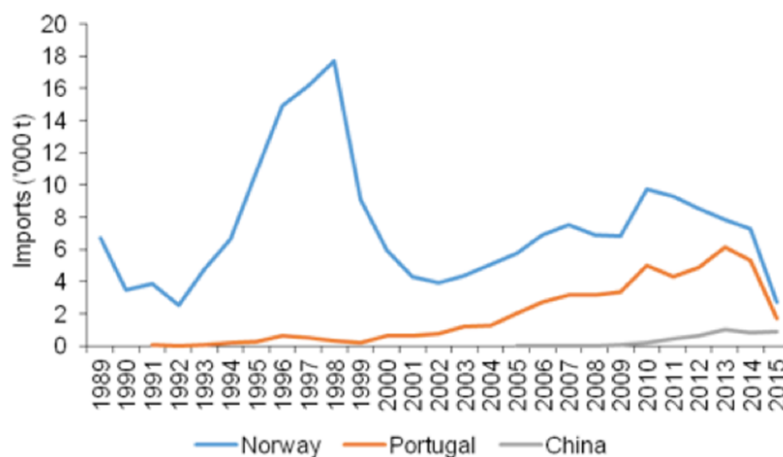


Figure 2.3. Brazilian imports of salted and dried cod from Norway, Portugal and China from 1989 to 2015 (Oct). Reprinted from MDIC (2015) cited in “Brazilian demand for salted & dried cod – the 1989 – 2014 period”, by R. P. Camargo Neto, P. R. Abdallah, T. Bjørndal & R. Pincinato, (2016). (In press).

According to Fjørtoft and Nystrand (2017), Brazil imports a great volume of *bacalhau* made from cod, saithe, tusk and ling, and imported around 35,000 tones of these products annually between 2010-14. Norwegian *klippfisk* accounted for 78% of these imports. Even larger volume of frozen fillet of Alaska pollock is imported by Brazil, mainly from China. The leading product exported by Norway to Brazil is the saithe *bacalhau*, but the quantity has decreased since 2011, going from 18,500 tones to 8,000 in 2016. The cod *bacalhau* reached the peak of exports volume in 2014, with 12,000 tones. In 2016 this volume was reduced to 6,200 tones. The quantity exported of ling and tusk *bacalhau* has been stable, but it has been decreased from 5,500 tones in 2010 to 3,000 tones in 2016.

Figure 2.4 shows the prices (FOB USD) of the imports of salted and dried cod from Norway, Portugal and China. The prices for the Norwegian product was higher than the Portuguese, aside from in 1997-99. For this period analyzed, the annual average of the import price of the Norwegian product was of \$8.00 per kilogram, and of \$7.50 for the Portuguese product. When the quantity imported by Brazil started to increase again in 2002, the Norwegian and the Portugal prices also increased, to \$8.60 and \$8.00 per kilogram, respectively. With the entrance in the market of China, Norway and Portugal started to compete with the low Chinese prices on an average of \$5.60 per kilogram, excepting in 2008 when the price was of \$12.21 per kilogram (Camargo Neto et al., 2016).

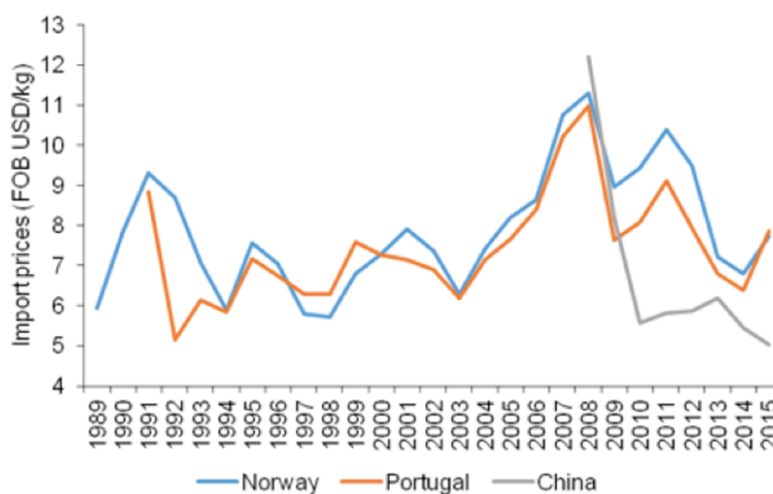


Figure 2.4. Brazilian imports prices of salted and dried cod from Norway, Portugal and China from 1989 to 2015 (Oct). Reprinted from Brazil (2015), cited in “Brazilian demand for salted & dried cod – the 1989– 2014 period”, by R. P. Camargo Neto, P. R. Abdallah, T. Bjørndal & R. Pincinato, (2016). (In press).

3. Theoretical framework

This chapter aims to review some of the theories on the relevant topics, in order to create the theoretical foundation for this study. Firstly, the model for this study will be discussed. Secondly, the main variables of the model will be revised.

3.1 The model for this study

Diamantopoulos et al. (2011) aimed to contrast in an empirical manner the two competing perspectives of the possible effects of country of origin image (COI) on purchase intentions. Their study compared two countries and analyzed the relationship between country of origin and brand image as drivers of purchase intention. The results show that COI, controlling for the effects of brand familiarity, indirectly affects the purchase intention of customers, being fully mediated by brand image. The base model of their study is presented in Figure 3.5, where COI is characterized by country image (CI) and product category image (PCATI).

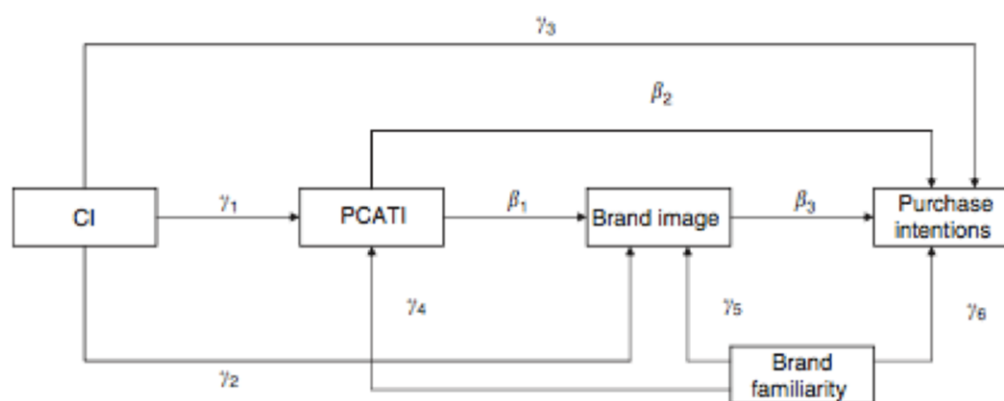


Figure 3.5. Base model. Reprinted from “The relationship between country-of-origin image and brand image as drivers of purchase intentions: A test of alternative perspectives” by A. Diamantopoulos, B. Schlegelmilch & D. Paliawadana, (2011). *International Marketing Review*, 28, 508-524.

The model in this thesis is based on this model, since it is simple and it shows the possible direct and indirect effects of CI and PCATI on brand image and purchase intentions. CI is related to “the overall perception consumers form of products from a particular country, based on their prior perceptions of the country’s production and marketing strengths and weaknesses” (Roth & Romeo, 1992, p. 480 cited in Diamantopoulos et al., 2011), whereas PCATI englobes the image of a particular country’s products in a particular category. The brand image, instead, captures “consumers’ perceptions of a brand’s characteristics” (De Chernatony & McDonald, 2003, p. 444 cited in Diamantopoulos et al., 2011). Moreover, in their study, the authors took into account differences in brand familiarity, which refers to the magnitude of direct and indirect experience a consumer has had with a brand (Campbell et al., 2003, cited in Diamantopoulos et al., 2011).

The authors undertook a severe empirical comparison of two competing theoretical conceptualizations of the working of CIs as a driver of consumers’ behavioral intentions: the “orthogonality” and the “irradiation” perspectives. The “orthogonality” perspective assumes that CI and brand image have direct and perhaps even compensatory effects on outcome variables, such as purchase intention. This means that consumers’ perception of a country does not impact their image of a certain brand of that country. Literature displays that a positive CI can counterbalance a weak brand, but a strong brand does not necessarily compensate for a country with negative image (Ahmed et al., 2002; Tse & Gorn, 1993 cited in Diamantopoulos et al., 2011).

The “irradiation” perspective claims that the consumers’ perception of a particular country does not affect their image of a brand from that specific country (Lebrenz, 1996 cited in Diamantopoulos et al., 2011). This happens because “the identification of the origin of a product influences the perception of one or more other attributes of the product” (Weiss-Richard, 2003, p. 42 cited in Diamantopoulos et al., 2011). In this case, the opposite may also occur, i.e., the consumers’ perception of a particular brand may affect their image of the country associated with the brand (Lampert & Jaffe, 1998 cited in Diamantopoulos et al., 2011).

The comparison between these two theories allowed the authors to portray the dominance of the “irradiation” perspective, given that CI and brand image are regarded as causally related drivers, whereas brand image is expected to at least partly absorb the impact of CI and PCATI on purchase intentions. Also, their finding suggest that brand image evaluations already capture the consumers’ perception regarding the country of origin.

Diamantopoulos et al. (2011, p. 515) have also included in their study dimensions which are helpful to assess the two first research questions of this study. These dimensions were attributes used to measure CI, PCATI and brand image. According to the authors, “to operationalize CI, PCATI, and brand image, we undertook an extensive review of the country of origin (COO) literature and identified a total of 24 intrinsic and extrinsic attributes, capturing different elements of the marketing mix”. In this present study, they were employed to measure the different dimensions in the model. However, the dimensions of “External features” and “Technology” were replaced by the “Product features” dimension, in order to measure consumers’ perceptions of attributes of the salted and dried cod, as was done in Lynghjem and Breivik’s (2015) study.

3.2 The main variables

3.2.1 Purchase intention and consumer decision making

According to Crosno et al. (2009), the purchase intention refers to the probability that consumers chose a particular brand of a product category in a particular purchasing situation. Shabbir et al. (2009) define the purchase intention as action propensities according to brand, or as the individual’s awareness to make an effort to purchase a specific brand. For Park (2002), purchase intention refers to what we think we are going to buy. Wang and Yang (2008) claim that this term can also be explained as the act or physiological action that portrays a customer’s behavior according to the product. Dodds et al. (1991) not only consider the purchase intention as the probability of consumers attempting to buy a product, but also as the behavioral inclination arisen after they are exposed to commercial messages. For Xiao Fu-Feng (2008 cited in Huang et al. 2011), this term refers to the tendency that is originated from consumers’ evaluation on solutions and choices made during the decision-making process, what is proved to be an important predictive indicator of consumption behavior according to Frishbein and Ajzen (1975).

Other scholars also mention the influence of other factors in the purchase intention of customers, such as: demographic factors (Daneshvary & Schower, 2000); quality and price (Aaker, 1991; Keller, 1993); product features, perception of consumers, country of origin and the perception of the country of origin (Wang et al., 2012). According to Kotler and Armstrong (2006), two factors affect the purchase intention of consumers: the attitude of significant others and unexpected situations. Shabbir et al. (2009) highlight the difference between attitude and intention, with the former meaning the evaluation of products and the latter referring to the individual’s motivation to perform a certain behavior. Ahmed and d’Astous (2004) claim that the customers’ perceived quality of the product and their purchase intention are affected by their level of involvement educed by the category of the

product, since different product categories have different purchase risks, what results in different levels of purchase involvement. For O’Cass (2004), the extent of the customers involvement is influenced by their monetary expenditure and the social implications of using the product.

Howard and Sheth (1969 cited in Laroche et al., 2005) proposed the confidence construct as one of the factors for purchase intentions, given that confidence is positively related to intention. Howard (1989 cited in Laroche et al., 2005) defines confidence as the customer’s subjective certainty that his or her judgement on the quality of a particular brand. Schiffman et al. (2008) proposed a model of the consumer decision making that demonstrates the problem-solving or cognitive consumer and the emotional consumer to some extent. For the author, the decision making of consumers refers to the selection of an option from a set of alternative choices. According to the model, three components form the decision process: input, process and output.

The input components refer to the external influences that comprises two main input factors: marketing inputs and sociocultural environment. The former one is made up of marketing activities of companies that aim to reach, inform and convince consumers to purchase and use their products. The latter is consisted of non-commercial influences such as family, friends, culture, subculture and other informal sources. The process component aims to explain the process of decision making of consumers and consists of three stages: the recognition of need, pre-purchase search and evaluation of alternatives. The consumers’ evaluation criteria in terms of desirable features of the product is formed by the information previously collected by them and any formerly conceived perceptions that they might have. These evaluation criteria will be used to categorize the different products available, and to assess which alternatives can meet the demands. The level of information that the consumers seek is positively related to the level of involvement they have and to the level of importance of the purchase. The purchase decision is dependable upon the collected information, through the evaluation of the alternatives based on product features, perceived value, previous experience, promotion, availability, return policy or good terms and conditions. Also, if the level of importance for the required product is high and the perceived attributes are also high, the customer is likely to pay a price premium to cover the need (Schiffman et al., 2008).

The output component of the Schiffman et al.’s (2008) model entails two connected types of post-decision activity: purchase behavior and post-purchase evaluation. There are three types of purchase: the trial purchase (first time purchase), the repeat purchase and the long-term commitment purchases. The brand must aim to increase the satisfaction of the consumers so that they can go through these three types of purchase. According to Perreau (2014), the post-purchase evaluation has significant consequences for the brand. These types of purchase depend on the information, experiences and expectations of the consumers. If the customer is satisfied with the product it is likely that he or she will repurchase the product. If the product exceeds the consumer’s expectations, he or she may become a long-term committed customer of the brand. For daily purchases with low level of involvement, such as Fast-Moving Consumer Goods (FMCG) or Consumer Packaged Goods (CPG), a committed consumer is a key source of revenue for the company when you consider all purchases a customer has made during his life time. When the opposite happens, i.e., when the customer is not satisfied with the purchased product, Schiffman et al. (2008) claims that the consumer will repeat the decision-making process on the next purchase, excluding the previously bought brand.

3.2.2 Country of origin

Country of origin (COO) has been researched since the 1960s, and has been shown to be an extrinsic indication for product evaluation since then (Roth & Diamantopoulos, 2009; Rezvani, 2012). This term was first introduced in a seminal article by Schooler (1965), and its effect on consumer

behavior has been one of the most studied subjects in international business (Peterson & Jolibert, 1995). The significance of COO effect is related to the fact that it can indirectly provide clues of product quality (Lee & Lee, 2009). According to Aaker (1991) and Keller (1993), COO is acknowledged to guide to associations in the consumers' minds. According to Yasin et al. (2007):

Many consumers utilize country-of-origin stereotypes to appraise products for example, "Japanese electronics are reliable", "German cars are excellent", "Italian pizza are superb". Many consumers believe that a "Made in . . ." label means a product is "superior" or "inferior" depending on their perception of the country (Yasin et al., 2007, p. 38).

Li et al. (1994) found in their study that COO, along with brand and price information, affect customers' perceived quality in a similar way. According to Hui and Zhou's (2002) study, COO cues directly impacts overall product evaluation and indirectly impacts, through product evaluation, product perceived value. Country of origin recognition is also of importance according to Martín Martín and Cerviño's (2011) study. Their findings suggest that the consumers' experience and integration with a brand from a foreign country are positively linked to the brand's country of origin recognition.

Wang and Yang (2008), while studying the relationship between brand personality and COO image, discovered that COO is a positive mediator in the relationship between brand personality and purchase intention. According to Rezvani et al.'s (2012) study, COO is one of the extrinsic cues that has influence on consumer product evaluation and on the purchase intention process. According to Parkvithee and Miranda's (2012, p. 20) study, "if low purchase involvement apparel with high brand equity is sourced from a country-of-origin of low perceived competence, the superior reputation of the brand encourages consumer partiality to the apparel's quality and purchase inclination".

Ashill and Sinha (2004), by studying the effects of COO and country and brand origin (CBO) on purchase intention, discovered that the components of brand equity, through the influence of brand loyalty, are three times more important than COO influence. While according to Yasin et al.'s (2007) study, COO image influences dimensions of brand equity positively and significantly, directly or indirectly, mediated by the effects of brand distinctiveness, brand loyalty and brand awareness/associations. In their meta-analysis study, Agrawal and Kamakura (1999, p. 1) discovered that COO "might not necessarily lead to a competitive (dis)advantage in terms of price premium or discount". Their findings suggest that price premium or discounts are explained by differences in product quality, rather than by the COO cue.

Lee and Lee (2009) considered the level of product knowledge in their study, and their findings suggest that consumers with high level of this variable were less likely to be influenced by COO cues in their product evaluation than those with low knowledge. Ghalandari and Norouzi (2012) found similar results in their study, adding that the influence of COO on willingness to purchase in individuals with low objective knowledge is greater than that in those with high objective knowledge.

Lynghjem and Breivik (2015), while studying the effect of COO on consumers' intention of Norwegian salted cod in the Spanish market, were pressed to differentiate between COO and brand awareness. Their findings suggest that COO awareness of Norwegian salted cod is low in the Spanish market, where few consumers are able to distinguish between Norwegian and Icelandic cod. Their results also show that product attributes related to quality are the most important drivers of purchase intention of Norwegian salted cod in Spain.

Diamantopoulos et al. (2011) stated that, in recent years, the COO construct and its research has been attacked with the claim that COO is not a relevant cue in the decision-making process of consumers. In their article, the authors restate the indirect impact of the country of origin image (CoI) on purchase intention. According to Zeugner-Roth and Diamantopoulos (2010, p. 446) "while

demanding rigor in CoI and COO research is indeed timely and important, completely rejecting this research stream is both premature and unwise”.

3.2.2.1 Country image

Country image can be defined as the perception of products from a specific country formed by consumers based on their previous perceptions of this particular country’s production and marketing strengths and weaknesses (Roth & Romeo, 1992). According to Roth and Diamantopoulos (2009), country of origin and country of origin image are two inseparably related constructs. While research on COO has focused on whether or not the nationality of a product would influence consumers’ evaluations and preferences, research on CoI helps explain which specific aspects of the country would affect consumers’ perceptions and attitudes, such as product evaluations and purchase intention, regarding products from a specific country.

The country image construct was first mentioned in 1970 by Nagashima in an academic paper, where he defined it as an image which is special image, stereotypical and standing, that the customers have in their mind about a particular country. This image can be molded by historical, economical and traditional variables” (Lin and Chen, 2006). Martin and Eroglu’s (1993) definition is that country image refers to the political, economic, technological and social characteristics of each country. According to Kotler (2011), country image is one of the first variables investigated in researchers regarding foreign products, international business and consumer behavior studies.

According to Laroche et al. (2005, p. 1) findings, CoI is a concept formed by three dimensions: cognitive, affective and conative components. Also, “country image and product beliefs affect product evaluations simultaneously regardless of consumers’ level of familiarity with a country’s products. (...) The structure of country image influences product evaluations both directly and indirectly through product beliefs”. Carneiro and Faria’s (2016) study revealed that the influence of country image on product evaluation was very low for ready-to-eat shrimp, but high for refrigerators. According to Costa et al.’s (2016) findings, the geographic component of the cognitive aspect of CoI impacts more the quality evaluation of fruits than of home appliances or clothes, the human component of the cognitive aspect has more impact on the quality perceptions of home appliances, and the affective aspect has a stronger effect on quality assessments of clothes.

Wang et al. (2012) discovered in their study that cognitive and affective country image have a different influence on the purchase intention, with the former affecting purchase through product image, and the latter directly influencing willingness to purchase, independent of product image. Roth and Diamantopoulos (2009) claim in their study that the focus on cognitive and affective country attitudes and their influence on purchase intention is a limitation. According to the authors, in the real world CoI is just one of many intrinsic, extrinsic and contextual elements that influence consumer decision making and choice.

For countries like Norway, a COO marketing strategy represents a possibility of boosting its international competitiveness regarding products and services that are too small to place themselves in a global scale (Iversen et al., 1998). In 2017, the Norwegian Seafood Council developed a new country of origin mark for Norwegian seafood, after an extensive analysis of awareness, value and perceptions enclosing the previous NORWAY label. The Creative Director Tone Bergan claimed that the new mark “Seafood from Norway” aims to portray the uniqueness of Norway, such as the Norwegians’ respect for nature, natural conditions, their coastal culture and origin (Norwegian Seafood Council, 2017).

According to the CEO of the Norwegian Seafood Council, Renate Larsen, the seafood business is Norway’s most important industry, with the potential to develop into their strongest brand

worldwide. He claims that with the adoption of the new logo, Norway is positioned as the origin and provider of the best seafood in the world. According to him, the “objective is to build a brand the whole seafood industry can be proud of, and which will further develop the industry towards a future in where seafood is our most important export product” (Norwegian Seafood Council, 2017, para. 1).

3.2.2.2 Product category image

Diamantopoulos et al.’s (2011 p. 509) definition of PCATI is that it “captures the image of that country’s products in a particular category”. According to Carneiro and Faria (2016), a summary effect may occur when consumers have prior experience with products from a specific country, which means that their perceptions of product quality may be influenced by the accumulated perception they have about products, in general, from that specific country or from the particular category of products from that country. For Rezvani et al. (2012), the successful match between country and product denotes that a country in particular specializes in that area. In addition, strategies to fortify and reassure the positive aspects of each product category and country image can be an effective strategy.

Pappu et al.’s (2007, p. 726) study shows that the impact of COO on the equity consumers associate with a brand from a particular country are product category specific. In addition, “each consumer-based brand equity dimension contributed differently to the relationship according to the product category, while the contribution of both country image dimensions (*macro* and *micro*) was also product category specific”. Their findings also revealed that cars are more sensitive to CoI than televisions as a product category.

In their study, Diamantopoulos et al. (2011) measured the country image at two levels: CoI and PCATI. According to Roth and Diamantopoulos (2009), if the main goal of a research is to explore the overall image of countries and their products, then global evaluations are more suitable measures of product images. If, however, the aim is to assess the influence of CoI on purchase intentions and evaluations of a specific brand or product, then scholars should request for specific products or brands, which is the case for this present study.

3.2.3 Brand image

A brand can be described as a sign, symbol, name, term, or design, or mixture of them which is intended to identify the products and services of one seller or group of sellers and to differentiate them from the competitors (Kotler, 1991). Brand image is defined as the perceptions that the consumer has regarding a brand, that is reflected by the associations stored in the consumer’s memory (Aaker, 1991; Keller, 1993). According to Keller (1993, p. 3), “brand associations are the other informational nodes linked to the brand node in memory and contain the meaning of the brand for consumers”. Keller (2008) states that brand image can be categorized by strength, favorability, and the uniqueness of brand associations. Brand associations indicated product benefits and summary evaluations of brands, given that they reflect the meanings of brands to customers by linking product information to the brand nodes in consumers’ memories

Brand associations are classified into three main categories: attributes, benefits, and attitudes. Attributes are related to the descriptive features that characterize a product or service, i.e., what the consumer thinks the product or service is or has and what the purchase or consumption involves. Benefits are related to the personal value that the customers assign to the product or service attributes, i.e., what the consumers think the product or service has to offer for them. The last category, brand attitudes, is important given that they shape consumer behavior and brand choice (Keller, 1993). Brand attitudes can be defined as the consumers’ general evaluations of a brand (Wilkie, 1986).

Brand associations are complicated and linked to one another, entailing several ideas, episodes, instances, and facts that establish a concrete network of brand knowledge (Yoo et al., 2000). They are a result of the consumer's brand belief, which can be built by the marketer, shaped by the customers themselves through direct experience with the product or service, and/or created by the consumer through interpretations based on existing associations (Aaker, 1991). Positive brand beliefs of consumers will affect their purchase intentions and brand choice (Yasin et al., 2007). Studies have shown that a strong, favorable, and exclusive brand image is related to willingness to pay for premium prices and higher brand equity (Faircloth et al., 2001; Lassar et al., 1995). According to Keller (1993), a brand is said to have positive customer-based brand value if consumers react favorable to product, price, promotion or distribution of the brand than they do to the same marketing mix components when it is credited to a fictitiously named or unnamed version of the service or product. The author also mentions that country of origin can be seen as a brand association, given that it forms symbolic brand values.

3.2.4 Brand familiarity

Brand familiarity can be defined as the magnitude of direct and indirect experience a consumer has had with a brand (Campbell et al., 2003 cited in Diamantopoulos et al., 2011). For Alba and Hutchinson (1987), brand familiarity refers to the number of product-related experiences that the consumer has had throughout product usage, advertising, etc. According to Keller (1993), brand awareness is related to brand familiarity, given that continuous exposure to a brand should lead to improved consumer ability to recognize and recall the brand. Scholars have also claimed that consumers may rely on perceived brand quality and brand familiarity as a marginal cue in their brand evaluations when the motivation or ability to process information is low (Baker et al. 1986; Petty & Cacioppo 1986).

Park and Lessig (1981) demonstrate in their study that the consumer's overall confidence in the chosen brand, i.e. the choice confidence, is a function of the individual's familiarity with the brand. It was discovered that consumers are not discerning enough in their choice at low levels of familiarity, what implicates that unfamiliar consumers are more likely to display low degree of choice confidence. Laroche et al. (1996) found in their study additional evidence that confidence in the brand evaluation is one of the drivers of purchase intention, and confirmed that the former is affected by brand familiarity. The authors also suggest that consumers' confidence regarding a brand may be due to their familiarity or experience with it, and that a marketer must enhance the customers' confidence in the brand in order to increase their intention to buy it. This can be done by offering the customer with more product-related information, or related experience.

Diamantopoulos et al. (2011, p. 521) found in their study that brand familiarity directly and significantly impacts both brand image perceptions and purchase intentions, and that, if omitted from models linking country of origin to the outcome variables, is likely to result in "(potentially severe) model misspecification with all the negative consequences this entails (i.e. biased parameter estimates and lower explained variance)". The authors also state that:

"(...) we explicitly control for the effects of brand familiarity for the following reasons. First, familiarity can be expected to enhance PCATI and brand image assessments as familiarity overcomes "fear of the unknown"; individuals are likely to be more circumspect/negative in their judgement of objects with which they are not familiar (Kent & Allen, 1994; Laroche et al., 1996). Second, familiarity may result in a greater willingness to accommodate imperfections, that is, a more tolerant evaluation of weaker facets of the brand (a "knowledge is loving" argument) (Colombo & Morrison, 1989). Third, brand familiarity can be expected to also directly (and positively) impact purchase intentions in that it reduces the mental

effort when making choices, and facilitates habitual purchase behaviour (a “force of habit” argument) (Laroche et al., 1996)”. (Diamantopoulos et al., 2011, p. 511).

3.2.5 Dimensions of country image, product category image and brand image

3.2.5.1 Product features

The dimensions named as “External features” and “Technology” employed by Diamantopoulos et al.’s (2011) study were replaced by the “Product features” dimension in this study, in order to measure consumers’ perceptions of attributes such as color, conservation, thickness, flavor, freshness and preparation time of the salted and dried cod. According to Chang and Wildt (1994), the product features and price are the main decision variables used by marketers to impact the assessment and purchase behaviors of potential consumers. The authors claim that marketers, to effectively make decisions related to these variables, aim to understand how consumers use product attribute and price information when assessing products.

Ares et al. (2010) found in their study that packaging features were the variables with the highest relative importance on consumers perception and purchase intention of functional foods. Xu et al. (2012) discovered in their study that Chinese consumers find seafood label a more important information source than prior consumption experience, and are willing to pay more for green-labeled and eco-labeled seafood.

According to Olsen’s (2008, p. 79) findings, “taste, distaste (negative affect), nutritional value and freshness (quality) are suggested to be most important in forming consumers' attitudes and preferences towards buying and consuming seafood”. Lynghjem and Breivik’s (2015) study shows that product attributes related to quality are the most important drivers of purchase intention of Norwegian salted cod in Spain, where product preferences differ across the studied regions in relation to product attributes such as thickness, freshness, color and texture.

3.2.5.2 Perceived quality

Quality can be described generally as superiority or excellence. Perceived quality, by extension, refers to the judgment of the consumer about a product’s whole superiority or excellence. It is “(1) different from objective or actual quality, (2) a higher-level abstraction rather than a specific attribute of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgment usually made within a consumer’s evoked set” (Zeithaml, 1988, p. 3). According to Aaker (1991), the perceived quality refers to the customer’s opinion of the quality the product or service represents and it directly impacts purchase decisions and brand loyalty, particularly when the customer is not capable of conducting a thorough assessment.

Perceived quality can enable a premium price for a product, creating gross margin for the company that can be invested in brand equity. It can also be seen as a competitive advantage, given that it provides the customer with a reason-to-buy and a source of differentiation, as well as channel interest and provide a basis for brand extension (Aaker, 1991). Brand extensions are related to the “use of an established brand name to enter a new product category”. If the brand is linked to high quality, then the brand extension should benefit. If it is associated with low quality, then the brand extension should be damaged (Aaker & Keller, 1990, p. 27).

The consumers often judge the quality of a product or service based on information cues linked to the product or service. These cues, either alone or jointly, provide the foundation for perceptions of quality and can be intrinsic or extrinsic. The first type is related to physical characteristics of the product, such as color, taste, size and flavor (Schiffman et al., 2008). The second type is related to

product characteristics that if altered, do not influence the objective nature of the product or service, such as price, brand, retail outlet and country of origin (Veale & Quester, 2009). Even though sometimes consumers use intrinsic cues in order to evaluate the product or service to base their choice “rationally” or “objectively”, more frequently extrinsic cues are used to judge quality (Schiffman et al., 2008).

Extrinsic cues can be influential enough to overcome sensory perceptions, as was shown in the study of Pechmann and Ratneshwar (1992 cited Veale & Quester, 2009) related to consumer judgment of orange juice quality. Respondents, by assessing the juice samples separately, claimed to prefer a lower quality juice if the price were somewhat high over a juice of lower quality if the price were similarly low. Previous studies have shown that perceived quality and perceived price are believed to be influential in the formation of value perceptions, with the former being positively associated to perceived value, and the latter being negatively related to perceived value (Sawyer & Dickson, 1984; Zeithaml, 1988). Perceived value is assumed to be a crucial variable affecting customer choice. If the perceived value is high, it is likely to lead to purchase intention (Dodds & Monroe, 1985; Monroe & Chapman, 1987) and to purchase itself (Zeithaml, 1988).

3.2.5.3 Perceived price

From the consumer’s standpoint, price can be defined as what is given up or sacrificed to obtain a product. A high price may lead to customers’ perception of high quality, but if it is set too high it may lead them to search for other alternatives (Zeithaml, 1988). According to Schiffman et al. (2008), the way consumers perceive price has a strong influence on purchase intention and satisfaction. Jacoby and Olson (1977) discriminated the objective monetary price (the actual price) from the perceived price (the consumer’s perception of the price). The former is not often encoded as the same as the latter by consumers. Some customers might remember the exact price, whereas others might only remember the price as “cheap” or “expensive”, or not encode the price at all. Prior studies show that the perceived price by consumers is shaped based on the actual price and the consumer’s reference price (Winer, 1986; Erickson & Johansson, 1985).

According to Lehmann and Winer (2005), customers compare actual prices with competitive and alternative prices before making a purchase choice based on their perceived quality of the product and their reference price. The reference price refers to the price used by consumers as a foundation for comparison with other prices, and it can be internal or external. The internal one refers to a mental price used by the customers to judge an observed price. The external one refers to the price the consumer has knowledge of, and is usually displayed in the place of purchase. Internal prices are likely to influence the perceived price over time, through price promotions, discounts and competition for example. Also, the observable price must be lower or equal to the customer’s reference price for the brand to encourage a purchase.

Lehmann and Winer (2005) also state that the objective of the price is not to retrieve the costs, but to capture the perceived value of the product in the consumer’s mind. For the authors, the product must deliver the quality and the expectations that the consumer has for the price paid, in other words, the product must deliver value for the money. According to Chang and Wildt (1994), the product features and price are the main decision variables used by marketers to impact the assessment and purchase behaviors of potential consumers. According to the authors, in order to successfully make decisions regarding these variables, marketers pursue knowledge about how consumers use product attribute and price information in their products’ evaluations. Aaker (1991) claims that if the customer-perceived quality of a product or service is high, the marketer can charge a price premium, increasing the profitability of the company. In competitive markets, a price premium is likely to boost the

perceived quality, while a competitive price is likely to greatly influence consumers' purchase intention and create value for money, what leads to a larger customer base and loyalty.

3.2.5.4 Distribution

Targeting a market involves communication channels, distribution channels, and selling channels. Distribution channels are used by marketers to display or deliver the physical product or service(s) to the consumer. Physical and service distribution channels include warehouses, transportation vehicles, and also several trade channels, such as distributors, wholesalers, and retailers. Selling channels are also used by marketers to effect trades with potential consumers, which includes not only distributors and retailers, but also banks and insurance companies that aid transactions. The supply chain, which goes from the raw materials to the final products for final buyers, can be characterized as a value delivery system (Kotler, 2002).

According to Cravens and Piercy (2007), strong channels of distribution secures that consumers get their desired product in time, what eventually increases consumers' trust given that they satisfy their needs as they wanted for. Time delivery of products to buyers is a critical issue that aims great attention from marketers. For Bee (2009), strong distribution channels safeguard a competitive position for the organization, given that logistics, timely production and dispatch of products for buyers indicates distribution capabilities of the organization and increases the customers' confidence in the brand. Distribution can also aid non-loyal customer to make a decision to buy the brand. Newman and Werbel (1973) highlight that repurchase without deliberation may be, among other variables, a function of product availability and not brand loyalty. According to Buttle (2004), that latent loyalty (when a strong attitude is not followed by repeated purchases) may be a matter of distribution and convenience.

3.2.5.5 Promotion

Promotion can be defined as the advertisement of a product to sell it to a customer. This practice is also known as the communication of the marketer with customers through several means of advertising. The main objective of promotion is to reduce the communication gap between the organization and the consumer (Lovelock & Wright, 2002). Promotion techniques, according to Hollensen (2007), reduce this gap because a consumer is attracted toward a specific product by promotional strategies, such as advertisement through multimedia, newspapers and other promotional actions. Marketing strategies focus on using media advertising to communicate with consumers in order to attract and convince them to buy the advertised product (Munusamy & Hoo, 2008).

According to Kotler (2002), a common business orientation named as the selling concept assumes that consumers and companies, if left alone, will normally not purchase enough of the organization's products. This means that the organization must engage in an aggressive selling and promotion effort, since the selling concept claims that customers must be convinced into purchasing. According to Buttle (2004), sales-oriented businesses assume that if they invest enough in advertising, public relations, selling and sales promotions, the consumers will be convinced to buy. The detailed study of Jensen and Jepsen (2006) provide evidence for this orientation. The authors found that the combination of online and offline promotion practices are sources of direct and indirect marketing and create chances for consumers to choose directly the advertised product.

3.3 Hypotheses

Based on the previously discussed theory and on Diamantopoulos et al.' (2011) model, nine hypotheses were created in order to help answer the two first research questions of this study, which are: (1) What are the drivers of the purchase intention of salted and dried cod for Brazilian consumers? (2) How does country of origin affect purchase intention of Norwegian salted and dried cod in Brazil? The hypotheses are shown in Table 3.1. They are tested in three regressions analyses. H₂, H₄, and H₈ test whether country image, product category image and brand familiarity have an effect on brand image. H₁ and H₇ test whether country image and brand familiarity have an effect on product category image. H₃, H₅, H₆ and H₉ tests whether country image, product category image, brand image and brand familiarity have an effect on purchase intention. Results are also compared with the qualitative results. The third research question (Can Brazilian consumers differentiate the Norwegian salted and dried cod from the others?) is assessed through specific questions in both the qualitative and quantitative analyses.

Table 3.1. Hypotheses.

H₁: Country image has a significant positive effect on product category image.

H₂: Country image has a significant positive effect on brand image.

H₃: Country image has a significant positive effect on purchase intention.

H₄: Product category image has a significant positive effect on brand image.

H₅: Product category image has a significant positive effect on purchase intention.

H₆: Brand image has a significant positive effect on purchase intention.

H₇: Brand familiarity has a significant positive effect on product category image.

H₈: Brand familiarity has a significant positive effect on brand image.

H₉: Brand familiarity has a significant positive effect on purchase intention.

4. Research methodology

This chapter explains the rationale for the application of the chosen research techniques and procedures in order to answer the research questions: (1) What are the drivers of the purchase intention of salted and dried cod for Brazilian consumers? (2) How does country of origin affect purchase intention of Norwegian salted and dried cod in Brazil? (3) Can Brazilian consumers differentiate the Norwegian salted and dried cod from the others? Firstly, the research design is discussed. Secondly, the qualitative and quantitative approaches are reviewed. Lastly, the reliability and validity of this study are deliberated.

4.1 Research design

The research design refers to the planning of the research. It indicates the required data, the sampling plan, the data collection technique and the analysis method. The research planning helps eliminate errors and inaccuracies. The aim of the research design is, therefore, to plan and structure the specific research project so the final validity of the research findings can be increased (Wiid & Diggines, 2009). According to Pallant (2016), the academic should consider the type of research design that is the best way to address the research questions. There are advantages and disadvantages to all types of research designs, so the chosen one should be the most appropriate approach to the research question.

Even though there are several ways to classify research designs, they are usually included into one of three general categories: experimental, quasi-experimental, and nonexperimental. This classification system is based on the level of control the experimental design has. The experimental design assigns participants of the study randomly to experimental and control groups. Quasi-experimental designs are used when randomized designs are not viable. Both of these designs can deliver information from which to draw causal implications. Nonexperimental designs (i.e., descriptive and correlational designs), on the other hand, cannot exclude extraneous variables as the cause of what is being observed because they do not control the variables and the environments that are being studied. The four most extensively nonexperimental approaches are: case studies, naturalistic observation, surveys, and focus groups (Marczyk et al., 2005). This study, thus, is classified in the nonexperimental research design, given that extraneous variables cannot be controlled.

The chosen approach for this study was survey. According to Marczyk et al. (2005), surveys studies ask respondents questions about their opinions, behaviors and attitudes. Some surveys simply describe what the respondents stated to think and do. Other surveys aim to find relationships between characteristics of the respondents and their affirmed opinions and behaviors, being referred to as correlational studies. The most popular methods of performing surveys are face-to-face, telephone, and mail. The main advantage of surveys is that they supply information related to large groups of people in a cost-effective way and with little effort, being the reason why this approach was chosen for this study.

Having chosen the research design, the data collection approach is the next step to be selected. There are two main approaches: qualitative and quantitative analyses (Wilson, 2006). Qualitative analysis aims to gain primary insight into the research problem, and usually focus on the gathering of detailed sums of primary data from rather small samples of subjects by questioning or observing behavior (Shiu et al. 2009). Quantitative analysis, on the other hand, is considered to be in the category of empirical studies, or statistical studies. Its main goal is the generalizability from the sample to the population, what requires randomization, control of variables, and validation and reliability of measures (Newman & Benz, 1998).

All behavioral research is made up of a combination of qualitative and quantitative constructs according to Newman and Benz (1998). The combination of two or more methods of data collection is named as a methodological triangulation (Duffy, 1987). Its application enables researchers to reinforce the study, given that the strengths in one method can balance the weakness in the other, and vice-versa (Rohner, 1977). Also, qualitative and quantitative methods can work together in an interactive way to grasp a better understanding of the phenomenon being studied (Rossman & Wilson, 1985). This study, therefore, uses triangulation in order to gain a deeper insight into the proposed research questions.

4.2 Qualitative analysis

Qualitative analysis has an inductive strategy, what means that the aim of the researcher is to seek strong evidence of the truth of the conclusion (Okasha, 2002). The essential features of this type of research are: (1) the accurate choice of theories and methods; (2) the acknowledgement and analysis of diverse perspectives; (3) the researchers' reflection on their study as a part of the production of knowledge, also called as "reflexivity"; and (4) the diversity of methods and approaches (Flick, 2014). The qualitative part of this study is explained in the following sections.

4.2.1 Interview method

One of the main methods to collect data in qualitative research is in-depth interviews, which involves a verbal interaction between a researcher and an interviewee that has good knowledge about the topic being studied by the former. They are usually conducted face-to-face, given that it is the most efficient way to gather in-depth knowledge, but they can also be undertaken through telephone, video-conferencing or email. In-depth interviews are either unstructured or semi-structured. In the former, the researcher does not plan the content or the flow of information to be collected. In the latter, the interviewer prepares a broad set of questions to ask, but encourages the respondent to expand on matters that they consider as important, also letting the interview flow naturally according to the respondent's answers (Legard et al., 2003; Coombes et al., 2009).

The advantage of in-depth interviews is that it allows the researcher to gather information quickly and to eliminate irrelevant information immediately (Saunders et al., 2009). Thus, for this study it was employed semi-structured in-depth interviews, given that it was essential for the research to gather deeper insight of the opinions of Norwegian exporters and the Brazilian market regarding the proposed research questions. Simple interview guides were created in order to keep a structure and to gather the desired information.

4.2.2 Informants

In total, 34 interviews were made. The goal was to follow the value chain of the salted and dried cod, targeting producers, sellers and buyers in order to gain a deep insight into the Brazilian market. Therefore, the interviews were done both in Brazil and Norway. In the former country, the interviews were made in the cities of Rio de Janeiro and São Paulo. It was interviewed four consumers from three different regions in Brazil, eight restaurants, three supermarkets, eight market stalls, two agents, and a subsidiary of a Portuguese exporter in Rio de Janeiro. In Norway, the interviews were done in the city of Ålesund, with eight Norwegian exporters of salted and dried cod to Brazil.

The selection of the informants started with the Brazilian ones. Several restaurants and supermarkets that served or sold salted and dried cod were visited in the cities of Rio de Janeiro and São Paulo. Yet, only a few of the approached ones accepted to be interviewed. However, this sample can be considered an adequate representation of these segments, given that the main chains were

interviewed, what means that the majority of their practices and clientele are the same among the same chain of stores or restaurants.

Most of the market stalls that sold salted and dried cod in the municipal market of the cities of Rio de Janeiro and São Paulo agreed to be interviewed, and therefore they can be considered to be a fair representation of this sector. When it comes to the consumers, the selection was made by asking those who accepted to answer to the quantitative survey if they would also agree to be interviewed. Sadly, only four agreed to it, not being a fair representation of the population. However, they are from different regions and financial classes. The selection of the agents was dependent on the contacts provided by the other interviewees, and therefore hard to control. Only four contacts were provided for this survey, of which only two were willing to help, also not being a fair representation of this sector.

The selection of the exporters started with the analysis of the Norwegian exporters of salted and dried cod to Brazil. According to the Norwegian Seafood Council (2018c), there are 18 Norwegian exporters to Brazil, 10 of which are located in the Sunnmøre region. Due to the constraint of resources, only these 10 were contacted, of which eight were willing to help. Hence, it can be said that the Norwegian exporters are a fair representation of this industry. The contact of the Portuguese exporter was given by one of the market stall informants. This informant is not a fair representation of the Portuguese industry in overall, but it was a good addition to the survey, given that its answers could be compared to its Norwegian competitors.

4.2.3 Interview guide

The creation of effective questions for the interview process is one of the most critical components of the interview design. Researchers should be careful to make sure that each of the questions will allow them to dive into the experiences and/or knowledge of the respondents, so that maximum data can be extracted out of the interview (Turner, 2010). McNamara (2009) suggests that the questions should be neutral, the wording should be open-ended (i.e., participants must be allowed to choose their own terminologies when replying the questions), questions should be clear and asked one at a time, and “why” questions must be carefully addressed. Creswell (2007) claims that the researcher must also prepare follow-up questions or prompts to guarantee that optimal responses are obtained from the respondents.

The aim of the in-depth interview was to gain deeper knowledge of what drives Brazilian consumers to purchase salted and dried cod, if country of origin has an impact on the purchase intention of Norwegian salted and dried cod in Brazil, and if Brazilian consumers can differentiate Norwegian salted and dried cod from others. Simple interview guides were made in order to guarantee that these research questions would be addressed. Templates of the interview guides in English¹ are provided from Appendix 1.1 to 1.4. The questions were adapted from Lynghjem and Breivik’s (2015) in-depth interview used in their study.

The interview guides were adapted according to the interviewee. Therefore, it was made interview guides for consumers, restaurants, sellers (supermarkets and other type of stores), agents, and exporters. However, all the guides addressed matters such as the type of salted and dried fish sold or bought, the importance of country of origin, the drivers of purchase intention of *bacalhau* for Brazilian consumers, demand features, comparison with other types of cod (such as the frozen one), and final considerations. Some of the differences between the interviews guides were specific to the

¹ The interview guides in Portuguese are available from the author upon request.

interviewee. For example, the exporters were asked about their marketing strategy in Brazil, while restaurants were asked if they included the country of origin of the *bacalhau* when writing the dish in the menu.

4.2.4 Qualitative data collection

The interviews were undertaken in the months of June, July and August of 2018. Before commencing the interviews, it was important to understand the different situational context of the different types of interviewees, and therefore adjust the data collection method accordingly. The aim of the study was explained for all the interviewees before the interview, and it was ensured the survey's academic purposes and that the interviewee could be kept anonymous should the respondent wished to. It was also asked for authorization to tape record, which only some agreed to. Thus, all the answers were typed simultaneously, with the use of a notebook or smartphone. The interviews lasted from 20 to 90 minutes. For the Norwegian exporters, the interviews were made face-to-face in the companies' headquarters, with the exception of one company, that chose to do it through the phone. The transcripts of the interviews were sent to them posteriorly by email, so that the interviewees could correct their answers.

For the other types of interviewees, the interviews were also made face-to-face, in their workplace (supermarket, market stall, restaurant or office). The exception was the interviews with one of the agents and the representative of the Portuguese exporter's subsidiary in the city of Rio de Janeiro, that were made through the phone due to incompatible availabilities. In addition, the interviews with two of the consumers were also made through the phone given that one of them is from the city of Teresina, in the northeast region of Brazil, and the other is from the city of Curitiba, south region of Brazil. The correction of the transcripts had to be done immediately after the interview for the majority of the interviewees, given the resistance they portrayed to give their email address. For supermarkets, stores, and restaurants, the resistance was even higher to accept to give the interviews. Therefore, for these interviews, the answers were read out loud to them once the interview was over, and then asked if there was something that should be corrected. The exception was one of the agents, that chose to correct it through email.

4.3 Quantitative analysis

Quantitative analysis refers to the action of explaining phenomena by gathering numerical data, which is analyzed with the use of mathematically based methods, in specific statistics (Aliaga & Gunderson, 2000). Its main goal is to generalize the findings from the sample to the population in order to find if the relationship found in the survey is whether a result of differences in the population or whether it is a result of idiosyncrasy or coincidence of the sample (Muijs, 2011). The generalizability requires randomization, control of variables, and validation and reliability of measures (Newman & Benz, 1998). The quantitative part of this study is explained in the following sections.

4.3.1 Construction of questionnaire

Questionnaires are the most often used data collection method in statistical work and in social sciences. Their main advantage is that they can be easily constructed. Also, they are very efficient in terms of effort, time and financial resources. The design of the questionnaire is of extreme importance, in general they should not exceed four pages or take more than 30 minutes to complete (Dörnyei & Taguchi, 2010). Their questions can be open or closed (also named as multiple choice). The former allows participants to frame their own reply, while the latter asks respondents to select one of two or more suggested categories (Sheatsley, 1983). Likert-scale questions are included in the closed

questions category. This type of question is a “psycho psychometric scale that has multiple categories from which respondents choose to indicate their opinions, attitudes, or feelings about a particular issue”. They can provide data that is easily compared and combined with qualitative data collection techniques (Nemoto & Beglar, 2014, p. 2). Also, they provide a wider range of possible scores, increasing the statistical analyses available to the researcher (Pallant, 2016).

The questionnaire in this study contained 56 questions. Its first part consisted of background information such as age, gender, monthly household income, size of household, region, frequency and preference of the respondents. The second section consisted of questions related to brand image and brand familiarity. The third and fourth sections referred to the dimensions proposed by Diamantopoulos et al. (2011) to measure product features, quality, price, distribution and promotion. The fifth section measured country image and product category image. Finally, the last section referred to the purchase intention of both salted and dried cod in general and for the Norwegian one. The template of the questionnaire in English² is found in Appendix 2.

4.3.2 Pre-test

A preliminary survey was carried out with ten Brazilian consumers, in order to assess if any changes should be made. Based on comments and opinions of these informants, the questionnaire was modified and simplified. Some sentences were rewritten in order to have a clearer meaning, and the annual household income question was changed to monthly values, for example.

4.3.3 Informants

In total, 151 answers were collected. The informants of the questionnaire were Brazilian consumers of salted and dried cod. The aim was to target the final consumers in order to get a better insight on their preferences and opinions, given that the qualitative survey focused on producers and sellers. The selected respondents were Brazilian consumers who claimed to have previously purchased salted and dried cod products.

4.3.4 Measurement of the constructs

The variables used in the quantitative analysis of this study are based on the model of Diamantopoulos et al. (2011), as previously discussed. Based on the formulated hypotheses, the independent variables are country image, product category image, brand image and brand familiarity, as well as the dimensions included in Diamantopoulos et al.'s (2011) study, which are product features, quality, price, distribution and promotion. The dependent variables are product category image (for hypotheses 1 and 7), brand image (for hypotheses 2, 4 and 8), and purchase intention (for hypotheses 3, 5, 6 and 9). Control variables were also included in the study, which consist of: gender, age, size of household, region, monthly household gross income³, frequencies and preferences.

Purchase intention or repurchase intention: In this study, the purchase intention is used as a dependent variable, which is measured through an item in a seven-point scale, as recommended and employed by Diamantopoulos et al. (2011). The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. It was also included an additional question derived from Lynghjem and Breivik's (2015) study, to assess whether the respondents could differentiate the Norwegian salted

² The questionnaire in Portuguese is available from the author upon request.

³ Changed to annual values in the analysis of the results.

and dried cod from the others. If so they were asked whether they were willing to purchase salted and dried cod from Norway, Portugal or other country, and they were also directed to a seven-point scale to assess specifically their purchase intention of Norwegian salted and dried cod. The items are presented below.

V₅₃: I intend to buy salted and dried cod.

V₅₄: Can you differentiate Norwegian salted and dried cod from the others?

(If yes) V₅₅: I intend to buy salted and dried cod from:

Norway Portugal Other

(If yes) V₅₆: I intend to buy Norwegian salted and dried cod.

Country image: The scales employed to measure CoI as an independent variable are derived from the study of Wang et al. (2012), consisting of (5) items in a seven-point scale. The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. The items are presented below.

V₄₃: In your perception, Norway is economically well developed.

V₄₄: In your perception, Norway has advanced technology.

V₄₅: In your perception, Norway has a good standard of life.

V₄₆: Based on your feelings, Norway is friendly towards us.

V₄₇: Based on your feelings, Norway is likable.

Product category image: The scales used to measure PCATI as an independent variable are adapted from Martín Martín and Cerviño (2011) and Wang et al.'s (2012) studies. The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. PCATI is measured through (5) items, presented below.

V₄₈: In your perception, Norway is a dominant country in the production of salted and dried cod.

V₄₉: You generally perceive Norwegian salted and dried cod as of high quality.

V₅₀: You generally perceive Norwegian salted and dried cod as having global brand presence.

V₅₁: You generally perceive Norwegian salted and dried cod as being produced with high workmanship.

V₅₂: You generally perceive Norwegian salted and dried cod as reliable.

Brand image: The scales used to measure brand image as an independent variable are employed from Wang and Yang (2010) and Lyngghjem and Breivik's (2015) studies, consisting of (3) items. The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. The items are presented below.

V₁₄: Salted and dried cod is superior than competing products (salted, frozen and desalted).

V₁₅: Salted and dried cod has a good reputation.

V₁₆: You would recommend the salted and dried cod product.

Brand familiarity: The scales used to measure brand familiarity as an independent variable are adapted from Diamantopoulos et al.' (2011) study. The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. Brand familiarity is measured through (3) items, presented below.

V₁₇: You are well informed of salted and dried cod.

V₁₈: You have good knowledge about salted and dried cod product.

V₁₉: You have good experience with salted and dried cod product.

Product features: The scales used to measure product features as an independent variable are employed from these authors' study, consisting of (6) items. The construct indicates 1 for not important, 4 for indifferent and 7 for very important. The items are presented below.

- V₂₀: How important is the flavor of the salted and dried cod to you?
- V₂₁: How important is the preparation time of the salted and dried cod to you?
- V₂₂: How important is the conservation of the salted and dried cod to you?
- V₂₃: How important is the color of the salted and dried cod for you to purchase?
- V₂₄: How important is the thickness of the salted and dried cod for you to purchase?
- V₂₅: How important is the freshness of the salted and dried cod for you to purchase?

Perceived quality: The scales used to measure perceived quality as an independent variable are adapted from Lynghjem and Breivik's (2015) study and Carneiro and Faria (2016)'s quality evaluation measures of ready-to-eat shrimp meal used in their study. The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. Perceived quality is measured through (5) items, presented below.

- V₂₆: In your opinion, salted and dried cod is healthy.
- V₂₇: In your opinion, salted and dried cod is of high nutritional value.
- V₂₈: In your opinion, salted and dried cod products have few additives.
- V₂₉: In your opinion, salted and dried cod is of high quality.
- V₃₀: In your opinion, salted and dried cod is of better quality than the alternatives (salted, frozen and desalted).

Perceived price: The scales used to measure perceived price as an independent variable are employed from Hui and Zhou (2002), Diamantopolos et al. (2011) and Lynghjem and Breivik (2015)'s studies, consisting of (4) items. The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. The items are presented below.

- V₃₁: Salted and dried cod is a good value for the money.
- V₃₂: In your opinion, salted and dried cod is a good buy.
- V₃₃: The current price of salted and dried cod is attractive.
- V₃₄: You buy salted and dried cod regardless of price.

Distribution: The scales used to measure distribution as an independent variable are adapted from Yoo et al. (2000) and Lynghjem and Breivik's (2015) studies. The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. Distribution is measured through (4) items, presented below.

- V₃₅: Salted and dried cod is easy to find in stores.
- V₃₆: You can choose from a wide range of salted and dried cod.
- V₃₇: More stores sell salted and dried cod, as compared to other cod products (salted, frozen and desalted).
- V₃₈: Salted and dried cod is distributed through as many stores as possible.

Promotion: The scales used to measure promotion as an independent variable are employed from Diamantopolos et al. (2011)'s study, consisting of (4) items. The construct indicates 1 for strongly disagree, 4 for neutral and 7 for strongly agree. The items are presented below.

- V₃₉: Salted and dried cod is intensely advertised.
- V₄₀: Salted and dried cod is widely known.

V₄₁: Salted and dried cod has prestige.

V₄₂: Salted and dried cod is internationally recognized.

Frequency and preference variables: As employed by Lynghjem and Breivik (2015), frequency and preference items were also included in this study. All the items are in multiple choice format.

V₆: What kind of cod product do you purchase more often?

V₇: What kind of salted and dried cod product do you purchase more often?

V₈: What is your favorite salted and dried cod product?

V₉: Where do you most frequently consume salted and dried cod?

V₁₀: How often do you purchase salted and dried cod?

V₁₁: What is the country of origin of the salted and dried cod you purchase more often?

V₁₂: Where do you usually purchase salted and dried cod?

V₁₃: How long do you usually take to prepare salted and dried cod?

Control variables

Age (V₁): Respondents were asked to choose the interval on which their age was included. Six options were given to them, ranging from 16 to 66 or more.

Gender (V₂): Respondents were asked to choose one option out of male and female.

Size of household (V₃): Respondents were asked the size of their household. Five options were given to them, ranging from 1 to 5 or more.

Region (V₄): Respondents were asked their region. Five options were given to them: North, Northeast, Southeast, Center-West and South.

Annual household gross income (V₅): Respondents were asked the level of their income per month, given that during the pre-test most of the informants declared to have problems in answering in annual values. These values are changed to annual values in the next chapter. Five options were given to them, considering that the minimum wage per month in 2018 was of BRL 954 (Trading Economics, 2018a) and that the Brazilian average income per month per capita was of BRL 2,112 for those who had some income (from all sources) in 2017 (Agência Notícias IBGE, 2018b), but also that this product is traditionally consumed mainly by higher income families (Camargo Neto, 2014). The options were: Less than 1 000, from 1 000 to 5 000, from 5 001 to 10 000, from 10 001 to 15 000, from 15 001 to 20 000, and more than 20 000.

4.3.5 Quantitative data collection

The questionnaire was created online, using the tool Google Forms, which was available from June to August of 2018. Supermarkets, markets and stores were target in order to approach potential consumers of salted and dried cod. The questionnaire was also shared in Facebook pages of universities and of cod recipes. However, most of the respondents were asked to share the questionnaire with family and friends, given the cost constraint in order to get a large sample size. Therefore, the sample cannot be considered completely random.

4.3.6 Statistical analyses

The collected numerical data was analyzed with the use of various statistical analyses. In order to do so, it was used “one of the, if not the, most widely used and comprehensive statistical programs in the social sciences” referred to as SPSS, which stands for Statistical Package for the Social Sciences. This program allows the researcher to score and analyze quantitative data rapidly and in several ways,

with the use of complicated and usually more suitable statistical techniques that would not be easily applied otherwise (Bryman & Cramer, 2001, p. 15).

The proposed hypotheses were accepted or rejected based on the results of the analyzes. Also, the quantitative results were compared to the qualitative results in order to gain deeper knowledge and insight of the proposed research questions, following the methodological triangulation method in order to strengthen the study. The employed statistical analyses are explained in the following sections.

4.3.6.1 Data cleaning

Before analyzing the data, it is essential to check for errors. Mistakes can be easily made when entering data, some of which can deeply damage the analyzes. The data screening process involves two steps: checking for error, and finding and correcting the error in the data file. In the first step, the researcher must assess whether there are any scores out of range in each of the variables. In the second step, the researcher must find which case is involved, which means finding where the error occurred in the data file. Then, the value must be corrected or deleted (Pallant, 2016).

4.3.6.2 Descriptive analysis

Once the data is clean from errors, the descriptive phase of the analysis can be initiated. Descriptive statistics aim to describe the characteristics of the chosen sample, and to assess whether any variable violates the assumptions underlying the statistical techniques that will be employed to address the research questions. “These descriptive statistics include the mean, standard deviation, range of scores, skewness and kurtosis”. For categorical variables, the frequency of answers is analyzed (Pallant, 2016, p. 53).

The mean refers to the average, and is calculated through the sum of all the values in the data file, which is divided by the number of cases. It can only be figured from interval or ratio data. The range is related to the difference between the highest and the lowest values in the data file (Wilson, 2012). The standard deviation measures how far the scores are from the mean on average, and is calculated by squaring the deviations from the mean and dividing it by one number less than the sample size (Weiss, 2012).

The skewness value offers an indication of how symmetric the distribution of the values is, with positive skewness suggesting a cluster of scored to the left, and negative skewness suggesting a clustering of scores in the right-end part of the graphic. The kurtosis, on the other hand, tells how peaked the distribution is. Positive kurtosis indicates a peaked distribution, while negative kurtosis indicates that the distribution is flat. Normal distributions should obtain value zero for these two measures (Pallant, 2016).

Missing data should also be considered given that it is still one of the most problematic matters in most researches, and it must be fixed to permit for as much of the sample to be assessed as feasible. Researchers must check the amount of missing data and decide if respondents or variables should be deleted. Two approaches can be selected: to use only valid data or to compute replacement data for the missing data. The former approach must be carefully assessed by the researcher, given that it can assure the full effect of any biases. The latter can be done by replacing the scores with the mean or with particular characteristics of the case employed in a predictive relationship (Hair et al., 2014).

According to Pallant (2016), the researcher can choose from the following options in SPSS: (1) to exclude cases listwise, an option that includes in the analysis only cases with full data on all of the listed variables; (2) to exclude cases pairwise, that excludes the case only if it is missing data for the specific analysis, keeping it for analysis which it has the necessary information; (3) to replace with

the mean; and (4) other advanced options for the estimation of missing values (e.g. imputation). The author highly suggests the second option and recommends that the third should not be used.

Outliers and extreme values should also be checked, since many statistical techniques are sensitive to them. They refer to cases that have scores well above or well below the majority of the other cases. They can be inspected through the histogram and the boxplot graphics. The researcher must check if the outlier or extreme value are a result of an error in the entering of data or if it is a genuine score. If it is an error, it must be corrected or deleted. If not, the researcher must decide what to do. Some scholars advise to remove it or to change it to a less extreme value so there will be no distortion of the statistics (Pallant, 2016). According to Hair et al. (2014, p. 65), outliers “should be retained unless demonstrable proof indicates that they are truly aberrant and not representative of any observations in the population”.

4.3.6.3 Factor analysis

In order to measure the proposed research questions, a confirmatory factor analysis was run to test if the items we have suggested measure the same scale. Confirmatory factor analysis (CFA) tests how well the variables being measured represent the constructs, i.e., CFA shows how well the theoretical specification of the factors matches the actual data, enabling researchers to confirm or reject their preconceived theory. Differently from exploratory factor analysis (EFA), in CFA the researcher is required to specify before results are computed the number of factors that exist for a set of variables and which of the factors each variable will load on (Hair et al., 2014).

Two main issues must be addressed in order to determine if a specific data set is suitable for factor analysis: the sample size and the strength of the relationship (correlation) among the variables (Pallant, 2016). The ideal sample size should be of 100 or more, and a sample of fewer than 50 cases should not be analyzed. Also, there should be at least five cases for each variable, the ideal ratio being of 10:1 (Hair et al., 2014). The strength of the relationship among the variables can be assessed through the correlation matrix, the Bartlett’s test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. If the correlation matrix shows few correlations above .30, factor analysis may not be appropriate. Also, the Bartlett’s test must be significant, and the KMO must be 0.6 or more to proceed with the factor analysis (Tabachnick & Fidell, 2013). According to the IBM Knowledge Center, the Bartlett’s test of sphericity checks if the correlation matrix is an identity matrix, what indicates an inappropriate factor model, while the KMO tests if the partial correlations amid the variables are small. In addition, the individual KMO (the measure of sampling adequacy for each variables) can also be analyzed, being displayed in the diagonal of the Anti-Image Correlation Matrix. This table also shows the negatives of the partial correlation coefficients, and most of the off-diagonal elements are small in a good factor model (Factor Analysis Descriptives, n.d.).

In order to determine how many factors should be extracted, the researcher can evaluate the Total Variance Explained table, which shows each component’s eigenvalue, as well as how much of the total variance it explains in percent. According to the Kaiser’s criterion, only components with eigenvalue of 1 or more must be considered. But given that using this criterion the researcher might often find too many components to be extracted, the Scree Plot is also of importance for the analysis (Pallant 2016). The level of explanation of the variables can also help in determining which ones to extract. In the Communalities table the communality of each variable can be assessed, which represents the amount of variance explained by the factor solution for each variable, i.e., the total amount of variance a variable share with all other variables. Variables with low communalities must be looked into (Hair et al., 2014).

Finally, the Component Matrix should be assessed, which shows unrotated factor loadings (correlation between the variables and the factors) of each variable on each factor (Pallant, 2016). The Rotated Component Matrix can also be checked, given that rotated loadings are generally used in factor interpretation, except for cases where data reduction is the goal (Hair et al., 2014). According to Pallant (2016), loadings above .40 are strong, while according to Hair et al. (2014, p. 116) “although factor loadings of +/- .30 to +/- .40 are minimally acceptable, values greater than +/- .50 are generally considered necessary for practical significance”.

4.3.6.4 Multiple regression analysis

Regression analysis is the most broadly used and versatile dependence technique, applicable in every aspect of business decision making (Hair et al., 2014). Wilson (2012) claims that there are three types of regression analysis: the simple linear regression, the multiple linear regression, and the non-linear regression. The first type is used to analyze the linear relationship between a dependent variable and an independent one, while the second type is employed to assess the relationship between a dependent variable and multiple independent ones. Lastly, the third type of regression analysis is used when it is assumed that the relationship between the dependent variables and the independent variables is not linear in regression parameters. For this present study, it was employed the multiple regression analysis, given that several independent variables are included in the model, and it is assumed a linear relationship between them and the dependent variable. The aim of multiple regression analysis is to use the independent variables, whose values are known by the researcher, to predict the dependent variable. The weight of each independent variable refers to its contribution to the prediction of the dependent variable. The set of weighted predictors forms the regression variate, which is the linear combination of independent variables that predicts the dependent variable the best (Hair et al., 2014).

In order to predict the dependent variable, there are some assumptions about the relationships between the dependent and independent variables that affect the statistical procedure (least squares) used for multiple regression. It is of great importance to assess whether the errors in predicting are a result of an actual lack of relationship among the variables or caused by some features of the data not accommodated by the regression model. The main method of prediction error for the variate is the residual, which is the difference between the observed and predicted values for the dependent variable. Plotting the residual versus the predicted or independent variables is a fundamental technique of identifying assumption violations for the whole relationship. The residual scatterplot allows us to check the normality of the error term distribution. The error distribution should be normally distributed about the predicted dependent variable scores. The Kolmogorov-Smirnov test can also be used to calculate the level of significance for the differences from a normal distribution (Hair et al., 2014; Pallant, 2016). If problems found, the bootstrapping technique can be employed. It refers to “a nonparametric approach to statistical inference that substitutes computation for more traditional distributional assumptions and asymptotic results”. Given that it does not require normally distributed errors or large sample size, the bootstrap can provide more accurate results when the data “are not well behaved or when the sample size is small” (Fox, 2016, p. 647).

Other main assumptions underlying multiple regression analysis are multicollinearity, sample size and outliers. Multicollinearity refers to a high level of correlation between the independent variables, what jeopardizes the regression model. Two values given by the analysis are Tolerance and VIF. The former refers to how much of the variance in the specific independent variable is not explained by the other independent variables. A very small value (less than .10) suggests problems

with multicollinearity. The VIF (Variance inflation factor), on the other hand, refers to the opposite of the Tolerance value and it should be lower than 10 (Pallant, 2016).

Regarding the sample size, Hair et al. (2014) claim that a general rule to keep the desired levels of statistical power and generalizability is to never have a ratio lower than five observations for each independent variable and the constant term. Tabachnick and Fidell (2013) also suggest a formula, considering the number of independent variables (m) included in the analysis: $N > 50 + 8m$. Multiple regression analysis is also very sensitive to outliers. The standardized residual plot can be requested in the analysis in order to assess outliers in the dependent variable (Pallant, 2016). Outliers are those with standardized residual values larger than 3.3 or lower than -3.3 (Tabachnick & Fidell, 2013).

When it comes to the interpretation of the results, the researcher must first assess the model fit. The coefficient of determination (R^2) represents the strength of the overall relationship. It represents the amount of variation in the dependent variable associated with all of the independent variables, i.e. the amount of variation in the dependent variable explained by the model. It can vary from 0 to 1, and the higher its value, the higher the explanatory power of the regression equation. The adjusted R^2 , on the other hand, considers the sample size and the number of independent variables in the model. It should be reported, given that the addition of independent variables can cause the R^2 value to increase even if they have few explanatory power or if the degrees of freedom become small (Hair et al., 2014).

The model fit can also be assessed in the table labelled ANOVA. The Regression Sum of Squares represents the amount of improvement in the explanation of the dependent variable accounted for by the independent variables. The Residual one represents the variance in the dependent variable not explained by the regression model (Hair et al., 2014). Also, the F test in this table assesses the statistical significance of the overall result. It tests if “the null hypothesis that multiple R in the population equals 0”. To be statistically significant, its p-value must be larger than the α value (0.05) (Pallant, 2016, p. 162).

Finally, the regression variate is assessed through the estimation of each regression coefficient (independent variable) for the explanation of the dependent variable. These coefficients denote the change in the dependent variable with the increase of one unit of the independent variable in question. The sign represents whether the relationship is negative or positive. The researcher should look at the unstandardized coefficient (b), and only look at the standardized ones (beta) as a guide or only for variables with minimum multicollinearity (Hair et al., 2014). But in order to interpret the coefficient, its statistical significance must be assessed. If its Significance value is higher than the α value (0.05), then the variable does not make a significant unique contribution to the explanation of the dependent variable, and should not be considered (Pallant, 2016).

4.3.6.5 Analysis of variance

In order to compare means between different groups, there are several types of t-tests available in IBM SPSS. The two types of tests used in this study were independent-samples t-test and one-way analysis of variance. The former is employed to compare the mean scores of two different groups of conditions or people, while the latter is used for the comparison of more than two groups. One-way analysis of variance involves one independent variable with a number of different levels, which correspond to different groups or conditions (Pallant, 2016).

Both of these types of analysis of variance englobe the same assumptions. The first assumption refers to the level of the measurement, which relates to the fact that the parametric approaches assumes that the dependent variable is measured in a continuous scale. The second and third assumptions relates to the fact that these techniques assume that the data was randomly gathered and are independent from one another. The fourth assumption is related to the fact that these techniques assume that that the data

is normally distributed. However, with a large enough sample, of more than 30 observations for example, these techniques are reasonably 'robust', and the violation of this assumption should not cause big problems (Pallant, 2016).

Lastly, the fifth assumption relates to the homogeneity of variance. The parametric techniques assume that the samples are gathered from populations of equal variance. In order to test this, IBM SPSS executes the Levene's test of equality of variances, which if found significant means that this assumption was violated. However, according to Pallant (2016, p. 209) "analysis of variance is reasonably robust to violations of this assumption, provided the size of your groups is reasonably similar (...)". The author also mention that two results are given for t-tests, one for when the assumption is violated and one for when it is not.

In order to asses if there is a significant difference between the groups in the analysis, for the t-tests the column labelled 'Sig. (2-tailed)' should be assessed, while for the one-way analysis of variance, the column labelled 'Sig.' in the ANOVA table should be checked. If their values are higher than .05, there is no significant difference between the groups in the analysis. For the one-way analysis of variance, in case the results show that there is a significant difference among the groups, the post-hoc tests in the mean scores on the dependent variable across the groups can tell where the differences lie (Pallant, 2016).

In addition, the effect size statistics can be employed in order to assess the magnitude of the difference between the groups. Eta squared is one of the most common used statistics, which represents the proportion of variance in the dependent variable accounted for by the independent variable (the groups). It varies from zero to one, and it is calculated by the ratio of the squared t value to the sum of the squared t value with the sample size minus two (Pallant, 2016). The guidelines for the interpretation of the values proposed by Cohen (1988) are that .01 values have a small effect, .06 have a moderate effect, and .14 have a large effect.

4.4 Validity and reliability

As an important step of the research process, the researcher must address two important characteristics: validity and reliability of the research. Validity is related to the extent of which a measure correctly represents what it is supposed to, while reliability refers to the extent of which the observed variable measures the "true" value and it is without errors, being the opposite of measurement error (Hair et al., 2014). This study, as mentioned previously, combines qualitative and quantitative methods. According to Patton (2002), the triangulation of the data collection strengthens the findings. Thus, the research design of this study can be said to improve the validity and reliability of the findings.

There are two types of validity: internal and external validities. Internal validity is related to "the quality of an experimental design such that the results obtained can be attributed to the manipulation of the independent variable". The external validity, on the other hand, is related to "the quality of an experimental design such that the results can be generalized from the original sample and by extension, to the population from which the sample originated" (Salkind, 2011, p. 147).

In order to ensure internal validity for the qualitative part of the survey, the transcript of the interview was corrected by all of the respondents. For the quantitative part of the survey, the selection method was identified as a threat to the internal validity of the study, based on the possible threats listed by Salkind (2011). Given that in order to get a large sample size was not possible without incurring in a great amount of costs, most of the respondents were asked to share the questionnaire with family and friends. Therefore, the sample cannot be considered completely random.

Regarding the external validity of the quantitative research, the problem was also linked to the sample size, given that the generalization to the population is a sensitive matter with a small sample.

However, the author also claims that there should be a balance between the internal and the external validity, given that internal validity is related to the level of control the researcher has over the study. According to the author, the study will have limited generalizability if there is too much control. Therefore, moderate degrees of internal validity should be achieved “by controlling extraneous sources of variance through randomization and a control group” (Salkind, 2011, p. 149). Thus, seven control groups were included in this study (age, gender, size of household, region, annual household gross income, frequency and preferences). For the qualitative part of the study, the external validity was ensured by the selection of respondents who could be considered as a fair representation of their population. However, this was not possible for the consumers, agents and Portuguese exporters.

Additionally, given that a confirmatory factor analysis was employed in the quantitative analysis to test if the items we have suggested measure the same scale, the construct validity had to be assessed. This term is related to the degree to which a set of measures actually reflects the latent construct they are supposed to measure, and it is made up by four components: convergent validity, discriminant validity, face validity and nomological validity. The first one refers to the degree to which a measure of a particular construct converge or share a high level of variance in common, and it is measured through the average variance extracted (AVE)- the sum of squared standardized factor loadings divided by the number of items. An AVE of .5 or higher suggests adequate convergence. The discriminant validity refers to the level of which a construct is different from other constructs, with regard of how much it relates with other constructs and how distinctly measured variables symbolize only this single construct. It is supported when the AVE estimates for each factor is greater than the shared variance between constructs (Hair et al., 2014). For this study, these two types of validity are presented and discussed in the next chapter.

The face validity, on the other hand, measures the degree of which the content of the items is in accordance with the construct definition, being based solely on the researcher’s judgement. Lastly, the nomological validity tests if the correlations between the constructs make sense theoretically, which can be done through the employment of constructs assessed by multi-item scales developed in prior studies (Hair et al., 2014). According to Cronbach and Meehl (1955, p. 291) “to validate a claim that a test measures a construct, a nomological net surrounding the concept must exist. When a construct is fairly new, there may be few specifiable associations by which to pin down the concept”. For this thesis, the employed scales are based on constructs evaluated by scales from prior studies.

When it comes to the reliability of the collected data, Smith and Albaum (2010) claim that the reliability of a survey is related to the regularity of results over sets of different respondents, or over sets of same respondents at different periods of time. Given that there are few or no studies with the same research questions for the Brazilian market, it is difficult to compare the results of this survey with others. However, for the qualitative interviews, Alshenqeeti (2014, p. 44) claims that validity and reliability can be ensured by taking notes and by “giving the interviewee a chance to sum up and clarify the points they have made”. For this present study, the qualitative transcripts were typed and completed immediately after each interview and corrected by the respondents.

Regarding the reliability of the scales employed in the factor analysis, Pallant (2016) claims that there are several different aspects of reliability, but that one of the main issues is related to the scale’s internal consistency. According to Shukla (2008), the internal consistency reliability aims to measure or assess the reliability of a total or summated scale, in which several items are added to create a total score. One of the most used indicators of this type of reliability is the Cronbach’s alpha coefficient, which should be above .7 to indicate a reliable scale (DeVellis, 2012). The values of the internal consistency reliability for the scales used in this study are discussed in the next chapter.

5. Results

This chapter presents the results from the qualitative and quantitative research. The chapter is divided into two parts. The first one presents the main findings of the gathered qualitative data, while the second part presents the results of the statistical analyses done with the quantitative data.

5.1 Qualitative results

In total, 34 interviews were made with a Portuguese exporter and eight Norwegian exporters of salted and dried cod to Brazil, two agents, three supermarkets, eight market stalls, eight restaurants and four consumers from three different regions in Brazil. The following sections presents the results for each respondent category separately.

5.1.1 Exporters

“Norway needs to start selling frozen cod to keep competitive in Brazil. But first, we need to fix the cost. Labor cost for example, is too high. Maybe if we have machines that can substitute labor, we will be able to be competitive” (EI₂).

Eight employees of Norwegian exporters from Ålesund were interviewed, as well as one employee of the Portuguese exporter Bras Cod- Bacalhau Bom Porto. The respondents were the presidents, managers, or employees who directly deal with the exports to the Brazilian market. The informants are shown in Table 5.2.

Table 5.2. Exporter informants.

EI ₁ : Bras Cod - Bom Porto	EI ₂ : Cod Export	EI ₃ : Jangaard
EI ₄ : West Norway	EI ₅ : Anonymous	EI ₆ : Anonymous
EI ₇ : Anonymous	EI ₈ : Anonymous	EI ₉ : Anonymous

EI₁ and EI₄ claimed to sell to the Brazilian market salted and dried cod of the following species: *Gadus morhua*, *Gadus macrocephalus*, saithe, tusk and ling. EI₂ declared to sell products of the *Gadus morhua*, saithe, tusk, ling and haddock. EI₃ to mostly sell the saithe species to Brazilian buyers, but also a little of the *Gadus macrocephalus* and the ling species. According to this informant *“All of our ‘Gadus morhua’ goes to Portugal”*. EI₅, EI₆ and EI₈, on the other hand, claimed to sell to Brazilian buyers salted and dried cod made of *Gadus morhua*, saithe, tusk and ling. EI₇ declared to sell saithe mostly, but also a bit of the *Gadus morhua* species, while EI₉ affirmed to sell products made of *Gadus morhua*, *Gadus macrocephalus*, saithe, tusk, ling and Alaska Pollock. All of the informants declared that their company have production sites in Norway. EI₁ also declared to have factories in Portugal, while EI₄ and EI₉ affirmed to have part of the production done in China. EI₄ added that *“Producing here in Norway is very expensive, so we chose to also produce in China to lower the costs”*.

When asked if their customers ask about the country of origin of the product they purchase, EI₁ replied affirmatively, claiming that mainly those who have knowledge of the product do. EI₂ stated that *“When they order from us, they know it is Norwegian. When we issue the document (health certificate), it is written there. The agents inform the importer what they are selling, therefore they inform that it is Norwegian”*. EI₃, EI₄, EI₆ and EI₉ only replied affirmatively, while EI₅ claimed that their buyers already know the origin of the product they purchase, and added that it is also informed in the label. EI₇ also claimed that their buyers usually don’t ask about the origin and according to the informant, *“(…) they take it for granted. They know we are producing. If we are producing from Alaska*

we have to tell them. We used to produce from Alaska but not at the moment". EI₈ stated that only some of their buyers ask this question, and added that *"The importers in Brazil know all of the exporters here in Norway (which are not many). So, they already know the product they are purchasing. They have high knowledge of the product"*.

The informants were also asked if Brazilian consumers can differentiate the Norwegian salted and dried cod from others. EI₁ replied that only some can, especially those who ask about the origin. EI₂ claimed to believe that the final consumers are not aware of country of origin, and added that *"(...) if the market does not care much they can also label Chinese or Portuguese as Norwegian, what affects our brand name. We have a quality and expensive product"*. This informant also added that *"(...) the labels do not clearly say it is Chinese or the chemicals that they have. Here in Norway, we have fresh water and salt. Portugal buys most of their fish in Norway. The product is basically the same, and it looks similar to ours, what makes it difficult for us to differentiate. How can the consumer differentiate?"*. EI₃ also claimed that it is difficult for the consumers to differentiate the origin, given that the Portuguese purchase raw material from Norway. Also, the informant mentioned that Norwegians exporters sell the product in wooden boxes where the label informs the origin, but that the markets and stores sell the product for final consumers in plastic packages, what makes it difficult for the exporter to divulgate the origin.

EI₄, on the other hand, mentioned that their buyers can differentiate the origin, given that the product that comes from China is more industrialized (skinless and boneless). EI₅ declared that *"Using the same type of frozen raw material I believe there it is not possible to notice if the salted and dried cod has been produced in Norway or in Portugal"*. This informant also mentioned that when the Portuguese purchase fresh fish and not the frozen raw material from Norway, their final product can become more yellow, and added that customers can differentiate the salted and dried cod from the frozen one because *"The desalted product (frozen) is not produced in Norway. Normally gives a difference in texture and taste, which can help to understand that the product is from Portugal. (...) If you go to a restaurant, you can see a difference between a fish made from the frozen cod and the salted and dried one (in taste)"*.

EI₆ declared that only consumers from higher classes are able to differentiate the origin of the *bacalhau*, and added that *"Business to business (importers) do. For final consumers, I think it depends on their class. People from lower classes substitutes products very easily, depending on the price. I think they are not aware of the origin, and I don't think they care, they are only concerned about the price"*. EI₇ claimed to believe that Brazilian consumers cannot differentiate the origin of the *bacalhau*, given that they know very little of how to assess its quality. For EI₈, those who cook are able to do so, such as maids. The informant also added that most of those who purchase salted and dried cod are from the middle and the higher classes. EI₉, on the other hand, claimed that *"Very few can tell the difference if the product is not identified by the origin at the point of sell"*.

The informants were also questioned if they believe that the country of origin of the Norwegian salted and dried cod impacts the purchase intention of Brazilian consumers. According to EI₁, only the consumers who have knowledge about the product are impacted by origin, and those who don't only worry about the appearance of the fish. This respondent also claimed that Brazilians buyers prefer a whiter salted and dried cod, and added that *"There still exists in the Brazilian market a preference for the Norwegian product. The Norwegian salted and dried cod has had a better positioning in Brazil than the Portuguese, because the Portugal used to send a product of less quality. Since a few years ago this hasn't happened anymore, (...) because the Brazilian consumers is demanding a higher quality product. But the consumer still has the idea that the Norwegian is better, but that is changing"*.

EI₁ also added that some consider the *imperial* salted and dried cod from *Porto* as being the best one, not even knowing what it is. According to the informant “*When the supermarket doesn’t want to write ‘Gadus morhua’, they write imperial of Porto, which is generic, vague and not informative*”. EI₁ also mentioned that the Brazilian law wasn’t very strict, and the saithe, tusk and ling species were sold as *bacalhau*, which is not allowed anymore, now that the legislation has become more rigorous. For EI₅, the logo “*Bacalhau da Noruega*” is a strong brand, but also highlighted that “*(...) some sellers might also use ‘Bacalhau do Porto’ as a brand, given that older days, the big and high quality salted and dried cod was from Porto, and sold as ‘Bacalhau do Porto’. So, nowadays, people make this association*”.

EI₂ declared to believe that if Brazilian consumers were to choose between Norwegian and Chinese salted and dried cod, they would choose the Norwegian one. But, according to this informant, only those who have knowledge of salted and dried cod give importance to the origin. EI₃, on the other hand, claimed to not know if the origin influences final consumers’ purchase intention. However, the informant replied that it doesn’t impact the purchase intention of supermarket buyers, and added that they give more importance to the price, declaring that “*It is a shame, because they should differentiate a good salted and dried cod from a bad one*”. For EI₄, the origin doesn’t influence any of the Brazilian buyers, and declared that what they value the most is if the product is of good quality, of which they are uncertain before the first try. According to this respondent “*From our products, the whole fish come from Norway, while the boneless and skinless loins and other cut products come from China. And we perceived that people purchase more the ones that come from China because of the price and of the cut*”.

For EI₆, the origin only impacts the purchase intention of consumers of higher classes, while EI₇ and EI₉ claimed to make a difference for all Brazilian consumers. According to EI₇ “*From old times and up till today, it has always been a good promotion the quality in general from Norway. So that is still in the minds of Brazilians. They know the fish is coming from the cold and clear Barent Sea, that’s the same in Iceland, so it is very difficult to distinguish the fish from these two countries*”. EI₈, on the other hand, claimed that it only makes a difference for the consumers who have a good knowledge of the product.

When asked about the marketing strategy of their brand in Brazil, and if their companies use the country of origin cue to advertise their product in Brazil, EI₁ claimed to write the species and the origin (Portugal) on the label. This informant also added that his company does not have a definite marketing plan, but informed that their strategy is to participate in fairs of the sector, some punctual publicity, actions on the internet and social media, and a strong investment at the point of sell. EI₂ claimed to use promoters to increase the country of origin awareness of the consumers. This respondent also added that “*The ‘Seafood from Norway’ label it is mandatory to put in the package for the importer. But the box is opened and the fish is taken out in the store without any label on. Some producers/exporters are starting to make their own packages. In the past, we used ‘Cod export’ in brazil, but due to bureaucracy (new regulations) we had to use authorizations for all the fabrics that ship the fish to brazil. We ended up applying just for a neutral brand (cartoon that all exporters can use). (...) So, for the moment we have to improve our marketing strategy*”. EI₄ also declared to use promoters in supermarkets and stores to divulgate their product, and claimed to use the brand “*Bacalanor*” and not “*West Norway*” in Brazil.

EI₃ and EI₆, EI₇ and EI₈, on the other hand, claimed that all of the marketing for their products is done by the Norwegian Seafood Council, which is mandatory for all of the exporters to pay for. EI₃, however, declared to be unhappy with the Council’s decision to change the logo for all Norwegians exporters from “*Bacalhau da Noruega*” to “*Seafood from Norway*”. This informant stated that “*I don’t*

think anyone in Norway liked it. They didn't consult the exporters. The old logo was better looking and known. It takes a while to introduce a new logo to the market". EI₆ also demonstrated concern, and declared that "We use 'Bacalhau da Noruega' as an important part of our communication, together with the Seafood Council. We have been concerned with the change of actions of the Council. The consumers, overtime, connected 'Bacalhau da Noruega' with codfish. So, I think it is going to cost a lot of money to introduce the new label 'Seafood from Norway', because Brazilians don't know about seafood and don't speak English".

EI₇, on the other hand, claimed to prefer the new label, and added that "*People that work with salted and dried cod are very traditional and want to keep the strategy, but in my opinion, we have to renew ourselves and make use of the new label. This label is covering all items. We are doing all kinds of fish in this company, so this marking can be used for our products. Distinguishing Norway is the most important. In Japan and many other countries this label is a success for us". This informant also declared to think that it is very important for Norwegian exporters to use the country of origin cue, not only for the Brazilian market, given that the condition for the cod and saithe in Norway are very good, and due to the fact that people know that "(...) the fish is coming from a good place".*

EI₅ claimed use the origin cue in their marketing strategy, which focus more on supermarkets and traditional buyers, not targeting the end consumer so much. This informant also declared that the companies that sell frozen cod have an easier task of adding information. According to EI₅ "*For Brazil, we only sell the fish in cartoons, and in wooden cases of 50 kg. So, our own marketing in Brazil is quite limited. It is mainly shown in the cartoons. We know that other companies are cutting the fish and selling in consumer packages (maybe half a kilo). These companies have more channel to communicate to the consumer. We don't control so much the marketing to the end consumer at the point of sell. Our fish goes to Brazil, to supermarkets, and to traditional importers, and they cut it or sell the whole fish to go to the point of sell'.*

EI₉, however, claimed to be trying to place their own identity on their products at the point of sell. For the products coming from Norway, the company uses the brand and the country of origin cue. For the products coming from China, the company only uses the former. According to this respondent "*What happens when the product goes to Brazil to supermarkets, is that they present the fish in a whole or cut it in the store. So, we provide some stickers with the brand, so the consumer can see which brand they are buying".*

Regarding the preference of the customers, EI₁ mentioned that a buyer of fancy Portuguese restaurant usually purchases the *Gadus morhua* species, and give more importance to quality, color and flavor of the product. Supermarket buyers, according to this informant, usually prefer the *Gadus macrocephalus* species, and give more importance to the price of the product. For EI₂, price and color are very important for Brazilian consumers. This informant also added that "*I think it is easier for people to purchase salted and dried cod if there is some promotion (for example a big stand). I they buy more loins, and in Northeast they make more stew and since it is a poorer region it is easier to sell cheaper products. In North, it sold more saithe (90%). Gadus morhua it is usually sold in big sizes and in restaurants in Rio and São Paulo".*

According to EI₃, the factors that influence the most the purchase intention of Brazilian consumers is price, promotion, distribution and the presentation of the product in the point of sell. The informant also added that the financial situation of the consumers makes a big difference on the preferences, claiming that the higher classes prefer the *Gadus morhua*, while the middle class usually purchase the saithe species. EI₃ also mentioned that when the price of the *Gadus morhua* species increases, the buyers usually switch to the *Gadus macrocephalus* species. For EI₄, the type of consumer also influences on what drives the purchase. According to this informant, buyers of higher classes give

more importance to quality and the presentation of the product (color and thickness), while the lower classes value more the price.

EI₅ claimed to perceive a variation between consumers from different regions in Brazil. According to this respondent *“In Northeast, they consume more of the saithe (cheaper fish). For this consumer price has a bigger weight. Some consumers buy twice a year, so they want the best quality. And if you have money and will buy twice a year, you wouldn't care about the price. The quality is checked through what people think is good (white and thick)”*. EI₉ also mentioned the regional and financial differences among Brazilian consumers, affirming that price, quality and appearance of the product (white and thick) are the factors that have a bigger impact on their purchase intention.

EI₆ claimed to specifically target the higher classes, who the informant claimed to give more importance to quality. According to him *“Because we have a clear strategy to sell to higher classes (A and B), we have a quality strategy. For us, promotion is not important, is about consistent quality overtime and distribution. The product must be there when the consumer thinks about the fish. The display in the point of sell is also very important”*.

EI₇ all of the points mentioned in the question (price, quality, promotion, distribution or product features such color, freshness, flavor, thickness, conservation and preparation time) have equal influence on the purchase intention of Brazilian consumers. According to the informant, *“All of these are important points. You cannot say that one Brazilian is buying because of this or this. It is tradition, and they are used to buying a good quality salted and dried cod. Of course, price is important, we know that a lot of people that cannot afford to buy this product as often as they want”*. This respondent also mentioned the fact that the tendencies in the Brazilian market are changing, claiming that the Brazilian consumer will tend to prefer packed, frozen, boneless and skinless products for convenience reasons. According to EI₈, the buyer's preferences varies according to the fish species. For the ling species, the informant claimed that *“For the ling species for example, there are a lot of complaints about larvae, For the saithe, the fish is already produced frozen, so the salt-curing must be well done, the color cannot be very dark and it must be thick. For the ‘Gadus morhua’ species, the same thing. Thickness, salt-curing and color counts a lot”*.

When it comes to the demand features, EI₁ claimed to sell to all segments, restaurants, supermarkets, stores and distributors. EI₂ stated to sell more to wholesalers (supermarkets), and indirectly to restaurants. This informant added that *“The Brazilian importers are usually supermarkets or traditional importers. But in Rio, there is not many traditional buyers anymore”*. EI₃ affirmed to mainly sell to traditional importers, using agents for all of the transactions. EI₄ declared that 80% of their clients are supermarkets, such as Carrefour, Walmart, Pão de Açúcar and Assaí. The other 20% are traditional importers. The informant also stated to use agents, but not to all of the sales. EI₉ also claimed to have the same ratio of clients, stating that their biggest client is Pão de Açúcar, and the other ones include Carrefour, Walmart and other small stores.

EI₅ declared to have agents, and to sell to large supermarkets and more traditional clients. EI₆ mentioned to have clients in Rio de Janeiro such as the supermarkets chains of Prezunic, Mundial and Zona Sul. The respondent also declared that *“We have more than one agent depending on the sellers, we have some direct contacts and we have a mix of traditional and small and medium supermarkets (we contact them both with agents and directly). But most of the sales are made through agents”*. EI₇ declared that their clients *“Are mainly traditional importers, which are doing business through agents. We also do business with some direct importers. I believe that the future will be to more direct sells to importers and supermarkets in Brazil”*. EI₈, as the majority, also declared to have as clients supermarket chains and traditional importers.

All of the informants declared to sell more for Christmas and Easter when it comes to the Brazilian market. EI₁ added that Mother's Day is also a picked season for their sales, while EI₂ claimed that "(...) *our challenge is to sell more fish over the year. If we import now, for many sellers it will be stored to sell in Christmas*". EI₃ added that "*The sells to the Christmas period used to start in September and October. But now, the buyers are purchasing in April/May and in November for Easter, because they think it is cheaper. It can actually be cheaper because some exporters that are not selling will want to sell cheaper*". EI₄ also declared that the big supermarket chains are ordering the products earlier, from June to January. According to EI₉, "*Our clients are making some time to plan the stocks, so we start the negotiation in May, and finish it in August, and the fish are shipped from June to January*".

From all of the respondents, only EI₁ and EI₄ declared to also sell other types of cod products. The former affirmed to also sell frozen and desalted *Gadus morhua*, while the latter stated to sell salted codfish, desalted codfish, and frozen and desalted codfish. EI₁ claimed that their buyers prefer the frozen product, while EI₄ declared that their frozen and desalted product, as well as the shredded products, are preferred by their customer because they are more practical. However, this informant also mentioned to sell more salted and dried *Gadus morhua* during the Christmas and Easter period.

Most of the respondents seemed to agree that the frozen product is increasing its market share in the Brazilian market. According to EI₁, this product is stealing consumers of the salted and dried cod. EI₂ mentioned that the Norwegian exporters are losing market share to products coming from China and Portugal. According to this respondent, the Brazilian market is changing towards more practical products, because there are fewer housewives and more people are working. The informant also stated that "*Norway needs to start selling frozen cod to keep competitive in Brazil. But first, we need to fix the cost. Labor cost for example, is too high. Maybe if we have machines that can substitute labor, we will be able to be competitive*".

EI₃ mentioned that the Brazilian market for the Portuguese frozen product is big. According to EI₆, "*There is a big growth for this product (frozen cod). The competition is tough*". EI₇ mentioned that "*The tendency of the market in general will be ready to cook products. Also, the restaurants will change and they will buy these products, they don't have time and it is too costly for them to desalt the salted and dried cod (...) So, the tendency will be consumer packages, skinless and boneless salted and dried cod. We see this clearly in all markets we are dealing with*". EI₈ had a similar opinion, and declared that the tendency of the Brazilian market is for the frozen and desalted product because consumers find it excellent. According to this respondent, younger generation wouldn't desalt a salted and dried cod, not even if it comes in a practical package.

The informants also mentioned other features of the Brazilian market for salted and dried cod. According to EI₁, for the size of the whole market, with more than 200 million inhabitants, the market for salted and dried cod is small (only 5%), with a lot of growth potential. For EI₃, the biggest problem of the Brazilian market is the small profit the exporters earn, due to high competition. EI₄, on the other hand, declared that the biggest problem of the Brazilian market is the economic crisis, claiming that "*When the population doesn't have money, the consumption of salted and dried cod decreases. I think more practical products are entering the market, what is increasing the consumption, given that there are good and cheap products. We are also producing in China because to do it only in Norway is expensive*".

According to EI₅, "*Cheaper products are mainly from China, not so much cheaper from Portugal. However, they are both offering more consumer convenient products, which is a challenge for our traditional product from Norway (...) But Brazilians are more aware of quality, so Chinese have had some problems with it*". EI₆, on the other hand, declared to find the Brazilian market stable

in volume, with a big potential. However, this respondent claimed that the Brazilian legislation is a big problem, given that each State has a different one, with different taxes, what leads to frauds. EI₆ also added that *“But when the real is around 3,30 (USD), we see that is a good stable market.”* EI₉, also mentioned the protectionist legislation and bureaucracy as the biggest challenges in Brazil.

For EI₇, a negative aspect of the Brazilian market is the fact that the buyers are mainly focused on price, and therefore keep switching from one producer to another. The relationship among the competitors was also mentioned. This informant claimed that there is a domestic agent in Norway, which is in contact with all of the producers. When a buyer asks for more than one species to be sent in the same container, if the producer doesn't have one of the ordered species, the domestic agent will contact other exporters in order to complete the order. EI₇, therefore, declared that some producers may make use of this situation to get rid of portions with lower quality. The informant, however, claims that *“(…) Serious companies don't take this risk anymore. But still, some companies do that. That can lead to problems, especially because Brazilians claim on everything, even if the saithe is perfect”*. This informant, however, also highlighted that *“But one good tendency in Brazil now is the new comers in the market, new importers that speak better English and enable a good communication with us. Now we can sell directly”*.

5.1.2 Agents

“The brand ‘Bacalhau da Noruega’ is very strong, the Norwegian company that succeeds in exporting frozen and desalted cod will have a great acceptance” (AI₁).

Two agents from the city of Rio de Janeiro were interviewed. The informants are shown in Table 5.3.

Table 5.3. Agent informants.

AI ₁ : Subsidiary of the J. A. Oliveira	AI ₂ : Lamosa Representações
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Both of the respondents claimed to represent salted and dried cod of the species of *Gadus morhua*, *Gadus macrocephalus*, ling, saithe and tusk. AI₁ added that the product made with *Gadus morhua* fish is the best one, and that most of the products that are sent to Brazil can only be considered salted and not dried because of the percentage of humidity. This informant also added that 80% of the products sent by Norwegian companies are imperial, with the exception of the saithe products, of which 70% are sent imperial and 30% universal. AI₁ also declared to represent only the following Norwegian companies: Brødene Sperre, Jacob Børge, Jangaard, Scan-mar and West Norway. AI₂ added to represent only the West Norway company, which has production sites in Norway and China.

AI₁ declared to pitch the sale of their clients' products to distributors who usually resell to restaurants, and to supermarkets such as Mundial and Zona Sul. AI₂ claimed to agency the sale of their clients mainly to supermarkets as well, such as Guanabara, Mundial and Intercontinental. And also to direct importers, such as the Sanes Brasil.

When asked if they can differentiate the Norwegian salted and dried cod from the others, both of the respondents claimed to have a good knowledge of the product. AI₁ declared that *“(…) the one from Portugal is not as well salt-cured as the Norwegian one, but not everyone is capable of differentiate them. If I see an open fish, I can differentiate it”*. AI₂ also added that some of the differences in the color of the product is due to difference in the period that the fish is left in the salt-curing process, made by the producers. According to the informant, the fish of the *Gadus morhua* species has a light straw color, and therefore can get more yellow with longer salt-curing methods.

The informants were also asked if the origin of the salted and dried cod is important for them when representing a brand. AI₁ declared to only work with Norwegian products, but to have already worked with Icelandic and Danish products before. The respondent also added that “(...) *the consumers ask for the Norwegian product*”. AI₂ declared that the origin is extremely relevant, because the buyers always asks about it during the negotiations. According to this informant “*We don't sell without informing the origination of the product. The origin is fundamental for the sale, also because of its influence on the price*”.

However, when specifically asked if the buyers of their clients ask or know about the origin of the salted and dried cod, AI₁ answered negatively, claiming that “*They know of our tradition, which is to represent products from Norway*”. AI₂, as mentioned in the previous paragraph, answered affirmatively, but highlighted that the final consumers usually identify the product by the fish species. This informant explained that traditionally, in Brazil, the legit salted and dried cod has always been the *Gadus morhua*, known as from Porto. During the 90s, given the nearly extinction of this species, the *Gadus macrocephalus* species was introduced in the market with the same name, what confused the consumers. The informant also added that “*It was then that the Norwegian Seafood Council started to make a strong work in the points of sell of the salted and dried cod, around 30 years ago, clarifying the names and the different characteristics of this product. Then, the consumers started to better identify the diverse types of salted and dried cod, and their scientific names*”. The respondent also mentioned that “*I think that the consumer knows that this product comes from Norway and Portugal, but still cannot identify that is it also produced in China. On the other hand, the Brazilian legislation is very demanding when it comes to the labelling*”.

When asked if the buyers of *bacalhau* are able to differentiate the Norwegian product from the others, AI₁ replied that “*Only those who work with salted and dried cod for many years*” are able to do so. According to this respondent, only distributors and those who purchase for supermarkets are able to differentiate this product. AI₂ also claimed that only those specialized in this area are able to do so, and added that final consumers are not able to identify if the salted and dried cod was produced in Norway or Portugal. This informant also emphasized that, because of the work made by the Norwegian Seafood Council in the points of sell with promoters, Brazilian consumers know today that Norway is a huge producer of *bacalhau*. According to AI₂, “*Since 1990 they have been doing this work, which is very important for the Norwegian marketing. Before, people used to think of Portugal when they thought of salted and dried cod. There still can be found a lot of consumers who think that it comes only from Portugal, but not the importers and those who purchase for supermarkets. These buyers know*”.

Both of the informants replied the best-sellers salted and dried cod they represent are from Norway. They were also questioned if the origin is important for the consumers when they purchase the product. Both respondents responded affirmatively. AI₁ added that usually the consumers prefer the Norwegian salted and dried cod. AI₂ added that customers associate the Norwegian and the Portuguese product as of being of good quality. The informant claimed that the work made by the Norwegian Seafood Council made the Brazilian consumers associate Norway with quality. According to AI₂, “*In terms of sale, my buyers prefer to purchase the salted and dried cod of Norwegian origin. Among other reasons, because Brazil is not a prioritized market by the Portuguese for the salted and dried cod. They had a great growth in the frozen and desalted market*”. However, the informant also emphasized the fact that in Rio de Janeiro, there is a strong Portuguese colony, what makes this city be very traditional when it comes to salted and dried cod.

The two informants declared to make use of the country of origin in the presentation and marketing of the product they represent. AI₂ claimed to receive support from the Norwegian Seafood

Council, which provides posters, folders and stands for consumers to taste the product. The informant stated that in the logo “*Bacalhau da Noruega*” is used in all Norwegian products, which is a result of 30 years of branding work of the Norwegian Seafood Council to change the belief of Brazilian consumers that salted and dried cod is from Portugal. Nevertheless, AI₂ highlighted the fact that the change of the logo from “*Bacalhau da Noruega*” to “Seafood from Norway” was not a good alteration for the Brazilian market, given that the new logo is in English, what pushes the product toward the elite classes even more. According to the informant, “*Norway wants to be seen as a country that sells fish, not only salted and dried cod. (...) they are giving up on 30 years of effort, when they finally managed to convince the Brazilian consumer that salted and dried cod is from Norway, they are not viewing Brazil according to its specificities. I believe they are going to lose market share because of that*”.

The respondents were also asked what they consider to be important when deciding which company to represent in Brazil. For AI₁, everything is related to the price. Yet, the informant declared to customarily seek for exporters who sell the best salted and dried cod from Norway, which comes in wooden boxes of 50 kilos, with eight to ten fishes. For their supermarket clients, however, this agent declared that they prefer paper boxes of 25 kilos, with seven to nine products, because they are easier to handle. AI₂, on the other hand, declared that since salted and dried cod can almost be considered as a commodity, price is the most relevant factor. This agent claimed to value more the exporter’s reliability.

Regarding the preferences of their customers, AI₁ affirmed that consumers seek for quality, considering the price at the same time. This respondent also claimed that the saithe species is currently selling a lot in Brazil because of the purchasing power of the majority of the population, which is low. Also, the agent mentioned the fact that this species is darker than the *Gadus morhua* species, but has a similar taste. Since consumers have a preference for the flavor, and not the color of the salted and dried cod, they end up purchasing the cheaper option, which is the salted and dried saithe. AI₂, on the other hand, claimed that the preference of the consumers depends on the situation of the country. This informant declared that “*(...) in a crisis, the price is more relevant. Out of the crisis, quality becomes more important. (...) when the Brazilian Real was paired with the American dolar (one to one), the Brazil imports of the salted and dried cod reached the amount of 35 thousand tons. In periods of crisis, only those the traditional buyers, who know wha they buy, remain purchasing this product*”.

When questioned if the demand of their clients is regular throughout the year, both of the respondents declared Christmas as the best-seller period, and the Easter holiday as a runner-up. According to AI₁, “*Here in Rio (the city and the adjacent municipalities), is different from the rest of Brazil, the salted and dried cod is best sold during Christmas than during Easter. In the rest of Brazil, the contrary is true*”. This informant also added that the negotiations of big volumes of products are closed in August and September for the Christmas period, and in January and February for the Easter period.

The two agents also represent frozen and desalted cod products. AI₁ claimed to also work with these types of products from Portugal and China, the latter being from the Norwegian company West Norway. As a matter of fact, this informant declared to think that all of the Norwegian exporters should start to produce the frozen and desalted cod product, due to the fact that consumers prefer it for convenience reasons. AI₁ also added that “*The brand ‘Bacalhau da Noruega’ is very strong, the Norwegian company that succeeds in exporting frozen and desalted cod will have a great acceptance*”. On the other hand, 90% of the products represented by AI₂ are salted and dried cod, who added that “*In Brazil, the Portuguese found a market niche in the frozen and desalted cod, while the Norwegian keep strong in the traditional salted and dried cod*”.

5.1.3 Supermarkets

“The Brazilian consumer knows more about salted and dried cod because of the promoters” (SI₃).

Three supermarkets’ employees were interviewed in the city of Rio de Janeiro. The respondents were responsible for the salted and dried cod sector. The informants are shown in Table 5.4.

Table 5.4. Supermarket informants.

SI ₁ : Pão de Açúcar	SI ₂ : Zona Sul	SI ₃ : Mundial
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Both SI₁ and SI₂ displayed the salted and dried fish in plastic packages done by themselves, while I₃ displayed the fish as a whole without any type of package, as shown in Figure 5.6. Only SI₂ kept the products in a refrigerated place. SI₁ claimed to sell *Gadus morhua*, *Gadus macrocephalus*, and ling (only when it has a good appearance). SI₂ claimed to sell *Gadus morhua*, both shredded and in fillets, and also tusk. SI₃ declared to sell *Gadus morhua*, both *imperial* (of highest quality) and *universal* (of less quality), as well as saithe. All of the respondents claimed to purchase the salted and dried cod produced by Norwegian companies. However, SI₁ declared to usually purchase the *Gadus macrocephalus* specie from other countries.



Figure 5.6. Display of salted and dried cod in SI₃.

SI₁ claimed that they are able to differentiate the Norwegian salted and dried cod from others due to training and to the brand, while SI₂ and SI₃ mentioned the information provided in the label as a method of differentiation. All of these supermarkets displayed the salted and dried cod of *Gadus morhua* as “*bacalhau do Porto imperial*” (imperial salted and dried cod of Porto).

When asked if the origin of the fish was important for the supermarket when choosing what product to resell, SI₁ replied that it is not significant and that they are more interested in quality than origin, while SI₂ mentioned that they give more importance to the species of the salted and dried cod being ordered, and not the origin. SI₃, on the other hand, mentioned that they are loyal to the Norwegian company from which they buy the salted and dried cod.

The informants were also questioned if their consumers ask about the origin of the salted and dried cod they purchase. SI₁ and SI₂ replied negatively. SI₁ claimed that their customers only check the appearance of the product, to assess its quality. This informant added that “*The most frequent question is if it has bones*”. SI₂ declared that their customers already have knowledge of the product, and therefore they don’t ask about its origin. SI₃, on the other hand, replied that their customers usually ask about it.

According to SI₁, the consumers do not know the origin of the salted and dried cod they purchase, and can only differentiate the Norwegian one from others because of the label. The respondent also mentioned that *“If displayed with the Norwegian sticker, and it has a good appearance, the salted and dried cod gets really appealing”*. The respondent also claimed that their customers are not concerned about the origin, but about the quality, which they assess by looking for the fish with better appearance and without bones. It is also displayed in the supermarket a board explaining the different species of salted and dried cod being sold, what the interviewee claims to help the customers decide what product to buy.

According to SI₂, their customers have knowledge about the characteristics of salted and dried cod, and therefore know the origin of the product they purchase. Yet, the informant declared that the even though their customers are concerned about the origin of the salted and dried cod when purchasing it, they seem to give more importance to the species of the fish, seeking more for *Gadus morhua*, and less for tusk. When asked if their customers can differentiate the Norwegian salted and dried cod from others, this informant stated that *“I think they only check if it is ‘Gadus morhua’”*. However, when asked if they prefer the Norwegian product from the others, the interviewee agreed, adding that they prefer the Norwegian *Gadus morhua*.

According to SI₃, their customers also know the origin of the salted and dried cod they purchase, but claimed that only traditional elderly customers would know how to differentiate the Norwegian salted and dried cod from others. The informant also stated that the origin is important for the consumers when purchasing the product. SI₃ also mentioned that the usual questions made by the customers are about the origin and the differences between them, the difference between the imperial product from the universal one, as well as the reason for the difference between the prices.

When asked the origin of the best-selling salted and dried cod, SI₁ replied that they sell the most the *Gadus macrocephalus* species, which is not of Norwegian origin. SI₂ and SI₃, on the other hand, declared to only sell Norwegian products. SI₂, however, added that the *Gadus morhua* species is the best-selling product of their store.

When it comes to the use of country of origin in the presentation and marketing of the product, SI₁ claimed that the suppliers usually are the one who provides the folders and the stickers with the brand and origin. However, according to the informant, such actions have not been happening lately in their store. For SI₂, some of the marketing actions done in their store is the use of the label *“Bacalhau da Noruega”* and *“Seafood from Norway”* on the salted and dried tusk. However, SI₂ created their own brand named as Porto D’Oro for the salted and dried cod of *Gadus morhua*. Whereas SI₃ stated that usually, when there is a promotion, they display the wooden boxes in which the exporters send the fish, which contains the brand label and the indication of the origin. This respondent also added that *“The Brazilian consumer knows more about salted and dried cod because of the promoters”* (SI₃). According to SI₂, *“The promoters of the Norwegian companies come here and promote the product. After they started doing that, our sells have increased, we are even going to have a separate fridge to display their products”*.

The informants were also asked about the most important features of the salted and dried cod for them when purchasing this product as retailers. SI₁ claimed that the quality is what they seek the most, by assessing the color, texture and temperature of the fish. SI₂ also mentioned quality, given the profile of their customers who seek high quality product. According to the interviewee, *“Our supermarket sells the most expensive salted and dried cod, and it sells a lot”*. For SI₃, they declared that they purchase the imperial *Gadus morhua* with good appearance, and therefore they assess the color and thickness of this product. For the saithe species, the informant claimed that price is the most important driver of purchase, given that this product is usually not displayed as the *Gadus morhua*.

When it comes to the customers, SI₁ mentioned that the most important drivers of purchase are quality (appearance) and price, while SI₂ claimed that they customers prioritize quality and assess the brand and color of the product. SI₃ again highlighted the difference between the species, claiming that the customers that purchase saithe prioritize price, while the ones who buy *Gadus morhua* seek for quality, and therefore prioritize the thickness and color of the product.

When asked about the demand features, SI₁ stated that those who typically buy salted and dried cod are customers with good financial situation, who have the habit of eating this product frequently. The informant also stated that *“We usually make packages of shredded salted and dried cod with low weight to be able to sell it for a cheap price, in order to encourage other customers to also buy it”*. Both SI₂ and SI₃ claimed that elderly customers are the ones who purchase the most this product. SI₃ added that house maids are also regular customers of salted and dried cod, and highlighted that the customers who purchase imperial product do not care about the price, while those who purchase the lower quality *bacalhau* are more heterogenic customers.

All the informants claimed to sell more during Easter and Christmas. SI₃ also mentioned to sell more around Mother’s Day (which is in May). SI₁ declared to sell well on the other periods of the year as well, given the customers who have the habit to consume it regularly. SI₂, however, declared to sell it very little in other periods of the year.

All of the interviewed supermarkets claimed to also sell Portuguese desalted and frozen cod. SI₁ stated that at the moment, customers are purchasing more this type of product due to lack of options. The informant explained that the store has not been offering loins and other types of cuts. He added that *“When we show a higher variety of cuts, people tend to buy more salted and dried cod. The price is also affecting our sells. Our store is of high quality products, and we don’t focus on cutting down on price, but due to competition we are being forced to decrease prices. The goal now is to sell.”*. On the other hand, SI₂ declared that the customers who purchase salted and dried cod are not attracted to the frozen and desalted one, given that they claim that the latter has less flavor than the former. In addition, the informant claimed that, in general, the customers of their supermarket are not sensitive to price. According to SI₃, customers purchase both types of cod product in order to mix them when they aim to shred the fish, given that the frozen product is more often offered with discount. This does not happen for the customers who purchase salted and dried cod in loins, which is not usually shredded.

5.1.4 Market stalls

“If we wrote ‘Bacalhau do Porto’, we would definitely sell more” (MSI₈).

Three market stalls’ employees were interviewed in the municipal market of Rio de Janeiro, while five were interviewed in the municipal market of São Paulo. The respondents were the owners of the stalls or the sellers. The informants are shown in Table 5.5.

Table 5.5. Market stall informants.

MSI ₁ : Mercado Municipal do Rio de Janeiro	MSI ₂ : Mercado Municipal do Rio de Janeiro	MSI ₃ : Mercado Municipal do Rio de Janeiro
MSI ₄ : Mercado Municipal de São Paulo	MSI ₅ : Mercado Municipal de São Paulo	MSI ₆ : Mercado Municipal de São Paulo
MSI ₇ : Mercado Municipal de São Paulo	MSI ₈ : Mercado Municipal de São Paulo	

All of the market stalls in the municipal market of Rio de Janeiro displayed the salted and dried fish in plastic packages done by themselves. The market stalls in the municipal market of São Paulo

also displayed the fish as a whole without any type of package. Only MSI₇ kept the products in a refrigerated place. All of the respondents claimed to sell *Gadus morhua* and *Gadus macrocephalus*, with the exception of MSI₇, which declared to only sell the former species. Moreover, MSI₁ also stated to sell saithe *bacalhau* during Christmas, while MSI₂ added that they usually sell *Gadus morhua* in loins and fillets, and shredded *Gadus macrocephalus*.

When asked about the origin of the products being sold, MSI₁ declared to purchase salted and dried cod from a Portuguese company throughout the year. For Christmas, this informant declared to also purchase this product from an unknown origin from a distributor in São Paulo, as well as salted cod from Iceland. MSI₂, MSI₃ and MSI₄ claimed to purchase Portuguese and Norwegian salted and dried cod, and MSI₃ added to sell Norwegian *Gadus morhua* and Portuguese *Gadus macrocephalus*. MSI₅ and MSI₆ claimed to only sell *bacalhau* from Portugal, while MSI₇ and MSI₈ claimed to only sell *klippfisk* from Norway.

All of the interviewees declared that they are able to differentiate the Norwegian salted and dried cod from others. MSI₁ and MSI₈ mentioned the information provided in the label as a method of differentiation, while MSI₂ claimed that the Norwegian salted and dried cod is usually drier than the Portuguese one. MSI₃ stated that Norwegian salted and dried cod comes in wooden boxes and it is whiter than the Portuguese one, due to differences in the salt-curing methods. MSI₆ and MSI₇ also mentioned that the Portuguese salted and dried cod is more yellow than the Norwegian one. MSI₅, on the other hand, claimed that the Portuguese *bacalhau* is usually whiter than their competitors.

The informants were also asked if the origin of the product is important for them when choosing what product to resell. MSI₁, MSI₂, MSI₃, MSI₅ and MSI₇ gave an affirmative answer. MSI₂ added that the Norwegian product is better because it is drier than the Portuguese one, while MSI₃ stated that the Norwegian *bacalhau* is better because is whiter than the ones from the competitors. MSI₄, MSI₆ and MSI₈, on the other hand, declared to not have preference when it comes to the origin of this product.

When asked if the customers ask for the country of origin of the salted and dried cod, there was discrepancy among the answers. MSI₄, MSI₅, MSI₇ and MSI₈ declared that they do ask. MSI₁ claimed that “*The customers rarely ask, Brazilians don’t know much about this product, the Portuguese know more*”. MSI₃ also claimed that only some of the customers ask, given that most of them do not have much knowledge about it. MSI₂ answered that their customers only ask about the species of the salted and dried cod, while MSI₆ declared that only the Portuguese customers ask about the origin.

For the majority of the respondents, Brazilian consumers do not know the origin of the salted and dried cod they purchase. Only MSI₅ and MSI₇ answered that they do know the origin of what they are buying. MSI₃ claimed that they know that the fish is caught in Norway, but not about where it is processed, while MSI₄ stated that their consumers usually know more about the species of the *bacalhau*. All of the respondents answered that Brazilian consumers cannot differentiate the Norwegian *klippfisk* from the others. Only MSI₅ was not sure of the answer, and portrayed to have little knowledge of the subject by stating that “*People usually say that salted and dried cod of Porto is whiter*”, which refers to the salted and dried cod of *Gadus morhua*. MSI₃ answered that consumers usually differentiate the origin of the salted and dried cod by the color, but the majority of the ones who can are Portuguese. MSI₄ claimed that “*The traditional Portuguese customers have a traditional culture and know what they want. Those who do not know are led by the knowledge of the sellers that are selling to them*”.

Those who sold salted and dried cod from different countries were also asked about the origin of the best-selling salted and dried cod. All of them replied to sell more the Norwegian *bacalhau*, except MSI₁, which claimed to sell more the Portuguese one. However, MSI₃ mentioned that they sell

more the *Gadus morhua* processed in Norway because this species is whiter and softer than the *Gadus macrocephalus* species, which they import from a Portuguese company.

Impressively, all of the informants stated that the origin does not have an impact on the purchase intention of the consumers. The exception was MSI₅, which declared that the Portuguese *bacalhau* is preferred due to its salt-curing method. MSI₂ mentioned that the cut of the fish is more important for the customers, while MSI₄ mentioned that the type of species is more relevant, claiming that *Gadus morhua* is the most requested type of *bacalhau*. MSI₈, on the other hand, stated that the origin itself of the product is not important, but said that “*If we wrote ‘Bacalhau do Porto’, we would definitely sell more*”. MSI₇ added that in reality, people just want to buy from a store they can trust.

When it comes to the use of the country of origin in the presentation and marketing of the product, MSI₁ declared to write the name of the producer’s company in the label, as well as display the brochure of the Portuguese brand. This informant also affirmed that “*People are beginning to understand a little bit more about this product and to consume it more due to its value for the money and its nutritional benefits. There are companies that are using promoters to help with that, such as supermarkets*”. MSI₂ affirmed to label the product with the same description that comes in the Norwegian producer’s boxes. As a matter of fact, MSI₂ used these boxes when displaying the product. The same approach is used by MSI₃, where the seller also used an apron with the Portuguese brand written on, as can be seen in Figure 5.7. MSI₄ declared to use only for the fillets the label with either the Portuguese brand or the Norwegian label with the logo “Seafood from Norway”. The latter also had some additional information, such as recipes or desalting methods. MSI₅, MSI₆, MSI₇ and MSI₈ also claimed to use the Norwegian label. It is important to highlight, however, that MSI₅ and MSI₆ also affirmed to sell only salted and dried cod from Portugal. In addition, MSI₇ also make use of brochures, stands and posters with the new Norwegian logo, as well as the old one (“*Bacalhau da Noruega*”), as can be seen in the Appendix 7.



Figure 5.7. Norwegian exporter’s box and seller with a Portuguese brand’s apron in MSI₃.

The informants were also asked about the most important features of the salted and dried cod for them when purchasing this product as retailers. Quality and price were mentioned by all of the respondents, with the exception of MSI₆, who claimed that they give priority to items according to the demand of the customers. For example, in a time of crisis they would give priority to price. MSI₁ added that distribution of the product is also important, while MSI₂ stated that “*We don’t see the value in buying a salted and dried cod of bad quality of which we cannot utilize much. We only work with imperial products*”. MSI₃ and MSI₇ mentioned that all of the items quoted in the question were of importance for them (price, quality, promotion, distribution and product features). MSI₃ stated that

“When it is for a restaurant you can buy any salted and dried cod, but here we display the product, so appearance is very important, especially for the imperial product”. MSI₇ added that it is very important for their store to receive at the right moment the type of product he wants. MSI₄, MSI₅ and MSI₈ also mentioned the appearance of the fish as being very important. MSI₄ stated that they give importance to the color and the size of the product, while MSI₈ mentioned that the salted and dried cod must be white and of large size.

Regarding the preferences of their customers, MSI₁ affirmed that some consumers just look for the price of the product, while others only look for quality. The informant added that “*The Portuguese prefer the drier salted and dried cod, while the Brazilians prefer the whiter one*”. MSI₂ mentioned that their customers usually assess the size, quality, color, thickness and price of their product, and then compare with the competitors. This informant also added that Brazilian customers are consuming more *bacalhau*, and sometimes seek for their more convenient products, such as the boneless and skinless fillet. The same informant also claimed that price is relative, given that a small family can purchase a product of BRL 100, “*and therefore they do not care much about the price, they want more a product of good quality*”. MSI₃ mentioned the appearance of the fish and the price, while MSI₄ only mentioned the appearance. The price and quality of the salted and dried cod was mentioned by MSI₅ and MSI₆, while MSI₇ declared that it depends because there are customers who are able to assess the characteristics of the product and others that are not. Lastly, MSI₈ affirmed that their customers usually give more importance to the price and the thickness of the *bacalhau*.

When asked about the demand features, MSI₁ and MSI₃ claimed that mostly older customers purchase salted and dried cod, and MSI₁ added that rarely people younger than 30 years old buys the product in their market stall, while MSI₃ added that “*Most of our clients are Portuguese who own restaurants. Brazilians prefer barbecue*”. MSI₂, MSI₄, MSI₅, and MSI₆ declared that their customers are diverse, but MSI₄ added that “*People who usually purchase salted and dried cod are those who have always purchases it and will continue to do so*”. MSI₇ claimed that most of his clients are traditional ones, such as Spanish, Portuguese and Italian customers who appreciate this product. This informant also added that “*The salted and dried cod is a noble product that we must emphasize its qualities and virtues. The younger generations want more convenience*”. MSI₈ mentioned that most of their customers have a good financial situation.

All of the respondents affirmed to sell more during the Christmas and Easter period. MSI₁ added that Christmas is the best-selling period for their store, while MSI₆ mentioned Easter as their best-selling period. MSI₅ added that the period of the year is extremely important for sells, and that when it is not during Christmas and Easter their sells drops significantly. MSI₆ and MSI₈ also mentioned that they feel a drop of the demand in an overall due to the increase in prices and the economic crisis Brazil is still recovering from.

MSI₁, MSI₂, MSI₃, MSI₆ and MSI₇ affirmed to also sell Portuguese frozen and desalted cod. All of them, however, claimed that customers usually prefer the salted and dried cod. MSI₂, MSI₃, MSI₆ and MSI₇ mentioned that this is due to the fact that the frozen and desalted product has less taste. MSI₃ also mentioned that their customers usually want to prepare and desalt the product themselves. MSI₁ affirmed that most of their customers purchase the frozen product when they have to cook something in a hurry.

5.1.5 Restaurants

“*Norway is losing market share because their competitors are charging a cheaper price, due to the economic crisis in the country. The value for the money of the Portuguese product is better, because even though it may be slightly of less quality, it is cheaper*” (RI₂).

Five restaurants' employees were interviewed in the city of Rio de Janeiro, one in Mangaratiba (a municipality in the state of Rio de Janeiro), and two in the city of São Paulo. The informants were the owners, the chefs or the headwaiters of the restaurants. The informants are shown in Table 5.6.

Table 5.6. Restaurant informants.

RI ₁ : Anonymous – Rio de Janeiro	RI ₂ : Anonymous – Rio de Janeiro	RI ₃ : Anonymous – Rio de Janeiro
RI ₄ : Anonymous – Rio de Janeiro	RI ₅ : Anonymous – Rio de Janeiro	RI ₆ : Anonymous – Mangaratiba
RI ₇ : Anonymous – São Paulo	RI ₈ : Anonymous – São Paulo	

RI₁, RI₄, RI₆ and RI₈ claimed to only purchase salted and dried cod of the *Gadus morhua* species, while RI₂ affirmed to buy desalted *Gadus morhua*. RI₃, on the other hand, claimed to purchase salted *Gadus morhua* and saithe, whereas RI₅ declared to buy salted and dried cod of those same species. RI₇ was the only respondent who claimed to purchase frozen and desalted cod of *Gadus morhua*. When asked about the origin of these products, RI₁ and RI₄ were certain in their answer of purchasing salted and dried cod from Norwegian companies, while RI₇ and RI₈ were also certain of buying from the same Portuguese producer. RI₂, RI₃, RI₅ and RI₆ claimed that the products purchased by them came from Norway. However, they were not completely sure, and portrayed some difficulty in understanding that the origin asked was where the fish was produced and not where it was caught. RI₆ was also uncertain, and added that “*I only worry if it is Gadus morhua*”.

RI₁, RI₅, and RI₇ declared that they are able to differentiate the origin of the product they purchase through the information provided in the wooden boxes or in the label. RI₂ and RI₃, on the other hand, claimed to only be able to differentiate the species of the product. According to RI₂ “*We purchase it without the head, so I am not able to differentiate it. But with the head I could maybe do it*”, while RI₃ claimed that “*I can differentiate if the product is made of Gadus, saithe or ling*”. For RI₆, the species of the salted and dried cod is more important than the origin. According to this informant, “*I don't look at the brand, but if it is not Gadus morhua I will not buy it*”. RI₄, on the other hand, affirmed that they only purchase Norwegian salted and dried cod, and therefore they are not sure of the appearance of the other products from the competitors. RI₈ also claimed to be loyal to their supplier, which is a Portuguese brand. The respondent affirmed that “*We only purchase products of the Bras Cod brand. Their salt-curing method is really good, the color of their product is not that white. When the salted and dried cod is very white it is not that good*”.

Most of the respondents declared to prefer the Norwegian product rather than the one from other origins. According to RI₂, “*When the Norwegian product comes as a whole or salted we can see that it is of higher quality. The fiber is different*”. This respondent also added that “*Norway is losing market share because their competitors are charging a cheaper price, due to the economic crisis in the country. The value for the money of the Portuguese product is better, because even though it may be slightly of less quality, it is cheaper*”. RI₆ and RI₇, however, declared to only have a preference for the *Gadus morhua* species, while RI₈ claimed to prefer the salted and dried cod from Portugal.

When asked if the origin of the cod product was important for them when purchasing it, the majority of the respondents gave an affirmative answer. According to RI₄, “*The best one is the Norwegian, period. There is no salted and dried cod that substitutes it*”. The exceptions were: RI₆, who again highlighted to only have a preference for the species of the fish; RI₇, who claimed to have a preference for the frozen product due to its convenience; and RI₈, who claimed to be loyal to the

company they purchase salted and dried cod from due to their professionalism, and not specifically because of their country of origin.

When specifically asked about their preferred species for their *bacalhau* dishes, most of the respondents declared to prefer *Gadus morhua*, and RI₃ added that “*I prefer Gadus morhua, the saithe species is more used to shred. We use saithe to make deep-fried dumplings with potatoes*”. The only exception was RI₅, which claimed that the species they purchase depends on the price and quality, but that they usually purchase *Gadus morhua* and saithe.

The informants were also asked if their clients usually ask about the country of origin of the *bacalhau* used for the dishes served by their restaurants. RI₁, RI₇ and RI₈ replied positively, but RI₇ highlighted that Brazilians, in general, still do not know much about codfish. However, RI₁ indicated that people usually ask if it is Norwegian *Gadus morhua*, which means their clients probably associate Norway with this species. RI₈ added that they usually show the desalting process of the salted and dried cod, as well as the thickness of the fish, to their clients. On the other hand, RI₂, RI₃ and RI₅ replied that their clients do not ask about the origin of the *bacalhau*. RI₅ added that “*They just ask about the species, but rarely*”. According to RI₄ and RI₆, their clients seldom ask about the origin. RI₄ added that “*They just feel the flavor*”, while RI₆ stated that “*Some ask, but most of them don't have much knowledge of it*”.

When asked if the country of origin of the *bacalhau* was mentioned in the menu, all of the respondents gave a negative reply. RI₁ and RI₈ added that they only mention the species (*Gadus morhua*), while RI₇ added that they might mention the origin to their clients verbally. Most of the informants declared that the origin of the fish is not relevant for the clients when ordering a dish. RI₁, RI₆ and RI₈ claimed that their consumers only have a preference for the *Gadus morhua* species of salted and dried cod. RI₁ added that “*(...) if we bring another type of salted and dried cod that is not Gadus morhua, the clients will notice and complain. After desalted, they can tell the difference*”, while RI₆ stated that “*Most of them cannot distinguish the species, but they can tell if it is a good quality fish by the fiber. The Gadus morhua is whiter, more tasteful and with the best fiber*”. RI₂ and RI₃ affirmed that most of their clients do not have knowledge of this product. RI₂ added that “*If five thousand clients come here, one will know how to distinguish the fish after it has been cooked*”. Only RI₄ and RI₇ claimed that the origin is relevant for their clients. The former claimed that the origin of the salted and dried cod is their restaurant's flagship, while the latter declared that origin is important for the clients for quality reasons.

The respondents were also questioned about the preference of their clients when it comes to cod products and salted and dried cod. RI₁, RI₄ and RI₈ affirmed that their clients prefer the salted and dried *Gadus morhua*. RI₂ and RI₃ declared that their customers do not have a preference, and that they are more concerned about the quality of the fish. RI₃ also added that “*The frozen product is for those who don't have much knowledge about cod, and want to cook fast. The price is attractive, but it doesn't have the same taste as the salted and dried one. Those who have knowledge purchase the salted and dried cod because of the taste*”. RI₄ added that people purchase the frozen product when they cannot find the salted and dried one. RI₅ and RI₇ answered that their customers do not have a preference, since they have little knowledge of *bacalhau*. RI₆ claimed that restaurants prefer the salted and dried cod because of the taste, but that the final consumers prefer the frozen cod due to convenience.

When asked about the most important features of the cod product when purchasing it as a restaurant, all of the respondents mentioned quality. According to RI₁, “*We have a regular supplier that provides us a product that follows a quality pattern. If they supply us with an inferior quality salted and dried cod, we complain. We order the imperial Gadus morhua of the best quality*”. For RI₅, a good quality product leads to better throughput, whereas RI₈ declared to always check the quality of

the product by weighting it and checking its appearance. RI₂, on the other hand, claimed that the type of the cod product affects his quality assessment. According to this informant *“I cannot assess the quality and freshness if it is salted cod. The desalted one I check the fiber (if it is firm) and the thickness. If, however, there is a discount for the desalted one I will not buy it because I wouldn’t trust the quality”*. RI₃ also mentioned price, while RI₄ also mentioned color (whiteness), thickness and appearance. According to this informant, *“A thick fillet provides a better look, it is a good marketing for the restaurant”*. RI₆ also mentioned the size of the fish, whereas RI₇ cited the flavor, color and price.

Regarding the preference of the customers, RI₁, RI₄ and RI₇ declared that their clients only worry about the quality of the dish, and not about the price. According to RI₁, *“Given the current situation of the country, many people are starting to worry about the price. But those who really know salted and dried cod and have a good financial situation seek and demand quality”*. For the customers of RI₂, *“(…) the flavor and the price are the two most important things. If it was a cheaper dish, it would be probably the best-seller dish of the restaurant”*. According to RI₃, RI₅ and RI₆, their customers give more importance to the price. RI₅ added that *“People want a dish visually appealing (….) The salted and dried cod cannot be dark, it must be soft and with a good texture”*. RI₈, on the other hand, claimed that their clients value the most the quality, appearance and flavor of the dish.

When asked about the type of clients who order the cod dish, RI₁ and RI₈ claimed that most of his customers are loyal to their restaurant. RI₁ affirmed that *“This restaurant franchise has been in the market for 60 years, so we already have a tradition of the salted and dried cod dish. Our clients are young, who travel frequently and who know about this product and its origin”*. According to RI₈ *“We have clients for over 40 years. A lot of young ones too, who comes with their parents since they were children”*. Elderly customers, however, were mentioned by the informants RI₂, RI₃, RI₄, RI₆ and RI₇. RI₂ added that *“The least ordered dishes in this restaurant are the ones with salted and dried cod because they are most expensive ones, so those who order them have a good financial situation and like the fish. You really have to like these dishes to spend BRL 100 on them”*. RI₃ also added that their customers are from the higher classes, with high purchasing power. RI₄ added that most of their customers are Brazilian tourists, and that occasionally younger clients also order this dish, whereas RI₆ added that apart from the majority of elderly customers, their clientele is diverse. According to RI₅, however, most of their customers are miscellaneous.

According to RI₁, RI₆ and RI₇, they have a regular clientele throughout the year. RI₂ declared that the *bacalhau* dishes are ordered the most during Easter. The informant also added that *“(…) during the rest of the year, the demand for these dishes is low. Here we only have two dishes of cod among 30 main dishes, and we are an Italian restaurant, so the risotto with cod is more ordered than the cod fillet”*. RI₃, RI₄ and RI₅ claimed to receive more orders for the cod dishes during Easter and Christmas, while RI₈ claimed to receive more orders not only during these periods, but also during Mother’s Day and Father’s Day. The latter also added that the Brazilian market for salted and dried cod is increasing, and that people are consuming more this product, including the youth.

5.1.6 Consumers

“I analyze the quality through characteristics such as color and thickness, and then I look at the price” (CI₁).

Four customers were interviewed, two being from the city of Rio de Janeiro (Southeast region of Brazil), one from the city of Curitiba (South region of Brazil), and one from the city of Teresina (Northeast region of Brazil). The informants are shown in Table 5.7.

Table 5.7. Consumer informants.

CI ₁ : Male, 61 years old, Rio de Janeiro	CI ₂ : Female, 47 years old, Rio de Janeiro
CI ₃ : Female, 60 years old, Curitiba	CI ₄ : Male, 24 years old, Teresina

CI₁, CI₂ and CI₃ are from higher classes, given that the former two claimed to have a household income of more than BRL 20,000 per month (more than BRL 260,000⁴ annually), while CI₃ claimed to have a household income between BRL 15,000 and BRL 20,000 per month (between BRL 195,000 and BRL 260,000 annually). CI₄, on the other hand, claimed to have a household income between BRL 5,000 and BRL 10,000 per month (between BRL 65,000 and BRL 130,000 annually). CI₁ and CI₂ claimed to usually purchase salted and dried cod of the *Gadus morhua* species. CI₃ was unsure of the answer, but presumed to typically purchase salted and dried cod of the same species. CI₄ declared to not have a clue of the species he normally purchases. All of them affirmed to purchase the product in supermarket, with the exception of CI₃, who claimed to usually buy salted and dried cod in specialized stores of this product.

When asked if they knew the origin of the salted and dried cod they usually purchase, CI₁ declared to presume that all of the salted and dried cod came from Norway, what indicates that the respondent doesn't have much knowledge of the product. CI₂ claimed to not know the answer, while CI₃ and CI₄ declared to purchase salted and dried cod from Portugal. All of the informants declared to not being able to differentiate the Norwegian salted and dried cod from the others, with the exception of CI₃, who claimed to be able to do so by looking at the information in the label.

The informants were also asked if they had a preference regarding the origin, cut or package of the product. CI₁ claimed to prefer sliced and pre-packed products regardless of the origin, while CI₂ declared to prefer Norwegian salted and dried cod. CI₃, on the other hand, affirmed to have a preference for unpacked Portuguese *bacalhau*, whilst CI₄ claimed to “(...) only buy the Portuguese one”.

Most of the respondents declared that the origin of the salted and dried cod is not important for them when purchasing it, with the exception of CI₄. Yet, CI₃ affirmed to have a preference for the authentic imported *bacalhau*. According to her, the origin “(...) does not make a difference. However, I do not purchase the imitation of salted and dried cod. A good quality product is charged more than BRL100 per kilo. The texture is different. The imported product is white, with large fillets. Thus, it is easy to differentiate them”. It was not clear, however, if by “imitation” the informant meant the salted and dried cod made with less quality species, such as saithe and ling, or the ones made with local species. It was difficult to grasp a precise answer, given the lack of knowledge of the respondent regarding the species of salted and dried cod. Nevertheless, it can be assumed that by authentic imported salted and dried cod, the informant meant the one made with the *Gadus morhua* species.

The informants were also specifically asked about their preferred species of salted and dried cod. CI₁ and CI₂ declared to prefer the *Gadus morhua* one. CI₃ and CI₄, on the other hand, claimed to not know the different species of salted and dried cod. The latter, however, affirmed to be able to recognize a good quality product by its appearance.

When asked about the most important features of the cod product when purchasing it, CI₁ stated that first comes quality and then comes price for him. According to the respondent, “I analyze the quality through characteristics such as color and thickness, and then I look at the price”. For CI₂, the thickness, promotion and distribution are the most relevant aspects of the product which drives the purchase act. CI₃ claimed to only assess the quality of the product, by checking the smell and if there

⁴ Brazilians earn 13 salaries per year, that is why the month values were multiplied by 13.

are black spots. However, this informant also added that *“I think that this product could be better distributed, it is not always available for purchase”*. CI₄, on the other hand, declared to value the most the price, quality and freshness of the product.

All of the informants, however, highlighted the fact that the salted and dried cod is an expensive product. According to CI₁, it can be characterized as selective, because Brazilians of lower classes cannot afford it. The informant also mentioned that *“It is seasonal, and the younger generations do not have much information about it, but the older generations do”*. CI₂ claimed that people end up purchasing this product only on special occasions because of its price. CI₃ had a similar opinion, and affirmed that *“Because of the crisis, I think people consume salted and dried cod less frequently. They maybe purchase the cheapest salted and dried cod, and they don’t know much about this product. Those who have never consumed it don’t know how to differentiate it. They only assess the smell, which is almost the same for all the salted and dried cod”*. CI₄ also claimed that salted and dried cod is not frequently consumed by Brazilians because of the price, and exemplified by saying that chicken is a cheaper substitute. The respondent also affirmed that *“It is more consumed in restaurants or for lunch over weekends in special occasions. At least here in Teresina, we can see that the shelves are never full, what shows that people do buy it. But also, because there isn’t many selling points of this product”*.

The purchase frequency throughout the year was also enquired to the informants. CI₁ affirmed to only purchase salted and dried cod twice a year, while CI₂ declared to purchase this product only for Ester and Christmas. CI₃ and CI₄, on the other hand, claimed to purchase salted and dried cod once a month. CI₃ added that purchases this product for Easter and other big holidays.

The informants were also questioned if they purchase other type of cod product. CI₁ and CI₂ declared to also buy frozen and desalted cod, due to convenience and its conservation time. According to CI₁, *“I prefer the frozen product for convenience reasons, because me and my family don’t prepare it the same day we purchase it. Then, we just leave it in the freezer and prepare it when we feel like it. We don’t feel a difference in flavor from the salted and dried one, because we season it with pepper and salt and serve it with vegetables”*. CI₂ added that consumers usually buy more the frozen product because it is cheaper and more discounts are offered on it. CI₃ affirmed to have already bought the pre-packed salted product. However, the informant claimed to prefer the unpacked salted and dried cod, because it is easier to manipulate, assess the texture and inspect the quality. CI₄ claimed to only purchase salted and dried cod. According to the respondent *“The one you find the most in Teresina is the salted and dried cod, especially during Easter. The frozen one, for example, you don’t find much”*.

5.1.7 Summary of qualitative results

All of the exporters declared that their company have production sites in Norway. One of them also declared to have factories in Portugal, while two informants affirmed to have part of the production done in China. Most of the respondents claimed to believe that Brazilian final consumers are not able to differentiate the Norwegian salted and dried cod from the others. Their marketing strategies included punctual publicity, strong investment at the point of sell and, for the Norwegian exporters, marketing actions done by the Norwegian Seafood Council, which is mandatory for all of the exporters to pay for. Regarding the preference of the customers, quality, price, color, flavor, thickness, promotion, distribution and presentation of the product were mentioned. Most of the respondents claimed to sell to supermarkets and traditional importers. All of the informants declared to sell more for Christmas and Easter, and one added that Mother’s Day is also a picked season for their sales. Only two of the respondents declared to also sell other types of cod products. Most of the respondents seemed to agree that the frozen product is increasing its market share in the Brazilian market.

Both of the agent respondents claimed to represent only Norwegian companies, including one with production sited in Norway and China. Both of them claimed that the origin of the salted and dried cod is important for them when representing a brand. One respondent claimed that the buyers of their clients do not ask or know about the origin of the salted and dried cod they purchase. The other respondent answered affirmatively, but highlighted that the final consumers usually identify the product by the fish species. Both informants claimed that only those specialized in this area are able to differentiate the Norwegian product from the others. Both respondents responded that the origin is important for the consumers when they purchase the product. The two informants declared to make use of the country of origin in the presentation and marketing of the product they represent. Price, quality, package and reliability were mentioned as important factors for the agents when deciding which company to represent in Brazil. For their customers, quality, price and flavor were mentioned. Both of the respondents declared Christmas as the best-seller period, and the Easter holiday as a runner-up. The two agents also represent frozen and desalted cod products.

All of the supermarket respondents claimed to purchase Norwegian salted and dried cod, and claimed to be able to differentiate it from others due to training, the brand and the information in the label. Species and the quality are more important than origin when purchasing the product for two of the respondents. Only two of the respondents claimed that their customers know the origin of the product they buy. Two informants mentioned that quality and the species of the fish are more important than the origin. The use of the country of origin in the presentation of the product includes folders, stickers, labels, and wooden boxes in which the exporters send the fish. Quality, price (for the saithe species) and product features such as color, texture and thickness were mentioned as the most important drivers of purchase intention for the supermarket as buyers. For their clients, quality, price, brand, color and thickness were mentioned. Higher class and elderly people were cited as common customers, as well as house maids. For the lower quality products, one informant mentioned to have a more heterogenic clientele. Easter and Christmas were stated as the periods with the most sales. All of the informants claimed to also sell Portuguese desalted and frozen cod.

The market stall respondents claimed to sell Norwegian and Portuguese salted and dried cod. All of the interviewees declared that they are able to differentiate the Norwegian product from others. The origin of the product is important for most of them when choosing what product to resell. For the majority of the respondents, Brazilian consumers do not know the origin of the salted and dried cod they purchase, and all of the respondents answered that Brazilian consumers cannot differentiate the Norwegian product from the others. Most of the informants stated that the origin does not have an impact on the purchase intention of the consumers. The use of the country of origin in the presentation of the product includes folders, labels, stands, posters, aprons and wooden boxes in which the exporters send the fish. Quality and price were mentioned by all of the respondents as the most important drivers of purchase intention for the market stalls as buyers, with the exception of one respondent. For their customers, quality, price, size, color and thickness were mentioned. Half of the respondents declared to have a diverse clientele, while two mentioned to mainly have elderly customers. Traditional European buyers and customers of higher classes were mentioned by the other two respondents. All of the respondents affirmed to sell more during the Christmas and Easter period. All of the five market stalls which also sell Portuguese frozen and desalted cod claimed that customers usually prefer the salted and dried cod.

The restaurant respondents claimed to buy Norwegian and Portuguese salted and dried cod, with some purchasing the salted, frozen and desalted or desalted product. However, some were not completely sure, and portrayed some difficulty in understanding that the origin asked was where the fish was produced and not where it was caught. Three of the informants declared that they are able to

differentiate the origin of the product they purchase through the information provided in the wooden boxes or in the label, while three claimed to only be able to differentiate the species of the product. Most of the respondents declared to prefer the Norwegian product rather than the one from other origins, and the *Gadus morhua* species. Five of the respondents claimed that their customers never or seldom ask about the origin of the salted and dried cod used for the dish. None of the respondents mention the country of origin of the product in the menu. Most of the informants declared that the origin of the fish is not relevant for the clients when ordering a dish, and some mentioned that their consumers only have a preference for the *Gadus morhua* species. Quality was mentioned by all of the informants as the most important driver of purchase intention. For their customers, quality, price, flavor, and appearance were mentioned. Most of the respondents claimed that the type of clients who order the cod dish are loyal customers or elderly ones. Most of the informants claimed to receive more orders for the cod dishes during Easter and Christmas.

From the interviewed consumers, three are from higher classes, while one is from a lower class. Two affirmed to purchase salted and dried cod of the *Gadus morhua* species, while the other two were unsure. Only two of the respondents knew the origin of the product they purchase. Only one informant declared to be able to differentiate the Norwegian salted and dried cod from the others, by looking at the information in the label. Most of the respondents declared that the origin of the salted and dried cod is not important for them when purchasing it. Quality, price, thickness, smell, appearance, freshness, promotion and distribution was mentioned by the informants as the most important driver of purchase intention. All of the informants, however, highlighted the fact that the salted and dried cod is an expensive product. One of the respondents declared to purchase the product twice a year, and one declared to purchase this product only for Easter and Christmas. Two of them claimed to purchase it once a month. Two of the respondents also declared to buy frozen and desalted cod, due to convenience and its conservation time.

5.2. Quantitative results

In total, 151 respondents answered to the questionnaire. The following sections presents the results of the statistical analysis done to analyze the data⁵.

5.2.1 Data cleaning and descriptive analysis

Firstly, all the data was translated to English. Then, it was observed that one respondent only answered to the first four questions of the questionnaire, and therefore was excluded from the sample. Subsequently, a frequency table was run with the remaining sample of 150, in order to assess missing values, maximum and minimum values, and whether to assess if there were any values out of the scale range for each of the scale questions. The results are presented next.

Age: All of the categories of age were represented, and all of the respondents answered to this question. The age group from 46 to 55 were the majority, being represented by 21.3% (32) of the respondents. In second were the age groups from 26 to 35, and from 36 to 45, each with 20.7% (31) of the answers. In third, 16.7% (25) were between the ages of 16 and 25, followed by the age group from 56 to 65, with 11.3% (17) of the answers. Lastly, 9.3% (14) of the respondents claimed to be 66 years old or more.

Gender: Out of 150 respondents, 66.7% (100) claimed to be females, while 32.7% (49) affirmed to

⁵ The statistical tables provided by IBM SPSS are available from the author on request.

be male. One respondent did not answer to this question.

Size of household: All of the categories were answered, and all of the respondents replied to this question. Most of the respondents claimed that the size of their household is three, representing 30% (45) of the answers. In second came those who answered four, with 28% (42) of the answers, followed by those who replied two, with 23.3% (35) of the answers. Informants with a household of five or more represent 12% (18) of the answers, while those who live alone are 6.7% (10).

Region: The majority of the informants affirmed to live in the Southeast region, with 92% (138) of the answers. Respondents from the Northeast region represent 4% (6) of the answers, while respondents from the South represent 2% (3) of the answers. Only one (0.7%) respondent from the Central-West region answered to the questionnaire. Two respondents did not answer.

Household income: Distribution of income shows that 28.7% (43) of the respondents had a household income from 5,001 to 10,000 per month (from 65,013 to 130,000 per year⁶), 25.3% (38) had a total household income from 1,000 to 5,000 per month (13,000 to 65,000 per year), and 18.7% (28) claimed to have a total household income higher than 20,000 per month (higher than 260,000 per year). Those who claimed to have a total household from 10,001 to 15,000 (130,013 to 195,000) represent 14.7% (22) of the sample, while those who had a household income from 15,001 to 20,000 (195,013 to 260,000) represent 11.3% (17). One respondent (.7%) claimed to have a household income of less than 1,000 per month (less than 13,000 per year), while one respondent did not answer to this question.

Most frequently purchased type of cod product: Respondents were asked about the kind of cod product they purchase more often. The majority claimed to frequently purchase salted and dried cod, with 49.3% (74) of the answers, while 26.7% (40) purchase more often frozen and desalted cod. The respondents who claimed to frequently purchase salted cod represent 20.7% (31) of the sample, while 2% (3) claimed to purchase more often sliced cod products. Only one respondent (0.7%) affirmed to purchase more often shredded cod products.

Most frequently purchased type of salted and dried cod product: Respondents were also asked about the kind of salted and dried cod product they purchase more often. The majority affirmed to frequently buy pre-sliced and packaged salted and dried cod products, representing 30.7% (46) of the answers. Those who stated to buy salted and dried saithe represents 26% (39) of the answers, followed by those who claimed to purchase salted and dried products made with codfish, with 25.3% (38) of the answers. The informants who affirmed to buy ling represent 4% (6) of the answers, while those who mentioned tusk represent 3.3% (5). Those who affirmed to purchase salted and dried cod of Port, or to not know the answer, represent 1.3% (2) each. One respondent (0.7%) claimed to not know the answer, because the product comes shredded, while another one affirmed to buy the cheapest option, and not frequently. Another respondent claimed to not buy salted and dried cod, while another affirmed to purchase none in particular. Eight respondents did not answer to this question.

Favorite salted and dried cod product: When asked about their favorite salted and dried cod product, most of the respondents claimed to prefer salted and dried products made with codfish, with 32.7% (49) of the answers. The percentage of informants who claimed to not have a preference was

⁶ Brazilians earn 13 salaries per year, that is why the month values were multiplied by 13.

of 28.7% (43), while those who affirmed to prefer pre-sliced and packaged products accounted for 17.3% (26) of the answers. Saithe was mentioned by 13.3% (20) of the respondents, while tusk was mentioned by 4.7% (7). Only 2 respondents (1.3%) affirmed to prefer ling. Three informants did not answer to this question.

Place of consumption: Respondents were also asked where they most frequently consume salted and dried cod. The percentage of those who affirmed to eat this product mostly at home was of 80.7% (121). Those who affirmed to consume more at restaurants were 15.3% (23) of the sample, while only 1.3% (2) claimed to consume salted and dried cod mainly at hotels. One respondent (0.7%) affirmed to eat it mostly at the parent's house, and another respondent claimed to consume it more often at relative's house. Two respondents did not answer to this question.

Purchase frequency: The purchase frequency was also enquired to the respondents. All of the respondents answered to this question. The majority of the informants, with the percentage of 60.7% (91), affirmed to buy this product from one to five times a year. Those who claimed to purchase only on Easter or Christmas represent 17.3% (26), while those who declared to buy it from six to ten times a year represent 12.7% (19). Those who affirmed to purchase salted and dried cod from 11 to 20 times a year were 4% (6) of the sample, while those who claimed to never purchase this product represent 3.3% (5) of the answers. Only 2% of the respondents (3) claimed to buy it between 21 and 30 times a year.

Country of origin of the most frequently purchased salted and dried cod: Distribution of the country of origin of the most frequently purchased salted and dried cod shows that the majority of 41.3% (62) of the respondents didn't know the answer to the question. The percentage of those who claimed to buy Norwegian salted and dried cod often was of 32.7% (49), while those who buy Portuguese represent 22.7% (34) of the sample. One of the respondents (0.7%) affirmed to not know the answer, because the purchased product is shredded. Another respondent claimed to buy salted and dried cod from Brazil, portraying lack of knowledge of the product. Three informants did not answer to this question.

Place of purchase: In the question about where the respondents usually purchase salted and dried cod, the majority of 84% (126) affirmed to buy in supermarkets, 6% (9) claimed to purchase the product in fish markets, while 4.7% (7) declared to buy in municipal markets. One respondent (0.7%) affirmed to purchase the product by order, while another one claimed to buy it in emporiums. Six respondents did not answer to this question.

Preparation time: Respondents were also asked how long they usually take to prepare salted and dried cod. The percentage of those who declared to take more than one hour was of 43.3% (65). Those who claimed to take from 41 to 60 minutes represent 24.7% (37) of the sample, while those who affirmed to take from 21 to 40 minutes represent 19.3% (29). One respondent (0.7%) claimed to take from 0 to 20 minutes to prepare the product, while another affirmed to not know the answer. One respondent did not answer to this question.

Difference recognition of the Norwegian salted and dried cod from others: Respondents were also asked if they could differentiate the Norwegian salted and dried cod from the others. The majority of 69.3% (104) claimed to not be able to do so, while 30% (45) affirmed to be able to differentiate the Norwegian product from others. One respondent did not answer to this question.

Further analysis of the frequency of the respondents who could differentiate the origin shows that the majority were females with the age of 66 or more, from the Southeast region, with a size of household of two, and annual household income from BRL 13,000 and BRL 65,000.

Intention to buy salted and dried cod from a specific origin: Those who answered “yes” to the previous question, were also asked the origin of the salted and dried cod they intend to buy. From this sample, 33 respondents (22% of the whole sample, and 73.3% of the sample who were directed to this question) claimed to intend to buy Norwegian salted and dried cod. Those who claimed to intend to buy the Portuguese product represent 5.3% (8) of the whole sample and 17.8% of those who can differentiate the origin of the product. One respondent (0.7% of the whole sample, and 2.2% of the sample who were directed to this question) affirmed to purchase the cheapest option. Another respondent wrote “*Actually, I like both the Portuguese and the Norwegian. I analyze the price*”, while another informant wrote “*Depends on the product at the day. I have a restaurant, so I prefer the frozen cod because it's more convenient (comes clean), easy to store and it's faster to prepare*”. One respondent who was directed to this question did not answer it.

Scale questions

The Frequency table for the seven-point scale questions shows that all of the answers are within the range of the scale. In addition, 19 of the questions only have one missing value, while 13 of them were answered by all of the respondents. Six of the questions have two missing values, two of the questions have three missing values, and only one was not answered by four of the informants. For the present study, it was decided to exclude cases pairwise, given that the small amount of missing values ensures that no biases will occur from deleting a case from the specific analysis it is missing data for.

Afterwards, the descriptive analysis of the data was made. The Descriptive Statistics table shows that most of the range of the answers for each question was six. The highest mean is of 6.54, and the lowest is of 3.35. The highest standard deviation is of 1.838, and the lowest is of 0.875. Most of the variables (35) portray a distribution of answers skewed to the right, while only six of them portray a distribution of answers to the left. The variable with the distribution most skewed to the right has a skewness value of -2.149, while the one with the distribution most skewed to the left has a value of +0.496. According to Hair et al. (2014), values outside of the range of -1 to +1 denote a significantly skewed distribution. All of the 12 variables with values falling outside this range are right skewed. However, all of them are close to the limit of -1. Regarding the kurtosis values, 25 of the answers portray a flatter distribution than normal distributions, while 16 portray to be peaked. The variable with the flattest distribution has a value of -0.991, while the one with the most peaked distribution has a value of +3.780. According to George and Mallery (2010), kurtosis values between -2 and +2 are considered as acceptable in order to attest a normal distribution. All of the 10 variables with values falling outside this range are peaked. However, all of them are close to the limit of -2.

Then, the outliers and extreme points were assessed by the inspection of the Boxplot graphics for each of the continuous variables. Only 13 of them revealed to have outliers, and only four had extreme values among their answers, which was better assessed in the Frequency tables of these variables. It is believed that these values are inappropriate illustration of the population from which the sample is drawn, and that statistical analysis, such as regression analysis, are sensitive to these values. Therefore, they were changed to the closer values not considered as outliers. Since the variables V_{24} , V_{25} , V_{43} and V_{44} had the most number of extreme values and/or outliers, they were all changed to the same value as the closest outlier to a value not considered as outlier. This action follows the

guidance given by some scholars to change outliers to a less extreme value so there will be no distortion of the statistics (Pallant, 2016).

5.2.3 Factor analysis

In order to measure the proposed research questions, a confirmatory factor analysis was run to test if the items we have suggested measure the same scale. Based on the research model proposed in this study, it was intended to make nine summated scales: brand image, brand familiarity, product features, quality, price, distribution, promotion, country image and product category image.

Brand image

The items that measured brand image are: V_{14} , V_{15} , and V_{16} . The descriptive analysis for this group of items shows that there were two missing values for the first variable, none for the second and only one for the third. The mean was from 4.55 to 5.89, and the standard deviation was from 1.2 to 1.735. All of the items portray to have negative values for skewness, which means that all of the answers have a distribution skewed to the right. Two of the items had a positive kurtosis value, which means they are peaked, while one is flatter than a normal distribution.

Results from the confirmatory factor analysis are shown in Appendix 3.1. The KMO value is .685, higher than .6 and therefore enough to proceed with the factor analysis. The Bartlett's test is also significant, which means that the variables are shown to have sufficient level of correlation in order to proceed with the analysis. Also, all of the correlations are above .30, which is appropriate. In the Anti-Imagine correlation table, most of the off-diagonal elements are small, which is good. Also, the individual KMOs are higher than .6. Therefore, all the variables have a good sampling adequacy.

All of the communalities are higher than 64%, which is good. Only one variable was shown to have eigenvalue above one, accounting for 66.6% of the explained variance. An inspection of the Scree Plot exposed a clear break after the first component, what confirms the one-component solution. However, the factor loadings all have high values, all above 80%. This shows that these items are suitable to be assigned to the same component (brand image). Regarding the reliability of the scale, the Cronbach's Alpha coefficient is .738, which suggests a good internal consistency. According to Pallant (2016), the alpha value should be higher than .7 to indicate a reliable scale. The Item-Total Statistics table shows that if any variable were to be deleted, the alpha value would decrease. Therefore, it was chosen to retain all of the three items in the brand image component, and make summated scales based on them.

Brand familiarity

The items that measured brand familiarity are: V_{17} , V_{18} , and V_{19} . The descriptive analysis for this group of items shows that there were no missing values for any of the variables. The mean was from 3.57 to 4.89, and the standard deviation was from 1.573 to 1.603. Two of the items portray to have positive values for skewness, which means that they have a distribution skewed to the left, while the other are skewed to the right. All of the items had a negative kurtosis value, which means they are flatter than a normal distribution.

Results from the confirmatory factor analysis are shown in Appendix 3.2. The KMO value is .596, which is approximately .6 and therefore is enough to proceed with the factor analysis. The Bartlett's test is also significant. Also, all of the correlations shown in the correlation matrix are above .30, which is appropriate. Most of the off-diagonal elements in the Anti-Imagine correlation table are small, which is good. Also, the individual KMOs have values that are higher or close to .6 (.575 and .559). Therefore, it can be said that they have an acceptable sampling adequacy.

Two of the communalities are high (79.2% and 86.6%), while one is adequate (49.6%). Only one variable was shown to have eigenvalue above one, accounting for 71.8% of the explained variance. An inspection of the Scree Plot confirmed the one-component solution. However, the factor loadings all have high values (93.1%, 89% and 70.4%). This shows that these items have a high correlation to the factor (brand familiarity). The Cronbach's Alpha coefficient is .796, which suggests a good internal consistency. If the third variable were to be deleted, the alpha value would increase. However, if this variable were deleted, the overall KMO would decrease to .5. Therefore, it was chosen to retain all of the three items and make summated scales based on them.

Product features

The items that measured product features are: V_{20} , V_{21} , V_{22} , V_{23} , V_{24} , and V_{25} . The descriptive analysis for this group of items shows that there was only one missing value for V_{25} . Also, the two last variables had four as minimum answers, which is high. The mean was from 5.24 to 6.25, and the standard deviation was from 1.072 to 1.809. All of the items portray to have negative value for skewness, which means that they have a distribution skewed to the right. Half of the items had a negative kurtosis value, which means they are flatter than a normal distribution. Whilst the other half had positive kurtosis values, which means they are peaked.

Results from the confirmatory factor analysis are shown in Appendix 3.3. The KMO value is .803, which is good. The Bartlett's test is also significant. However, three of the correlations are below .30, which is a red flag. Most of the off-diagonal elements in the Anti-Imagine correlation table are small, which is good. Also, the individual KMOs are all higher than .6, which means they have a good sampling adequacy. Three of the communalities are higher than 60%, which is good. One of them is of approximately 46%, which is adequate. However, two of the communalities are low (35% and 33.8%). Only one variable was shown to have eigenvalue above one, accounting for 52.57% of the explained variance. However, the following two variables have Eigenvalues close to one (.862 and .788). An inspection of the Scree Plot exposed a clear break after the first component, what confirms the one-component solution.

Four of the factor loadings have high values, higher than 65%. This shows that these items measure the component of product features. The first two variables have lower values (59.2% and 58.1%), but still suitable to be in this group. The Cronbach's Alpha coefficient is .795, which suggests a good internal consistency. If the second variable were to be deleted, the alpha value would increase to .802. The factor analysis was then run again without this variable, and it was shown that the overall KMO increased from .803 to .814. But, given that the increase in the Cronbach's Alpha coefficient and in the overall KMO is small, and that these values are already good including V_{21} , it was chosen to retain it in the analysis, and make summated scales with all the six product features items.

Quality

The items that measured quality are: V_{26} , V_{27} , V_{28} , V_{29} , and V_{30} . The descriptive analysis for this group of items shows that there was one missing value for V_{28} and two for V_{30} . The mean was from 4.50 to 5.37, and the standard deviation was from 1.482 to 1.828. All of the items portray to have negative value for skewness, which means that they are significantly distributed to the right. Three of the items had a negative kurtosis value, which means they are flatter than a normal distribution. Whilst the other two had positive kurtosis values, which means they are peaked.

Results from the confirmatory factor analysis are shown in Appendix 3.4. The KMO value is .791, which is more than enough to proceed with the analysis. The Bartlett's test is also significant. Also, only one of the correlations shown in the correlation matrix is below .30. In the Anti-Imagine

correlation table, most of the off-diagonal elements are small, which is good. Also, the individual KMOs are all higher than .6. Therefore, it can be said that they have a good sampling adequacy. Three of the communalities are higher than 70%, which is good. One of them is 43%, which is adequate. However, one of the communalities is low (38.6%). Only one variable was shown to have eigenvalue above one, accounting for 60.7% of the explained variance. However, the following variable has an Eigenvalue close to one (.792). An inspection of the Scree Plot confirmed the one-component solution.

The factor loadings have high values, higher than 62%, what shows that these items have a high correlation to the factor and are suitable to be assigned to the same component (quality). The Cronbach's Alpha coefficient is .822, which suggests a good internal consistency. If the third variable were to be deleted, the alpha value would increase to .823, and to .840 if the fifth variable were deleted. However, by running a factor analysis without the third or the fifth variables, the KMO values decreases. So, given that and the fact that the Cronbach's Alpha coefficient is already high including all the variables, all of them were retained in the analysis and in the summated scale for quality.

Price

The items that measured price are: V_{31} , V_{32} , V_{33} , and V_{34} . The descriptive analysis for this group of items shows that there were two missing value for V_{31} and two for V_{33} , and only one for V_{32} and V_{34} . The mean was from 3.44 to 5.34, and the standard deviation was from 1.196 to 1.827. Two of the items portray to be distributed to the right, while the other two revealed to be skewed to the left. All of the items had a negative kurtosis value, which means they are flatter than a normal distribution.

Results from the confirmatory factor analysis are shown in Appendix 3.5. The KMO value is .637, which is good. The Bartlett's test is also significant. However, two of the correlations shown in the correlation matrix are below .30. Even though is not a significant amount, it should be kept in mind. In the Anti-Imagine correlation table, most of the off-diagonal elements are small, which is good. Also, the individual KMOs are all higher than .6. Therefore, it can be said that they have a good sampling adequacy. One of the communalities is of 66.5%, which is good. The following two are 46.1%, 53.7%, respectively, which is adequate. However, one of the communalities is relatively low (41.5%).

Only one factor was shown to have eigenvalue higher than one, accounting for 51.96% of the explained variance. However, the following two variables have Eigenvalues close to one (.793 and .733). An inspection of the Scree Plot confirmed the one-component solution. The factor loadings have high values, higher than 65%. This shows that these items measure the component of price. The reliability of this scale was also assessed, and the Cronbach's Alpha coefficient is of .676, which is close to the limit proposed by Pallant (2016). However, none of the variables, if deleted, would increase the alpha value. Therefore, it was chosen to retain all of the three items and make a summated scale based on these results.

Distribution

The items that measured distribution are: V_{35} , V_{36} , V_{37} , and V_{38} . The descriptive analysis for this group of items shows that there was one missing value for V_{35} , V_{37} and V_{38} . Two missing values were shown for V_{36} . The mean was from 3.41 to 4.93, and the standard deviation was from 1.592 to 1.835. Three of the items portray to be distributed to the right, while the other one revealed to be skewed to the left. All of the items had a negative kurtosis value, which means they are flatter than a normal distribution.

Results from the confirmatory factor analysis are shown in Appendix 3.6. The KMO value is .706, which good. The Bartlett's test is also significant. However, two of the correlations shown in the

correlation matrix are below .30, which denotes that it must be carefully investigated if the items correlate. Most of the off-diagonal elements are small in the Anti-Imagine correlation table and the measures of sampling adequacy are higher than .6, which is good. Therefore, it can be said that they have a good sampling adequacy. The communalities values are not that high. Only one variable had a high communality value of 70.9%. Two had adequate values of 55.6% and 48.7%, while one of them had a low value of 39.3%. Only one factor was extracted, accounting for 53.60% of the explained variance. However, the following variable has an Eigenvalue close to one (.804). An inspection of the Scree Plot confirmed the one-component solution.

The factor loadings have high values, higher than 62%, what shows that these items are suitable to be assigned to the same component. The scale proved to be reliable, given that the Cronbach's Alpha coefficient is of .705. Even though this value could be increase if the third variable were deleted from this group, the increase would be only of .003. Also, this variable has a good factor loading and individual KMO value. And given the fact that if the Cronbach's Alpha value is higher than .7, it is possible to group the items in the same factor, it was chosen to retain all of the items in the distribution factor, and to make a summated scale based on these results.

Promotion

The items that measured promotion are: V_{39} , V_{40} , V_{41} , and V_{42} . The descriptive analysis for this group of items shows that there three missing values for V_{39} , one for V_{40} , two for V_{41} and four for V_{42} . The mean was from 3.35 to 5.31, and the standard deviation was from 1.4343 to 1.838. One of the items portray to have positive values for skewness, which means that it has a distribution skewed to the left, while the others are skewed to the right. All of the items had a negative kurtosis value, which means they are flatter than a normal distribution.

Results from the confirmatory factor analysis are shown in Appendix 3.7. The KMO value is .559, which is lower than .6, but only by .041. The Bartlett's test is significant. But three of the correlations are lower than .30. The lowest one is the correlation value between V_{39} and V_{42} , which has the value of .071. Most of the off-diagonal elements in the Anti-Imagine correlation table are small, which is good. Yet, the measure of sampling adequacy displayed on the diagonal shows that the individual KMOs have values close to .6 (.556, .594, .554 and .539). Therefore, it can be said that they have a relatively adequate sampling adequacy.

All of the communalities are higher than 75%, which is good. Two factors were shown to have eigenvalues higher than one, accounting for 81.1% of the explained variance. An inspection of the Scree Plot confirmed the two-component solution, with the two first variables in the first group and the last two in the other. The rotated factor loadings are above 82% for the variables in their respective groups (V_{41} and V_{42} for the first group; V_{39} and V_{40} for the second). However, the unrotated factor loading of V_{40} for the first group is way higher than for the second group (which are 72% and 48% respectively). The issue seems to be the V_{39} , which has an unrotated factor loading of 54% with the first group, and of 70.9% for the second.

Regarding the reliability of the scale, the Cronbach's Alpha coefficient is .655, lower than .7, but only by .045. If the first variable were to be deleted, the alpha value would increase, but only .002. However, by running a factor analysis without this variable, the KMO value would decrease. So, given that and the fact that the overall KMO and Cronbach's Alpha coefficient including all the variables are very close to the minimum limit to proceed with the factor analysis, all of them were retained in the analysis and in the summated scale for promotion. Furthermore, the regression analysis requests larger sample sizes when more independent variables are included in the analysis.

Country image

The items that measured country image are: V_{43} , V_{44} , V_{45} , V_{46} , and V_{47} . The descriptive analysis for this group of items shows that there was one missing value for all of the variables. The first three variables had a small range of answers, given that the minimum answer was of 6, 4 and 5, respectively. The mean was from 5.31 to 6.75, and the standard deviation was from .433 to 1.444. All of the items portray to have negative value for skewness, which means that they are distributed to the right. Three of the items had a negative kurtosis value, which means they are slightly flatter than a normal distribution, while two of them had a positive kurtosis, which means they are slightly peaked than a normal distribution.

Results from the confirmatory factor analysis are shown in Appendix 3.8. The KMO value is .692, which is good. The Bartlett's test is also significant. However, four of the correlations shown in the correlation matrix are below .30, what should be kept in mind. In the Anti-Imagine correlation table, all of the off-diagonal elements are small, which is good. The individual KMOs for V_{46} and V_{47} are lower than .6. However, the values are close to .6 (.588 and .587). Therefore, it can be said that they have an acceptable sampling adequacy. All the communalities are higher than 76%, which is good.

Two factors were extracted, accounting for 83% of the explained variance. An inspection of the Scree Plot confirmed the two-component solution. The rotated factor loadings are above 85% for the variables in their respective groups (V_{43} , V_{44} and V_{45} for the first group; V_{46} and V_{47} for the second). However, the unrotated factor loadings of V_{46} and V_{47} for both groups are really close. The Cronbach's Alpha is .749, and none of the variables, if deleted, would increase it. Given this, the good value of the overall KMO for the factor with the five variables, and the fact that the factor loadings of V_{46} and V_{47} are near for both groups, it was chosen to keep all of the variables in the same factor, and make a summated scale based on it.

Product category image

The items that measured product category image are: V_{48} , V_{49} , V_{50} , V_{51} , and V_{52} . The descriptive analysis for this group of items shows that there was one missing value for all of the variables, with the exception of V_{48} , that had two missing values. The mean was from 5.15 to 5.89, and the standard deviation was from 1.2 to 1.41. All of the items portray to have negative value for skewness, which means that they are significantly distributed to the right. Four of the items had a negative kurtosis value, which means they are slightly flatter than a normal distribution, while one of them had a positive kurtosis, which means it is slightly peaked than a normal distribution.

Results from the confirmatory factor analysis are shown in Appendix 3.9. The KMO value is .838, which is excellent. The Bartlett's test is also significant. Also, all of the correlations shown in the correlation matrix are above .30, what shows that the items correlate well. In the Anti-Imagine correlation table, all of the off-diagonal elements are small, which is good. All of the individual KMOs are above .8, which indicates great sampling adequacy. One of the communalities is adequate, with 49.3%. The others had good values of 62.4%, 62.5%, 60.5% and 70%. Only one factor was shown to have eigenvalue higher than one, accounting for 60.9% of the explained variance. An inspection of the Scree Plot confirmed the one-component solution.

The factor loadings have high values of above 70%. This shows that these items have a high correlation to the factor and are suitable to be assigned to the same component (product category image). The scale proved to be reliable, given that the Cronbach's Alpha coefficient is of .836. The Item-Total Statistics table shows that if any variable were to be deleted, the alpha value would

decrease. Therefore, it was chosen to retain all of the three items in the product category image component, and make summated scales based on them.

5.2.4 Convergent validity and discriminant validity

The convergent validity was calculated by the average variance extracted (AVE)- the sum of squared standardized factor loadings divided by the number of items, as explained in the previous chapter. An AVE of .5 or higher suggests adequate convergence. As it is shown in Appendix 4.1, all of the AVE estimates for each of the factors are higher than .5. Therefore, convergent validity is established for these summated scales.

The discriminant validity, on the other hand, is supported when the AVE estimates for each factor is greater than the shared variance between constructs, as explained in the previous chapter. The calculation was made with the use of the correlation of the factors, which were squared in order to find the shared variance, as shown in Appendix 4.2. Since all of the AVE estimates for each of the factors are higher than their respective shared variances, discriminant validity is established for these summated scales.

5.2.5 Regression analysis

This section of the analysis aims to answer the following research questions: (1) What are the drivers of the purchase intention of salted and dried cod for Brazilian consumers? How does country of origin affect purchase intention of Norwegian salted and dried cod in Brazil? For the first question, the total sample of 150 respondents was used. For the second question, the employed sample was of the 45 respondents who claimed to be able to differentiate the Norwegian salted and dried cod from others. This division was made because it only makes sense to assess the purchase intention of the Norwegian salted and dried cod of the consumers who can actually differentiate the origin of the product.

5.2.5.1 Regression 1: Brand image

It was measured if country image, product category image and brand familiarity have a significant positive impact on brand image, tested by the following hypotheses:

H₂: Country image has a significant positive effect on brand image.

H₄: Product category image has a significant positive effect on brand image.

H₈: Brand familiarity has a significant positive effect on brand image.

In addition, the summated scales for product features, quality, price, distribution and promotion were included in the analysis as independent variables, based on previous research by Diamantopoulos et al. (2011), that used these dimensions to measure CI, PCATI and brand image. It was also included in the analysis the control variable of age.

5.2.5.1.1 Regression for the first research question

Results of the regression analysis presented in Appendix 5.1 show the R² and the adjusted R², which represent the strength of the overall relationship of the model. The R² and the adjusted one for this regression are around 55%, which infers that more than half of the variation of Brand Image is explained by the model, which indicates a good model fit. On the ANOVA table, the Regression Sum of Squares is larger than the Residual one, meaning that the explained portion of the model is larger than the unexplained part, which also indicates a good model fit. The F value is relatively high, which indicates that it may be on the null hypothesis rejection area. It can be, however, due to the degrees of

freedom, that are 130 for the Residual Sum of Squares. However, the most important is the significance value. If the p-value of the F test is lower than the α value (0.05), then the null hypothesis can be rejected and the model is statistically significant, which is the case for this model (Appendix 5.1). Therefore, it can be said that the model has a good fit and is statistically significant.

Regarding the coefficients of the independent variables, results shows that Brand Familiarity, Product Features, Quality, Price, Distribution and Promotion are significant, considering a confidence level of 95% (α value 0.05). Quality is the variable with the highest positive effect on Brand Image, with one increase on the its value increasing .355 of Brand Image. While Distribution is the only variable with a negative effect of -.189. Country Image and Product Category Image are not significant, so the null hypothesis cannot be rejected. The control variable is also not significant, which means that gender does not improve the explanation of Brand Image. The VIF and Tolerance values shows that the assumptions for multicollinearity were not violated (Appendix 5.1).

When it comes to the distribution of the residuals, the Kolmogorov-Smirnov statistic compares our function with the distribution expected if the sample was normally distributed. If the p-value $\leq \alpha$, then the data do not follow a normal distribution, which is the case for this data. Therefore, it was performed the bootstrap method, with a sample size of 200, as was done in Lynghjem and Breivik's (2015) study. The bootstrapped results shows that the R^2 and the adjusted R^2 values remained roughly the same, and that Brand Familiarity, Product Features, Quality and Promotion are significant. Quality also displays to have the highest effect on Brand Image, with one increase in its value increasing .346 of Brand Image. Country Image, Product Category Image, Price, Distribution and the control variable of gender were not significant, as shown in Table 5.8. Therefore, from the three hypotheses presented previously, only H_8 is accepted.

Table 5.8. Bootstrapped results of the first regression analysis.

Items	B	Beta	t	Sig.	Tolerance	VIF
Country Image	-.023	-.016	-.237	.813	.838	1.193
Product Category Image	.019	.018	.241	.810	.686	1.457
Brand Familiarity	.173	.199	2.690	.008	.666	1.502
Product Features	.240	.208	2.932	.004	.724	1.382
Quality	.346	.372	4.533	.000	.539	1.854
Price	.138	.135	1.638	.104	.537	1.864
Distribution	-.143	-.154	-1.775	.078	.483	2.072
Promotion	.171	.169	2.003	.047	.511	1.957
Gender	-.118	-.049	-.762	.448	.880	1.136
R^2 and Adjusted R^2	55%	51.7%				
F and Sig.	16.807	.000				
Regression Sum of Sq.	96.760					
Residual Sum of Sq.	79.320					

5.2.5.1.2 Regression for the second research question

Results from the regression analysis presented in Appendix 5.2 show that the values of the R^2 and the adjusted one are 61.4% and 50.2%, respectively, which infers that more than half of the variation of performance is explained by the model, which indicates a good model fit. On the ANOVA table, the Regression Sum of Squares is larger than the Residual one, meaning that the explained portion of the model is larger than the unexplained part, which also indicates a good model fit. The p-

value of the F test is lower than the α value (0.05), which means that the null hypothesis can be rejected and the model is statistically significant (Appendix 5.2). Therefore, it can be said that the model has a good fit and is statistically significant.

Regarding the coefficients of the independent variables, only Brand Familiarity is significant, considering a confidence level of 95% (α value 0.05), with one increase on the its value increasing .298 of Brand Image. While the other variables are not significant, so the null hypothesis cannot be rejected. The control variable is also not significant, which means that gender does not improve the explanation of Brand Image. The VIF and Tolerance values shows that the assumptions for multicollinearity were not violated (Appendix 5.2).

When it comes to the distribution of the residuals, the Kolmogorov-Smirnov statistic test shows that the p-value was higher than α , which means that the data follows a normal distribution. However, given that small sample size, it was performed the bootstrap method, with a sample size of 200, as was done in Lynghjem and Breivik's (2015) study. The bootstrapped results shows that the R^2 and the adjusted R^2 values remained roughly the same. The results also show that only Brand Familiarity is significant, with one increase on its value increasing .320 of Brand Image, as shown in Table 5.9. Therefore, from the three hypotheses presented previously, only H_8 is accepted.

Table 5.9. Bootstrapped results of the second regression analysis.

Items	B	Beta	t	Sig.	Tolerance	VIF
Brand Familiarity	.320	.315	2.258	.032	.687	1.455
Country Image	-.291	-.188	-1.285	.209	.626	1.598
Product Category Image	.366	.270	1.541	.134	.438	2.284
Product Features	-.016	-.010	-.063	.951	.483	2.070
Quality	.340	.295	1.436	.162	.318	3.141
Price	.336	.284	1.536	.135	.392	2.552
Distribution	-.148	-.149	-.762	.452	.352	2.844
Promotion	.082	.073	.397	.695	.399	2.509
Gender	-.021	-.007	-.050	.961	.656	1.525
R² and Adjusted R²	61.1%	49.1%				
F and Sig.	5.070	.000				
Regression Sum of Sq.	44.548					
Residual Sum of Sq.	28.312					

5.2.5.2 Regression 2: Product category image

It was measured if country image and brand familiarity have a significant positive impact on product category image, tested by the following hypotheses:

H_1 : Country image has a significant positive effect on product category image.

H_7 : Brand familiarity has a significant positive effect on product category image.

It was also included in the analysis as independent variables the summated scales for product features, quality, price, distribution and promotion based on previous research by Diamantopoulos et al. (2011). The control variable of age was also included in the analysis.

5.2.5.2.1 Regression for the first research question

The regression analysis offers information of the model as a whole, as well as for the contribution of each of the independent variables to the explanation of the dependent variable. Table 5.10 provides the results of the third regression analysis. From the values of the R^2 and the adjusted one, it can be seen that they are around 30%, which infers that not even half of the variation of performance is explained by the model, which does not indicate a good model fit. On the ANOVA table, the Regression Sum of Squares is significantly lower than the Residual one, meaning that the unexplained portion of the model is larger than the explained part, which also indicates a bad model fit. The F value is relatively high, which indicates that it may be on the null hypothesis rejection area. It can be, however, due to the degrees of freedom, that are 132 for the Residual Sum of Squares. However, the most important is the significance value. If the p-value of the F test is lower than the α value (0.05), then the null hypothesis can be rejected and the model is statistically significant, which is the case for this model. In conclusion, even though the model does not have a good fit, it is statistically significant.

Table 5.10 also shows information about the coefficients. It can be seen that Brand Familiarity, Product Features, Price, and Distribution are not significant, considering a confidence level of 95% (α value 0.05). Therefore, the null hypothesis cannot be rejected. The control variable of gender appears to not be significant as well, which means that gender does not improve the explanation of Product Category Image. Country Image, Quality and Promotion are significant. Quality has the highest contribution, increasing the dependent variable in .262. Therefore, from the two hypotheses presented previously, only H_1 is accepted. Regarding the Collinearity Statistics, all of the VIF values are around 1, which means that there is some association between the variables but not enough to cause problems. The tolerance values are all above 0.10, which is an indication of no multicollinearity problems.

Table 5.10. Results of the third regression analysis.

Items	B	Beta	t	Sig.	Tolerance	VIF
Country Image	.259	.191	2.512	.013	.905	1.105
Brand Familiarity	.035	.046	.520	.604	.669	1.494
Product Features	.152	.146	1.725	.087	.728	1.373
Quality	.262	.315	3.319	.001	.579	1.728
Price	-.029	-.031	-.330	.742	.585	1.710
Distribution	-.006	-.007	-.073	.942	.542	1.846
Promotion	.176	.193	2.029	.044	.578	1.732
Gender	.076	.035	.452	.652	.887	1.127
R² and Adjusted R²	31%	26.9%				
F and Sig.	7.424	.000				
Regression Sum of Sq.	46.065					
Residual Sum of Sq.	102.375					

When it comes to the distribution of the residuals, the Kolmogorov-Smirnov statistic compares our function with the distribution expected if the sample was normally distributed. If the p-value $\leq \alpha$, then the data do not follow a normal distribution. In the case of this data, the p-value is .2, which is higher than α (assuming α as .05). Therefore, we can consider the residuals as normally distributed.

The residual distribution is slightly skewed to the left due to its negative value on the descriptive table. Also, the positive kurtosis value means that the distribution is slightly peaked. From the Histogram, the distribution can be considered as mostly normally distributed. The normal Q-Q Plot

looks good, since the residuals are following the regression line. The Detrended Normal Q-Q Plot shows a few outliers, which can also be seen on the boxplot table. The boxplot table shows that the median is relatively symmetric according to the 50% box, since it is located approximately in the middle. Also, the whiskers are shown to be symmetric according to the box as well.

5.2.5.2.2 Regression for the second research question

Results of the regression analysis presented in Appendix 5.3 show that the R^2 and the adjusted one are 50.5% and 38.1%, respectively. The significant difference among them occurs because the adjusted R^2 considers the sample size and the number of independent variables in the analysis. Considering the adjusted R^2 , the model does not have a good model fit, since it explains less than half of the variation of the dependent variable. On the ANOVA table, the Regression Sum of Squares is almost the same as the Residual one, meaning that the explained portion of the model is roughly the same as the unexplained part, which also does not indicate a good model fit. The p-value of the F test is lower than the α value (0.05), then we can reject the null hypothesis and the model is statistically significant, which is the case for this model (Appendix 5.3). In conclusion, even though the model does not have a good fit, it is statistically significant.

Regarding the coefficients of the independent variables, results show that none of the variables are significant, considering a confidence level of 95% (α value 0.05). Therefore, the null hypothesis cannot be rejected. The control variable is also not significant, which means that gender does not improve the explanation of Product Category Image. The VIF and Tolerance values shows that the assumptions for multicollinearity were not violated (Appendix 5.3).

When it comes to the distribution of the residuals, the Kolmogorov-Smirnov test of normality shows that its p-value was higher than α (.05), which means that the distribution can be considered normal. However, given the small sample size, the bootstrap method was employed. The bootstrap results show that the R^2 and the adjusted R^2 values increased to 56.5% and 45.2%, respectively. They also show that Product Features and Promotion are the only significant variables, with the former having the highest positive effect on Product Category Image of .403, as can be seen in Table 5.11. Therefore, none of the two hypotheses presented previously are accepted.

Table 5.11. Bootstrapped results of the fourth regression analysis.

Items	B	Beta	t	Sig.	Tolerance	VIF
Brand Familiarity	.058	.080	.566	.575	.701	1.426
Country Image	.160	.142	.986	.332	.675	1.482
Product Features	.403	.349	2.198	.036	.556	1.799
Quality	.087	.103	.489	.628	.319	3.135
Price	.164	.188	1.011	.320	.407	2.455
Distribution	-.122	-.167	-.840	.407	.357	2.802
Promotion	.305	.367	1.081	.046	.452	2.213
Gender	.466	.214	1.531	.136	.719	1.391
R^2 and Adjusted R^2	56.5%	45.2%				
F and Sig.	5.024	.000				
Regression Sum of Sq.	22.517					
Residual Sum of Sq.	17.367					

5.2.5.3 Regression 3: Purchase intention

It was measured if country image, product category image, brand image and brand familiarity have a significant positive impact on purchase intention, tested by the following hypotheses:

H₃: Country image has a significant positive effect on purchase intention.

H₅: Product category image has a significant positive effect on purchase intention.

H₆: Brand image has a significant positive effect on purchase intention.

H₉: Brand familiarity has a significant positive effect on purchase intention.

As was done in the previous regression analyses, the summated scales for product features, quality, price, distribution and promotion were also included in the analysis as independent variables, based on previous research by Diamantopoulos et al. (2011). It was also included in the analysis the control variable of age. For the regression analysis for the first research question, the employed dependent variable was V₅₃ (I intend to buy salted and dried cod). For the regression analysis for the second research question, the employed dependent variable was V₅₆ (I intend to buy Norwegian salted and dried cod).

5.2.5.3.1 Regression for the first research question

Results of the regression analysis presented in Appendix 5.4 show that the R² and the adjusted one are around 35%, which infers that not even half of the variation of performance is explained by the model, which does not indicate a good model fit. On the ANOVA table, the Regression Sum of Squares is significantly lower than the Residual one, meaning that the unexplained portion of the model is larger than the explained part, which also indicates a bad model fit. The F value is relatively high, which indicates that it may be on the null hypothesis rejection area. It can be, however, due to the degrees of freedom, that are 129 for the Residual Sum of Squares. However, the most important is the significance value. If the p-value of the F test is bigger than the α value (0.05), then the null hypothesis can be rejected and the model is statistically significant, which is the case for this model (Appendix 6.4). Thus, even though the model does not have a good fit, it is statistically significant.

Results shows that Brand Image, Brand Familiarity, Quality, Price, Promotion, Country Image and Product Category Image are not significant, considering a confidence level of 95% (α value 0.05). Therefore, the null hypothesis cannot be rejected. The control variable is also not significant, which means that gender does not improve the explanation of Purchase Intention. Product Features is the only significant independent variable, with the effect of one increase on the its value increasing .341 of Purchase Intention. The VIF and Tolerance values shows that the assumptions for multicollinearity were not violated (Appendix 5.4).

Regarding the distribution of the residuals, the Kolmogorov-Smirnov statistic test shows that the p-value was lower than α , which means that the data do not follow a normal distribution. Therefore, it was performed the bootstrap method, with a sample size of 200, as was done in Lynghjem and Breivik's (2015) study. The Boostrapped results show that the R² and the adjusted R² values remained roughly the same, and that only Product Features is significant, with one increase in its value increasing .273 of Purchase Intention, as shown in Table 5.12. Therefore, none of the four hypotheses presented previously are accepted.

Table 5.12. Bootstrapped results of the fifth regression analysis.

Items	B	Beta	t	Sig.	Tolerance	VIF
Brand Image	.220	.185	1.776	.078	.450	2.220
Brand Familiarity	.045	.044	.493	.623	.629	1.590
Product Features	.273	.199	2.340	.021	.677	1.478
Quality	.142	.128	1.247	.215	.463	2.161
Price	.233	.190	1.971	.051	.525	1.904
Distribution	.091	.082	.806	.422	.471	2.124
Promotion	-.045	-.037	-.376	.708	.495	2.020
Country Image	.113	.063	.829	.409	.838	1.194
Product Category Image	.111	.084	.997	.321	.686	1.458
Gender	.039	.014	.183	.855	.876	1.142
R² and Adjusted R²	39.7%	34.8%				
F and Sig.	8.098	.000				
Regression Sum of Sq.	99.002					
Residual Sum of Sq.	150.378					

5.2.5.3.2. Regression for the second research question

Results of this regression analysis presented in Appendix 5.5 show that the R² and the adjusted one are 51.7% and 35.6%, respectively. The significant difference among them occurs because the adjusted R² considers the sample size and the number of independent variables in the analysis. Considering the adjusted R², the model does not have a good model fit, since it explains less than half of the variation of the dependent variable. On the ANOVA table, the Regression Sum of Squares is slightly higher than the Residual one, meaning that the explained portion of the model is roughly the same as the unexplained part, which also does not indicate a good model fit. The p-value of the F test is lower than the α value (0.05), then we can reject the null hypothesis and the model is statistically significant, which is the case for this model (Appendix 5.5). In conclusion, even though the model does not have a good fit, it is statistically significant.

Regarding the coefficients of the independent variables, results shows that only Product Category Image is significant, considering a confidence level of 95% (α value 0.05), with one increase on its value increasing Purchase Intention in .923. Given that the other variables are not significant, the null hypothesis cannot be rejected. The control variable is also not significant, which means that gender does not improve the explanation of Purchase Intention. The VIF and Tolerance values shows that the assumptions for multicollinearity were not violated (Appendix 5.5).

When it comes to the distribution of the residuals, the Kolmogorov-Smirnov test of normality shows that its p-value was lower than α (.05), which means that the distribution cannot be considered as normally distributed. In addition to this, given the small sample size, the Bootstrap method was employed. The bootstrapped results show that the R² and the adjusted R² values increased to 58.2% and 43.3%, respectively. The results also show that only Product Category Image is significant, with one increase in its value increasing 1.010 of Purchase Intention, as can be seen in Table 5.13. Therefore, from the four hypotheses presented previously, only H₅ is accepted.

Table 5.13. Bootstrapped results of the sixth regression analysis.

Items	B	Beta	t	Sig.	Tolerance	VIF
Brand Image	-.083	-.094	-.477	.637	.389	2.573
Brand Familiarity	.035	.039	.243	.810	.584	1.711
Product Features	.080	.057	.322	.750	.483	2.070
Quality	-.080	-.078	-.346	.732	.297	3.364
Price	.241	.228	1.125	.270	.362	2.759
Distribution	-.125	-.141	-.679	.502	.345	2.901
Promotion	-.251	-.250	-1.287	.209	.396	2.522
Country Image	-.111	-.080	-.506	.617	.592	1.689
Product Category Image	1.010	.835	4.348	.000	.405	2.471
Gender	-.251	-.095	-.631	.533	.656	1.525
R² and Adjusted R²	58.2%	43.3%				
F and Sig.	3.902	.002				
Regression Sum of Sq.	33.768					
Residual Sum of Sq.	24.232					

5.2.6 Analysis of variance

Analysis of variance was employed in order to assess the mean scores for purchase intention between the different groups within the control variables that were not included in the regression analysis (age, household income, size of household and region). In addition, the mean scores of the summated scales employed in the regression analysis were also compared, based on the respondents who could and could not differentiate Norwegian salted and dried cod from the others.

5.2.6.1 Age

One-way between groups analyses of variance were conducted to assess the impact of age in the scores of the dependent variable of purchase intention. Respondents were divided in six groups, according to the options of answers provided in the questionnaire. The first analysis was made with the sample of 150, and therefore the variable V₅₃ (I intend to buy salted and dried cod) was used. The assumption of homogeneity was not violated, given that the Levene's test for homogeneity of variances was not significant. However, no significant difference among the mean scores of the dependent variable for the six groups was found, since the p value provided in the ANOVA table was not significant. The second analysis was made with the sample of 45 who claimed to be able to differentiate Norwegian salted and dried cod from others, and therefore the variable V₅₆ (I intend to buy Norwegian salted and dried cod) was employed. The assumption of homogeneity was also not violated, and there was not a statistically significant difference found among the groups as well. The results are shown in Appendix 6.1.

5.2.6.2 Size of household

One-way analyses of variance were also conducted to assess the impact of the size of household in the scores of the variable of purchase intention. Respondents were divided in five groups, according to the options of answers provided in the questionnaire. As done previously, the first analysis was made with the employment of the dependent variable of V₅₃ and the sample of 150. The assumption of homogeneity was not violated, but no significant difference among the mean scores was found. For the second analysis, the variable of V₅₆ and the sample of 45 was employed. The same results of the first analysis were found. The results are shown in Appendix 6.2.

5.2.6.3 Region

Independent sample t-test was used to compare the scores of the dependent variable of purchase intention based on the regions. Due to the larger sample from the Southeast region, respondents were divided in two groups: those from Southeast and those from the other regions. As done previously, the first analysis was made with the employment of the dependent variable of V_{53} and the sample of 150. The assumption of homogeneity was not violated, given that the Levene's test for homogeneity of variances was not significant. Therefore, the information in the first line of the t-test was assessed, which refers to 'Equal variances assumed'. However, its p-value was not significant, which means that there is not a significant difference among the mean scores for these two groups. For the second analysis, the sample of 45 respondents and the variable of V_{56} were employed. The same results of the first analysis were found. The results are shown in Appendix 6.3.

5.2.6.4 Household income

One-way analyses of variance were also conducted to assess the impact of the household income in the scores of the dependent variable of purchase intention. Respondents were divided in five groups, according to the options of answers provided in the questionnaire. The first two options were merged, given that the first option only had one answer. As done previously, the first analysis was made with the employment of the variable of V_{53} and the sample of 150. The assumption of homogeneity was not violated, but no significant difference among the mean scores was found. For the second analysis, the variable of V_{56} and the sample of 45 was employed. The same results of the first analysis were found. The results are shown in Appendix 6.4.

5.2.6.5 Difference recognition of the Norwegian salted and dried cod from others

Independent sample t-tests were performed to compare the mean scores of the summated scales used in the regression analysis based on whether the respondents could or not differentiate the Norwegian salted and dried cod from the others. The analyses were made with the sample of 150, and therefore it was employed the variable of V_{53} to assess purchase intention. The results are shown in Appendix 6.5. The Levene's Test of Equality of Variance provides results indicating that there is equality of variance for all of the variables, with the exception of country image. In addition, the variables of purchase intention, product category image, brand familiarity, product features, quality and price present a significant difference in scores among the two groups. All of these variables have a higher mean score for the group of respondents who could differentiate the Norwegian product from others. While the variables of country image, brand image, distribution and promotion do not present a significant difference.

The magnitude of the difference between the means was assessed through effect size statistics. The eta squared for each of the variables were calculated based on Pallant's (2016) formula, explained previously. The proportion of variance in the dependent variables explained by the two groups of respondents who could and could not differentiate the Norwegian product was small to moderate for purchase intention (eta squared = .03), country image (eta squared = .02), product category image (eta squared = .04), brand image (eta squared = .025), product features (eta squared = .035), distribution (eta squared = .02) and promotion (eta squared = .02). For brand familiarity (eta squared = .13), quality (eta squared = .12) and price (eta squared = .08), the proportion is moderate to large, meaning that around 10% of the variance in these variables are explained by the two groups of respondents who could or could not differentiate the origin of salted and dried cod.

5.2.7 Summary of quantitative results

The summary of the results of the quantitative part of this study are presented in this section. The descriptive analysis shows that the majority of the respondents were females from the age group from 46 to 55, with a size of household of three. Also, more than 90% of them were from the Southeast region. Distribution of income shows that the majority of the respondents had a household income from 65,013 to 130,000 per year. Most of the informants claimed to frequently purchase salted and dried cod and pre-sliced and packaged salted and dried cod products, respectively. In addition, salted and dried products made with codfish were the favorite salted and dried cod product for most of them.

Most of the respondents affirmed to eat salted and dried cod mostly at home, and to purchase it in supermarkets from one to five times a year. The majority of the respondents didn't know the country of origin of their most frequently purchased salted and dried cod. Furthermore, those who declared to take more than one hour to prepare salted and dried cod dishes were the majority. Surprisingly, only 45 respondents affirmed to be able to differentiate the Norwegian product from others, from which the majority claimed to intend to buy Norwegian salted and dried cod. Further analysis of the frequency of the respondents who could differentiate the origin shows that the majority were females with the age of 66 or more, from the Southeast region, with a size of household of two, and annual household income from BRL 13,000 and BRL 65,000.

The research model was found to be well designed, given that the results of the factor analysis shows that the proposed constructs are appropriate, through the assessment of the KMO values and the significance of the Barlett's test of Sphericity. The reliability of the scales was also assured, through the Cronbach Alpha's test. Convergent and discriminant validity were also employed and confirmed.

The results of the regression analyses made with the whole sample of 150 show that from the nine hypotheses presented previously, only H₁ (country image has a significant positive effect on product category image) and H₈ (brand familiarity has a significant positive effect on brand image) are accepted. Product features, quality and promotion were also shown to have an effect on brand image, with quality having the highest positive effect. Quality and promotion were also shown to have an effect on product category image, with the former also having the highest positive effect. Only product features was shown to impact purchase intention. The control variable of gender was found not to be significant.

The results of the regression analyses made with the sample of 45 respondents who could differentiate the Norwegian salted and dried cod from the others show that only H₅ (product category image has a significant positive effect on purchase intention) and H₈ (brand familiarity has a significant positive effect on brand image) are accepted. In addition, only product features and promotion were shown to have an effect on product category image, with the former having the highest positive effect. The control variable of gender was also found not to be significant.

Analyses of variance show that the control variables of age, region, size of household and household income do not have significant mean difference for the scores of purchase intention, for both the variables of V₅₃ and V₅₆. However, the variables of purchase intention, product category image, brand familiarity, product features, quality and price present a significant difference in scores among these two groups of respondents who could and could not differentiate the Norwegian salted and dried cod from the others. In addition, all of these variables have a higher mean score for the group of respondents who could differentiate. Furthermore, the proportion of variance in the dependent variables explained by these two groups of respondents is larger for the variables of brand familiarity (eta squared = .13), quality (eta squared = .12) and price (eta squared = .08).

6. Discussion, implications and limitations

This chapter presents the discussion of the obtained results from the qualitative and quantitative analyses. Results of the quantitative part of this study aim to support the findings of the qualitative analysis, given the previously discussed issues with the quantitative data. The managerial implications, limitations and suggestions for further research are also presented in this chapter.

6.1 Discussion

Qualitative results suggest that the drivers of purchase intention for Brazilian final customers of salted and dried cod in general are quality and price. In addition, product features such as color and thickness were also mentioned by the majority of respondents as characteristics used to assess the quality. The quantitative findings suggest that only country image has a significant positive effect on product category image, and only brand familiarity has a significant positive effect on brand image. These findings partially support Diamantopoulos et al.'s (2011) model. In addition, the variables of product features, quality and promotion were shown to have an effect on brand image. The last two variables were also shown to have an effect on product category image. Quality has the highest effect for both of these results. Surprisingly, only product features was shown to impact purchase intention of salted and dried cod in general for Brazilian final consumers.

It can be inferred from the results, that quality and price are the two main drivers of purchase intention for Brazilian consumers of salted and dried cod in general. This supports Aaker's (1991) findings, who claims that the perceived quality refers to the customer's opinion of the quality the product or service represents and it directly impacts purchase decisions and brand loyalty, particularly when the customer is not capable of conducting a thorough assessment. This finding also supports Schiffman et al.'s (2008) findings, who claims that the way consumers perceive price has a strong influence on purchase intention and satisfaction. Roth and Diamantopoulos' (2009) results are also supported by this finding, since these authors found that in a real-world scenario, country image is not the only cue present and many other intrinsic (e.g., quality), extrinsic (e.g., price, warranty) and contextual (e.g., store layout) factors would influence consumer decision making and choice

Qualitative results also show that the product features, such as color and thickness, are imperative for the consumers when assessing quality, what can explain the fact that the product features impacts the purchase intention of salted and dried cod in general for Brazilian final consumers in the quantitative results of the study. This supports Loppane's (2014b) findings that among the most important attributes that Brazilian consumers take in consideration when buying this product are the color and the thickness of the fish. This is also aligned with Schiffman et al.'s (2008) findings, that suggest that consumers often judge the quality of a product or service based on information cues linked to the product or service, which provide the foundation for perceptions of quality. Physical characteristics of the product are among the intrinsic cues used by consumers to assess the product, while price and packages are among the extrinsic cues. Lynghjem and Breivik's (2015) findings also show that product attributes related to quality are the most important drivers of purchase intention of Norwegian salted cod in Spain.

Aaker (1991) claims that if the customer-perceived quality of a product or service is high, the marketer can charge a price premium, while Lehmann and Winer (2005) suggest that the observable price must be lower or equal to the customer's reference price for the brand to encourage a purchase. These conclusions partially support the results of this study, given that it can be inferred that price has become increasingly important for Brazilian consumers, given the recent economic crisis. However, qualitative results suggest that poorer customers value more price (and therefore purchase the saithe species), while those with a better financial situation value more quality and product features of the

product, such as color and thickness (and therefore prefer *Gadus morhua* species). Regional differences were also mentioned, following the same logic. For example, consumers from the Northeast region were said to prefer cheaper products given that this region is one of the poorest of Brazil. However, in this study, analyses of variance show that the control variables of region and household income do not have significant mean difference for the scores of purchase intention, for both salted and dried cod in general, and specifically the Norwegian one.

Furthermore, most respondents of the qualitative analysis highlighted the fact that the salted and dried cod is an expensive product. Out of the four final consumers interviewed, three were from higher classes, and none of them declared to value price. Quality was mentioned by two of them, and one mentioned product features such as thickness. Price was mentioned by the middle-class informant. In addition, quantitative results show that the majority of the respondents were females from the age group from 46 to 55 years old, with a household income from BRL 65,013 to BRL 130,000 per year. Additionally, salted and dried products made with codfish were the favorite salted and dried cod product for most of the respondents. However, saithe was ahead of the codfish species in the question regarding the most frequently bought salted and dried product. Furthermore, the *Gadus morhua* is often associated with higher quality and a certain status. Most of the interviewed restaurants claimed to favor quality, and therefore to only purchase the *Gadus morhua* species.

Hence, it can be assumed that the consumers who have knowledge about the species of the product and have financial capability will most likely purchase the higher quality product, which is often associated as the *Gadus morhua* species. Those consumers with less financial capability will prioritize price and often choose the saithe species, which has a similar taste to the *Gadus morhua* species. It must be mentioned though that quantitative results show that control variables of age, region, size of household and household income do not have significant mean difference for the scores of purchase intention, for both salted and dried cod in general and the Norwegian one. Gender was also found not significant in any of the regression analyses.

Most of the respondents of the quantitative analysis affirmed to eat salted and dried cod mostly at home, and to purchase it in supermarkets from one to five times a year. This supports Fjørtoft and Nystrand's (2017) findings that Brazilian consumers prefer salmon over salted and dried cod in general. Their survey also indicates that Brazilians prefer to eat *bacalhau* for lunch home in weekends. However, this finding contradicts Lopane's (2014b) finding that the consumption of salted and dried cod, on a daily basis, has been increasing mainly due to its availability in restaurants and due to the growing tendency of consumers eating out.

These findings may also be linked to the fact that results of this study also clearly vindicate that the salted and dried cod market in Brazil is seasonal. According to the vast majority of qualitative respondents, the demand is larger during Christmas and Easter. Mother's Day was mentioned by some of the respondents as well, while some of them also highlighted the fact that the city of Rio de Janeiro is different from the rest of Brazil, given that the salted and dried cod is best sold during Christmas than during Easter. The correlation that Brazilian consumers make of *bacalhau* with Christmas and Easter is extremely strong. An explanation for this is that the consumption of this product has always been strictly related to the religion, since the Portuguese also brought to Brazil the catholic religious practices, as supported by Lopane's (2014a) findings. In addition, most of the supermarkets, market stalls, and restaurant informants mentioned that their clientele is mostly made up by elderly customers from higher classes. It can be inferred, therefore, that elderly people are usually more religious and for this reason tend to follow religious and customary practices more strictly, which includes the tradition of consuming salted and dried cod in these periods. This is also in accordance with Camargo Neto's (2014) findings that this product is consumed mainly by higher income families, and with a bigger

demand during Easter and Christmas. Quantitative results, however, show that the majority of the respondents were females from the age group from 46 to 55 years old, what can be explained by the fact that mostly women in this age group are the ones who do the groceries in Brazil.

When it comes to the loss of market share of Norwegian exporters in Brazil, it can be inferred that not only the opening of the market and the shift to a floating exchange rate as mentioned by Camargo Neto et al., (2016), or the economic crisis as mentioned by some informants, can explain this trend. Most of the respondents of the qualitative analysis seemed to agree that the Brazilian market is changing towards more practical products. Informants mentioned that sometimes consumers seek for more convenient products, such as the packaged, boneless and skinless ones. The frozen cod was also mentioned by the majority of the respondents as a threat to the salted and dried product, given its convenience and its conservation time, as well as its cheaper price. However, a few informants mentioned the fact that traditional buyers of salted and dried cod products are not attracted to the frozen product because it has less flavor.

Quantitative results show that the most purchased cod product by Brazilian final consumers are pre-sliced and packaged salted and dried cod products. Also, those who declared to take more than one hour to prepare salted and dried cod dishes were the majority. It can be inferred that cod dishes are not quickly prepared, what can justify the preference of some consumers for the frozen product, that eliminates the need to desalt the product, and therefore saves time. Other factors can also explain this trend, such as the increasing number of women working and not being housemaids anymore, or the fact that these more convenient products come from China or Portugal and are cheaper than the salted and dried cod products, given the high labor costs in Norway.

Qualitative results also show that the majority of Brazilian final consumers cannot differentiate the Norwegian salted and dried cod from the others. Some respondents mentioned that it is difficult for consumers to differentiate because Portuguese exporters purchase raw material from Norway. In addition, some mentioned that final consumers usually identify the product by the fish species, or that only those who have knowledge of the product, traditional elderly customers or traditional Portuguese buyers are able to recognize the origin. Quantitative results show that only 30% of respondents affirmed to be able to differentiate the Norwegian product from others. Besides, the majority of the respondents didn't know the country of origin of their most frequently purchased salted and dried cod.

These results support Lynghjem and Breivik's (2015) findings that suggest that country of origin awareness of Norwegian salted cod is low in the Spanish market, where few consumers are able to distinguish between Norwegian and Icelandic cod. Moreover, the nomination of the salted and dried cod at the point of sales may be one of the reasons for the lack of knowledge of Brazilian consumers regarding the origin of the product. For example, all of the interviewed supermarkets displayed the salted and dried cod of *Gadus morhua* as "*bacalhau do Porto imperial*" (imperial salted and dried cod of Porto). This may lead buyers to think that the product comes from Portugal.

Quantitative results also show that the majority of the respondents who could differentiate Norwegian salted and dried cod from others were females with the age of 66 or more. Therefore, this supports the qualitative findings that mostly elderly consumers purchase and thus are familiar with the product. Quantitative findings also show that consumers who could differentiate the origin of the product had a higher mean score for the variables of purchase intention, product category image, brand familiarity, product features, quality and price. Furthermore, the proportion of variance in the dependent variables explained by these two groups of respondents is larger for the variables of brand familiarity, quality and price. This means that these consumers are more interested in quality and are familiar with the product. In addition, the higher scores for the price related questions shows that they consider the current price attractive and that the product is a good value for the money.

Some of the interviewed exporters have mentioned that only consumers who have knowledge of salted and dried cod give importance to the origin, or the clients of high financial classes. It was also mentioned that those who don't have knowledge only worry about the appearance of the fish. The supermarket, market stall and restaurant informants, on the other hand, claimed that their customers do not have much knowledge about salted and dried cod, and that the origin does not impact their purchase intention. According to these respondents, consumers value more the quality, species or cut of the product. Besides, most of the interviewed consumers declared that the origin of the salted and dried cod is not important for them when purchasing it. Two of them, however, claimed to prefer the Portuguese product, while another preferred the Norwegian one. One claimed to prefer sliced and pre-packed products regardless of the origin.

It is also imperative to differentiate the final consumers from the retailers. Qualitative findings highly suggest that the latter care more about the origin than the former. Most of the market stall and restaurant informants claimed that the origin of the cod product was important for them when purchasing it. Regarding the latter, most of the respondents declared to prefer the Norwegian product rather than the one from other origins. The agent informants claimed that origin is extremely important because buyers ask about it. Most of the supermarket informants, however, claimed to value more the quality or the species of the product. Besides, qualitative results also indicate that retailers have more knowledge about the product, and therefore are able to make this differentiation. For example, one of the supermarket informants mentioned that they are able to differentiate the Norwegian salted and dried cod from others due to training. The fact that these typed of buyers are in contact with the packages sent by the exporters also help them recognize the brand and origin. These results do not support Ghalandari and Norouzi's (2012) findings that the effect of production origin country on willingness to purchase in individuals with low product knowledge is greater than in those with high product knowledge. Likewise, they do not support Lee and Lee's (2009) findings that consumers with high product knowledge were less likely to be influenced by country of origin cues in their product evaluation than those with low product knowledge.

A plausible explanation may be the fact that when it comes to salted and dried cod, the origin is highly linked to the product features and quality. Those who have knowledge about this product, therefore, are also aware of the different origins and product characteristics. The consumers who don't have much knowledge of the product, on the other hand, will not be sure of the different origins of the product, and therefore it will not impact their purchase intention. In addition, some of the consumers may only consider the species as a measure of quality, not considering the processing origin that important.

Corroborating these findings, quantitative results show that, from the sample of 30% of respondents who could differentiate the Norwegian salted and dried cod from the others, only product category image has a significant positive effect on purchase intention, and only brand familiarity has a significant positive effect on brand image. In addition, only product features and promotion were shown to have an effect on product category image, with the former having the highest positive effect. These findings also partially support Diamantopoulos et al.'s (2011) model as well. However, the fact that product category image has an effect on purchase intention supports Rezvani et al.'s (2012) findings that the successful match between country and product denotes that a country in particular specializes in that area, which is the case for the Norwegian industry of salted and dried cod.

But most importantly, the findings that product category image has a significant positive effect on purchase intention of this sample also support the premise that the consumers with knowledge associate Norwegian salted and dried cod with quality. For example, the majority of respondents of this sample also claimed to intend to buy Norwegian salted and dried cod. This may be linked to the

fact that Norwegian exporters have mostly focused on producing high quality products. In addition, the work made by the Norwegian Seafood Council in the past decades have also contributed to make Brazilian consumers associate Norway with quality, as mentioned by one of the agent informants.

Furthermore, given the work made by the Norwegian Seafood Council in the points of sell with promoters, Brazilian consumers know today that Norway is a huge producer of *bacalhau*. According to one of the agent informants, consumers used to think of Portugal when they thought of salted and dried cod. Even though there are still final consumers who believe that this product comes only from Portugal, most of the importers and supermarkets know about the different origins of the product now, especially about Norway. A reason for this may be the fact that some of the interviewed exporters mentioned to use the origin cue in their marketing strategy, which focus more on supermarkets and traditional buyers, not targeting the end consumer so much. However, the lack of knowledge of Brazilian final consumers about the origin of salted and dried cod products can also be linked to the fact that there is still a lot of misinformation in the nomination of the products. For example, all of the supermarkets and some of the market stall displayed the *Gadus morhua* species as being “*bacalhau do Porto imperial*” (imperial salted and dried cod of Porto), even for Norwegian products. Some of the market stalls displayed stickers or labels of Portuguese exporters on Norwegian products and vice-versa. In addition, one of the interviewed supermarkets created their own brand named as Porto D’Oro for the salted and dried cod of *Gadus morhua* of a Norwegian exporter.

Nevertheless, the homogeneous marketing strategy made by the Norwegian Seafood Council for all the Norwegian exporters has increased the country of origin awareness of the consumers, according to qualitative results. This finding corroborates Kotler’s (2002) findings that the organization must engage in an aggressive selling and promotion effort, since the selling concept claims that customers must be convinced into purchasing.

The Norwegian Seafood Council’s strategy consists on providing posters, folders and stands for consumers to taste the product at the point of sell. The old logo of “*Bacalhau da Noruega*” has made Brazilian consumers in general aware of Norway as a producer of salted and dried cod, specially because this strategy focuses more on the country than on the brand. Which makes sense, given the fact that the exporters’ boxes are opened and the fish are taken out in the store without any label on. However, qualitative results also show that some of the exporters are starting to make their own packages and stickers to reinforce their brand as well at the point of sell. The change to the new logo (“Seafood from Norway”), however, is yet to be proven successful. Some of the exporter and agent informants have mentioned their concern, given that the old logo is a result of 30 years of branding work of the Norwegian Seafood Council to make Brazilians recognize the Norwegian origin. Moreover, the new logo is in English, what may segment the product even more, given that most Brazilians do not speak English.

6.2 Managerial implications

This study aims to assess the effect of country of origin on the purchase intention of Norwegian salted and dried cod for Brazilian consumers. It also attempts to provide insight on the drivers of purchase intention of this product for Brazilian consumers. The findings of this study, therefore, can be useful for managers and executives of Norwegian companies.

Firstly, results of this study show that it must be made a differentiation between final consumers and retailers. Marketing strategies must be different toward these two groups. Findings also show that the consumers who have knowledge about the species of the product and have financial capability will most likely purchase the higher quality product, which is often associated as the *Gadus morhua*

species. Those consumers with less financial capability will prioritize price and often choose the saithe species. The companies, therefore, must reinforce through marketing strategies, the quality of the Norwegian *Gadus morhua* salted and dried cod in a way that would appeal the traditional and high-class consumers. For the consumers of saithe, the strategy may be to portray the different dishes that it can be used for, such as for the fried potato dumplings.

Additionally, in order to be competitive in the market, Norwegian companies must strive to increase the demand throughout the year as well. A marketing strategy that can be implemented along with the Norwegian Seafood Council is to target other special dates besides Christmas and Easter. Mother's Day, for example, was mentioned as a peak demand by some of the qualitative informants. Marketing strategies can also suggest the salted and dried cod dish for Father's Day and birthdays for example.

It is also imperative for Norwegian companies to increase the country of origin awareness among the Brazilian final consumers. In order to do this, a marketing strategy that can be made along with the Norwegian Seafood Council is to provide information to the consumers about the different species of salted and dried fish, highlighting the fact that the "*Bacalhau do Porto imperial*" is actually referring to the *Gadus morhua* for example. Most importantly, by providing this information, the marketing strategy must link this to the quality of the Norwegian *Gadus morhua* salted and dried cod.

Finally, the loss of market share of Norwegian exporters to Brazil partially due to the increase of more convenient products in this market must be assessed. Norwegian companies must start to consider how to deliver more convenient products to the Brazilian market for an affordable price in order to compete with Portuguese and Chinese products.

6.3 Limitations and suggestions for further research

The first limitation of this study refers to the small sample used to assess the second research question in the quantitative analysis, given that the number of respondents that could differentiate the Norwegian salted and dried cod from the others was extremely low. In order to reach an acceptable level of sample size for this group, the amount of gathered data would have to be more than three times the sample size gathered for the whole research of 151 respondents. Given the resource constraints, that was not possible. In addition, it was hard to predict beforehand the number of respondents that would be able to differentiate the origin of the product. This was noted throughout the field work. This may have affected the levels of statistical power and generalizability of the regression analyses. However, it is expected that the bootstrapped results are more accurate, given that it does not require a large sample size.

The second limitation is also related to an assumption not met for most of the regression analyses. It was found that the distribution of errors of the data used in some of the regression analyses were not normally distributed. This may have affected the statistical procedure (least squares) used for multiple regression. However, as for the first limitation, the use of the bootstrap method is expected to have provided more accurate results, given that this approach does not require normally distributed errors.

Another limitation is the randomness and generalization of the results, which can affect the internal and external validities. Given that in order to get a large sample size was not possible without incurring in a great amount of costs, most of the respondents were asked to share the questionnaire with family and friends. Therefore, the sample cannot be considered completely random. In addition, the generalization to the population is a sensitive matter with a small sample. However, Salkind (2011, p. 149) claims that there should be a balance between the internal and the external validity, given that

internal validity is related to the level of control the researcher has over the study. According to the author, the study will have limited generalizability if there is too much control. Therefore, moderate degrees of internal validity should be achieved “by controlling extraneous sources of variance through randomization and a control group” (Salkind, 2011, p. 149). Thus, seven control groups were included in the quantitative analysis.

The constraint of resources also precluded the field survey to be made in other regions of Brazil, what made the survey be more concentrated in the Southeast region. Therefore, the results of this thesis relate more to the Southeast region. However, in order to alleviate this, two of the consumers that were interviewed were from other regions. Also, the states of São Paulo and Rio de Janeiro in the Southeast region are the main importers of salted and dried cod, with more than 50% of the imports (Aliceweb, 2016 cited in Camargo Neto et al., 2016). The constraint of resources also affected the selection of the sample of the qualitative analysis, what resulted in an unfair representation of the populations of the interviewed agents, consumers and Portuguese exporters.

The last limitation relates to the fact that, even though there are a lot of surveys regarding the Brazilian market of salted and dried cod, there are not sufficient surveys regarding the influence of country of origin in the purchase intention of Brazilian consumers. Hence, the discussion of this study was made through the comparison of studies related to other products or markets, such as Lyngghjem and Breivik’s (2015) study. Given the previous discussed limitations and gaps in the literature, further research should investigate the following topics:

1. Regional effect on the preferences of Brazilian final consumers: The qualitative results of this study have shown that poorer Brazilian final consumers value more price, and prefer the saithe species of salted and dried cod. It was mentioned that these differences are also true for the different regions. Further research should be made with final consumers throughout the different regions in Brazil to assess if this is indeed true.
2. Recognition of the origin of the salted and dried cod by Brazilian final consumers: The results of this study have shown that the level of country awareness of Brazilian final consumers is extremely low. Further research should be made in order to assess the specific reasons for that.
3. Change of logo of Norwegian products made by the Norwegian Seafood Council: Respondents of the qualitative analysis have mentioned the concern with the change of logo from “*Bacalhau da Noruega*” to “Seafood from Norway”. Further research is suggested in order to assess if the change has made country awareness among Brazilian final consumers increase.

7. Conclusion

This study aims to answer the following research questions: (1) What are the drivers of the purchase intention of salted and dried cod for Brazilian consumers? (2) How does country of origin affect purchase intention of Norwegian salted and dried cod in Brazil? (3) Can Brazilian consumers differentiate the Norwegian salted and dried cod from the others?

Qualitative results show that quality and price are the two main drivers of purchase intention for Brazilian consumers of salted and dried cod in general. It was also found that the consumers who have knowledge about the species of the product and have financial capability will most likely purchase the higher quality product, which is often associated to the *Gadus morhua* species. Those consumers with less financial capability will prioritize price and often choose the saithe species. Qualitative results also show that the product features, such as color and thickness, are imperative for the consumers when assessing quality, what can explain the fact that the product features impacts the purchase intention of salted and dried cod in general for Brazilian final consumers in the quantitative results of the study.

Qualitative findings also clearly vindicate that the salted and dried cod market in Brazil is seasonal, with a larger demand during Christmas and Easter. Mother's Day was mentioned by some of the respondents as well. Most of the qualitative informants mentioned that their clientele is mostly made up by elderly customers from higher classes. Quantitative results show that the majority of the respondents were females from the age group from 46 to 55 years old.

It was also found that the loss of the market share of Norwegian exporters in Brazil can be linked to the fact that the Brazilian market is changing towards more practical products, such as the desalted and frozen product, or the packaged, boneless and skinless ones. Most of the qualitative respondents seemed to agree consumers seek for more convenient products.

Results also indicate that the majority of the Brazilian final consumers cannot differentiate the Norwegian salted and dried cod from the others. Qualitative results also suggest that final consumers usually identify the product by the fish species, and that only those who have knowledge of the product, traditional elderly customers or traditional buyers are able to recognize the origin. Quantitative results show that those who could differentiate the origin of the product are more interested in quality and more familiar with the product. Additionally, they consider the current price attractive and the product a good value for the money. Quantitative results also indicate that the majority of the respondents who could differentiate Norwegian salted and dried cod from others were females with the age of 66 or more.

Qualitative findings also vindicate that only consumers who have knowledge of salted and dried cod give importance to the origin, or the clients of high financial classes. Most importantly, it was found that it is necessary to make the differentiation between final consumers from and retailers. Qualitative findings highly suggest that the latter care more about the origin than the former. Quantitative results corroborate this premise, given that, from the sample of 30% of final consumers who could differentiate the Norwegian salted and dried cod from the others, only product category image has a significant positive effect on purchase intention, and only brand familiarity has a significant positive effect on brand image.

It can be also inferred from the qualitative and quantitative results that the consumers with knowledge associate Norwegian salted and dried cod with quality. Qualitative findings also indicate that the homogeneous marketing strategy made by the Norwegian Seafood Council for all the Norwegian exporters has increased the country of origin awareness of the consumers. The change to the new logo ("Seafood from Norway"), however, is yet to be proven successful in Brazil.

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APPENDIX

Appendix 1: In-depth interview guides in English.

1.1 In-depth interview guides for exporters.

1. What are the different salted and dried cod products you sell to Brazil?
2. What is the origin of the salted and dried cod you export to Brazil?
3. Do the importers ask the country of origin of the cod?
4. Do you believe that Brazilian final consumers can differentiate the Norwegian salted and dried cod from others?
5. Do you believe that the country of origin of Norwegian salted and dried cod impact the purchase intention of Brazilian final consumers?
6. What is the marketing strategy for your brand in Brazil? Does your company aim to use the country of origin cue to advertise your product in Brazil?
7. What is most important for Brazilian final consumers when purchasing salted and dried cod? Price, quality, promotion, distribution or product features such color, freshness, flavor and thickness?
8. Who are your Brazilian buyers?
9. Is the demand even throughout the year?
10. Do you also sell other types of cod products (such as frozen desalted cod)? If yes, which of your products are preferred by the buyers?
11. What is your perception of the Brazilian market for salted and dried cod? Is there anything you would like to add?

1.2 In-depth interview guide for other types of respondents.

1. What are the different salted and dried cod products you represent/sell/buy?
2. Who usually buys salted and dried cod?
3. Are you aware of the country origin of the salted and dried cod you sell? If yes, where are they from?
4. Can you differentiate the Norwegian salted and dried cod from the others?
5. Is the origin of the salted and dried important for you when representing/purchasing this product?
6. Do your consumers ask for the country or origin of the salted and dried cod they buy?
7. Are they aware of the country origin of the salted and dried cod they buy?
8. Can they differentiate the Norwegian salted and dried cod from the others?
9. What is the origin of the most bought salted and dried cod (In case represents more than one origin)?
10. Is the origin of the salted and dried important for them when purchasing this product?
11. Do they prefer Norwegian salted and dried cod from the others?
12. Do you use the country of origin cue in the presentation and promotion of the products?
13. What is most important for you when purchasing salted and dried cod/choosing what companies to represent? Price, quality, promotion, distribution or product features such color, freshness, flavor and thickness?
14. What is most important for the consumers when purchasing salted and dried cod? Price, quality, promotion, distribution or product features such color, freshness, flavor and thickness?
15. Is the demand even throughout the year?
16. Do you also sell other types of cod? If yes, which type of cod do you think consumers prefer?
17. What is your perception of the Brazilian market for salted and dried cod? Is there anything you would like to add?

1.3 Extra questions for restaurants.

1. Do you prefer salted and dried cod from Norway, Portugal, China, pre-sliced and packaged, or other? (I
2. Do you have a preference when it comes to the species of the fish of the salted and dried cod?
3. Do you include the country of origin of the salted and dried cod when writing the dish in the menu?
4. Do you think that the origin of the product is important for the consumers when ordering the dish?
5. What cod product do you think the consumers prefer? And regarding salted and dried cod?
6. Who orders the *bacalhau* dish?

1.4 Extra questions for consumers.

1. And where you usually purchase this product?
2. Do you prefer salted and dried cod from Norway, Portugal, China, pre-sliced and packaged, or other?
3. Do you have a preference when it comes to the species of the fish of the salted and dried cod?
4. How frequently do you purchase salted and dried cod?
5. Do you also buy other types of cod? If yes, which type of cod do you prefer

Appendix 2: Questionnaire in English

Country of origin effect on Brazilian consumers' purchase intention of Norwegian dried and salted cod.

Master thesis survey.

General Information

1. What is your age?

Marcar apenas uma oval.

- Between 16 and 25
 Between 26 and 35
 Between 36 and 45
 Between 46 and 55
 Between 56 and 65
 66 or more

2. What is your gender?

Marcar apenas uma oval.

- Male
 Female

3. What is the size of your household?

Marcar apenas uma oval.

- 1
 2
 3
 4
 5 or more

4. In what region of the country do you live?

Marcar apenas uma oval.

- North
 Northeast
 Southeast
 Center-West
 South

5. What is the monthly gross income of your household in BRL?

Marcar apenas uma oval.

- Less than 1 000
 From 1 000 to 5 000
 From 5 001 to 10 000
 From 10 001 to 15 000
 From 15 001 to 20 000
 More than 20 000

6. What kind of cod product do you purchase more often?

Marcar apenas uma oval.

- Dried and salted
 Salted
 Frozen and desalted
 Shredded
 Outro: _____

7. What type of dried and salted cod product do you purchase more often?

Marcar apenas uma oval.

- Cod
 Saithe
 Ling
 Tusk
 Pre-sliced and packaged

8. What is your preferred product of dried and salted cod?

Marcar apenas uma oval.

- Cod
 Saithe
 Ling
 Tusk
 Pre-sliced and packaged
 I have no preference

9. Where do you most frequently consume dried and salted cod?

Marcar apenas uma oval.

- Home
 Hotel
 Restaurant
 Outro: _____

10. How often do you purchase dried and salted cod?

Marcar apenas uma oval.

- Never
 1 - 10 times a year
 11 - 20 times a year
 21 - 30 times a year
 31 - 40 times a year
 More than 40 times a year
 Only for Easter and/or Christmas

11. What is the country of origin of the dried and salted cod you purchase the most?

Marcar apenas uma oval.

- Norway
 Portugal
 China
 Outro: _____

12. Where do you frequently purchase dried and salted cod?

Marcar apenas uma oval.

- Supermarket
 Fish market
 Outro: _____

13. How long do you usually take when preparing dried and salted cod?

Marcar apenas uma oval.

- 0 - 20 min
 21 - 40 min
 41 - 60 min
 More than 1 hour
 I don't know

Brand Image and Familiarity

14. Dried and salted cod is superior from competing products (salted, sliced and frozen desalted).

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Strongly disagree Strongly agree

15. Dried and salted cod has a good reputation.

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Strongly disagree Strongly agree

16. You would recommend the dried and salted cod product.

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Strongly disagree Strongly agree

17. You are well informed about dried and salted cod.

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Strongly disagree Strongly agree

18. You have good knowledge about dried and salted cod.

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Strongly disagree Strongly agree

19. You have good experience with dried and salted cod.

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Strongly disagree Strongly agree

Product Features and Quality

20. How important is the flavor of the dried and salted cod for you?

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Not important Very important

21. How important is the preparation time of the dried and salted cod for you?

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Not important Very important

22. How important is the conservation time of the dried and salted cod for you?

Marcar apenas uma oval.

- 1 2 3 4 5 6 7
Not important Very important

23. How important is the color of the dried and salted cod for you to purchase?
Marcar apenas uma oval.

1 2 3 4 5 6 7
Not important Very important

24. How important is the thickness of the dried and salted cod for you to purchase?
Marcar apenas uma oval.

1 2 3 4 5 6 7
Not important Very important

25. How important is the freshness of the dried and salted cod for you to purchase?
Marcar apenas uma oval.

1 2 3 4 5 6 7
Not important Very important

26. In your opinion, dried and salted cod is healthy.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

27. In your opinion, dried and salted cod is of high nutritional value.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

28. In your opinion, dried and salted cod products have few preservatives.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

29. In your opinion, dried and salted cod is of high quality.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

30. In your opinion, dried and salted cod is of better quality than the alternatives (salted, slice and frozen desalted).
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

Price, Distribution and Promotion

31. Dried and salted cod is a good value for the money.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

32. In your opinion, dried and salted cod is a good buy.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

33. The current price of dried and salted cod is attractive.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

34. You buy dried and salted cod regardless of price.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

35. Dried and salted cod is easy to find in markets.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

36. You can choose from a wide range of dried and salted cod.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

37. More stores sell more dried and salted cod than its competing products (salted, sliced and frozen desalted).
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

38. Dried and salted cod is widely distributed across stores.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

39. Dried and salted cod is intensely advertised.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

40. Dried and salted cod is widely known.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

41. Dried and salted cod has prestige.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

42. Dried and salted cod is internationally recognized.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

Country Image and Product Category Image

43. In your perception, Norway is economically well developed.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

44. In your perception, Norway has advanced technology.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

45. In your perception, Norway has a good standard of life.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

46. Based on your feelings, Norway is friendly towards us.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

47. Based on your feelings, Norway is likable.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

48. In your perception, Norway is a dominant country in the production of dried and salted cod.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

49. You generally perceive Norwegian dried and salted cod as of high quality.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

50. You generally perceive Norwegian dried and salted cod as having global brand presence.
Marcar apenas uma oval.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

51. You generally perceive Norwegian dried and salted cod as being produced with high workmanship.
 Marcar apenas uma oval.

1 2 3 4 5 6 7

Strongly disagree Strongly agree

52. You generally perceive Norwegian dried and salted cod as reliable.
 Marcar apenas uma oval.

1 2 3 4 5 6 7

Strongly disagree Strongly agree

Purchase Intention

53. You intend to buy dried and salted cod.
 Marcar apenas uma oval.

1 2 3 4 5 6 7

Strongly disagree Strongly agree

54. Can you differentiate Norwegian dried and salted cod from the others?
 Marcar apenas uma oval.

Yes
 No Pare de preencher este formulário.

Purchase Intention

55. You intend to buy dried and salted cod from:
 Marcar apenas uma oval.

Norway
 Portugal
 China
 Outro: _____



Appendix 3: Results from confirmatory factor analysis.

3.1 Brand image

Items

KMO: .685, Barlett's Test of Sphericity Sig: .00, Variance explained: 66.6%, Cronbach's alpha: .738.
Factor loadings: V₁₄: .806, V₁₅: .842, V₁₆: .800

3.2 Brand familiarity

Items

KMO: .596, Barlett's Test of Sphericity Sig: .00, Variance explained: 71.8%, Cronbach's alpha: .796.
Factor loadings: V₁₇: .890, V₁₈: .931, V₁₉: .704

3.3 Product features

Items

KMO: .803, Barlett's Test of Sphericity Sig: .00, Variance explained: 52.57%, Cronbach's alpha: .795.
Factor loadings: V₂₀: .592, V₂₁: .581, V₂₂: .802, V₂₃: .844, V₂₄: .808, V₂₅: .678

3.4 Quality

Items

KMO: .791, Barlett's Test of Sphericity Sig: .00, Variance explained: 60.7%, Cronbach's alpha: .822.
Factor loadings: V₂₆: .846, V₂₇: .876, V₂₈: .656, V₂₉: .858, V₃₀: .622

3.5 Price

Items

KMO: .637, Barlett's Test of Sphericity Sig: .00, Variance explained: 51.96% Cronbach's alpha: .676.

Factor loadings: V₃₁: .815, V₃₂: .679, V₃₃: .733, V₃₄: .644

3.6 Distribution

Items

KMO: .706, Barlett's Test of Sphericity Sig: .00, Variance explained: 53.60% Cronbach's alpha: .705.

Factor loadings: V₃₅: .746, V₃₆: .698, V₃₇: .627, V₃₈: .842

3.7 Promotion

Items

KMO: .559, Barlett's Test of Sphericity Sig: .00, Variance explained: 81.1%, Cronbach's alpha: .655.

Rotated factor loadings: V₃₉: .893 (2), V₄₀: .825 (2), V₄₁: .892 (1), V₄₂: .922 (1)

Unrotated factor loadings: V₃₉: .543 (1) .709 (2) V₄₀: .722 (1) .480 (2), V₄₁: .834 (1), V₄₂: .543 (1) .709 (2)

3.8 Country image

Items

KMO: .692, Barlett's Test of Sphericity Sig: .00, Variance explained: 83%, Cronbach's alpha: .749.

Rotated factor loadings: V₄₃: .894 (1), V₄₄: .857 (1), V₄₅: .868 (1), V₄₆: .934 (2), V₄₇: .930 (2)

Unrotated factor loadings: V₄₃: .786 (1) -.434 (2), V₄₄: .853 (1), V₄₅: .772 (1) -.410 (2), V₄₆: .638 (1) .695 (2), V₄₇: .660 (1) .676 (2)

3.9 Product category image

Items

KMO: .838, Barlett's Test of Sphericity Sig: .00, Variance explained: 60.9%, Cronbach's alpha: .836.

Factor loadings: V₄₈: .702, V₄₉: .790, V₅₀: .790, V₅₁: .778, V₅₂: .837

4 Appendix: Validity

4.1 Convergent validity

	Factor loading	Squared factor loading	AVE
Brand Image	.842	.709	1.999
	.806	.650	
	.800	.640	
Brand Familiarity	.931	.867	2.155
	.890	.792	
	.704	.496	
Product Features	.844	.712	.526
	.808	.653	
	.802	.643	
	.678	.460	
	.592	.350	
Quality	.581	.338	.607
	.876	.767	
	.858	.736	
	.846	.716	
	.656	.430	
Price	.622	.387	.519
	.815	.664	
	.733	.537	
	.679	.461	

	.644	.415	
Distribution	.842	.709	.536
	.746	.556	
	.698	.487	
	.627	.393	
	.834	.695	
Promotion	.734	.539	.513
	.722	.521	
	.543	.295	
	.853	.728	
Country Image	.786	.618	.557
	.772	.596	
	.638	.407	
	.660	.436	
	.837	.701	
Product Category Image	.790	.624	.609
	.790	.624	
	.778	.605	
	.702	.493	

4.2 Discriminant validity

Factor	BI	BF	PF	Q	P	D	Prom	CI	PCI
BI	1	.288	.208	.434	.179	.007	.112	.009	.130
BF		1	.099	.248	.181	.028	.081	.015	.097
PF			1	.171	.064	.045	.055	.005	.119
Q				1	.141	.005	.073	.003	.196
P					1	.220	.176	.080	.074
D						1	.353	.030	.034
Prom							1	.042	.120
CI								1	.065
PCI									1
AVE	1.999	2.155	.526	.607	.519	.536	.513	.557	.609

5 Appendix: Regression results

5.1 First regression analysis

Items	B	Beta	t	Sig.	Tolerance	VIF
Brand Familiarity	.171	.198	2.776	.006	.668	1.497
Country Image	-.017	-.011	-.179	.858	.864	1.158
Product Category Image	-.010	-.009	-.123	.902	.690	1.450
Product Features	.234	.201	2.914	.004	.712	1.404
Quality	.355	.381	4.787	.000	.534	1.872
Price	.175	.167	2.191	.030	.584	1.711
Distribution	-.189	-.202	-2.557	.012	.542	1.846
Promotion	.188	.184	2.368	.019	.560	1.786
Gender	-.040	-.016	-.264	.792	.886	1.129
R² and Adjusted R²	.56%	.53%				
F and Sig.	18.415	.000				
Regression Sum of Sq.	104.038					
Residual Sum of Sq.	81.606					

5.2 Second regression analysis

Items	B	Beta	t	Sig.	Tolerance	VIF
Country Image	-.171	-.108	-.792	.435	.669	1.494
Product Category Image	.233	.170	1.071	.292	.495	2.020
Brand Familiarity	.298	.298	2.243	.032	.706	1.417
Product Features	.011	.007	.045	.965	.526	1.901
Quality	.425	.367	1.923	.064	.342	2.922
Price	.303	.252	1.549	.131	.469	2.131
Distribution	-.213	-.218	-1.357	.185	.484	2.064
Promotion	.166	.145	.924	.363	.508	1.986
Gender	.035	.012	.086	.932	.677	1.477
R² and Adjusted R²	61.4%	50.2%				
F and Sig.	5.484	.000				
Regression Sum of Sq.	46.399					
Residual Sum of Sq.	29.141					

5.3 Fourth regression analysis

Items	B	Beta	t	Sig.	Tolerance	VIF
Brand Familiarity	.077	.105	.715	.480	.717	1.395
Country Image	.277	.197	1.330	.193	.706	1.415
Product Features	.277	.234	1.408	.169	.559	1.790
Quality	.243	.288	1.394	.173	.363	2.755
Price	.009	.011	.059	.954	.469	2.131
Distribution	.095	.133	.753	.457	.493	2.028
Promotion	.153	.183	1.069	.293	.526	1.900
Gender	.582	.267	1.857	.073	.750	1.334
R² and Adjusted R²	50.5%	38.1%				
F and Sig.	4.080	.002				
Regression Sum of Sq.	20.228					
Residual Sum of Sq.	19.833					

5.4 Fifth regression analysis

Items	B	Beta	t	Sig.	Tolerance	VIF
Brand Image	.210	.175	1.686	.094	.440	2.275
Brand Familiarity	.049	.047	.547	.586	.630	1.586
Product Features	.341	.243	2.896	.004	.668	1.496
Quality	.147	.131	1.288	.200	.454	2.202
Price	.189	.151	1.648	.102	.564	1.774
Distribution	.071	.063	.659	.511	.516	1.938
Promotion	-.055	-.045	-.479	.633	.537	1.863
Country Image	.136	.074	1.004	.317	.864	1.158
Product Category Image	.127	.094	1.137	.258	.690	1.450
Gender	-.046	-.016	-.214	.831	.885	1.129
R² and Adjusted R²	39.2%	34.5%				
F and Sig.	8.332	.000				
Regression Sum of Sq.	105.083					
Residual Sum of Sq.	162.693					

5.5 Sixth regression analysis

Items	B	Beta	t	Sig.	Tolerance	VIF
Brand Image	-.064	-.071	-.350	.729	.386	2.592
Brand Familiarity	.078	.087	.535	.597	.607	1.647
Product Features	.190	.131	.746	.461	.526	1.901
Quality	-.211	-.203	-.883	.384	.306	3.271
Price	.275	.255	1.329	.194	.436	2.296
Distribution	-.308	-.350	-1.865	.072	.457	2.187
Promotion	-.130	-.126	-.701	.489	.495	2.022
Country Image	-.050	-.035	-.223	.825	.656	1.524
Product Category Image	.923	.750	4.083	.000	.477	2.095
Gender	-.407	-.152	-.983	.334	.677	1.478
R² and Adjusted R²	51.7%	35.6%				
F and Sig.	3.141	.006				
Regression Sum of Sq.	31.412					
Residual Sum of Sq.	29.315					

6 Appendix: Analysis of variance

6.1 Age

	Levene Statistic	Sig.	F	Sig.	One-way analysis of variance
Sample of 150	1.492	.196	.627	.680	No significant difference
Sample of 45	1.595	.184	.898	.492	No significant difference

6.2 Size of household

	Levene Statistic	Sig.	F	Sig.	One-way analysis of variance
Sample of 150	2.152	.077	.416	.797	No significant difference
Sample of 45	2.257	.080	.967	.436	No significant difference

6.3 Region

	Levene's Test for Equality of Variances	Sig.	T	Sig. (2-tailed)	Mean difference	T-test for equality of means
Sample of 150	Equal variances assumed	.136	1.605	.111	.667	No significant difference
Sample of 45	Equal variances assumed	.968	.963	.341	.622	No significant difference

6.4 Household income

	Levene Statistic	Sig.	F	Sig.	One-way analysis of variance
Sample of 150	1.025	.397	.478	.752	No significant difference
Sample of 45	1.148	.349	.547	.702	No significant difference

6.5 T-tests for the summated scales based on whether the respondents could or not differentiate the Norwegian salted and dried cod from the others.

	Levene's Test for Equality of Variances	Sig.	T	Sig. (2-tailed)	Mean difference	T-test for equality of means
Purchase intention	Equal variances assumed	.076	2.233	.027	.546	Significant difference
Country image	Equal variances not assumed	.017	-1.597	.115	-.23346	No significant difference
Product category image	Equal variances assumed	.564	2.401	.018	.43759	Significant difference
Brand image	Equal variances assumed	.061	1.920	.057	.39881	No significant difference
Brand familiarity	Equal variances assumed	.658	4.611	.000	1.03241	Significant difference
Product features	Equal variances assumed	.086	2.296	.023	.40032	Significant difference
Quality	Equal variances assumed	.716	4.485	.000	.94064	Significant difference
Price	Equal variances assumed	.299	3.567	.000	.68666	Significant difference
Distribution	Equal variances assumed	.112	1.587	.115	.35183	No significant difference
Promotion	Equal variances assumed	.462	1.656	.100	.33936	No significant difference

Appendix 7: Pictures of the Norwegian salted and dried cod and its marketing in market stalls in the municipal market of São Paulo.

