Strategic risk – Russian sanctions and their impact on Danish companies

- *A study of the effect of the Russian counter sanctions on Danish companies in the food and agricultural sector exporting to Russia*

Master thesis

MSc in Economics and Business Administration (International Business)

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Abstract

This paper examines the background and effect of the Russian counter sanctions on the Danish food industry, and points to strategic risk mitigation tools available to companies facing adverse changes in the external environment. As case company Arla is used in order to illustrate the effects on Danish food companies and the actions taken with the aim of reducing the negative impact of the sanctions, and macroeconomic data is used to investigate the aggregate effect on the Danish economy. The paper contributes to the literature on a contemporary topic, which has not received much attention by the scientific community. Firstly, the background was found to be partly historical with reference to events in the Cold War and post-Soviet Russia, namely the annexation of or reunification with Crimea, and partly based on the political, institutional, and economic structure of Russia. An authoritarian rule with centralized power, an aggressive foreign policy, and a need for victories on the domestic political stage were all contributing factors leading to the imposition of the sanctions. Secondly, the effect on both Arla and the Danish economy has been insignificant at an aggregate level, although the interaction with the Russian market was reduced drastically, where Arla took a range of measures in order to reduce the impact of the sanctions. These actions include a general approach of diversification, an aspect of long-term strategy and collaboration with a local partner. Four different risk mitigation tools were assessed: adjustment of internationalization efforts, supply chain resilience, diversification, and lobbying. Of these tools, diversification was deemed the most effective, while supply chain resilience also contributed to reducing risk exposure, and both of these tools were used by Arla to some degree. Finally, the generalizability and predictability of trade conflicts and non-market-based impact, with emphasis on the coronavirus, were discussed, where it was found that many similarities exist, especially with regard to other trade disputes, and that these adverse events were only predictable to some extent. Suggestions for further research include the usage of in-depth firm-level analysis using internal data, a deeper analysis of the mechanics of Russian society and perspectives from other sectors in similar crises. The validity is assessed as being high, while the reliability is at a medium level, spurring the need for further analysis.

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1: Introduction

In the aftermath of the collapse of the Soviet Union President Vladimir Putin eventually gained control of the Russian Federation and has held onto power ever since. In the pursuit of a more active foreign policy, the Crimean Peninsula was annexed in early 2014, which was widely condemned by the international community – especially the Western economies. Diplomatic and economic sanctions followed, but Putin retaliated by imposing counter sanctions on the European Union (EU), targeting specific sectors such as food and agriculture, aluminum, and finance.

This study revolves around these counter sanctions imposed by the Russian Federation on European companies, where the goal is to investigate the causes of these sanctions and their impact on the Danish food industry and assess the effectiveness of various strategic risk mitigation tools from a theoretical as well as an empirical perspective.

After examining the relevant theory, methodological foundation and the collected data, the thesis initiates the analysis by examining background of the sanctions, both from a historical perspective and with regard to the political, institutional, and economic factors at play. Subsequently, a broader perspective is taken in order to combine the theoretical foundation with macro level data analyzing the effectiveness of the counter sanctions on the Danish economy. Following the macro-level analysis, the consequences of the counter sanctions on a selected case company operating in the Danish food industry, Arla, are analyzed. The main focus of attention in the case analysis is the direct effect of the counter sanctions on the company, as well as its response to the changing business environment.

After analyzing the background of the sanctions and their impact, four different strategic risk mitigation tools are assessed, drawing on the experiences of Arla and the academic literature available on the subject. Subsequently, an effort will be made in trying to relate the topic to other sources of strategic risk and examine the notion of acting preemptively before the occurrence of adverse events to discuss whether this is realistic. Finally, after concluding the results of the report, the limitations of this paper and suggestions for further research will also be examined.

1.1: Motivation

Strategic risk has been described by the managing director of Deloitte's Strategic Risk Solutions practice, Andrew Blau, as *"…those [risks] that threaten to disrupt the assumptions at the core of an organization's strategy. They're often hard to spot and hard to manage"* (Blau, 2014). A major focus of companies, 81% of companies in a survey carried out by Deloitte indicated that they explicitly manage strategic risk, but this is the result of a development taking place, meaning that *"…many companies are taking a broad view of strategic risk that doesn't just focus on challenges that might cause a particular strategy to fail, but on any major risks that could affect a company's long-term positioning and performance"* (Deloitte, 2013). This definition allows for significant interpretation, as organizations' strategies differ greatly across industry and

country, so the focus of this thesis will be the *risks posed by changes in the external environment, particularly by national characteristics such as politics, institutions, and economy.*

Political forces and the institutional environment are parts of the metaphorical 'playing field' from which companies choose their strategies, and so an increased understanding of these forces contribute to refining strategy formulation. This obvious relevance, albeit not a key concern to smaller actors, hopefully makes the thesis directly applicable to companies who work with an approach to alter the political and institutional environment to their advantage.

Russian sanctions, springing from the annexation or reunification of Crimea, have been the talking point in Western – and presumably also Russian – media during the past five years, so the subject has lingered in the conscience among the general public. A preliminary search of scientific articles does not, however, indicate that the subject has received any significant academic attention, so this thesis can hopefully prove to be a wanted, if not needed, contribution to the academic discussion.

1.2: Problem

The problem statement will contain one question to be investigated, while the analysis and discussion will have each their own research question. These guidelines for the academic process ahead will be outlined below, but in general it must be considered vital to disseminate the larger problem – as given in the problem statement – into smaller, more manageable sections.

Problem statement: *What was the background for and impact of the Russian counter sanctions, and what tools do multi-national enterprises (MNEs) have at their disposal when facing strategic risks in order to mitigate these effects?*

The analysis will take a temporal structure investigating the events and dynamics leading up to the imposition of the sanctions, the effect of the sanctions as they were implemented, and an ex post view on the tools companies in the future will be able to use. This structure is chosen for two reasons: Firstly, the flow of arguments and analysis is logical to the reader when constructed with time as the primary connection between the research questions. Secondly, the broad focus on not just the immediate effects on the sanctions serves to create a holistic picture of the Russian counter sanctions in particular and protectionist trade policies in general. Furthermore, it is the goal to include both qualitative and quantitative data, and likewise draw on both an academic foundation and events described by the media.

Research question I: *How were the Russian counter sanctions formulated and which dynamics facilitated them?*

Before analyzing the effect of the sanctions, it is crucial to understand the background of the sanctions. The answer to the first research question will contain a short historical explanation of the events leading up to the sanctions, and a brief description of the technical aspects of them. In order to fully understand the background of the current trade war, an in-depth analysis of the characteristics of Russian society and the dynamics between the different spheres of society is carried out.

Research question II: *What was the financial effect of the Russian counter sanctions on the Danish food industry as a whole?*

In parallel to the case analysis, a view will be taken on the aggregated effect of the Russian counter sanctions on the Danish food industry as a whole. The answer to this question is based upon analysis of macroeconomic data, meaning that the analytical mode is purely quantitative. In order to assess the aggregated effect on the industry, a comparison to other European countries and previous economic crises in the Danish food sector will be carried out. It is important to emphasize that the analysis will not be containing linear regression but will be limited to descriptive statistics so as to limit the scale of the analysis.

Research question III: *What financial and strategic effects did the Russian counter sanctions have on Arla and how did they navigate in these sanctions?*

Once the background of the sanctions has been uncovered, the obvious next step is to assess the effect of these sanctions on Danish companies. In order to gain the necessary analytical depth, the Danish dairy company Arla has been chosen, where both the financial effect on the company and the strategic actions taken by the management will be analyzed. Given the double-faceted focus on both the financial and strategic effect on the company, the answer to this question will contain both quantitative and qualitative analysis.

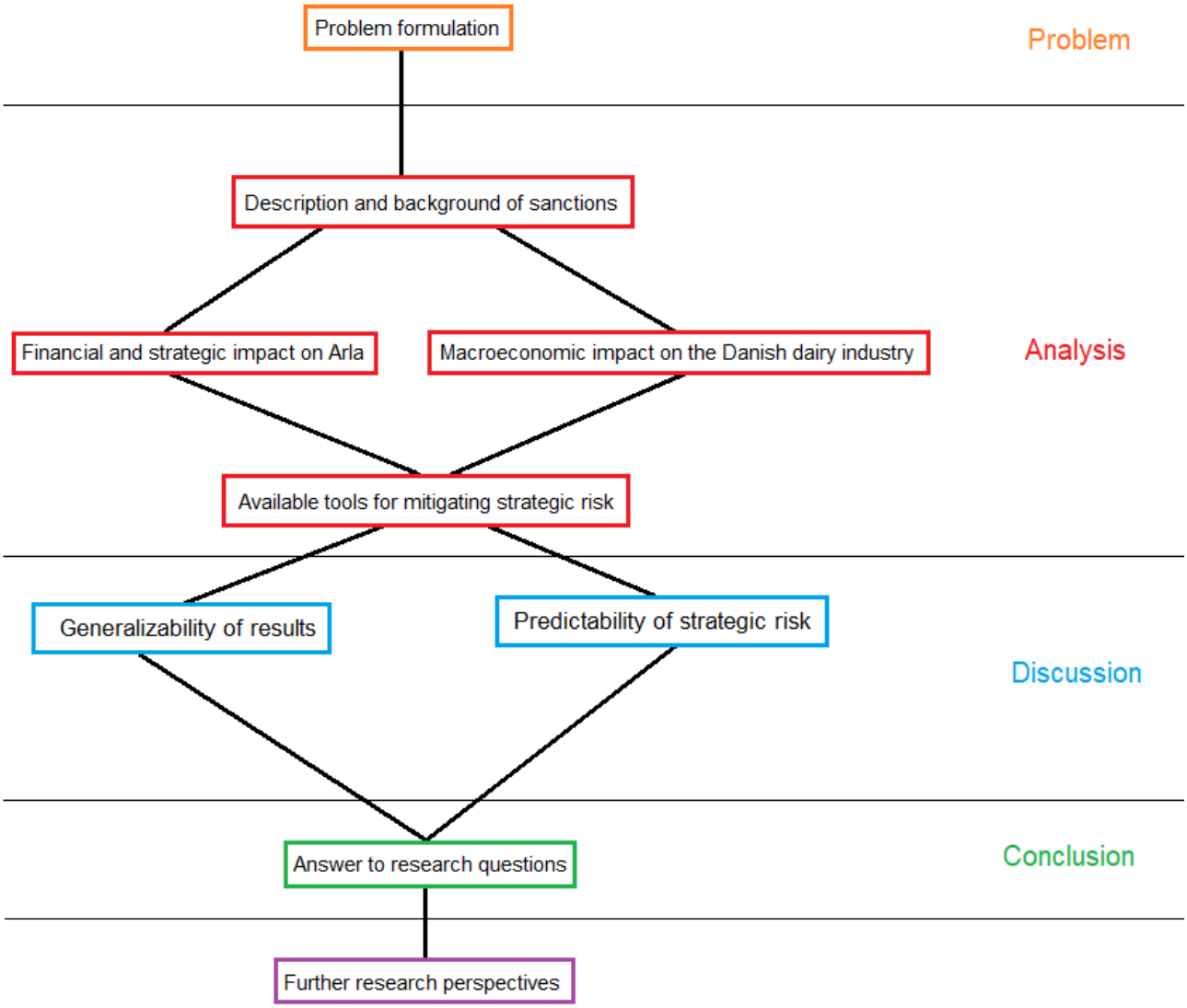
Research question IV: *How can MNEs realign their strategies when exposed to strategic risk?*

When assessing the effectiveness of the strategies implemented by the companies in the Danish food industry, it is necessary to know which strategies are available and which of those are recommended by academia. This provides a range of options of strategies or approaches to formulate the proper strategy for the specific situation of institutionally unstable business environments. These various strategies will be based upon actions taken by Arla and on major topics in the field of international business.

Discussion topic: Is the case of the Russian counter sanctions generalizable across other scenarios of strategic risk, and is it possible for companies to forecast adverse changes in the external environment?

As an extension to the analysis, a discussion will be carried out with the aim of examining the applicability and generalizability of the results. The discussion will be divided into these two main topics and will present well-rounded arguments indicating both positive and negative answers in order to ensure the robustness and objectivity of the discussion. Finally, the discussion will present a brief section of areas for further research so as to incorporate the results found in this thesis into a larger, more general framework of best practice for companies facing strategic risk from the external environment.

The research design of the paper can be seen below in model 1 below.



Model 1: Research design

1.3: Delimitation

The first dimension relevant to delimitation is spatial. This thesis will primarily focus on Danish companies for two reasons. Firstly, the network of the author is largest in Denmark, and so it would be more convenient to find a relevant case company domestically than to go beyond borders. It is only necessary to use one country, if the goal is to conduct a qualitative analysis with emphasis on depth, so one might as well choose a company with which prior knowledge is obtained. Secondly, the Danish statistical bureau has comprehensive data available about companies and their export. Another positive feature of choosing an EU economy for the macro-level data is the availability of data from the EU statistical bureau, Eurostat. This also means, that data regarding European companies might be used as a secondary layer of the macro level analysis in order to compare the effect of the sanctions on Danish companies with other countries in the EU.

The second dimension is temporal. Russian counter sanctions were implemented in 2014, so most of the specific literature such as news articles and scientific articles on the topic are from 2014 to 2020. There is more general theory available from before this period which will also be incorporated, especially in the last section of the analysis. The company level analysis is focus on two periods: before and after the sanctions. The period following the sanctions are also limited to the interval 2014 to 2020, while the period before the sanctions need a subjectively defined limit. In order to isolate the change of the political landscape to Russian sanctions, the period has to be relatively short, but if the period is to be significant for inference of analytical results, it cannot be too short. There is no clear-cut solution to this delimitation, but a period of five years prior to the imposition of sanctions is deemed sufficient and concise.

A third delimitation is industry. When examining both micro and macro-level data, it is evident that only industries included in the embargo is considered. The Foreign Ministry of Russia targets only the food sector, but that includes meat, fruit, vegetables, seafood, and staple foods. For the macro level analysis, it is possible – and perhaps easier – to examine all food exports as a whole. At a micro-level, in the case analysis, it is not possible to span all industries, so one has to be chosen, where it is the hope that companies across the food sector are symmetrical in the sense that they have similar responses and used similar political risk mitigation strategies.

The last delimitation is naturally the case company. Arla was chosen for two reasons; the company is affected by the embargo and it is an industry leader. The first reason is rather trivial and was mentioned in the paragraph above – of course the company has to be affected by the counter sanctions. The second reason is related to the generalizability of the results and the availability of data. In the Danish food industry, there is a large number of small and medium-sized enterprises (SMEs) which differ in many respects; but there are only few major companies dominating the industry, such as Arla and Danish Crown. Among these large corporations, Arla was chosen as a result of the data availability.

2: Theory

This chapter will provide examples of papers used as the theoretical foundation of the analysis, which will focus on three main areas of research.

Firstly, general economic theory serving as background knowledge during the analysis will be presented, as to provide an overview of the foundation used to explain basic economic mechanisms. Diversification, the societal impact of business and other topics will be explored in this section.

Secondly, articles specifically investigating the topic of the trade war between the EU and Russia will be reviewed in order to create an overview of the current situation.

Thirdly, the field of entry modes with emphasis on internationalization theory will be explained, in order to assess the cross-border operations of Arla and other companies.

Political theory constitutes a part of the academic foundation explaining the mechanisms at play when society changes. The interaction between society and business can be explained partly by these theories, so these will be presented as well.

Subsequently, a range of theories from the field of strategic management which does not fit any of the other categories but still contribute to the understanding of the problem will be presented.

Finally, the PIE-model will be described in detail, as this theory bridges the gap between the current situation and the corporate actions appropriate in relation to formulating the strategies.

2.1: General economic theory

Modern economics rests upon pillars of theory, where the Phillips curve is one of the most significant. The curve is a result of an observation made by Arthur Phillips in 1958, revealing an inverse relationship between unemployment and inflation (Phillips, 1958). The implication for society cannot be overstated; governments must choose between keeping their citizens employed or reduce the diminishment of their savings.

Another groundbreaking theory which shaped economic theory, especially within the field of finance, was the theory of portfolio diversification formulated by Harry Markowitz in 1952. He showed that by diversifying a portfolio of assets, risk could be reduced significantly, and there was an efficient frontier on which all meaningful asset compositions lay (Markowitz, 1952). Using diversification has expanded to the field of business, as risk management has become an increasingly important tool following events exposing so-called “black swans” like the financial crisis of 2008. A follow-up on the theory of portfolio diversification and its appliance within business was presented in 1976 by Alan Rugman, who used Fortune 500 companies and found that internationally diversified companies were given risk reduction benefits not available to strictly national companies (Rugman, 1976).

Finally, one of the oldest theories still taught directly in strategy is the one of scientific management, founded by Frederick Taylor in 1911 with his book of the same name. Through measurement and scrutiny,

managers were able to adjust even the smallest processes, whereby the many minor improvements increased the overall productivity significantly (Taylor F. W., 1911).

One of the most groundbreaking papers on the effect of institutions on business environments was published by D. North, where institutions were defined as "humanly devised constraints that structure political, economic and social interaction" (North, 1991). The interdependence between institutions and the political and economic aspects of society is at the core of the analysis and will be elaborated later when explaining the PIE-model, but the paper of prof. North deserves to be mentioned when discussing relevant literature. Institutions are divided into formal and informal institutions, where the first are often legal and the latter cultural, and this categorization will be used in the analysis of the background of the counter sanctions. Furthermore, the article by prof. North emphasizes the historical aspect when discussing the development of institutions, which spurs the addition of a short section explaining the historical backdrop of the counter sanctions imposed by the EU first and later by Russia.

2.2: Theory concerning the conflict between Russia and the EU

Within academia, there has not been given significant attention to the topic of the impact on business related to the conflict between Russia and the EU, but given the problem stated in this thesis, effort has been made in order to uncover any theoretical aspects and other analyses related to the subject.

Parallels between the Russian invasion of Georgia in 2009 and the annexation of Crimea has been drawn, where the aggressive foreign policy was explained partially by the so-called Brezhnev doctrine. This policy stated that the Russian government has, since the occupation of Czechoslovakia in 1968, protected its "privileged interests" within the countries of the former Warsaw Pact. In this context, the influence of Western nations cannot reach beyond the former limits of the pact, and if they do so, the Russian government is forced to act in order to protect its sphere of influence (Chifu, Nantoi, & Sushko, 2009).

In the case of Ukraine, the country has long been split politically and culturally between the spheres of influence between the EU and Russia, which has partially spurred the conflict in 2013-2014, but also prior to this during the Orange Revolution in 2005 (Samokhvalov, 2015).

Research has shown that the effect of the sanctions on the Russian Federation was rather severe, while the effect on the Euro-zone was less significant (Kholodilin & Netsunajev, Crimea and punishment: the impact of sanctions on Russian economy and economies of the euro area, 2019). As the focus of this thesis is the Danish economy, the results produced from the previous paper cannot be applied directly but can serve as a proxy for the expected effect on the Danish economy.

In assessing the effect of the sanctions on the EU as opposed to the background for the sanctions, an Austrian paper has made an attempt to separate the effect of the sanctions on exports from other effects related to the Russian market, such as oil price changes and Ruble depreciation (Christen, Fritz, Streicher, & Hinz, 2016). In this paper, results showed that approximately 36% of the decline in exports from Austria to Russia can be explained by the sanctions. Given the difference between Austria and Denmark, the results might not be

directly applicable in addressing the research questions in this thesis but can still serve as a useful indicator of the relative strength of the sanctions on the EU-Russian trade.

Understanding the effect of the sanctions on the overall export activity requires a separation of the impact of the sanctions by the different factors relevant to trade activity. This separation is provided by a paper from 2015, where the sanctions imposed upon Russia were shown to be a contributing factor in the depreciation of the Ruble, thus indirectly affecting Danish companies. The paper shows, though, that the sanctions have very little effect on the depreciation of the Ruble, and that the decreasing oil prices is the largest component in this depreciation (Dreger, Kholodilin, Ulbricht, & Fidrmuc, 2016).

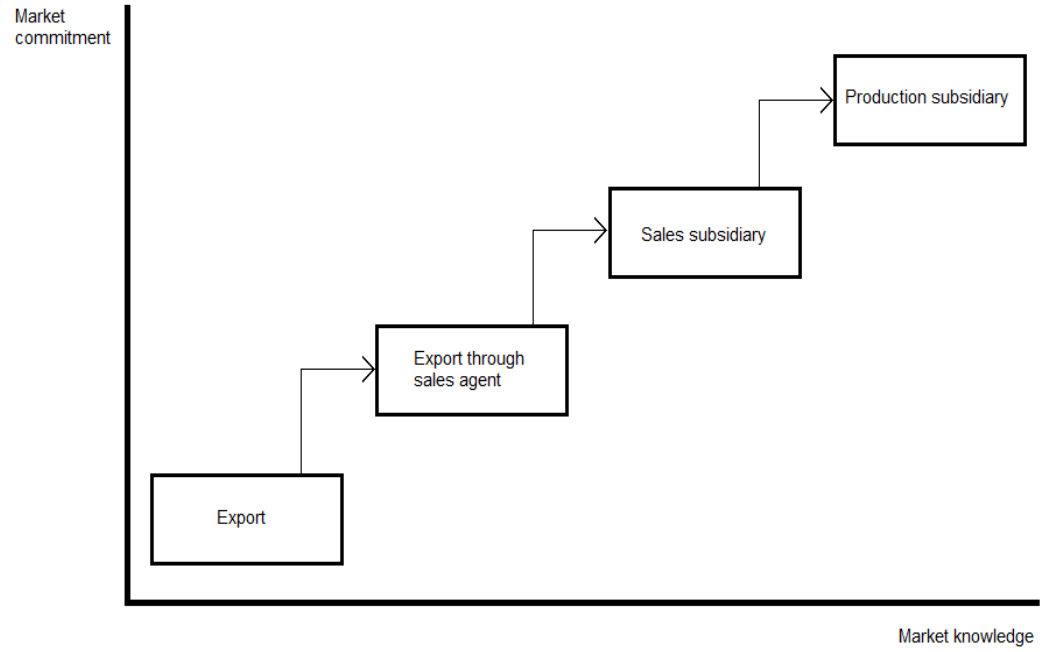
If one were to examine the broader effects on the Danish economy outside embargoed goods, e.g. suppliers to dairy farms or factories in Russia demanded as part of the import substitution strategy, it would likely show that the adverse effects on exports from Denmark were also reduced. Results showed that around 90% of the trade decrease is affecting non-embargoed products on a European level, where Denmark has been exposed slightly more than the average EU country (Crozet & Hinz, 2016).

A research paper from the Chief Economist Unit of the European Commission's Directorate-General on Trade shows that the overall impact caused by the Russian counter sanctions has been negligible, with exports from the EU decreasing only 0.12% (Zornitsa, 2017). There is, however, considerable disparity in this export, where the categories 'vegetable and fruits', 'other meats' and 'dairy products' have decreased by 30%, 14%, and 11% respectively.

Understanding the political mechanisms, both from the EU and from Russia, and how they affect international trade is vital when mitigating negative economic effects, as shown in a research paper published by Russian academics shortly after the imposition of the Russian counter sanctions (Klinova & Sidorova, 2016). Another paper on a similar topic investigates the effect of the European sanctions on the Russian food industry (Shagaida & Uzun, 2017). There is less analytical value in this paper, since it is more descriptive than its counterpart by Klinova and Sidorova, and the article seems to be somewhat biased in Russia's favor. Nonetheless, this paper provides valuable insights into the response of the government in face of the challenges, showing that import substitution and importing through third-party countries, like Bosnia-Herzegovina, Belarus or Macedonia, to combat the European sanctions were some of the elements of the strategy aimed at mitigating the economic impact of the sanctions.

2.3: Entry modes and internationalization

Internationalization is the process of expanding operations across national borders, typically by exporting, setting up sales offices or establishing wholly owned subsidiaries, and is covered exhaustively in the academic literature on strategy (Johanson & Vahlne, 1977). The notion of internationalization is mostly used to describe companies engaging in activities in other countries in an incremental manner but can also be used to explain the degree of commitment in other markets by MNEs, as seen below in model 2. According to the internationalization theory of the Uppsala Model, companies start by committing as little as possible; by initiating export. If exporting proves successful, the experience will provide the company with more knowledge about the markets and will lead the company to engage further into the new market, which in turn increases the knowledge. This re-iterative process of internationalization is relevant for understanding the Danish food industry as a whole, especially SMEs which do not have the capacity of large companies like the case company of this thesis. The model was later extended in order to account for the effect of being an 'outsider' instead of the psychic distance between the home country and the foreign market (Johanson & Vahlne, 2009). Most likely, this is more relevant for Danish companies operating in Russia, since the psychic distance is not very high – lower than the distance to the US for example (Håkanson & Ambos, 2010) – but the effect of being an outsider will still remain. This view is supported by further research on the topic of the effect of societal knowledge on uncertainty in the market, where it is evident that the perceived uncertainty from entering a foreign market is reduced by increasing the experiential knowledge of the market (Hilmersson & Jansson, 2012).



Model 2: The establishment chain, illustration not provided by the source, (Johanson & Vahlne, 1977)

Furthermore, it was revealed that experiential knowledge of high specificity, in the sense that the business networks of the target market is known to the entrant, is the most important type of knowledge in reducing uncertainty, and that the risk reducing effect increases with institutional distance from home country to host country (ibid.).

Trust-building is an essential parameter when Western companies choose to establish a joint venture (JV) or a partnership with a local company in Russia, where interpersonal relations are considered to be the most important. Both the Western company and the local company contributes to the partnership, where the Western part often brings financial resources and operational know-how and the Russian partner brings knowledge of the local culture and market (Ariño, Abramov, Skorobogatykh, Rykounina, & Vilà, 1997). In relations with markets where language barriers do not exist, the preference for JVs over wholly-owned subsidiaries (WOS) increases with cultural distance and political risk (López-Duarte & Vidal-Suárez, 2010). However, in scenarios with language barriers, such a relationship does not necessarily exist, and sharing the venture with a local partner does not reduce external uncertainty (ibid.). Another paper points to a preference for JVs when the focal company considers the host country to exhibit greater ethical-societal uncertainty, but the general political climate has a low effect on the entry mode choice (Demirbag, McGuinness, & Altay, 2010).

Studies from China show that ties to domestic companies are valuable to foreign companies entering the market, as it reduces the liability of foreignness, where strong ties to partners with non-market based complementary assets are important in protecting intellectual property rights and any relation to domestic firms with market-based assets are important in the commercialization stage of innovation (Soh & Yu, 2010). Non-market-based assets in this case include research and development (R&D) and tax benefits, licenses, political connections, while market-based assets include localization expertise, customer experience, brand names and channel management experience. In any case, relations with established, domestic firms benefit the entering company by reducing the liability of foreignness.

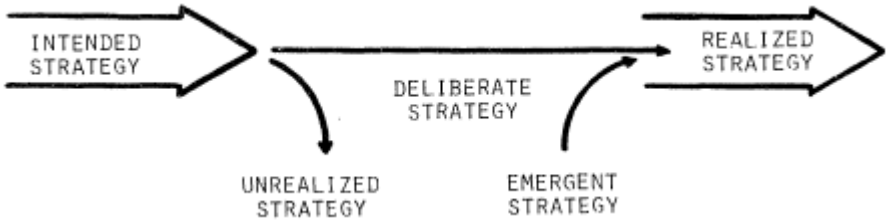
Changes in commitment in foreign markets could also reflect themselves as divestment, which has different degrees and different causes (Benito, Divestment and international business strategy, 2005). Adjustment, failure, and re-structuring are the three main causes behind divestments, and these have different effects on the likelihood of units being shut down or sold off. Local responsiveness, corporate flexibility, unique local resources, and local ties all impact the likelihood of divestment, and these are mainly related to the strategy of the company and the location of operations. Summed up, companies pursuing transnational strategies were the most likely to divest as a result of changing market conditions. The costs of exiting a market was investigated by the same author, where it was found that companies holding tangible investments in foreign markets were slower to exit than companies primarily holding intangible assets in the host country (Benito, 1997).

Within the manufacturing sector, companies from Europe generally choose more integrated entry modes when facing high governmental/political risk, while product-market risk exhibited the same impact on firm strategy (Brouthers, Brouthers, & Werner, 2002). Governmental/political risk are, in this study, defined primarily as trade barriers, which, together with the emphasis on European firms, makes the results relevant to our problem at hand. These results are, however, disputed in a study of firms in developing countries observed over a long period from 1980 to 2006, where it was found that host countries with weak political institutions induce companies to use less integrated entry modes (Lee, Biglaiser, & Staats, 2014). In support of the latter results, studies from China in the same time period has shown that companies do prefer more flexible, i.e. less integrated, entry modes when facing market uncertainty. They do, however, emphasize that lowered flexibility comes at the price of lowered commitment, which will reduce the potential return on the investment (Li & Li, 2010).

Between the two arguments suggesting that companies should either reduce commitment in uncertain markets in order to reduce risk or increase commitment with the aim of gaining valuable knowledge of the market, is a unifying voice suggesting both. Results in the study have shown that the presence of institutional voids is positively correlated with the realization of a commitment-increasing strategy formation for MNEs. In this adjustment of commitment to foreign markets, they also find that companies facing institutional uncertainty should design strategies with the purpose of making the organization more flexible (Santangelo & Meyer, 2011). This distinction can serve as an explanation of the viability of both arguments, in that manufacturing companies will choose integrated entry modes and thus committing themselves more to the market, in order to protect themselves against a lack of institutions protecting them, but that the risk of an existing, but unstable institutional environment will increase the risk related to the market, which fosters a need for flexibility and allows for decrease of commitment in the case of adverse institutional changes.

2.4: Strategic management theories

The theory of Santangelo and Meyer builds upon the strategic management classic, “Of Strategies, Deliberate and Emergent”, which examines the topic of strategy formulation and the approaches to adaptation of strategy (Mintzberg & Waters, 1985). Strategies can be categorized into eight types; the planned, the entrepreneurial, the ideological, the umbrella, the process, the unconnected, the consensus and the imposed strategies. Common for these strategies is that they all operate within the continuum of deliberate-emergent, showcasing that strategies can rely on coordination and analysis, on flexibility and responsiveness, or a mix between these, as shown in model 3 below.



Model 3: Strategy formulation, (Mintzberg & Waters, 1985)

As an extension to this theory, the concepts of effectual and causal decision-making logic emerged, where the effectual logic resembles deliberate strategy formulation and causal logic emphasizes agility much like the emergent strategy approach. The study investigated Russian SMEs, where it was found that these firms benefit only from a causal approach if it is implemented at a moderate or high degree, while the effectual approach to strategy is only viable at low levels. Furthermore, the causal approach benefits established companies more than start-ups, indicating that companies who are established and able to take advantage of a high degree of planning and coordination should do so, while start-ups could benefit from using an effectual approach even at a low implementation rate (Laskovaia, Marino, Shirokova, & Vale, 2019).

A more general theory of firms' choices of globalization strategies appearing in most management textbooks is the matrix of global integration and national responsiveness. Global integration relates to the use of global supply chains in order to reach economies of scale, while national responsiveness is expressed through the adaptation of market offerings to the different markets. More globally integrated companies are pursuing a *global* strategy if they are less nationally responsive, and *transnational* if they are more nationally responsive, while the less globally integrated companies conduct an *international* strategy if they are less nationally responsive and *multi-domestic* if their strategy is more nationally responsive (Luthan & Doh, 2018). A way of achieving global integration is to take advantage of outsourcing labor-intensive parts of the supply chain to developing nations, although this topic has given way to public debate where domestic jobs were sacrificed in order to achieve integration and efficiency (Mankiw & Swagel, 2006).

Within the field of supply chain management, the topic of supply chain resilience has emerged as a tool to resist disruptions to operations, where a framework was built with the purpose of increasing supply chain

resilience, as is shown in the table below.

Proactive strategy	*Readiness elements*	*Subelements*
	Collaboration	Coordination, cooperation, joint-decision making, knowledge sharing, supplier certification, supplier development
	Human resource management	Employee training and education, risk-sensitive culture and mindset, cross-functional teams, experienced employees for crisis management
	Inventory management	Use of inventory and safety stocks to buffer disruptions
	Predefined decision plans	Contingency plans, communication protocols
	Redundancy	Production slack, transportation capacities, multiple sourcing and production locations
	Visibility	Early warning communication, information sharing, real-time and financial monitoring
Reactive strategy	*Response, recovery and growth elements*	*Subelements*
	Agility	Communication, information sharing (= visibility), quick supply chain redesign, velocity
	Collaboration	Coordination, cooperation, joint-decision making, knowledge sharing, supplier certification, supplier development
	Flexibility	Backup suppliers, easy supplier switching, distribution channels, flexible production systems, volume flexibility, multi-skilled workforces
	Human resource management	Employee training and education, risk-sensitive culture and mindset, cross-functional teams, experienced employees for crisis management
	Redundancy	Production slack, transportation capacities, multiple sourcing and supplier locations

Table 1: Grouping and synthesis of the most grounded SCRES elements, (Hohenstein, Feisel, Hartmann, & Guinipero, 2015).

Illustrated in the table above, companies can use both proactive and reactive strategies across the four different phases of disruption: readiness before the shock arrives, response immediately after the shock, recovery once the damage has been contained, and growth after the shock has been mitigated. It is evident from the table that a parallel can be drawn to the former theories of deliberate versus emergent strategies, where planning, knowledge sharing and collaboration can serve as elements of a deliberate strategy, while flexibility and agility are in line with emergent strategies (ibid.).

Another theory looking into the value of resilient supply chains in the mining industry found that knowledge, flexibility and robustness are core elements in securing input factors against shocks from the external environment (Alonso, Gregory, Field, & Kirchain, 2007). Sharing information with suppliers in order to create an overview of the input availability, keeping several suppliers in the network and creating more

efficient processes are examples of how to achieve knowledge, flexibility, and robustness. These measures are in line with the proposed strategies for building resilient supply chains mentioned earlier, emphasizing their relevance, but the framework developed by Hohenstein et al. is chosen for use in further analysis, as it is built around a literature review summing up the research in the field.

2.5: PIE-model

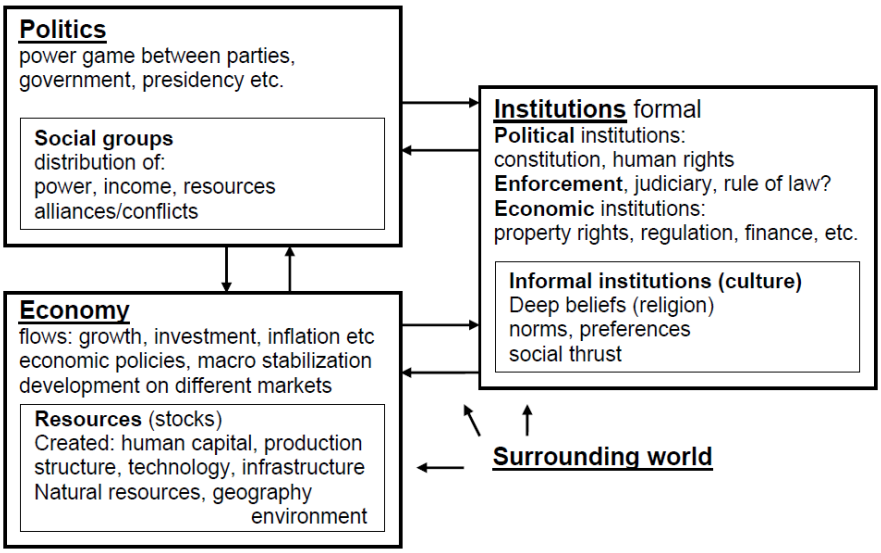
In academia, strategic risk is considered a broad concept encompassing risks associated with the external dimension of the company and the risks these factors expose the company to. In this thesis, focus is on political risk, but research has suggested that political risk cannot be considered as isolated shocks to the market in general or to a company in particular. Rather, the political sphere is closely related to the institutional and economic sphere, which is why the more appropriate, generalized term of 'strategic risk' will be used henceforth.

The primary theory underlying this delimitation of the academic area of interest is the PIE model, which considers the three dimensions mentioned earlier – political, institutional, and economic, as well as the relations to the international environment. Institutions of the society examined is divided into sub-groups which overlap with the economic and political dimensions, and informal institutions:

"The political institutions *define the rules for how the political system functions through the constitution. The* economic institutions *set the framework for the rules of the game in the economy. The* informal institutions *laid down in the given culture set the unwritten rules of the game both for politics and economy."* (Mygind, 2007)

Political effects on the business environment consist mainly of social groups in the society and the overlaps to the other dimensions of the model, while the economy consists of both flow variables, e.g. GDP and its components, and stock variables, e.g. physical and human capital, natural resources and technological capacity. On top of these national dimensions and their interdependence, the influence from the surrounding world affects these dimensions, e.g. trade affects the economic dimension, strategic alliances affect the political dimension, international benchmarks and organizations affect the institutional dimension.

All these local characteristics exert pressure on the companies that operate in this location and must be considered when forming a strategy. A graphical representation of the four elements of the model is shown below in model 4.



Model 4: The PIE-model, (Mygind, 2007)

What is special about the PIE-model, as compared to other macro-level models, is the holistic perspective and the emphasis on dynamics. Institutions are central in the PIE-model but are also at the core of the current trade war between Russia and the EU, but as these are largely created by and facilitating both political and economic events and, the chosen model is very relevant for analyzing the problem at hand.

2.6: Political theory and cultural analysis

Given the nature of the problem which spans the spheres of business and politics, some political theory will be relevant, especially the theory related to lobbying and to the mechanics affecting the institutional and political contexts of Russia. One study laying the foundation for major parts of the analysis is a comparison of different sources of political risk analyses. In this study, analyses published by The Economist, PRS Group and BERI were compared, where it was found that the reports of the PRS Group were of the highest quality, which led to the selection of the political risk analyses published by the PRS Group (Howell & Chaddick, 1994). It must be noted, though, that the article assessing these models use the temporal interval 1987-1992, so the evaluation of these political risk measures could have changed, but it is assumed that they have improved their analytical methods since 1992.

Lobbying usually targets policy makers while bureaucrats influencing regulations is considered to be corruption. The distinction can sometimes be rather unclear, but by using the above definition, lobbyism and corruption is split between the two spheres of politics and institutions as these were divided in our previous analysis. Lobbying has proven to be quite effective, as lobbying companies are 16% more likely to influence government policy than companies not lobbying (Campos & Giovannoni, 2017). Furthermore, lobbying has been proven to be more effective in countries with low degrees of political competition and more sub-national administrative tiers, making lobbying particularly effective in Russia (Choi, Jia, & Lu, 2015).

There has been a significant growth in the number of industrial organizations in Russia, but this growth has been distributed unequally across sectors. The number of industrial organizations is largest in the transportation and food processing sectors, while the participation is highest in transportation, audit and retail trade. It was also suggested that these industrial organizations are in contrast with single-firm lobbying efforts controlled by oligarchs, where the former could voice concerns more firmly than the latter which should present more balanced and moderate demands (Duvanova, 2011). The contrast between companies controlled by oligarchs and organizations of other companies is clear when considering the current political structure in Russia where the elite has created substantial barriers to the spread of democracy. Power is increasingly consolidated around the president and the legislative branch is under pressure albeit the president has sought their support for major decisions (Gill, 2002). Within the field of natural resources management, corruption is related to poor economic development, and especially countries with abundant natural resources are prone to institutional corruption (Williams & Dupuy, 2016). Political ties between business leaders and political leaders in Russia has been a topic of public interest, i.e. the power of the oligarchs, and studies have actually shown that personal ties to policy makers were of great importance in the Soviet era and in the early transition, but the significance of these relations have diminished with the transition from command economy to market economy (Karhunen, 2008).

The academic field of international politics is vast, and substantial literature has been written on the subject, which is quite relevant to the problem examined in this thesis. In order to limit the scope of the broader political analysis, a comparison between the Russian political system and the different schools of international politics will be drawn. Especially the traditional dichotomy of realism versus liberalism will be applied, where realism is emphasizing the role of nation states and the lack of supranational authority and liberalism is more focused on cooperation and bringing the internal philosophy of the state into its foreign policy (Reus-Smit & Snidal, 2008).

A final topic of interest to the problem investigated is that of Russian culture, which is examined by a book on the Russian youth culture. Here, the Westernization of art has influenced Russians to have a more positive view on Western countries while inspiring the domestic art production industry (Pilkington, Omel'chenko, Flynn, & Bliudina, 2002).

3: Methodology

After collecting the data, it is transformed into fragments that can be analyzed and assembled with the help of theory in order to create a clear, unified picture of the problem. The purpose of this chapter is to describe the process of sorting, analyzing, and putting together these data fragments. The chapter will contain two sections: a methodological section explaining the process itself and its pitfalls, and a section commenting on the scientific reflections taken in the writing process, including the validity and reliability of the results.

3.1: Process description

The academic process had its natural offset in the problem: The impact of the Russian counter sanctions on the Danish food industry. This sparked the research of information to be analyzed in the thesis, so academic literature written on the subject was collected, while simultaneously reaching out to relevant case companies. Even though these two processes, the theoretical and the empirical, were taking place in parallel, the two paths will be described separately below.

From a former course, the PIE-model was introduced, and partially formed the basis of the theoretical structure of the thesis. Having identified the theoretical foundation, which would make up large parts of the interdependence between theory and data, only supplementary theories were to be added. These were largely comprised of scientific articles analyzing this specific topic, but it was vital that these theories had a possible link to the data used in the thesis. In the process of finding additional academic support, the snowball method was used with an offset in well-known articles, such as the Uppsala model. Articles taking a strict national focus not relating to either Danish companies, European companies, or European economies in general, would not be considered to further analysis. Typically, the articles chosen as part of the theoretical foundation had universal approaches or used data to confirm their theses which would also be available for Danish companies to be tested in this thesis. In addition to theoretical sources, other reports from organizations such as the World Bank and authorities from the U.S. and the EU were screened in order to assess whether already existing analyses could bring another perspective into the imminent analysis.

Starting of the search for a case company, a list of companies to contact was compiled with the help of two sources; the list of Danish companies operating in Russia created by the Trade Department of the Danish Embassy in Moscow, and the list of Danish food companies exporting to Russia as disclosed by the Russian Federal Service for Veterinary and Phytosanitary Surveillance, Rosselkhoznadzor. The initial step was conducted by reaching out to relevant companies either through personal contacts, general e-mail addresses or channels dedicated to student collaboration, where the companies were offered to be part of the case analysis. All companies were offered to be the sole case company of the thesis, where they would have significant leverage in shaping the scope of the analysis to fit their needs. A copy of the finalized thesis, a presentation of the thesis and the signing of a non-disclosure agreement were all elements offered to the case companies. In return, they were to provide sales numbers on country level and give access to interviews with relevant employees. Few companies responded to the offer, but none were interested in acting as a case

company for the thesis, where typically three different reasons were given: Lack of resources, corporate no-disclosure policy, or reference to the sensitivity of the subject. Lack of resources is self-explanatory, while the no-disclosure policy was likely due to miscommunication about the data needed for the thesis. The sensitivity of the subject, being political by nature, was revealed only at an interview at the sales office of a Danish company. It was noted, that few Danish (or European) companies would have an interest in collaborating on a project where the strategic position and opinion on the external framework is potentially exposed to Russian authorities.

The process of reaching out to relevant case companies led to a pivoting of the structure of the thesis. Instead of using a case company, annual reports of one of the large exporters in the food industry would be a sufficient data foundation for this thesis. For this purpose, the Danish companies Arla and Danish Crown were chosen, as they had significant trade relations with Russia and publicly disclosed annual reports. Upon further research of their annual reports from the period of 2007-2019, it was concluded that only the annual reports of Arla contained the necessary information revealing patterns of export to Russia. This period is interesting because it starts prior to the imposition of the sanctions on European companies and continues past the implementation of the sanctions and captures effects of the measures taken by these companies.

To supplement this micro-level examination of annual reports, data from statistical bureaus was also collected, in order to support the analysis of the aggregate effect of the sanctions on the Danish food industry. After collecting both theory and data relevant for the thesis, they were used collectively to analyze the research questions in order to answer the problem statement.

Once the problem statement was answered and the purpose of the thesis was fulfilled, the analysis was complemented by a discussion with the aim of reaching into the future. This would ideally put the current situation into a broader perspective and give relevant companies recommendations for handling the exposure to politically based strategic risk. Hopefully, the final section of the thesis should give room for deeper exploration of the topic, where several suggestions to paths of further discovery are provided, upon concluding the analysis.

3.2: Analytical methods

It is important to emphasize, that there will not be any thorough quantitative analysis in this study, meaning that sophisticated statistical models will not be used to test relevant data. The analysis relies primarily on examining results found by third parties, but descriptive analytics are part of constructing an overview of the situation. Working with institutionally and politically related topics, attention will primarily be given to the qualitative methods, but these cannot stand alone when discussing the economic sphere of the countries involved.

Before analyzing the effects of the sanctions, a detailed description of the sanctions will be presented using translated versions of the original decrees issued by the Kremlin. Following this description, a historical walkthrough of the events leading to the imposition of the sanctions will be delivered, using primarily news

articles published when the events were taking place. Finally, the dynamics of Russian society is analyzed using the PIE-model as the overarching framework, but where the qualitative macro-level data was gathered through various sources.

The aggregated effect of the sanctions on the Danish food industry will be carried out using data from Danmarks Statistik (DST), where the dairy exports from Denmark to Russia, the total export from Denmark to Russia, and the industrial output and employment levels of the dairy industry are visualized and related to the development in other European countries and previous crises in Denmark.

The case analysis will be divided into a quantitative section and a qualitative section. The quantitative section will contain descriptions of the development in the results of activities pertaining to Russia, and the overall revenues and profits of Arla. The purpose of the financial analysis is to assess whether the development of the company's export activities in Russia point to a significant effect of the sanctions, and whether this effect had an impact on the overall financial performance of the company.

For the qualitative section, the annual reports of Arla will be analyzed with the aim of creating an overview of the actions taken by the company before, during and after the imposition of the counter sanctions. Risk management strategies implemented by Arla and the strategic adjustments are at the core of the case analysis and will thus be given special attention.

The overall goal of the case analysis is to gather information on the counter measures taken in a trade war scenario and evaluate both the actual damage inflicted on the company and the effect of the risk management strategy. Some risk is associated with using only one case company as a proxy for a whole industry, but appropriate adjustments will be done as to avoid presenting asymmetrical results.

Finally, the actions taken by Arla in the wake of the crisis will be analyzed in broader terms and supplemented by theoretical sources in order to choose four groups of tools available to companies facing strategic risk: Adjustment of the internationalization process, diversification, building resilient supply chains, and lobbying to change the external environment. Each of these tools will be assessed in relation to the situation of Arla, where a range of sources will be included to support the assessment of the strategic risk mitigation tools.

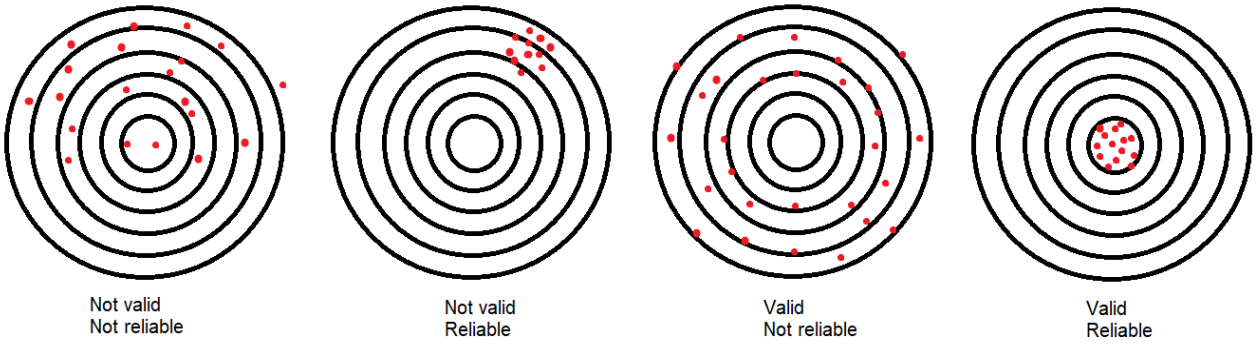
3.3: Scientific reflections

All academic work relies on a methodological premise by which the analysis is carried out and results are found. Most well-known are the inductive and deductive approaches, where empirics lead to theory formulation or theories are tested against empirics, respectively. The third and most recent approach, the abductive approach, suggests another analytical strategy where qualified estimates based on observations make up the results. Abduction differs from induction in that no theory is formed on the basis of the observations, but a range of arguments is built up to support the best estimate. This thesis uses an abductive approach, in the sense that no definitive answer is provided as a result of the observations, but the large number of observations presented and analyzed will lead to the drawing of a conclusion. Abduction is the

obvious method in this type of study, as there is no secure method of drawing incontestable conclusions about all dynamics of a society or about the most effective method of mitigating strategic risk.
Abduction is related to the school of philosophy called pragmatism, where *"the usefulness, workability or practicality of ideas, policies or proposals are the criteria of their merit"* (Rosenthal & Thayer, 1999). Pragmatism was, like abduction, formulated by the philosopher Charles Peirce, and stresses the functionality of thoughts, which is relevant to the research design of this thesis.

3.4: Validity and reliability

Three important concepts in relation to the applicability of the thesis' results and the metacognitive understanding of the process are validity, reliability, and generalizability. The first two concepts will be investigated in depth separately in the sections below, before concluding on the overall quality of the results. The varying levels of validity and reliability are often illustrated using a target model, where validity represents the degree to which bullseye is the center of the shots fired, while reliability is the spread between the shots fired, as shown in model 5 below.



Model 5: Validity and reliability, illustration not provided by the source (Thisted, 2011)

3.4.1: Validity

There are two types of validity: Internal and external validity. Internal validity measures the coherence between the problem statement and the results found in the analysis, while external validity relates to the generalizability of the results found. Only internal validity will be examined in this section, as the discussion will be dedicated to examining the external validity, or generalizability.
The problem statement revolves around *the background for and impact of the Russian counter sanctions on the Danish food industry, and what these companies can do in a similar scenario in the future – both preemptively and reactionarily – to mitigate the negative effects*. In constructing the analysis, it was the intention to create a flow from the past through the present to the end by examining the case of Russian counter sanctions' cause, their effect, and the potential tools for next similar scenario. The analysis is divided into three parts: One part investigating the background of the sanctions, another part examining their effect on the Danish food sector at an aggregate level and a case at firm level, and finally one part focusing on the tools available to MNEs facing strategic risks from the external environment. This structure allows a high

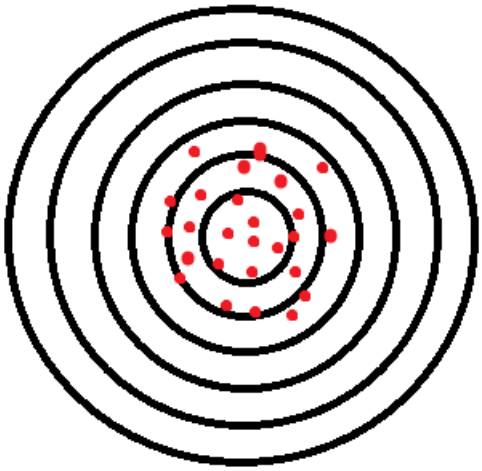
degree of coherence between the different parts, because each of the four research questions and sections of the analysis are naturally separated and followed by the next. The first research question refers the formulation of the sanctions and the background of the sanctions, which is further divided into two parts. The formulation of the sanctions is rather straight forward, but the background can be analyzed in different ways. Taking a historical perspective and using a model containing both a political, an institutional and an economic perspective should cover the ambiguous term "background" in a sufficient manner. The second section of the analysis is investigating the core of the problem statement: What is the impact on the Danish food industry? Impact means, in this case, both the economic and strategic impact in terms of loss of export revenues for the companies and change in macroeconomic indicators, and the strategic actions taken by companies facing this negative shock from the external environment. This analysis should be relatively easy to perform as data is readily available, and several articles and reports have been written on the subject but could prove more difficult in terms of relating it to the problem statement. Investigating the strategic actions of companies is subjective by nature, and it is dangerous to judge on large and capable firms as an outsider. Since only one company has been chosen for the micro-level analysis, it could be difficult to reach the point of providing recommendations to a whole industry, where many players are significantly smaller than Arla. However, the economic impact on the case company and the Danish economy should be clear and objective. If one should point out potential shortcomings in terms of validity for the second part of the analysis, it is natural to consider whether the chosen macroeconomic parameters are relevant in assessing the impact of the sanctions on the economy. By using two different trade related parameters and two more societal measures, the goal is to avoid choosing too few indicators to analyze.

For the final part of the analysis, there is a potential issue in choosing the strategic risks or tools to mitigate these wrongly or choosing too few. Trying to limit the number of recommended paths out of risk exposure and reducing speculation and avoiding concrete initiatives would make the analysis more coherent with the problem statement, which asks what companies *can* do, and not what they *should* do. Thus, the largest risk in terms of internal validity is related to the final part of the analysis, as the taxonomical level is highest here.

3.4.2: Reliability

Reliability is a concept describing the quality of the measurements used in the analysis, where flaws in the measurements could lead to unsystematic errors. These errors are independent of the subject examined, and in the example of the Russian counter sanctions, the primary source of unsystematic error is most likely the qualitative aspects. Assessing the effectiveness of the different strategic risk mitigation tools is highly subjective and could therefore be biased by the author's own preferred strategies or by the strategies encountered in the limited academic screening of literature. In the first section of the analysis, there is also a minor risk of choosing the wrong societal characteristics which could lead to a wrong measurement of the dynamics within Russian society and thereby draw false conclusions on the background of the counter sanctions. The second section contains mainly descriptive statistics based on data derived from official

statistics and annual reports, where the risk of making unsystematic errors is quite small. Some analysis of the strategic actions taken by Arla will be carried out in the second section, but as the taxonomical level here is in the lower end, errors in measurement is not likely here either. All in all, there could be issues with reliability in the third section of the analysis and, less probable, in the first part of the analysis, concluding that the reliability of the results is at a medium level.



Valid
Somewhat reliable

Model 6: Validity and reliability of this paper

All in all, the internal validity of the analysis is assessed as being high, while the reliability is at a medium level as shown in model 6 above.

4: Data collection and description

This thesis uses both qualitative and quantitative data, so this chapter on data will be split into two sections examining these individually. By describing the data and explain how it was collected, the goal is to increase scientific robustness by revealing potential limitations, and thoroughly uncover interesting perspectives that may improve the analysis and its results. The analytical process itself has been described in more detail in the methodological section, and so the attention of this section will be on the part of the process that stretches from the search and subsequent uncovering of data to having the data available for analysis. The argument for collecting both qualitative and quantitative data is based on the assumption that both the strategic and financial positions of the companies in the Danish food industry are relevant in assessing the impact of changes in the external environment.

4.1: Qualitative data

The primary type of data used in the analysis is qualitative data, which supported all layers of the analysis from the description of the sanctions' background to the assessment of the actions taken by Arla in relation to the strategic risk mitigation tools available. The qualitative sources span both country analyses, reports from international organizations, news articles and insurance companies, and the following presentation of the data will be divided into two sections focusing on the case company and the more general results, respectively.

4.1.1: Micro-level qualitative data

The primary source of qualitative data is the annual reports of Arla. In these reports, executive management explains the effect of the Russian counter sanctions on the operations of the company. Furthermore, news articles and other sources relevant to the analysis of Arla will be presented when necessary. In the annual reports, the company usually discloses any major changes related to the Russian market but has in one instance dedicated a three-page article on the subject of Russia. Additionally, in a few cases they have presented general information about their approach to risk management and the tools they use.

The use of Arla as a single case to describe the food industry as a whole includes a discussion of the differences between the company and the industry, which will be provided in the analysis. Case analysis can, however, be used to describe general phenomena and make the results derived generalizable to some extent (Flyvbjerg, 2010). However, the benefits of the duality between the levels of perspective, firm and country respectively, does come at the price of overgeneralizing the specific observations. The insights drawn from qualitative data is vital in constructing an overview of the strategic positioning and counter measures taken in light of the changing external environment.

4.1.2: Macro-level qualitative data

Public sources such as reports published by international organizations make up the largest part of the macro level qualitative data. While these publications do not necessarily explain the individual actions taken by companies exhaustively, they often uncover the underlying motives of these actions. Political and legal action is hard to quantify directly, but still have a major impact on the external framework, so the key source of qualitative data on a macro level is analyses carried out by third parties. These include the PRS Group who supplies annual country risk reports on most countries, but also the World Bank, OECD, the EU institutions, Dansk Industri, and others who have contributed in creating a wholesome picture of Russian society through the fragments of data found online. Additionally, some academic papers provide both data and theories regarding the Euro-Russian trade climate and the political situation, so these must also be counted as macro level qualitative data sources.

4.2: Quantitative data

For the macro level analysis and in the case analysis, quantitative data was collected from both the case company and DST. These two data sources will be described separately, as they are quite different in their nature, where the companies provide financial data on their activities and DST provides the macroeconomic data.

4.2.1: Micro-level quantitative data

Collecting quantitative data on the micro level is also done most efficiently through analysis of the annual reports of the case company, Arla. The primary financial indicators used were the total revenues, the total profits, and the revenues stemming from the Russian market. Total revenues and total profits are found in the profit and loss statements and are thus rather easy to plot into a graph, but the revenues stemming from activity on the Russian market were more difficult to retrieve. From the accounting year 2013, the disclosure method changes from the Russian market alone to “Russia and other countries” including Australia and Greece. Shifting the method of disclosure in 2013 poses a specific challenge for this analysis as it limits the number of observations available and blurs the effects of the counter sanctions.

Arla belongs to accounting class C under Danish law, and as such, is audited by chartered accountants (Da: *statsautoriserede revisorer*), typically from either of the Big Four auditing companies. This increases the trustworthiness of the data, and leads to the assumption, that the information drawn from these reports is true and of high quality. It is important to include micro level quantitative data in the analysis, as it is a useful tool for observing the tangible effect of the Russian counter sanctions on one of the most financially robust and internationally oriented companies in the Danish food industry. The assumption is that financial robustness decreases the impact of trade barriers, while international exposure increases the impact of trade barriers. The relative strength of these two contrary effects is not known but the company is generally assessed as being an appropriate proxy for the Danish dairy industry since it dominates the industry.

4.2.2: Macro-level quantitative data

In creating an overview of the aggregate effect of the Russian counter sanctions on the Danish food industry, macro level quantitative data provides valuable insights. Official data on the aggregated industry are by nature the most important source of information, as it accurately addresses the problem statement. Denmark is enriched by having a comprehensive database of publicly available data, aggregated, and anonymized through the official statistical bureau of Denmark, Danmarks Statistik (DST). DST is part of the Ministry of Social Affairs and the Interior in Denmark and is therefore considered an exceptionally reliable and useful source of data, which many companies, organizations and public authorities frequently use.

Another important source of statistical information is the European statistical bureau, Eurostat which is part of the European Commission, and considered a highly trustworthy resource. This source is not directly specifically addressing Danish food companies in all their publications, but it is argued that the Danish food industry is somewhat similar to the European average, although slightly more export oriented. There is some overlap between DST and Eurostat, in which case data from DST will be chosen as the primary source. These were used for the collection of data regarding employment, exports and economic activity in the food industry, and these data formed the basis of the analysis answering research question II.

5: Background for the imposition of counter sanctions

Following the occupation of Czechoslovakia in 1968, premier of the Soviet Union, Leonid Brezhnev, issued the doctrine of *"limited sovereignty",* stating that "the sovereignty of Ukraine cannot be significantly wider than that of the members of the Warsaw Pact prior to the collapse of *'the socialist camp'*." (Chifu, Nantoi, & Sushko, 2009). This policy of establishing a buffer zone between the Russian Federation and Western countries could be seen as the offset for the annexation of Ukraine and the ongoing conflict in Eastern Ukraine. The questionable privilege of being located politically and geographically in the borderlands between NATO and the former Warsaw Pact has led to tensions unsolved, as was also evident in 2005 during the Orange revolution. These tensions manifest themselves as a political divide between the western and eastern parts of the country, ultimately paving the way for the recent uprisings in Ukraine (Samokhvalov, 2015).

Towards the end of 2013, at the Maidan Nezalezhnosti square in Kiev, Ukraine, the suspension of an association agreement between Ukraine and the European Union was protested when president Yanukovich favored closer ties to the Russian Federation and the CIS countries (Balmfort, 2013).

This sparked civil protests throughout the country, and in 2014, the Russian president, Vladimir Putin, convened his military chiefs to discuss the annexation of Crimea. In the following weeks, masked soldiers without insignias, later nicknamed "green men" in the media, roamed Crimea and the riots escalated, eventually leading to an independence referendum widely condemned by Western nations. The majority of voters favored an accession to the Russian Federation on March 16, 2014, leading the European Union and Canada to impose sanctions on Russian individuals the following day, while the United States had already imposed similar sanctions and was followed up by a range of other Western nations (Ashton, 2014).

The Russian Foreign Ministry responded by publishing a list of American officials who were banned from entering Russia, and this led to an escalation of sanctions alternating between both sides (RT.com, 2014).

On the 6th of August 2014, the Russian president Putin issued a presidential decree banning a range of agricultural products from entering the Russian Federation which was put into effect the following day (Walker & Rankin, 2014).

5.1: Description of the counter sanctions

Before investigating the societal dynamics leading to the imposition of these sanctions, it is useful to present the details of the sanctions. As mentioned above, the presidential decree of the 6th of August 2014 initiated the process of banning the import of agricultural products of the European Union, but the US, Canada, Australia, and Norway were also included in the decree.

The decree itself was not detailed and merely stated that the import of a range of goods from countries partaking in the sanctions against Russia would be banned:

"(…) within one year from the date of entry into force of this Decree shall be prohibited or limited to foreign economic operations, providing for import into the territory of the Russian Federation of certain agricultural products, raw materials and foodstuffs originating in the states, that have decided to impose economic sanctions against Russian legal entities and (or) individuals or joined such decision.", adding that the government of Russia was to define a list of agricultural products, raw materials and food named in the decree (Putin, 2014).

The following day, a detailed list of agricultural and food products included in the ban was issued by the Russian government, where, among others, the following products were included (Medvedev, 2014):

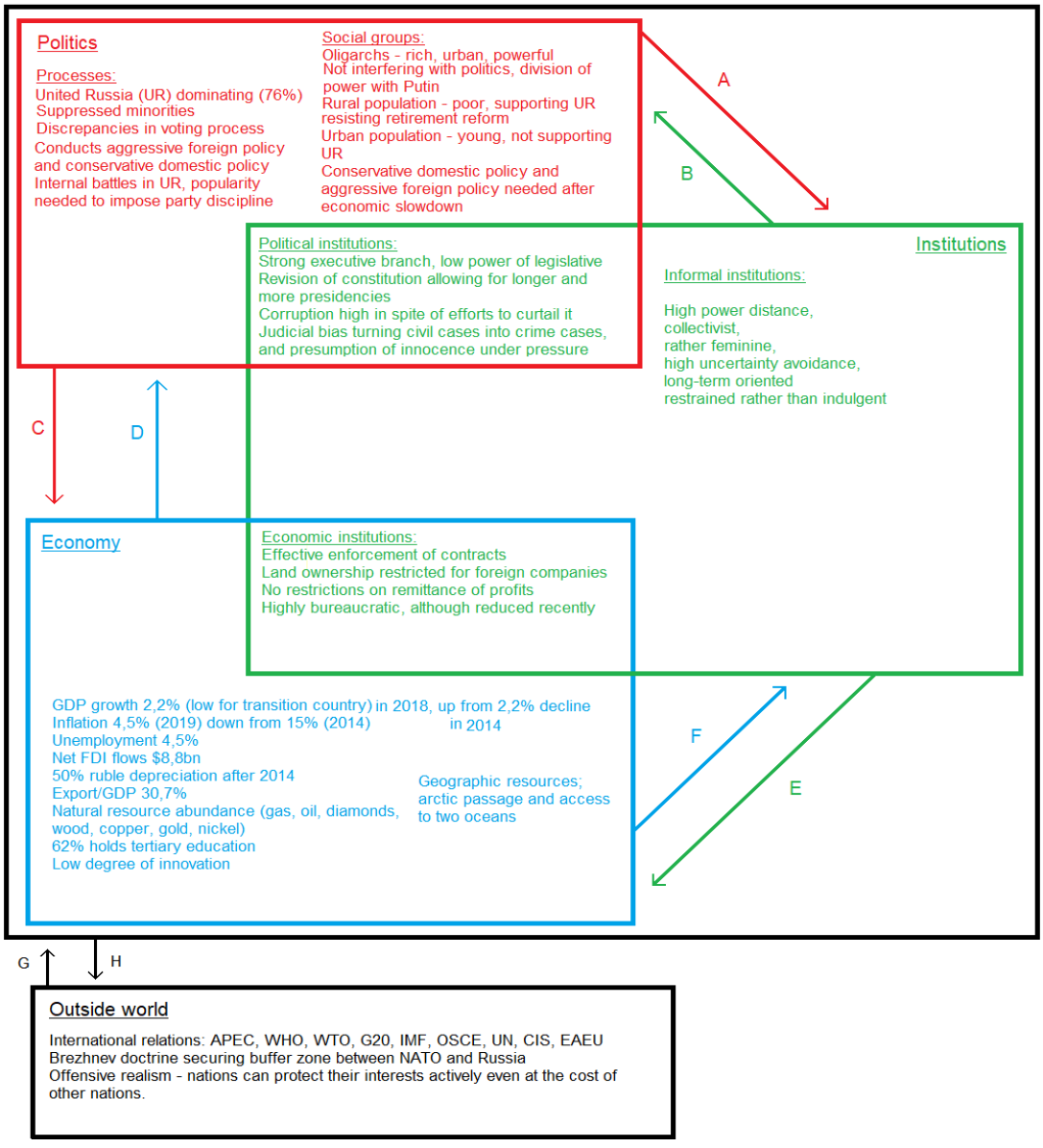
- Meat of bovine animals; fresh, chilled or frozen
- Pork; fresh, chilled or frozen
- Fish and crustaceans, molluscs and other aquatic invertebrates
- Milk and dairy products
- Vegetables, edible roots and tubers
- Fruits and nuts
- Sausages and similar products of meat, meat offal or blood
- Finished products, including cheese and curd (cottage cheese) based on vegetable fats
- Foods (milk containing products on the basis of vegetable fats)

It appears from the decrees that the origin of the products determine whether they are affected by the import ban, making transport through neutral countries invalid as a method of circumvention unless relabeling of the country of origin takes place.

Another interesting feature is the duration of the decree, which is specified to be one year from the date of signature, thus ending on the 6th of August 2015. The sanctions, however, were extended on several occasions; on the 25th of June 2015, when the ban was extended to the 5th of August 2016 and the list was modified to exclude lactose-free milk and other lactose-free dairy products, and only finished products containing 1.5% or more milk fat and exempting goods destined for baby food. Subsequently, the ban was prolonged until the 31st of December 2017, and extended for one year in the following years, with the current decree ending on the 31st of December 2020 (European Commission, 2019).

5.2: Mechanisms in the politics, institutions, and economy of Russia

In order to understand the background of the sanctions and improve the forecasting capabilities of companies concerning institutional changes in Russia, it is necessary to improve the knowledge of the political, institutional, and economic mechanisms shaping the institutions of the country. One of the most appropriate tools in assessing these societal characteristics is the PIE-model, the political-institutional-economic model, as it focuses on the dynamics within and between these three pillars of society which all affect businesses (Mygind, 2007). There is, however, a need for complementing the framework with theories from the spheres of international relations, political science, and cultural analysis. For this reason, the framework is merely a guiding tool allowing us to dig into the mechanisms leading to the events outlined earlier, where a full overview is given below in model 7.



Model 7: Overview of the PIE-model for Russia

5.2.1: Politics

Russian politics has seen a major shift in the 1990s from being an administrative task with little parliamentary dynamics to a pseudo-democratic game of signaling raw power, meaning that the ruling elite previously had a stable foundation to implement policies. As a communist one-party state there were no serious contenders to the executive power, and the great shift from communism to democracy in the 1990s has not changed the stability of Russian politics but added a new dimension. This new dimension is the illusion of free elections, where long-standing incumbent Vladimir Putin has had to prove himself as a capable and effective leader.

5.2.1.1: Political processes

With the ruling party, United Russia, having won the election on the 18th of March in 2018 with 76% of the seats in the State Duma, and a historical majority since the inception of the Russian Federation, there is no active opposition and usual democratic process as is known from the Western countries (PRS Group, 2018). Minorities are suppressed, as seen in Chechnya and other areas in the North Caucasus area. Mainstream media is controlled by the government, either through ownership or censorship, leading to reduced coverage of political parties in opposition to the government. The organization OSCE sent a mission to observe the most recent Duma elections, finding *"discrepancies in voting, counting, and tabulation procedures, and noted that the elections took place in an atmosphere which seriously limited political competition"*(ibid.). Presidential elections exhibit the same support for United Russia, as the incumbent received 76.7% of votes given, where his *"aggressively nationalist foreign policy helped to sustain his popular support",* further lending to the notion that the president conducts policy from a platform of raw power and nationalism (ibid.). Even though United Russia is the dominating party in the country, there have been battles between different factions, and Putin's popularity in the country is related to his ability to impose discipline within the party (ibid.).

5.2.1.2: Social groups

As a result of a high level of inequality in Russia, there are very wealthy and influential groups, sometimes referred to as "oligarchs", while there is also a large number of people living with a low income. The oligarchs usually reside in the larger cities, e.g. Moscow or Saint Petersburg, while the income is quite low in the rural areas of Russia. These two groups are both powerful and important factions in Russian politics: one has wealth and power, the other is large in numbers. In addition to these factions, the liberal, young, intellectual segments in the major cities pose a continuous threat to Putin's stability, while the population in the rural, impoverished provinces far away from the major cities has been increasingly negative towards the government as a result of the proposal to increase retirement age to 65 (Fokht, 2019).

As can be seen from election results of 2016, the two large cities of Moscow and Saint Petersburg voted less frequently for the United Russia party, while many rural provinces, especially in the South and Central areas, provided the party with impressive results (Россия сегодня, 2016). During the prosperous era between the year 2000 and the financial crisis, the popularity of the president increased along with the significant

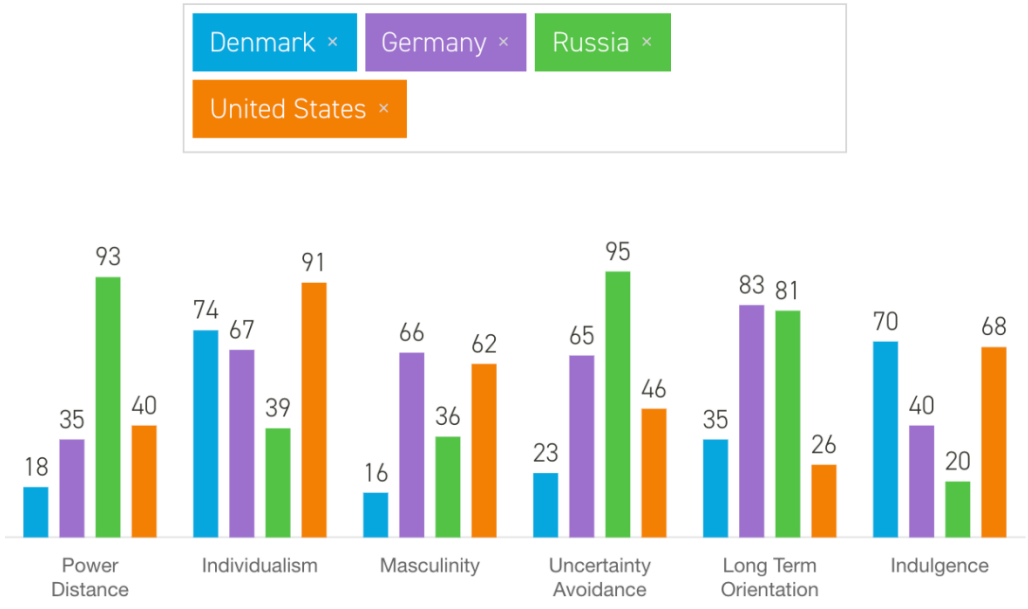
increases in real income of the population. More recently, however, the slowing down of the economic progress has facilitated the need for showcasing power. This usually takes place through conservative measures in domestic policies and an aggressive foreign policy, as mentioned earlier (Taylor A. , 2018). There has been a tradition for leaders of industry and business in Russia to abstain from entering politics if the government did not interfere in the business arena and these "oligarchs" were given a voice in the policies enacted. However, the generous campaign pledges of 2012 were to be financed by liberalization reforms which were not appreciated by the Russian business elite (PRS Group, 2018).

5.2.2: Institutions

The formal and informal institutions are at the heart of the problem investigated in this paper, and there is an abundance of information in the analysis of institutions available in uncovering the mechanics at play in the period before the imposition of the counter sanctions. One has to be selective, so only the most relevant cultural, political, and economic institutions will be examined below.

5.2.2.1: Informal institutions

Culture is quite difficult to assess without bias, so the most objective method of analyzing Russian culture is to use third party data examining different dimensions of culture. Hofstede's six cultural dimensions have been widely used and by using data from his own organization, an investigation can be carried out as regards the cultural dynamics relevant to the imposition of the Russian counter sanctions (Hofstede Insights, 2020). To compare the Russian cultural dimensions, three other national cultures have been chosen: the Danish, the German and the American. Denmark is chosen because the offset of the project is the effect on the Danish economy, while Germany and the United States are chosen because they are large economies involved in the sanctions. There are many large economies in the EU, but Germany is chosen because of its dominating position in European politics. The individual scores for the four nations can be seen in model 8 below.



Model 8: Cultural dimensions of Denmark, Germany, Russia and the U.S., (Hofstede Insights, 2020)

What comes to mind when observing the cultural dimensions of Russia, are the high scores in power distance, uncertainty avoidance and long-term orientation, while the country scores low on indulgence and individualism, while the culture is more feminine than masculine. The large power distance relates to the strong presidency, meaning that the Russian people is used to power inequalities, while the low degree of individualism and high degree of long-term orientation indicates that the population is able to endure hardness, especially when the collective requires it. This hardness has come with the initial European and American sanctions, and with restrictions to import Western goods, providing the leaders of Russia an argument for engaging in behavior with adverse effects on the economy. Contrary to this readiness to endure hardness, the high degree of uncertainty avoidance logically leads the population to be against strategic actions that could jeopardize the stability of the nation.

5.2.2.2: Political institutions

In Russia, the political institutions center around the president and the executive branch, which is relatively strong in comparison with the legislative branch (PRS Group, 2018). Additionally, the executive branch is largely insulated from legislative control, and power is consistently being consolidated around the president (Gill, 2002). Recently, the constitution is in the process of being revised, with signs showing that the incumbent president could serve until 2036 should the changes be approved by the parliament (Quinn, 2020). Amending the constitution is an example of how powerfully the president can affect the political environment, when his party has the majority in the parliament and the opposition is fragmented and suppressed.

Corruption is still a large problem in Russia in spite of efforts to curtail it, where several high-ranking officials have been charged with corruption charges and legislative amendments have been passed in order to reduce corruption (PRS Group, 2018).

Russian courts have a tradition of turning civil cases into criminal cases with a bias to convict, while presumption of innocence tends to be ignored by the Russian courts. It is recommended to receive professional legal counsel when operating in the country as a foreign individual or corporation (ibid.).

5.2.2.3: Economic institutions

Enforcement of contracts is effective where the country is ranked highly on international comparisons, but Russian companies are often given advantages over foreign ones. This is seen in public procurement, where the law states that Russian companies must always be chosen unless the product or service can only be obtained by foreign companies (PRS Group, 2018).

Land ownership is also restricted with special zones around ports or land borders only available to Russian companies, and a maximum of 50% ownership of agricultural land, leading to foreign investors often leasing land for the maximum period of 49 years. Furthermore, the establishment of or investment in companies within “strategic sectors” by foreign investors must be approved by the authorities (ibid.).

The enforcement of intellectual property rights is challenged with a decline during recent years, and reports show that this area is not a priority for government officials, particularly visible within the areas of trademark counterfeiting and copyright infringement (ibid.).
Remitting profits for MNEs operating in Russia is generally not restricted, and the Central Bank of Russia controlling the Ruble is not tying the currency to any foreign currency leaving decisions of monetary policy increasingly at the discretion of the Russian government (Condon, 2019).
Bureaucracy is omnipresent in Russia, especially in relation to customs, financial services, establishment of corporations and many other facets of business life, often requiring entering foreign investors to establish subsidiaries in Russia (ibid.). It must be noted, though, that the Russian government has made an effort to reduce this bureaucracy by implementing 34 reforms increasing their ranking in the Doing Business index while only three reforms lowered their ranking, indicating a willingness to make business in Russia more convenient (World Bank, 2020).

5.2.3: Economy

Russia is experiencing increasing growth rates in GDP per capita with a growth of around 2.2% in 2018, which is still rather low for a transition economy. Inflation is also at a – for Russian standards – low level with consumer prices increasing by 4.5% in 2019 compared to 15% in 2014. Unemployment rates are decreasing to currently 4.5% in 2019, but net FDI flows have also decreased the last three years to a level of around $8.8B. Contrary to the declining investment flows, exports as a share of GDP has increased over the last three years to 30.7%, although it is hovering around a stable level since around year 2000. Common for all these economic indicators is the worsening around the years 2014-2015, where the Russian GDP per capita was declining with around 2.2%, while the nominal exchange rate has depreciated 50% from a long-term stable level at around 30 rubles per US dollar to around 62 rubles per dollar in 2019 (The World Bank, 2019). The economic impact of the sanctions has been significant, but the Russian economy was in a significantly better state in the years before the annexation of Crimea. The engagement in the military conflict could have been partly fueled by an economy recovered from the financial crisis of 2007-2008.
The Russian economy relies heavily on the exports of natural resources, gas and oil in particular, while also diamonds, wood, copper, gold and nickel are important in terms of export revenues (Bradshaw & Connolly, 2016). Geographical resources also play an important role in the Russian economy, where the location between Europe and China provides great options to supply whatever market is most profitable. Furthermore, the Northern Passage could become ice-free in the future opening up profitable trade routes.
The educational level in Russia is rather high in terms of attainment of tertiary education, ranking third in the world with around 62% of the population holding tertiary degree. This does not, however, necessarily translate into an efficient work force capable of increasing the value of the production, as Russian companies struggle with innovation, limiting the long-term quality of the economy as it is harder to adapt to changing market conditions (Sanghi & Yusuf, 2018). Apparently, the Russian resources are in good stock regarding

natural resources, geography, and educational level, but the business infrastructure of the country could face difficulties in the long term.

5.2.4: International relations

Russia is a member of a range of global organizations such as the APEC, WHO, WTO, G20, IMF, OSCE, UN including a permanent seat in the security council, the organization of former Soviet nations, CIS, the Eurasian Economic Union, EAEU, and many others (CIA, 2020). These affiliations with the international community indicate commitment to the general codes of conduct used by the world, but there are also important organizations where Russia is not a member. These include EU and NATO, most notably, signaling that they are turning their attention towards other parts of the world, and held up with the membership of CIS, they are still closely tied to former communist countries and countries in opposition to American-led Western dominance. China, Venezuela, Iran, and Cuba are examples of the building of relationships with other nations than those in Europe and the West in general.

As was mentioned earlier, the Brezhnev doctrine shaped Russian foreign policy after 1968, leading to enforcement of the buffer zone created between the NATO countries and Russia (Chifu, Nantoi, & Sushko, 2009). Following the breakdown of the Soviet Union, many Eastern European countries started to align more with Western Europe than with Russia leading to both EU and NATO membership to several of these ex-Soviet states. The Brezhnev doctrine has likely survived in some form, as the protection of Russian citizens was one of the arguments for annexing Crimea. This could be seen as an *offensive realist* approach to international relations, where it is generally accepted for nations to protect their own interests actively and pursue self-interests, even at the cost of other nations (Reus-Smit & Snidal, 2008, p. 139). It is not clear if there is also a touch of idealism mixed with the opportunistic realpolitik executed in Russian foreign policy, since the powerful president Putin was raised within the Soviet system and the close ties to ex-Soviet states through CIS could point towards ideological desires to regain the former glory. The realist approach to foreign relations makes a trade war justifiable, as they are seen as a necessary loss in order to preserve the nation states against European encroachment from the West towards the East (ibid.).

5.3: Dynamics within the PIE-model

Once the various characteristics of Russian society have been mapped, it is convenient to turn the attention towards the dynamics changing the political, institutional, and economic spheres of the country. The methodically most structured way to go about this uncovering of the dynamics is to focus on each of the aforementioned relations. In order to limit the scope of the analysis of the dynamics of the PIE-model, the Russian society will be examined under one in relation to the effect of the surrounding world. For an overview of these relations, please see model 1 where both the characteristics and the relations are illustrated.

5.3.1: Relation A - Politics to institutions

Even though the political environment in Russia is characterized as stable, the struggle for remaining in power has led President Putin to amend the constitution in a way allowing him to run for election again once his term ends in 2024. At the same time, protests against the political elite and lack of democratic processes are popping up around the country, mainly in Moscow, where especially the young, liberal segment has been the leading social group aiming at reducing the power of the presidency (Hodge, 2019). In addition to the political forces pulling in different directions regarding the political institutions, the economic policies of the government have changed the economic institutions as well. Raising the retirement age to 65, just below the average male life expectancy of 66, is an example of how the government in Moscow is reacting to adverse economic changes affecting the country (Fokht, 2019).

5.3.2: Relation B - Institutions to politics

Institutions shape the political interactions within society, and as such the impact of institutions on politics cannot be overlooked when considering the ongoing changes in the political sphere. In the context of Russia, these changes are evident when observing the informal institutions, where culture is changing along with the art scene. Especially young Russians get a more positive view on Western nations through their dominance in music, movie and other production of art (Pilkington, Omel'chenko, Flynn, & Bliudina, 2002, p. 53). But, even though Western movies are among the most popular, there has recently been a trend showing increasing quality and quantity in domestic movie production, often with a patriotic theme (Macnab, 2018). This flow of ideas can serve to change the political processes as seen in the protests occurring with intervals in Russia and put up a resistance against policies implemented with the aim of consolidating power.

5.3.3: Relation C - Politics to economy

Fiscal policy is one of the primary tools policymakers use to regulate the economy, and in the case of Russia, the military spending increased significantly from 2011 and onwards (Warsaw Institute, 2019). These military investments have put a strain on an economy already exposed to significant volatility in oil revenues (Reuters, 2020), where the increase in retirement age mentioned earlier might be one of the fiscal changes needed to mitigate the budgetary challenges.

Furthermore, the policies of the president allying with the so-called oligarchs to divide political and economic power, and the declining investments in R&D pose significant challenges to start-ups and other SMEs relying on innovation (GMIS, 2019).

5.3.4: Relation D - Economy to politics

When discussing the Russian economy, it is relevant to note that it is based largely upon the extraction and export of natural resources. When the oil price declined both during the financial crisis of 2008 and after the annexation of Crimea, the government had to reform the economy. These economic reforms have stabilized government revenues partially, but the president has had to adapt the economic policy in order to signal stability and deliver on the generous campaign promises. An example is the labor market reforms raising the age of retirement to 65, which most likely is a political maneuver used to balance the federal budget.

An additional dimension to the relation between economy and politics, is the fact that the deteriorating Russian economy is also affecting the policies. As a result of the international sanctions, depreciation of the Ruble and declining prices of the main export commodity, oil, the president put the blame on Western countries and operate from a platform of nationalism. In this regard, the sanctions were both a cause and a consequence of nationalism, and the process seems to be re-iterative.

5.3.5: Relation E - Institutions to economy

Revenues from oil and gas make up a large fraction of the country's export and is controlled through state-owned enterprises such as Gazprom. Decisions on production volumes and infrastructure projects are made in these companies, which can be considered economic institutions, and the decisions made by companies like Gazprom have a significant effect on the total revenues of the government (Nahernak & Simpkins, 2008). Changing informal institutions help shape the culture in a way that encourages women to participate in the labor market on more equal terms with men, which increases the median real wages and increases competitiveness of domestic companies (Weinstein, 2018). Russia has traditionally had a rather high female labor participation rate which has dropped after the collapse of the Soviet Union and subsequently risen again gradually in Russia (World Bank, 2020).

5.3.6: Relation F - Economy to institutions

Corruption is an obvious link between the economy and institutions, where a declining economy could affect the quality of the institutions. Many developing economies are more prone to corruption than developed economies, and especially countries with large natural resources see high corruption levels (Williams & Dupuy, 2016). Russia is no exception, as they score relatively high on the perception of corruption while having abundant natural resources (Transparency International, 2018). Even if the case of Arla does not operate within the field of natural resource extraction, the country in which they operate is still affected by these dynamics.

5.3.7: Relation G - Effect of the surrounding world on politics, institutions, and economy

Russia has taken a major economic hit as a result of the international sanctions imposed on her, and the quality of life for many citizens has most likely dropped because the variety of products in their local grocery store has diminished. This affects the social groups and, in turn, the political processes in the form of protests and decreasing popularity as described earlier, but also affects the real incomes and the benefits received from the government, such as pensions. Being an economy with a low degree of export diversification, Russia is quite sensitive to changes in global factors such as oil and gas prices.

5.3.8: Relation H - Effect of politics, institutions, and economy on the surrounding world

This relationship is at the core of the entire analysis, and consequently needs little elaboration, but it is useful to pinpoint a few of the most important observations. The international sanctions were a direct response to the Crimean incident, and the decision to carry out this military operation was likely founded in part nationalism as a response to a failing economy, and part geopolitical strategy to maintain some type of buffer between NATO and Russia.

5.4: Concluding remarks

With the Crimean incident serving as the backdrop of the bilateral imposition of sanctions between the EU and Russia, significant restrictions on trade relations between the two parties ensued. The focus of this thesis is the sanctions imposed on the EU, and these revolve primarily around agricultural and food products. The sanctions were updated and prolonged on several occasions, and both the static characteristics of Russian society and their interactions help to explain the reasoning for the imposition of these sanctions.

Political dynamics point to an aggressive foreign policy as a result of the need to sustain the president's popularity ratings following a declining economy, but the expansionary foreign policy was at the same time one of the main causes of the current economic turmoil experienced in Russia. The institutional infrastructure of Russia, including the low degree of democracy and the consolidation of power around the presidency has created room for maneuvering allowing the imposition of sanctions without formal resistance. On the other hand, various social groups have protested against the political and economic situation in the country, with young, urban voters requiring more personal freedom and former supporters in rural areas oppose labor market reforms necessary to rectify the damage done to the economy which is partially caused by the ongoing trade war.

6: The impact of Russian counter sanctions on the Danish food industry

For the analysis of the impact of Russian counter sanctions on the Danish food industry, a two-sided perspective is taken, where both the aggregated effect is analyzed on a macro level and the specific effect on the dominant company in the Danish dairy industry, Arla, is analyzed on a micro level. For this purpose, the analysis will be split in two components: The aggregate effect on the Danish food industry as a whole and the effect on and strategic changes made by Arla.

The big picture analysis draws on data primarily from DST, where industry-specific data can be obtained, and from which four different parameters have been chosen. Firstly, the export to Russia is chosen as the primary indicator of the effect on the Danish food industry, as the Russian government specifically targeted exports from the EU within this industry. Secondly, the total foreign trade across all industries is analyzed in order to identify the overall trade exposure of the Danish economy to Russia. Thirdly, the industrial index is analyzed with the purpose of uncovering the change in economic activity in Denmark as a result of the changing trade environment, and thus separate the total effect on the Danish food industry on domestic and international activity. Finally, the employment in the food industry is analyzed to investigate whether the counter sanctions had any social implications, as employment has long been a key political indicator and thus has an impact on society at large.

Once the overall effect on the Danish food industry has been examined, one of the largest companies in the Danish food industry, Arla, will be analyzed with an offset in their annual reports from 2007 to 2019. The company is briefly presented along with a description of its relation to the Russian economy, and the impact

of the sanctions on their performance is analyzed. Subsequently, the strategic actions taken by Arla will be investigated with special attention given to the risk management strategy of the company and the adjustment of their strategy for the Russian market.

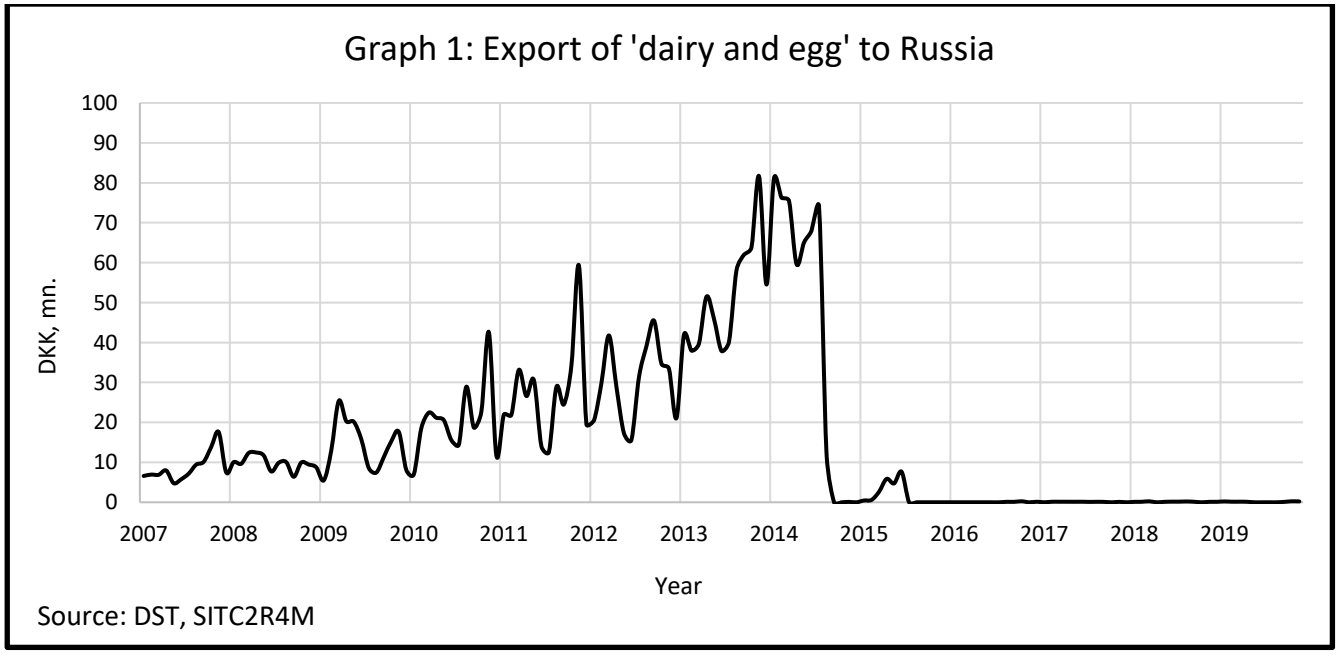
Through the analysis of key companies in the Danish food industry along with macro-level data, the goal is to uncover the economic impact of the Russian counter sanctions and provide qualitative data to exemplify the adjustments made by companies in the face of strategic risk according to contemporary academic literature.

6.1: The aggregated impact on the Danish food industry

The macroeconomic indicators of trade activity and its impact on society can be described mechanically, which is an important first step, but in order to raise the analysis to a higher level, it is necessary to put the development into perspective. Geography and time are appropriate dimensions to consider when comparing the shock to Danish food industry that the Russian counter sanctions likely had, as it allows for comparison to other economies contemporarily and other time periods in Denmark. Therefore, the analysis of the development in the Danish food industry will expand from mechanical description to comparisons with other EU economies and with other shocks received during the period covered by the data.

6.1.1: Food export from Denmark to Russia

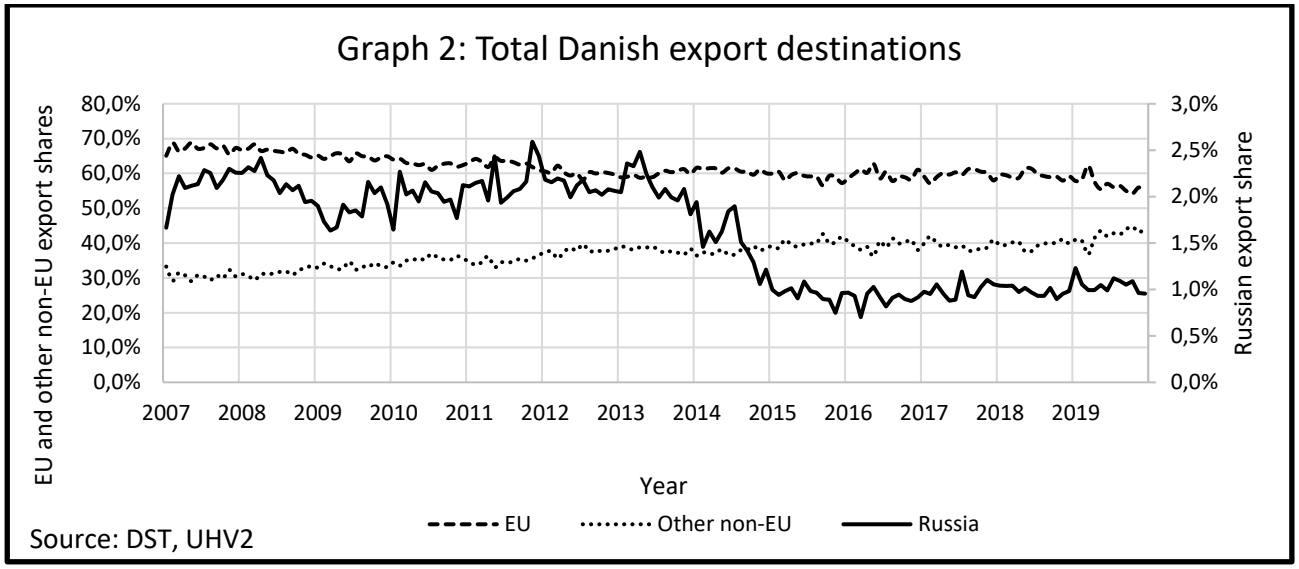
Starting off with the Danish food export to Russia, the UN provides official categories to classify products traded internationally under the Standard International Trade Classification abbreviated SITC (UNSD, 2020). It is among these categories we find the important category relating to the subject at hand: the Danish food industry. The category chosen is “dairy and eggs”, and the total exports from Denmark to Russia within these categories are depicted in graph 1 below.



When looking at the graph, it is clear that there was a major decline in exports around 2012-2013, where a decline from 74M to zero from July 2014 to September 2014 was observed.
This sharp decline in exports shows that the adverse impact of the sanctions on the Danish food industry is of a larger magnitude than that of the EU average, where the export of dairy products has declined by 11% (Zornitsa, 2017). The Danish economy being more affected by the sanctions than the average European economy points to the fact that the Danish economy is more exposed to the Russian economy through international trade.
When evaluating the sharp decline in the food export from Denmark to Russia, it must be noted that the depreciation of the Russian ruble has also reduced the obtainable revenue for Danish companies, and that this has a significant effect on the value of exports (Christen, Fritz, Streicher, & Hinz, 2016). The Russian economy has responded to the lowered influx of European goods by increasing domestic production and importing goods from non-EU countries in Europe, including EU goods which were transported through these countries (Shagaida & Uzun, 2017). Increased competition from domestic producers of food could maintain the low exports from Danish companies even after the sanctions have been lifted (Beck & Madsen, 2018).
However, an increase in the food share of the disposable income of Russian households could likely counter this effect (Shagaida & Uzun, 2017). The aggregated effect on Danish food exports in the long run is still uncertain, but there are dynamics derived from the counter sanctions which could have an impact on the Danish food industry in the future.
Comparing the major decline in food exports to Russia, there is no similar decline across the 13-year interval, but the most significant decline, apart from the one triggered by the Russian counter sanctions, was from April 2008 to December 2008 where the exports dropped by 90% from around DKK 220B to DKK 24B. This was during the financial crisis, which could have had an impact on the declining exports, as household incomes declined; but another explanation also related to household income changes is the oil price which declined by two thirds from May 2008 to December 2008 (U.S. Energy Information Agency, 2020).

6.1.2: Total exports from Denmark to Russia

In order to illustrate the exposure of the Danish economy as a whole to foreign trade with Russia, the total Danish export to Russia across all categories is examined. The food industries of Europe were the target of the sanctions and are thus at the heart of the analysis and the problem at hand. However, in order to examine the overall effect on the Danish economy, it is vital to investigate how significant Russia is to Denmark as a trade partner, and also how large a fraction of the Danish economy the food industry is. Below in graph 2 is the development of the total export from Denmark to Russia compared to the export to EU countries and to non-EU countries (excluding Russia).



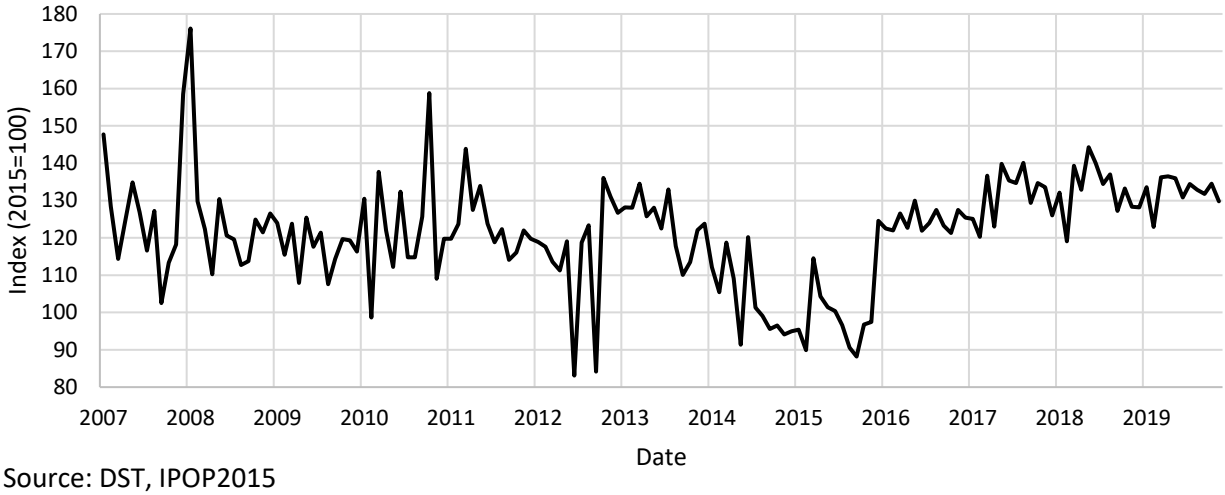
As can be seen in the graph, the exports to Russia across all product categories decreased after July 2014, from a level of around 2% of total exports to around 1% and has stabilized at a permanently lower level. Exports to EU countries has also been stable with a slightly decreasing trend, while the export to other non-EU countries has been stable with a slight upwards trend. A decrease from 2% to 1%, and thus halving the export share, indicates that the sanctions have had a significant impact on the foreign trade between Denmark and Russia. As with the Danish export of food, it must be noted that other factors not related to the sanctions most likely also have a significant effect on the lowered trade activity (Dreger, Kholodilin, Ulbricht, & Fidrmuc, 2016). The food exports have traditionally represented slightly below 20% of the total exports from Denmark, so the counter sanctions could have had an effect on the decline in the Russian export share, but not likely the full effect of 50%. While the share of total exports was halved, the nominal change in DKK was 26.2% from 2013 to 2014, which is put into perspective by total exports to all countries increasing 2.1% in the same period. In a European perspective, this is large decline in exports, where the average EU economy decreased 14% (Kholodilin & Netsunajev, 2019), indicating that the Danish economy is more exposed to the Russian economy than the average EU economy – perhaps as a result of the relatively large food exports. There have been large discrepancies between the exposure of the different countries, and where the effect of sanctions has a stronger effect on traditional trading partners, revealing why the Danish economy has been relatively more exposed to the sanctions (Klinova & Sidorova, 2016).

In the period from 2007 to 2019, the second largest decline in total export share to Russia also took place around the time of the financial crisis of 2008, when the share dropped from 2.4% in May of 2008 to 1.6% in May of 2009. This points to the oil price being more dominant than business cycle dynamics, as all countries were affected by the recession and thus should reduce the total export leaving the distribution of export recipients unchanged; but the export to the oil-dependent economy of Russia declined further depicted in graph 2.

6.1.3: Industrial production

The industrial production index can be used as a measure of industrial activity in Denmark, and when export is declining, the output is expected to decline as well. In graph 3 below the industrial production index is shown, containing data only for dairy production, as the case company examined later, Arla is operating in this industry.

Graph 3: Industrial production index



Source: DST, IPOP2015

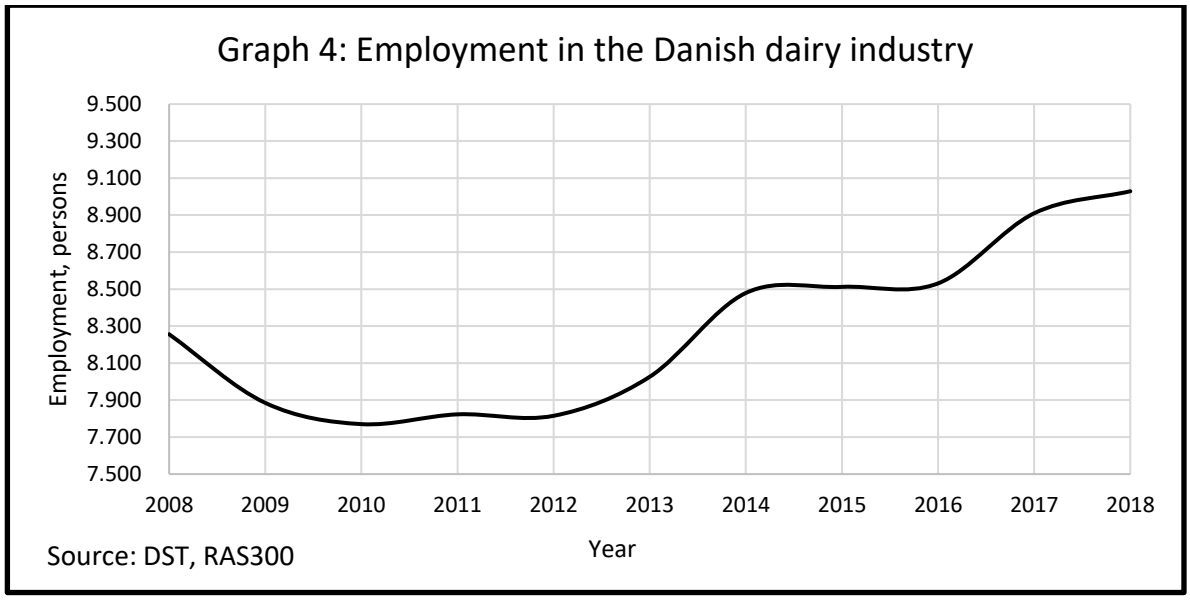
The overall picture of the industrial production index is, that the production of dairy is quite volatile, especially before the imposition of the Russian sanctions. Looking at the dairy industry, there was a decline in the index around the summer of 2014, but already in the beginning of 2016, the production increased significantly and has stabilized around this new level. In summation, there has not been a significant decline around the time of the imposition of Russian sanctions, as can be seen in the data concerning total exports and food exports. On the contrary, the dairy industry has actually increased its industrial output, while it has remained rather stable throughout the period, which could indicate that the dairy products of Denmark suffered an initial decline in 2015 before finding alternative distribution channels leading into markets with a higher demand.

Industrial output indicates whether the companies in the dairy industries had to reduce the activity level as a result of the reduced export to Russia. As it seems that the industrial production was increasing and the food export to Russia declined, the goods produced are either sold in other foreign markets or consumed domestically. If one assumes that the domestic consumption in Denmark remained stable over the period, the dairy products must have been diverted to other markets (Beck & Madsen, 2018). In doing so, it could therefore circumvent the adverse effects on the companies' profit statements, which will be investigated later.

In a European perspective, the Danish industrial production of dairy products exhibited high volatility, although there is no clear trend in the Danish production as can be seen in the European production, which has increased steadily over the period (please see appendix B).

6.1.4: Employment

Employment is the final parameter to consider, as this indicator has an effect on society and is thus of interest to the public and policymakers while also counteracting the social responsibility that many companies pride themselves on. The employment data in graph 4 below is, like the industrial production index, limited to the dairy industry in order to make the analyses comparable across parameters.



The first thing that comes to mind when considering the number of employees in the dairy industry, is the low volatility and increasing trend, where the employment in the dairy industry is decreasing from 2008 to 2010 and increasing from 2010 to 2018. Around the time of the imposition of Russian counter sanctions, in 2014, the upward trend of employment in the dairy industry halts and stabilizes for a few years, indicating that the sanctions could have postponed an otherwise anticipated increase in employment in the dairy industry.

According to macroeconomic theory, unemployment is inversely related to inflation and the tradeoff related to this relationship has remained a significant political battlefield (Phillips, 1958). In addition to the choice between safeguarding employment and ensuring a low inflationary level, employment is also an essential concern for many voters and workers in most societies (Newport, 2018). Offshoring of jobs in the nineties and beginning of the new millennium has raised a feisty debate in Western countries (Mankiw & Swagel, 2006), highlighting the importance of this indicator among the public opinion and thus policymakers. The significance of employment as an indicator of societal development can therefore not be questioned, and it has been a key concern for many companies to do an effort in combating unemployment. In addition to this long-term trend of offshoring and the subsequent trend of reshoring, i.e. repatriating business activities,

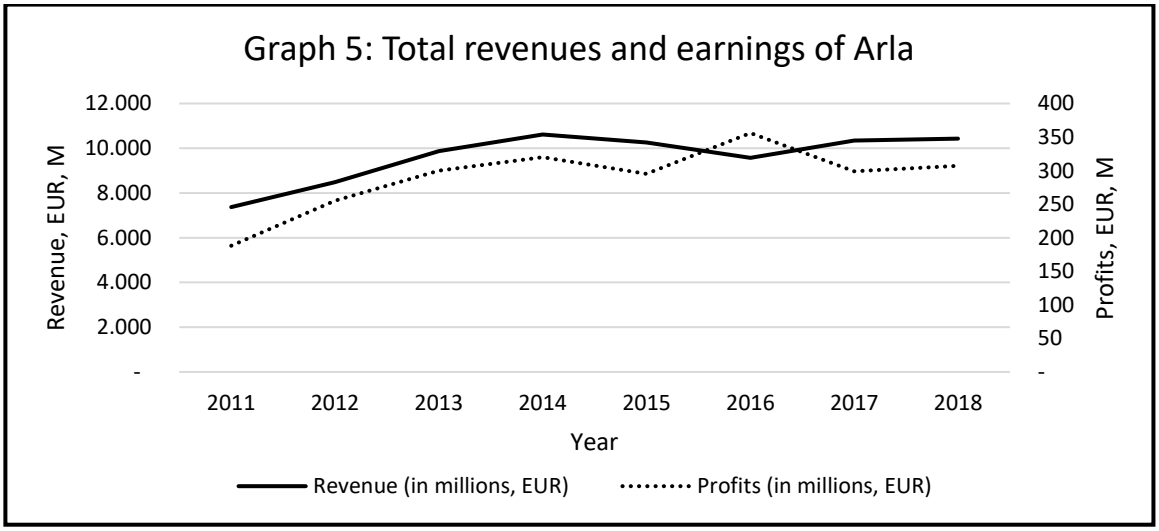
global economic business cycles have strong effects on employment. The decline in employment after 2008 is most likely related to the financial crisis, where global demand decreased leading to layoffs in many industries.

Maximizing employment is primarily a challenge for policymakers and regulators and so relates more to the overall effect on the Danish economy, but as will be examined in the subsequent analysis, the theme of employment will also play a role in the strategic behavior of individual companies.

If one were to examine the broader effects on the Danish economy outside embargoed goods, e.g. suppliers to dairy farms or factories in Russia demanded as part of the Russian import substitution strategy, it would be evident that the adverse effects on exports from Denmark were also reduced. It has been shown that around 90% of the trade decrease is affecting non-embargoed products on a European level (Crozet & Hinz, 2016). This fact points to large discrepancies in the distribution of export declines, where food and other products were being exported less frequently and other goods were exported at the same volume or perhaps at a higher volume.

6.2: The impact on Arla

Arla is a Danish-Swedish dairy company originally founded in the 1880s as a cooperative and is today owned by 9,759 milk producers across seven countries, having 19,174 employees. In 2019, the company was operating in 151 countries and reporting revenues of €10.5B which earned them a profit of €2.2B (please see appendix A). As can be seen below in graph 5, they have experienced growth across both parameters but have stagnated during the last five years. They are producing milk, cheese, butter, bacterially-fermented milk products (e.g. yoghurt, sour cream, kefir), milk-based beverages, ingredients, milk powder (including infant formula) and a range of other dairy products (Arla, 2019).



6.2.1: Operations in Russia

In 2007, the company established a JV, Arla Artis LLC, with a local partner in Russia, Molvest, focusing on sales of cheese and butter products (Arla, 2007). Although it was not possible to retrieve data from 2007 to 2010, it is clear from graph 6 below, that the Russian division of Arla saw its revenue increase until 2013, when the revenues decreased by 11% in 2014 and further by 64% in 2015.

While the JV established in 2007 had a purely sales-oriented function, Arla invested in another JV with an aim to produce cheese in 2013. They hoped to achieve this goal by building a factory in collaboration with Russia's third-largest dairy company, Molvest Group, and planned to commence production in the first quarter of 2014 (Arla, 2013).

In 2014, 36 employees in Russia and 79 employees in Denmark were made redundant as a direct consequence of the imposition of the counter sanctions, as the trade barriers reduced overall demand of Arla products. In spite of the layoffs, the production in Russia continued using local products, and even modernized the production facilities spending 3 million euros and purchased a new production line for cream cheese (Arla, 2014). The production facilities have continued production throughout the duration of the counter sanctions as the main input, raw milk, stems from Russian farmers, while components for this production can be imported from Denmark freely (Sennov, 2016).

While local production in collaboration with the local partner Molvest continued, or even increased, the exports from EU countries came to a halt as a consequence of the counter sanctions. This resulted in a strategic deprioritization of the Russian market, as Arla put it:

"(…) Because of the recent embargo of European goods, we will not increase our strategic efforts in Russia. We will try to retain the loyalty of the consumers towards the Arla brand by offering locally produced yellow

cheese and melting cheese within retail and foodservice. Existing and new products will be produced by our local partner Molvest". (Arla, 2015, p. 45)

In spite of the deprioritization of Russia, the country is designated as a key region driving value for the shareholders of Arla. This ambiguity in the market strategy could best be described as a long-term prioritization with reduced revenue targets in the short term. It seems that Arla's logic in 2015 was to invest in brand awareness so the consumers will return to imported Arla goods when the counter sanctions have been lifted, but they will not set an aggressive growth target for the country. The reduced aggressiveness can be seen in the revenue targets of 2015, where they aim at maintaining the same revenue in Russia while expecting growth of 100%-300% in other growth markets.

Another change in the reporting of the performance in the Russian market is the consolidation of a group of countries known as "Russia and other countries". Until 2015, Russia was an independent region in the annual reports of Arla, making it relatively easy to assess the performance of Arla in Russia before 2015. This is why the data used for graph 6 ends in 2015, because it is not possible to compare Russia to "Russia and other countries". It is not explicitly stated why Russia became part of a larger group of countries, but it could be an attempt to cover the poor performance by blending it with better performing markets or because the products exported to Russia transits through a third-party country.

6.2.2: Strategic actions taken

In 2014, Arla developed a three-step risk management approach: risk spread, calculated risk and adaptation. Risk spread relates to diversification, where sales, production and wholly owned subsidiaries are established across the globe. Calculated risk entails the assessment of risks versus potential, where risk-taking is coupled with growth opportunities as some markets might be too significant to leave or stay out of. Adaptation presents itself as monitoring new market opportunities and remains flexible in order to minimize strategic and operational risk. These three pillars of risk management will be central in the analysis of Arla's risk management efforts and are compared to the actions taken.

6.2.2.1: Risk spread

Arla was actively pursuing a diversification strategy where products are to be marketed in a range of different growth markets in order to avoid 'black swan' outcomes – unlikely events with high potential damage to the company (Arla, 2014). These other markets include the "Middle East and North Africa", "China", "South East Asia", "The Americas", and "Sub-Saharan Africa", which, together with "Russia and other countries", represent the six regions in Arla International.

Diversification has long been seen as a means to reduce risk, both within the sphere of international business and finance. International diversification is shown to reduce profit variance (Rugman, 1976), while diversification is a cornerstone of modern portfolio theory (Markowitz, 1952). In this sense, Arla's strategy of geographical diversification is theoretically well-founded, and judging from graph 5, there has been no

significant negative effect on the overall financial performance of Arla as a result of the Russian counter sanctions.

6.2.2.2: Calculated risk

The long-term strategy for Arla in 2014 was to remain active in the Russian market in order to avoid wasting consumer trust and invested capital. The company aimed at reaching this objective by maintaining the awareness of Arla brands in Russia during the crisis through the marketing of locally produced cheese products and increase yearly production from 1,000 tons to 8,000 tons. Simultaneously, relationships with local partners were to be strengthened while the opportunity to cooperate with dairy producers from countries not targeted by sanctions was explored (Arla, 2014). The Russian farmers are not shareholders of Arla, and that the expanded cooperation with local farmers is a response to the urgent need for raw materials in order to maintain Arla's market presence and brand awareness.

The establishment of JVs with inherently reduced risk associated was also one of the tools being used in order to manage risk (Arla, 2014). JVs established with local players have reduced risk compared to greenfield investments or acquisitions (Lee, Biglaiser, & Staats, 2014), and so can be seen as a risk mitigation tool for Arla, or at least a cautionary step in the internationalization process ranging from initial export to sales offices in 2007 to production through a JV in 2013.

6.2.2.3: Adaptation

In 2016, Arla constructed a mapping of strategic, operational, and new risks where the likelihood and potential impact of these different sources of risks were analyzed. In this mapping, "political instability and turmoil in new markets" were designated a moderate (near-high) likelihood and moderate (near-high) potential impact. The annual reports mentioned that protectionist policies and recessionary trends in especially oil exporting economies could reduce the local purchasing power, which is aimed at the Middle East and Sub-Saharan Africa but could also include Russia (Arla, 2016). Connecting the oil price and economies sensitive to volatility in the oil price to reduced demand is in line with the previous analysis of the Danish food industry (see graph 1), where oil price declines were indicated as a factor leading to decreased exports from Denmark to Russia.

Research points to firms in the manufacturing sector choosing more integrated entry modes when facing high political or governmental risk (Brouthers, Brouthers, & Werner, 2002). This is reflected in the actions taken by Arla when they shift from export to managing the JV with Molvest, where the primary risk is the unstable supply of high-quality milk (Arla, 2014, p. 51).

6.2.2.4: Other risk management tools

When commenting on the adaptation of strategy to political instability, analysis and lobbying efforts are part of the strategic toolbox, which naturally leads the analysis towards investigating these as risk mitigating tools (Arla, 2016, p. 64).

Another element of Arla's strategy is to increase profitability of the existing products, whereby they can reach higher revenue targets even with a limited production capacity. Profitability is a recurring topic in the annual reports and does not relate solely to the company's operations in Russia but is rather a global strategic aim. This is highlighted by an increased focus on collaboration with other companies, e.g. Starbucks, but can also be detected in the investments in marketing of "strategic brands" such as Lurpak, Arla, Castello and Puck (Arla, 2016, p. 31). The profitability of Arla hinges on the "combined effect of transferring the milk received to value-added products and to more profitable markets", thus underlining a strategic effort to localize the most profitable markets and products (Arla, 2019, p. 83). The focus on profitability is most likely a result of the corporate structure, where input prices are largely retransferred to the shareholders, and revenue maximization and production efficiency become the primary competitive parameters.

6.2.3: Effect on Danish economy

Arla is the largest dairy company in Denmark and as a result, their actions impact all of the Danish dairy industry. In order to assess how relevant Arla as a company is to the analysis of the national dairy industry as a whole, it is necessary to analyze how large a fraction of the industry the company makes up. To achieve this goal, the revenue and employees of the company will be compared to the aggregated numbers pertaining to the whole industry.

In 2017, there were 5,800 Danish employees in Arla, while the total employment in the dairy industry in 2017 was 8,910, meaning that Arla employed around 65% of all employees in the Danish dairy industry (Madsen, 2018). There have only been few reported layoffs as a result of the Russian counter sanctions, as mentioned earlier, and the total employment in the Danish dairy industry has been rather stable with an increasing trend. This indicates that employment is insensitive to the decline in revenue experienced and could be related to the different risk mitigation strategies implemented by Arla, i.e. risk spread, calculated risk and adaptation.

In 2012, Arla's total revenue stemming from the Russian market was DKK 634M, while the total Danish exports to Russia within the category of "dairy and eggs" were around DKK 360M. These numbers are not directly comparable for a couple of reasons: the aggregated category includes both dairy and eggs, and a part of Arla's revenue in Russia stems from products that were not imported from Denmark. However, some fraction of the total Danish dairy and egg export stemmed from Arla's products, so in spite of not being able to compare the numbers directly, the relationship between the two values prove that Arla is the dominating player in the Danish dairy industry. Being the dominant player in the industry, the capacity of Arla cannot be compared to the average food company exporting to Russia, as Arla has significant capabilities as regards

the analysis of changes in the external environment. Additionally, the lobbying efforts will be more difficult for smaller companies which present less market power, and the global nature of the company enables it to shift attention to other markets, pointed out earlier.

Thus the societal effect of the Russian counter sanctions on Arla is limited despite the significant size and market share of the company in the Danish food industry.

6.3: Concluding remarks

The overall effect of the sanctions has been negligible for both the Danish food industry and for Arla, although the interaction with the Russian market has experienced severe declines. The Danish food export to Russia almost disappeared, and the total trade with Russia was halved, but the industrial index surged to a higher level than before the crisis, while the employment in the food industry remained stable. Arla experienced sharply declining results from activities on the Russian market, but the overall financial performance of the company did not suffer from the import ban. The company has implemented risk management strategies emphasizing diversification and long-term focus, but still had to lay off employees and reduce the variety of products manufactured in Russia. Finally, it was found that Arla is a dominant player in the Danish food industry, and that this provides the company with benefits not available to smaller companies, e.g. analytical capacity, and lobbying power.

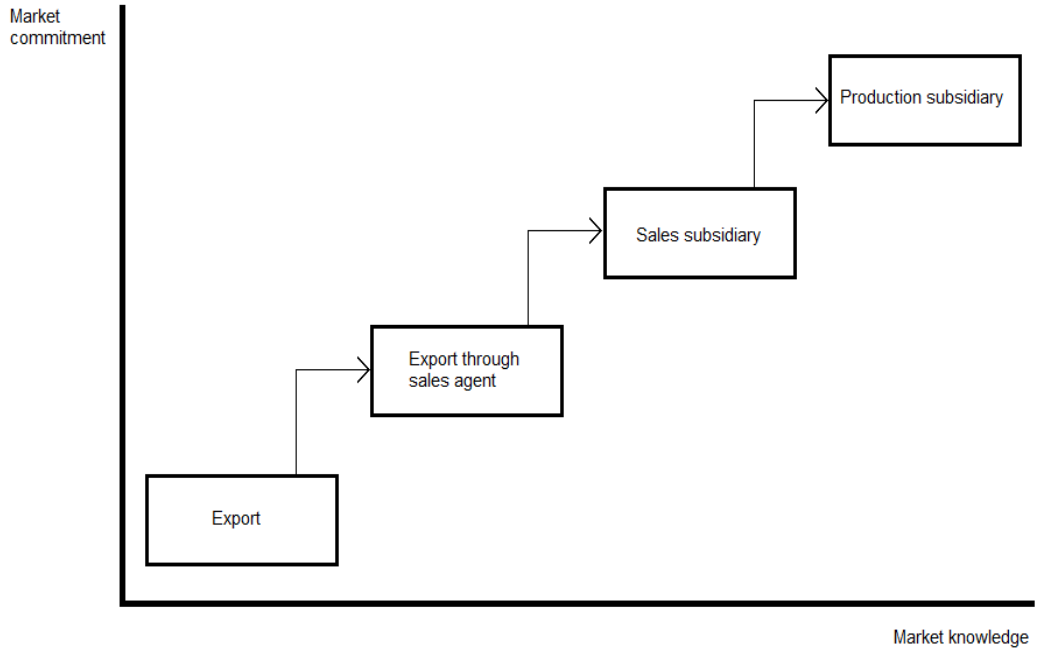
7: Four tools for companies facing strategic risk

When uncertainty arises in the external environment of a company, strategies often have to be adapted or even reformulated altogether. Companies encountering these shifts in the external environment have a set of options which can be large but falls within different overarching categories such as adjustment of international activity, diversifying to other markets, restructuring of supply chains, lobbying for beneficial changes in the environment or even succumbing to illegal practices. The internationalization process explains the way in which companies increase or decrease commitment in different markets and is both a tool used by Arla and a method which has received significant academic attention. Restructuring of supply chains has also been used by Arla, but has, in relation to risk management, not received the same amount of attention as the internationalization process, which makes this tool an interesting perspective to add. Diversification is a tool used by Arla, although the geographical dispersion of activity is not directly related to the current case of the Russian counter sanctions, but the academic attention given to this field is undeniable. Finally, lobbying is a tool mentioned briefly by Arla itself, but was primarily included in the report as it relates to the interaction between businesses and the institutional context in which they operate. On a finishing note, a few other tools, which do not deserve the same amount of detail as the four main tools, will be analyzed solely with the purpose of not leaving any stone unturned in relation to the risk mitigation strategy used by Arla and its competitors. These different options will be analyzed and subsequently compared to the case of Arla and the findings brought forward earlier in the report.

7.1: The internationalization process

One of the most important models of the internationalization process of companies is the Uppsala model of internationalization, where the company alternates between increasing knowledge of the foreign market and the commitment to this market in an incremental process (Johanson & Vahlne, 1977). The model was later extended to consider markets as network where knowledge is gained by engaging in relationships rather than by operating in countries with a low psychic distance or integrating more deeply with the market (Johanson & Vahlne, 2009).

The so-called *establishment chain* lists four different levels of foreign market commitment: irregular export, export via sales agents, sales subsidiaries, and production subsidiaries as illustrated in model 2 below:



Model 2: The establishment chain, illustration not provided by the source, (Johanson & Vahlne, 1977)

Later, the theory was further extended by other authors to include reductions as well as increases in commitments in foreign markets as a method of adapting to changes in the external environment. Choosing to establish a JV rather than a production subsidiary can thus be seen as the valuing of flexibility due to the institutional uncertainty (Santangelo & Meyer, 2011). More specifically, the institutional framework can influence the strategy, leading to a gap between the intended and realized strategies as was described in other theories earlier. Without having examined the overall corporate strategy of Arla, it seems as if the strategy falls within the category "umbrella strategy", where management is *"in partial control of organizational actions, defines strategic boundaries or targets within which other actors respond to own forces"* (Mintzberg & Waters, 1985). It seems, though, that the company also strategizes partially through the "planned strategy" approach, where formal plans have been formulated by central management in Denmark, built to thrive in stable, predictable environments (ibid.).

Reducing or increasing commitment to foreign markets is thus one of the methods used to adapt to changes in the institutional environment, which was also seen in the case of Arla. In 2013, the company decided to increase their commitment to the Russian market by establishing production in the country through the Molvest dairy factory. After the implementation of the Russian counter sanctions, the company fired employees related to the export of goods from Denmark to Russia. This can actually be seen as a method of increasing the commitment to the market as the focus has shifted away from export and onto production.

A method to reduce commitment utilized by Arla, is the focus on only a subset of the product portfolio instead of offering the full selection of products to the market. Specifically, the company produces a few,

strategic products such as yellow cheese while disregarding other products which require a larger production setup.

It has been demonstrated in the case of China, another emerging economy, that the establishment of strategic partnerships as Arla did with Molvest can be seen as an entry mode with a smaller degree of commitment, where no equity is invested but the liability of foreignness is overcome. Building a relationship with a local partner in the host economy is a way of increasing the network of the focal company and bypass obstacles related to being an outsider with no or few relations to stakeholders in the host economy (Soh & Yu, 2010). Seeing that the psychic distance between Denmark and Russia is smaller than the distance between Denmark and China, it is likely to be easier to overcome the liability of outsidership in Russia than in China (Håkanson & Ambos, 2010). Furthermore, the fact that the institutional environment of Russia is quite different from the Danish, illustrated by the large psychic distance between the countries, and that Arla has more than 10 years of experience with the Russian market further reduces the uncertainty when committing to the Russian market, i.e. shifting from export to the establishment of a JV with a local firm (Hilmersson & Jansson, 2012).

Adjusting foreign market commitment can be seen as a general tool to mitigate institutional risk, as a reduction in the commitment increases the flexibility needed to address the type of shock coming from the external environment (Li & Li, 2010). Choosing to establish a JV could is also be seen as a risk reducing factor in itself, as wholly-owned subsidiaries entail a greater level of risk in transition economies (Demirbag, McGuinness, & Altay, 2010). However, some reports point to language barriers eliminating the preference of JVs over wholly-owned subsidiaries, potentially leading Arla to be more indifferent between these two options from a strategic risk perspective (López-Duarte & Vidal-Suárez, 2010).

These factors illustrate that the four levels of the establishment chain of the Uppsala model are to be seen as discrete levels in a spectrum of market commitment. In the lower extreme of market commitment is the national company only operating in its home country, while the upper extreme is more unclear. Complete global integration where the company is equally present on all markets could be a suggested upper extreme, as per the transnational strategy in the global integration versus national responsiveness matrix (Luthan & Doh, 2018, s. 300). Within this framework, Arla can be characterized as pursuing a transnational strategy; being globally integrated and relying on economies of scale, while also exhibiting a high degree of national responsiveness where the product portfolios differ greatly across host countries (ibid.).

A drawback of adjustment of commitment in the market is the potential costs of divestment which can lead to slower market exits when tangible investments have been made (Benito, 1997). Given that the strategy of Arla has been characterized as transnational, the company falls within the category that generally has the highest propensity to divest, meaning that the company could be likely to exit the JV in the future (Benito, 2005). Arla's direct cost of modernizing the yellow cheese factory with Molvest in 2014 was €3M., but the indirect costs in relation to this project is unclear, i.e. the training of employees, implementation of IT

systems etc. most likely incurred additional expenses. As mentioned, companies following a transnational strategy are more prone to divest, but the company has not yet divested as of the annual reports up until 2019.

It must be assumed that the primary motive for internationalizing was to market the products stemming from the raw milk supplied by its owners. As a cooperative, the management has a special obligation towards the shareholders, not only to provide stable returns but also to sell their produce. The price of the primary input factor, raw milk, should thus not worry Arla in the same way that management usually worries about reducing costs of raw materials. Raw milk price is a key performance indicator for Arla stated explicitly in all of their annual reports, as their shareholders hold a dual interest: they want to maximize the milk price and maximize the revenue of Arla. When Arla states that they will use locally produced milk, it is the result of the barriers entailed by the Russian sanctions and can be a necessary step taken in order to maintain consumer trust and strengthen the presence on the market. The dual interest, however, stops with the shift of suppliers from the shareholders to competing farmers; minimizing the milk price is important again when the only earnings to the shareholders come in the form of Arla's profits. This goes to show that when the external environment changes, the internationalization of the company can tie up capital in less profitable activities, with divestment becoming relatively more difficult as a result of location-specific capital already allocated. Arla chose to remain at their level of internationalization, but the special nature of cooperatives reduces the attractiveness of operating in the new and less profitable market.

7.2: Restructuring of supply chains

A method particularly useful for companies facing obstacles to the flow of goods is to restructure supply chains so the barrier is circumvented. There is no agreed upon definition which has unified researchers within the field of supply chain resilience, but supply chain resilience is generally a term used for describing the responsiveness and flexibility of supply chains when these meet unexpected disruptions and can therefore be seen as a type of risk management (Hohenstein, Feisel, Hartmann, & Guinipero, 2015).

Within the field of supply chain resilience, there are four different phases: readiness, response, recovery and growth. Readiness describes the preparation before the external shock affects the company, while response is the initial reaction to "an uncertain and turbulent business environment". The recovery phase relates to the "return to the original state after disruption" while the growth phase is "focused on the potential for growth after being disturbed, reflecting the developmental nature of SCRES (Supply Chain Resilience, edited) in terms of moving to a new state and improving competitive position" (ibid.). These four phases are divided into two, more general phases: the ex-ante disruption phase, comprised of the readiness phase, and the post-disruption phase, comprised of the response, recovery, and growth phases.

For each of the two phases – before and after disruption – different elements are important to establish in order to increase the resilience of the supply chain, as shown in the table below.

Proactive strategy	*Readiness elements*	*Subelements*
	Collaboration	Coordination, cooperation, joint-decision making, knowledge sharing, supplier certification, supplier development
	Human resource management	Employee training and education, risk-sensitive culture and mindset, cross-functional teams, experienced employees for crisis management
	Inventory management	Use of inventory and safety stocks to buffer disruptions
	Predefined decision plans	Contingency plans, communication protocols
	Redundancy	Production slack, transportation capacities, multiple sourcing and production locations
	Visibility	Early warning communication, information sharing, real-time and financial monitoring
Reactive strategy	*Response, recovery and growth elements*	*Subelements*
	Agility	Communication, information sharing (= visibility), quick supply chain redesign, velocity
	Collaboration	Coordination, cooperation, joint-decision making, knowledge sharing, supplier certification, supplier development
	Flexibility	Backup suppliers, easy supplier switching, distribution channels, flexible production systems, volume flexibility, multi-skilled workforces
	Human resource management	Employee training and education, risk-sensitive culture and mindset, cross-functional teams, experienced employees for crisis management
	Redundancy	Production slack, transportation capacities, multiple sourcing and supplier locations

Table 1: Grouping and synthesis of the most grounded SCRES elements, (Hohenstein, Feisel, Hartmann, & Guinipero, 2015)

As can be seen from table 1, some of the elements are both useful before and after the external shock is received: collaboration, human resource management and redundancy. Working closely with suppliers, training employees, and using multiple suppliers with excess capacity are useful regardless of the situation and thus should always be prioritized to some extent. Knowledge, flexibility and robustness are deemed key elements used for decreasing primary stocks and facilitate transition to more sustainable substitutes within the materials science, further supporting the general elements important when creating resilient supply chains (Alonso, Gregory, Field, & Kirchain, 2007).

In the case of Arla, collaboration with their partner Molvest remained a priority after the imposition of the sanctions, as described in the previous section of the report. Furthermore, Arla has scaled up production at the factory of its local partner and sourced milk from local farmers, pointing towards redundancy. Redundancy through multiple sourcing locations, however, poses a challenge to an agricultural cooperative,

as mentioned earlier. It can be useful in maintaining operations when the conventional supply, in this case raw milk from the company's shareholders, seizes, but limits the potential market size for these suppliers. Flexibility in terms of multiple distribution channels is especially useful for Arla, since they could face difficulties selling all of their products as a result of a strengthened domestic agricultural sector. The increased capacity is another sign of flexibility and would indicate that they do not have an issue with selling their products. The local partner plays a key role in the distribution of products, but the marketing of products under the brand of Arla Natura could prove to be less successful than using their local partner's brand. This is, however, a part of the company's strategy, to maintain consumer relationship and knowledge of the brand in order to capitalize on the added value of import products after the embargo (KILDE). Collaboration, including joint decision-making and knowledge sharing is a resource for Arla as local employees have experience from former crises, and the level of collaboration is predicted in the long term as a result of the challenges faced on the Russian market (Arla, 2014). This goal overlaps with the field of human resource management, where "experienced employees for crisis management" is a tool to strengthen the supply chains. A close collaboration with the local partner could also enhance some of the other aspects of supply chain resilience, e.g. information sharing as a result of joint-decision making, transportation capacity increases through synergies, and supplier development as know-how is transferred to local suppliers.

Strategies of supply chain resilience enhancements are only relevant for certain types of institutional constraints, such as limitations to domestic and international logistics. Trade barriers are included in this type of constraints and are therefore a key element in Arla's mitigation strategy, where the topics of collaboration, human resource management, flexibility and redundancy play an important role.

7.3: Diversification

The advantages of spreading risk across different markets, products, currencies etc. has long been known in the field of international business. Diversification traditionally takes place over two dimensions; product or market, where the former is related to the expansion of the product portfolio of the company, while the latter is about entering new markets (Rugman, 1976). Market diversification and entry into new markets relates closely to the internationalization process discussed earlier, but the focus here will be the diversification towards other markets than the focal market at hand, which in our case is Russia.

Arla has – as a result of the imposition of the counter sanctions – diverted investments and attention away from Russia and into new growth markets such as China, the Middle East, and South East Asia. The company's market diversification has possibly helped retain both overall revenue and profits, so in Arla's case, diversification was effective. One reason diversification was an appropriate tool for mitigating adverse institutional change could be the fact that they had already identified six key markets with high growth rates prior to the imposition of the sanctions.

On the other hand, product diversification for Arla in Russia is declining as they are focusing on producing a smaller range of goods when relying only on local milk suppliers and being unable to import produce from the EU. As Arla is a cooperative owned by the milk farmers outside Russia, using only local milk seems counterproductive. However, this strategy is a step towards maintaining the consumers' knowledge of and familiarity with the company and its brands for when the counter sanctions are over and products are again made with milk from EU countries.

On a global level, the company is pursuing a product diversification strategy in order to reach new consumer segments and reduce risks. Using licensing agreements with companies like Starbucks and Mondelez helps draw on strong, international brands and possibly penetrate markets where the internal brands of Arla, such as Lurpak, Castello and Puck, are unknown. In addition to a portfolio of brands, the company also targets conscientious consumers with products that are organic, vegan, CO_2-neutral, low-calorie, lactose-free or on-the-go products, and thereby tapping into global trends among consumers in high income countries. All of these variations within the product portfolio deviate from the traditional core products; milk, cheese, butter and related products, and further reduces the exposure towards shifts in consumer preferences, commodity prices or other changes in the external environment of Arla. Another type of product diversification pertains to the usage of different distribution channels, i.e. targeting both consumers directly through retail outlets, through wholesaling to restaurants, hotels etc., and to other food processing companies. Separate departments serve each of these segments with the overarching goal to have the demand needed in order to sell the full amount of milk delivered by the company's shareholders.

In the face of adverse institutional change, diversification can prove to be an effective tool if used proactively, as the assets located in each country are minimized. An example from theory could be useful to illustrate this: *"Originally, the firm was growing pineapples only in the Philippines for sale in European countries; however, in order to reduce its dependence on only one country, the firm was decided to begin growing pineapples in Kenya also. In case of expropriation or a bad crop, the firm has the flexibility to switch sources of supply and reduce the impact of uncertainty on its system"* (Mascarenhas, 1982). Although the emphasis in the above quote is given to the supply chain resilience, the benefits of diversification applies to the imposition of trade barriers as well. Diversification is one of the most significant tools used by Arla, where especially geographical diversification reduces the strategic risk. This has proven to be useful in mitigating the effect of the sanctions on the company's overall financial performance.

7.4: Lobbying

An indirect way of handling institutional risk is through lobbying, where companies, organizations of companies or consultants hired by companies try to change the institutional environment to their advantage. Arla has taken upon itself to lobby the European Union in relation to Brexit, so the company does use lobbying as a tool to mitigate risk (Arla, 2016). Arla also uses lobbying aiming at strengthening the economic landscape in which the suppliers operate, although the details are not stated explicitly. These lobbying efforts do not necessarily concern the export environment but shows that they are aware of this tool and uses it when deemed appropriate (Arla, 2013).

It is not known whether Arla uses lobbying towards the Russian government, but as was seen in the development of the counter sanctions, exemptions were added for lactose free products, baby food and products low in milk fat (European Union, 2014). The value of personal ties to policy makers were important in the Soviet era, but has been declining along with the transition from command to market economy, so it is uncertain how effective this strategy will be in the future (Karhunen, 2008).

There is a differentiation between lobbying and corruption, where lobbying targets policymakers in order to change legislation in favor of the company, and corruption is the manipulation of bureaucrats with the aim of having the existing rules bent to the advantage of the company (Campos & Giovannoni, 2017). Lobbying is seen by many companies as a necessary measure in order to meet adverse changes in the external environment, while corruption is illegal in many countries and against the internal compliance policies of many MNEs.

As the activities of Arla encompass an increasing number of markets, the company has initiated several anti-corruption measures, e.g. unannounced visits to subsidiaries, automated control mechanisms, and other initiatives mentioned in most of the annual reports. With corruption being omnipresent in Russia, having strong compliance mechanisms could serve as an obstacle to a company like Arla, reducing their exposure to advantages requiring these illegal activities as their competitors might do. Branding itself as a socially responsible company would, however, give the company an edge over other actors in the market.

In addition to single-firm lobbying efforts, some companies choose to engage in industrial organizations where professional lobbyists work to promote the interests of its members. The food processing industry in Russia has a high degree of organization (Duvanova, 2011), implying two things for Arla:

Firstly, the industry is already lobbying the government for more profitable conditions, but these conditions could be reserved to Russian-owned companies and thereby work against the interests of Arla. It is crucial to understand whether the ongoing lobby activities within the food processing sector explicitly favors domestic companies or work to improve market conditions generally, as these organizations are highly effective compared to single-firm lobbying (Campos & Giovannoni, 2017).

Secondly, the local partner, Molvest, could bring perspectives into the lobbying efforts where the benefits of establishing JVs with foreign MNEs are highlighted. These benefits could include the transfer of know-how from Western countries or necessary investments into machinery made more expensive as the Ruble

depreciated (Ariño, Abramov, Skorobogatykh, Rykounina, & Vilà, 1997). Nevertheless, the company continues to use lobbying as a tool of avoiding adverse events in affecting the external environment in spite of its questionable effectiveness.

7.5: Other tools for mitigation of strategic risk

Apart from the already mentioned methods of dealing with institutional risk, there are other tools available to companies trying to mitigate these risk factors. These methods are used by Arla as discussed in the case earlier but are also methods described by academic literature or news channels.

Extending the lobbying tool for Arla is the focus on analytical teams trying to uncover risks not seen on the surface and enhancing the effectiveness of the lobbying efforts. Analyzing the external environment is useful regardless of the specific tool chosen, so it can be seen more as a foundation for any of the solutions provided above. This report in itself can be seen as a piece of analysis useful when identifying and applying one or more analytical tool(s), and it is difficult to find any paper discussing the value of general analysis to business operations since every paper contains an analysis itself. An example of this analysis is seen in the concept of Taylorism, where the careful study of the production process leads to improvements in efficiency. The case of Taylorism is useful to express the well-known value of analysis in business science, even though Taylor's experiments were of a more operational nature rather than strategic (Taylor F. W., 1911). Using analysis and planning extensively is clearly visible in the annual reports of Arla, where risk management sections play a role in several of the publications. This indicates that Arla uses a causal approach rather than an effectual approach, leaning more towards stability and analysis rather than agility and flexibility, which is particularly beneficial to larger companies, as opposed to SMEs which are more sensitive to changes in the external environment (Laskovaia, Marino, Shirokova, & Vale, 2019).

Another method used by importers and exporters, is circumvention of the ban by moving goods through third party countries. Belarus and Kazakhstan are in a customs union with Russia, mentioned earlier as the Eurasian Economic Union, making it lucrative to export EU produce to these countries before forwarding it to Russia. Another route is through other European countries not included in the counter sanctions such as Switzerland, Liechtenstein, Faroe Islands, Greenland, Iceland, Serbia or Macedonia, but efforts have been made to track the country of origin rather than the exporting country in order to close the loophole (European Parliament, 2017). Alongside the usage of third-party countries, it is also possible to use the waiver for personal use, which might facilitate some traffic at least in the border areas, e.g. Saint Petersburg and Finland or Estonia (Geller, Maidment, & Devitt, 2014). Naturally, the circumvention of the counter sanctions is mostly relevant to the current case of the embargo, but there is some similarity to the theories of supply chain resilience, where the goal is to keep supplies flowing to production through the usage of a range of tools.

7.6: Concluding remarks

Arla has used several risk mitigation tools available to companies facing strategic risk, of which adjustment of the level of internationalization, diversification across products, distribution channels and markets, supply chain resilience and lobbying were the most important. In addition to these primary tools, analysis of the environment and logistical circumvention of the trade barriers were presented, but the former is rather trivial, and the latter was not used by Arla according to their annual reports. Given the insignificant effect on the overall performance of the company, the measures taken by Arla, both proactively and reactively, must be assessed as being effective. Although difficult to quantify the individual contributions of these tools, diversification is most likely the strongest tool used by the company, building upon a longer period of global expansion targeting both stable, industrialized markets and emerging markets. Additionally, the field of supply chain resilience contains measures used by Arla, helping the company mitigate the negative effect of the sanctions on their Russian activities.

8: Discussion

Following the results derived from the analysis, questions arise regarding the application of these, in order to make the findings useful to practitioners. The issue pertaining to the transfer of academic contributions to applied best practices can be divided into two part: the transferability of the results, and the predictability of strategic risk. The two sections take an offset in similar trade disputes and in non-market-based crises such as pandemics and natural disasters with special attention given to the current situation regarding the coronavirus.

8.1: Generalizability of results

There has been a series of trade conflicts in recent years, of which the trade war between the U.S. and China starting in 2018 is one of the most significant. This conflict is part of president Trump's political agenda, where the outsourcing of American jobs is an important topic both during his campaign and during his presidency. Following the presidential election, tariffs were being imposed on imported goods from China, while the response from Beijing was retaliatory. The main goal of these tariffs was to reduce the trade deficit of the U.S., and the economic effect was clear for the American economy. Consumer goods became more expensive, the agricultural export to China declined by almost two thirds, and reports show that the isolated effect on the American GDP was a decline of 0.3% (Swagel, 2019). On the other hand, the conflict has led to the implementation of changes in the economic institutions of China, where protection of intellectual property rights was strengthened, the requirement of domestic ownership share for JVs with foreign MNEs was lowered, and president Xi has pledged to increase imports (Denyer, 2018).

Obviously, the source of the Sino-American trade war was political as with the EU-Russian conflict, but the nature of the sanctions is quite different. In the Sino-American example, there were no import bans, meaning that all goods could continue to cross borders like previously, albeit at a higher cost for the parties involved, while there were to be no exchange of (agricultural) goods at all between the European nations and Russia. The argument for imposing the sanctions is also different in the Sino-American case when compared to the EU-Russian. The former is part of a protectionist or nationalist policy and the latter is a political tool of pressure as a response to violation of international law.

There is a significant difference in the overall effect of the two different sanctions; while the Sino-American sanctions hit industries fiercely and led to bankruptcies in the U.S. (Rappeport, 2019), the effect of the EU-Russian trade war has been rather negligible at an aggregate level. The reason for this discrepancy can likely be ascribed to the different sizes of the trade relations. China is the largest trade partner of the U.S., while Russia is only the largest trade partner for a few, smaller countries in Eastern Europe. Many of the larger economies of Europe have strong domestic markets and the intra-EU trade is significant.

When comparing the effects, the first thing that comes to mind is the absence of institutional change as a result of the sanctions. No new economic institutions were implemented in neither the EU nor Russia, as was the case in China, and this fact becomes even more interesting when considering the difference in size and

resilience of the Russian and Chinese economies. Taking the difference of the Russian and Chinese economies into consideration, and adding the exposure to oil price volatility, it could seem strange that it is the Chinese government that engages in a dialogue and adapts their institutional framework. Whether the cause of this oddity is the fact that the Russian government is more political than pragmatic, or because the Sino-American relationship is stronger than the EU-Russian is unclear. It must be noted that there has been a trend of opening up the economy on the Chinese side, e.g. by strengthening the protection of Western intellectual property, which likely holds a part of the explanation. However, it is evident that the Russian economy has not collapsed yet and that the government has not given any concessions to the EU, meaning that the outcome of the trade war is still to be settled. The Sino-American trade war is ongoing as well, but there have been more visible signs of development in this conflict.

Arla has operations in both the U.S. and China, where production is aimed at supplying the domestic markets, and the extent of the intra-firm transfer of goods between the two countries is unknown. This means that the crisis could have a weak effect on Arla, but there might be a more general trend of buying locally sourced goods as part of a larger "America First"-agenda. Similarly, president Trump has advocated for trade policy changes towards their European allies, where especially the German automobile and French wine industries have been the designated culprits. If this trend spreads to the food industry, the declining American demand would have a substantial impact on Arla given the scale of their exporting activities to the U.S.

In more general terms, restrictions to the flow of goods across borders produce sub-optimal outcomes, and this outcome is the result of all trade barriers. It has been well-documented by economic theory, e.g. by the theory of comparative advantages, that international trade is beneficial for all parties involved. The overall economic effect of these barriers is negative, as the market would have already adapted to the current conditions even without the restrictive trade policy, if this was the most efficient.

Having an ambition to restrict the flow of goods across borders can be an important part of one's political agenda, but one aspect to consider, is whether it is realistic in all industries. The sanctions between the EU and Russia target primarily food, which is a rather simple product, and the sanctions may have reduced the variety in grocery stores, but the Sino-American trade war is more general and includes sophisticated products. One example is the iPhone, which president Trump has insisted be made in the U.S., but the supply chain network upstream from assembly is so complex that it would most likely not be possible to produce in one country without imports (Graham, 2019). Given that imports will continue at a higher, taxed level, the consumer goods would become more expensive, but if the conflict evolves to an outright import ban as is the case in Europe, the products might not be available to the consumers at all. All of these trade disputes indicate that the global trade environment is moving in a more protectionist direction after decades of free trade agreements and removal of trade barriers, both in North America, in the EU and in other regions of the world.

In addition to trade conflicts, other sources of strategic risk can pose substantial damage to companies. The most contemporary example of these types of crises is the coronavirus. Impossible to predict, the virus spread across the globe within weeks and has caused even the most developed nations to institute severe restrictions on companies and consumers. These restrictions caused some industries to seize all operations, such as the hospitality industry, while the activity in other sectors were reduced significantly, such as the shipping and retail industries.

Coronavirus, and other biological or natural disasters, create uncertainty for businesses as they can experience declining demand which in turn leads to uncertainty for consumers as their jobs are in jeopardy. Declining demand is also a result of trade barriers, since there will be a smaller potential market to satisfy, meaning that the two risks can be compared to a certain extent.

However, in the treatment of these phenomena once they emerge, there are some differences, as diseases can be cured and cities rebuilt after floods and earthquakes, provided that appropriate investments follow. Trade barriers cannot be removed as a direct result of action taken by the business community, only through political or institutional action. Lobbying is an exception to this rule, where companies, as mentioned in the analysis, can indirectly affect policymakers and bureaucrats to change or remove barriers to trade.

Risk mitigation tools can serve to protect MNEs from local disasters, such as earthquakes, hurricanes, and floods, but not from global phenomena such as pandemics or global military conflicts. Spreading operations across the world, making them more resilient or shaping the environment through lobbying can thus only prevent a range of disasters.

One similarity between trade barriers and these non-market-based crises is the ability to prevent or limit the damage of the change. Trade barriers are results of political decisions and can thus always be reversed by the leaders implementing them, but the adverse effect of some of the other crises could also be mitigated or even prevented altogether. Demanding earthquake-proof foundations when constructing new buildings, installing early warning systems in areas prone to tsunamis or volcanic eruptions or even investing in response mechanisms used for outbreaks of diseases are examples of tools aimed at mitigating their effect.

In relation to the outbreak of coronavirus, Arla is privileged in the sense that a range of their products are necessary goods, meaning that the elasticity is low, and that demand is rather insensitive to the occurrence of crises. The company could lose market shares to local competitors when operating in a foreign country, but the food sector is likely not to suffer disproportionately compared to other sectors. Their client base could change as hotels and restaurants are forced to seize operations, but grocery stores will likely make up for the loss taken in the hospitality sector.

Increasing input prices usually lead to reduced profit margins, but in the case of Arla, increasing revenues and making production more efficient are the most important topics. Having a structure where farmers integrate downstream reduces the uncertainty and shifts the risk management towards the consumers, reducing the impact of the changing prices on the competitive position. In contrast to other agricultural

produce, milk is not as susceptible to bad harvests as grains, vegetables, wine or fruits, as cows are kept indoor and fed with purchased fodder. Prices on fodder as a result of bad harvests or diseases in crops could, however, increase the production costs of milk, which in turn leads to increasing prices for consumers. Being isolated from changes in the weather makes the production more stable and allows the company to focus on other sources of strategic risk.

8.2: Predictability of strategic risk

In order to predict the implementation of trade barriers, it is important to have a solid understanding of the different political, institutional, and economic factors shaping the trade policy. Predicting changes in the external environment can prove to be difficult, since many of the mechanisms at play are not visible to companies and citizens. Ties to policymakers and bureaucrats could provide information useful in predicting upcoming policy changes, e.g. trade barriers, which makes lobbying a potentially effective tool in forecasting strategic risk caused by governmental action. Thorough analysis of public information could also be an important tool, especially when analyzing the economic environment using financial data and using political risk analyses similar to the ones used in this report, or through the use of local staff embedded in the relevant context. The predictability of the governmental environment is related to the behavior of political leaders, where rash decision-making leads to increase volatility and speed of policy changes. An example of this type of behavior, the incumbent president of the United States, Mr. Trump, is known for expressing himself freely and personally to the voters, primarily through Twitter but also at press meetings in the White House. Another example is authoritarian regimes where there is no thorough democratic process behind changes to policy, and where presidential decrees often take the place of legislative bills, as happened in Russia during the turmoil following the Crimea incident. Political behavior of this sort can greatly decrease the predictability compared to consensus-seeking systems where powerful legislatures negotiate and compromise over a prolonged period.

What has also surprised the public was the idea of opening up a second front in the trade war against Canada and the EU, both of which are close allies to the U.S. This is another sign that the president is rather unpredictable in his behavior, as these other Western nations share a similar culture and they share many of the same strategic military goals. It is one thing to react more aggressively than expected towards adversaries but targeting allies sends the signal that all tools are on the table.

Another factor that might affect the predictability is the relative power of bureaucrats and their tendency to accept bribes or otherwise being incentivized by companies and individuals outside the institutional framework of the government. As mentioned earlier, having ties to administrators could grant access to information useful when predicting changes in the external environment, but agents with no access to privileged information, changes can appear random or even counterlogical. Related to corruption, this source of uncertainty is mostly related to developing countries but can decrease the predictability in the institutional environment in these countries. Finally, economic volatility will also decrease the predictability, as it can be

difficult to identify trends in economic environments where key indicators exhibit random walk-patterns. Examples include countries with hyperinflation, attacks on the national currency or rapidly changing fiscal policy.

In many authoritarian regimes, the electoral outcomes can be predicted with a high degree of certainty, as the ruling party often retains power through state-owned media outlets and discrepancies in the democratic process. A relevant example of a firm grip of the electoral processes is Russia, where the ruling party United Russia often presents convincing results at both presidential and parliamentary elections. Critics have pointed out that some of the ballots actually belong to deceased voters resulting in voting percentages above 100 in some constituencies. These fraudulent practices will, in addition to the monopoly of information to many voters, especially in rural areas, mean that it is very difficult for the opposition to gain a majority in the elections. Having a de factor one-party rule strengthens the predictability of political outcomes but shifts the balance of power in favor of the different factions inside the party. With a predictable parliamentary composition and unpredictable power struggles within the party actually decreases the overall predictability. Transparency is a key issue here, as many democratic systems, especially in Europe, have a wide array of political parties with rather transparent leadership structures and policy suggestions. Even though United Russia wins the election, it is unclear what legislation is passed in the Duma and what decrees are signed by the president, but in more democratic systems, the composition of the parliament gives a predictable and clear indication for the political change that ensues. A counterweight to this unpredictability within United Russia is the strength of the leader. It is widely assumed that the current leader and president, Mr. Putin, has a strong and capable platform within the party, limiting the extent of the internal power struggle. The future is more uncertain, though, as it is unclear what happens when he leaves office, if the currently unknown successor has an equally significant impact on Russian politics. Suppressing the power struggles within the party induces even more uncertainty, since it makes the line of succession blurred. These dynamics both increase and decrease the predictability of policy outcomes, but as it is unclear which effect is strongest, this poses an uncertainty in itself.

Emergence of non-market-based crises, e.g. coronavirus and natural disasters, is more difficult to predict, as there is no transparency in the development of these diseases and they often emerge randomly or unintentionally. What can be predicted to some extent, however, is the spread pattern of these diseases through the level of healthcare systems and emergency management systems, travel patterns and other factors. There is, however, a significant level of randomness involved in these analyses, as can be seen with the major impact of the virus on Italy and Spain where the health care system is rather advanced.

A decisive parameter of competition in the process of predicting this type of risk, is the speed at which information is obtained and analyzed. Larger companies have departments dedicated to risk management, and regional subsidiaries report to headquarters as these crises evolve. Having local knowledge combined with the support of a major MNE gives an advantage over strictly local companies, in the same way that

smaller exporting companies are disadvantaged compared to larger companies who can dedicate manpower to the analysis of these crises. It could therefore be argued, that these crises are easier to track for larger companies, and that they would to a larger extent adjust their operations accordingly. On the other hand, large companies are often less agile than smaller companies, rendering it difficult to make use of this knowledge in a swift manner.

With global activities, Arla has subsidiaries with local employees who have knowledge of the country or region in which they operate. With these resources, it must be expected that they would be able to more accurately predict the outcome and change of crises than their smaller competitors. Through their distribution network, they receive information about the effect of the crisis, e.g. the decrease in demand as a result of the coronavirus, giving them the ability to forecast the effect in other areas once the disease spreads. It is unclear how effective these predictions would be when a factor of randomness is also at play, but as a geographically diversified company, Arla would have to manage the virus in areas not yet affected, as well as managing it in contaminated areas. Using previous knowledge is an effective tool for managing current crises, and past experiences have most likely also formed the basis for contingency plans aimed at mitigating the next similar problem.

More local disasters such as earthquakes and volcanic eruptions can also be predicted shortly before the areas are affected, but as mentioned earlier, MNEs can avoid these unsystematic risks by diversifying. In the long term, problems such as climate change, pollution and environmental damage constitute significant risk factors for companies. Externalities can be seen as systematic risk affecting all markets, and they are difficult to prevent when they require united action and the investment of vast resources. One could argue that systematic risk does not skew the market to any one company's advantage and should therefore not pose a problem on firm level. On the other hand, repositioning of the company with the aim of mitigating the effect of these adverse changes in the external environment or even benefitting from them, could prove to be profitable. Predicting the specific effect of these long-term changes on the focal company is not an easy task, but companies have increasingly applied CSR policies in order to capitalize on concerns among the consumers. Examples of these policies include the MSC, FSC and ASC certifications, where the risk of overfishing or deforestation catalyzes the industry to change its practices. The risks of overfishing and deforestation are long-term changes that can be predicted through analysis of the demand for seafood and lumber, respectively, and the current global production. Similarly, as regards climate change the long-term effects are well-documented by scientists everywhere, so companies can predict the change on their operations; both in the direct environmental effect and in the legislative action taken in order to mitigate the effect on society as a whole. The long-term effects can thus be predicted more easily than rapid changes, i.e. natural disasters and the outbreak of diseases, allowing companies to adapt their strategies.

9: Conclusion

The counter sanctions were facilitated by a range of factors: A strong and centralized power structure, a foreign policy doctrine focused on protecting the Russian sphere of interest in bordering countries and a need for asserting power as a move to increase popularity domestically. The historical background plays an important role in escalating the conflict, where the Crimean incident was the triggering event, but the structural characteristics of the country were necessary conditions for the imposition of the sanctions. Targeting primarily the food industry, the counter sanctions were prolonged and relaxed on several occasions, while the intended effect on the European food industry was questionable. The Danish food export to Russia was almost eliminated, and the total exports were roughly halved. Employment remained rather stable and mainly followed business cycles movements, while the industrial output in the dairy industry was volatile but generally insensitive to the sanctions. On firm-level, Arla also experienced a significant decline in the revenues and profits from its Russian activity, but the overall financial results of Arla were not affected. The company has an extensive risk management strategy emphasizing diversification, long-term strategizing and adapting to and analyzing changes in the strategic environment. Four tools for mitigating strategic risk were investigated: Adjustment of internationalization effort, supply chain resilience, diversification and lobbying. Arla took use of all these tools at varying degrees, but it was found that diversification was the most effective tool in reducing risk exposure. Adjustment of internationalization is related to diversification, but focuses narrowly on one country, and lobbying is generally an effective tool, although less so in Russia. Supply chain resilience provides tools relevant to Arla, and the company has used some of these tools, but there is still room for improvement.

In summation, the background of the sanctions was historical and facilitated by an authoritarian regime with a need for solidifying power through an aggressive foreign policy, while the effects of the Russian counter sanctions on Arla and the Danish economy were insignificant at an aggregate level. Arla has taken some measures to mitigate the effects of these sanctions, proving diversification to be the most useful, followed by supply chain resilience, who were both deemed generally effective from an academic point of view.

10: Limitations and perspectives on further research

It would be relevant to analyze the political dynamics of Russian society in more depth, as these explain a great part of the causes behind the implementation of the counter sanctions. At the same time, a better understanding of these dynamics could also help increase the predictability of these actions, and thus allow companies to prepare for changes in the environment. More specifically, it would be interesting to elaborate more on the theories of international politics, in order to understand what line of reasoning is followed by the Russian government.

In order to generalize the results found in this report, it would also be rather useful to investigate other changes in the external environment, e.g. the effect of the coronavirus, but this is not possible yet as the economic impact on companies is still evolving.

Analyzing only one company exposes the thesis to unsystematic risk, as Arla could be a special case deviating from the industry average, and so one limitation is the horizontal narrowness that is necessarily used here. An obvious method of omitting unsystematic risk is to include other companies, both larger companies such as Danish Crown, and smaller companies which have operations in or trade relations with Russia. Examining different company sizes, degrees of involvement with the Russian market, and product categories will all help in constructing a more detailed picture of the Russian counter sanctions and their effect.

The analysis carried out concerns the food industry only, which allows for the potential skewing of the results. It is primarily the direct effect of the counter sanctions, i.e. the import ban of agricultural goods and food to Russia, but as has been mentioned by literature in this field, other factors have an effect on the companies apart from the sanctions, e.g. oil price volatility or the decline of the Russian ruble. These indirect effects, which might have been amplified by the actions taken by the Russian government, pose challenges to companies across industries, and this potentially allows for a broader analysis looking at the general conditions of doing business in Russia as an MNE.

A critical limitation of the study is the availability of data, as only public data has been used due to unwillingness of disclosure by relevant companies. Optimally, internal data from Arla would also be used in the result in order to understand the activities derived from the changing external environment. Interviews with key employees and more specific sales numbers would allow for a better understanding of the effect of the counter sanctions on the company, both strategically and financially. Further studies on the subject should attempt to obtain this information in order to make the analysis even deeper.

Most of the limitations pertaining to this study can be derived from the lack of resources and access. Having more time and a higher limit on the size of the study would allow for a deeper study, but this is contingent on the much-needed access to internal data which is rarely disclosed by companies. The limitations do not, however, limit the analysis to an extent where the results are useless, but a deeper and wider scope would provide additional insights if more resources and a higher degree of access were obtained.

References

Alonso, E., Gregory, J., Field, F., & Kirchain, R. (2007). Material Availability and the Supply Chain: Risks, Effects, and Responses. *Environmental Science & Technology, 41*(19), s. 6649-6656.

Ariño, A., Abramov, M., Skorobogatykh, I., Rykounina, I., & Vilà, J. (Spring 1997). Partner Selection and Trust Building in West European-Russian Joint Ventures. *International Studies of Management and Organization, 27*(1), s. 19-37.

Arla. (2007). *Annual report 2007.* Viby J: Arla.

Arla. (2013). *Annual report 2013.* Viby J: Arla.

Arla. (2014). *Annual report 2014.* Viby J: Arla.

Arla. (2015). *Annual report 2015.* Viby J: Arla.

Arla. (2016). *Annual report 2016.* Viby J: Arla.

Arla. (2019). *Annual report 2019.* Viby J: Arla.

Ashton, C. (17. March 2014). *Council Decision 2014/145/CFSP of 17 March 2014 concerning restrictive measures in respect of actions undermining or threatening the territorial integrity, sovereignty and independence of Ukraine.* Hentet fra Official Journal of the European Union: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2014:078:0016:0021:EN:PDF

Россия сегодня. (2016). *Выборы в Госдуму.* Hentet fra Ria.ru: https://ria.ru/20160918/1476912507.html#/summary

Balmfort, R. (12. December 2013). *Kiev protesters gather, EU dangles aid promise*. Hentet fra Reuters: https://www.reuters.com/article/us-ukraine/kiev-protesters-gather-eu-dangles-aid-promise-idUSBRE9BA04420131212

Beck, B. E., & Madsen, M. D. (2018). *Rusland 2018: Potentiale for danske virksomheder trods fastlåst politisk situation.* Copenhagen: Dansk Industri.

Benito, G. R. (1997). Divestment of foreign production operations. *Applied Economics, 29*(10), s. 1365-1378.

Benito, G. R. (14. February 2005). Divestment and international business strategy. *Journal of Economic Geography*, s. 235-251.

Blau, A. (8. December 2014). *Strategic Risks: The New Frontier of Risk Management.* Hentet fra The Wall Streat Journal: https://deloitte.wsj.com/riskandcompliance/2014/12/08/strategic-risks-the-new-frontier-of-risk-management/

Bradshaw, M., & Connolly, R. (2016). Russia's Natural Resources in the World Economy: history, review and reassessment. *Eurasian Geography and Economics, 57*(6), s. 700-726.

Brouthers, K. D., Brouthers, L. E., & Werner, S. (2002). Industrial sector, perceived environmental uncertainty and entry mode strategy. *Journal of Business Research, 55*(6), s. 495-507.

Campos, N. F., & Giovannoni, F. (2017). Political institutions, lobbying and corruption. *Journal of Institutional Economics, 13*(4), s. 917-939.

Chifu, I., Nantoi, O., & Sushko, O. (2009). *The Russian Georgian War: a trilateral cognitive institutional approach of the crisis decision-making process.* Bucharest: Editura Curtea Veche.

Choi, S.-J., Jia, N., & Lu, J. (January-February 2015). The Structure of Political Institutions and Effectiveness of Corporate Political Lobbying. *Organization Science, 26*(1), s. 158-179.

Christen, E., Fritz, O., Streicher, G., & Hinz, J. (2016). *Auswirkungen der Wirtschaftssanktionen der EU und Russlands auf Wertschöpfung und Beschäftigung in Österreich und der EU.* Vienna: Österreichisches Institut für Wirtsschaftsforschung.

CIA. (16. March 2020). *World Factbook*. Hentet fra Central Intelligence Agency: https://www.cia.gov/library/publications/the-world-factbook/geos/rs.html

Condon, C. (8. July 2019). *Central Bank Independence*. Hentet fra Bloomberg: https://www.bloomberg.com/quicktake/central-bank-independence

Crozet, M., & Hinz, J. (2016). *Friendly fire - the trade impact of the Russia sanctions and counter-sanctions.* Kiel: Kiel Institute for the World Economy (IfW).

Deloitte. (2013). *Exploring Strategic Risk.* Hentet fra Deloitte: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Governance-Risk-Compliance/dttl-grc-exploring-strategic-risk.pdf

Demirbag, M., McGuinness, M., & Altay, H. (2010). Perceptions of Institutional Environment and Entry Mode - FDI from an Emerging Country. *Management International Review, 50*, s. 207-240.

Denyer, S. (10. April 2018). *Facing trade war with US, China's Xi renews vow to open markets, import more*. Hentet fra Washington Post: https://www.washingtonpost.com/world/chinas-president-pledges-to-reduce-investment-restrictions-tariffs-on-auto-industry/2018/04/09/e3012ffa-3c39-11e8-955b-7d2e19b79966_story.html

Dreger, K., Kholodilin, K. A., Ulbricht, D., & Fidrmuc, J. (13. January 2016). Between the hammer and the anvil: The impact of economic sanctions and oil prices on Russia's ruble. *Journal of Comparative Economics*, s. 295-308.

Duvanova, D. S. (2011). Firm Lobbying versus Sectoral Organization: The Analysis of Business-State Relations in Post-Communist Russia. *Post-Soviet Affairs, 27*(4), s. 387-409.

European Commission. (24. June 2019). *Russian import ban on EU products.* Hentet fra European Commission: https://ec.europa.eu/food/safety/international_affairs/eu_russia/russian_import_ban_eu_products_en

European Parliament. (2017). *Russia's and the EU's sanctions: economic and trade effects, compliance and the way forward.* Brussels: Directorate-General for External Policies, Policy Department.

Flyvbjerg, B. (2010). Fem misforståelser om casestudiet. I S. Brinkmann, & L. Tanggaard, *Kvalitative metoder: En grundbog* (s. 463-487). København: Hans Reitzels Forlag.

Fokht, E. (20. June 2019). *Russia and Putin: Is president's popularity in decline?* Hentet fra BBC: https://www.bbc.com/news/world-europe-48674705

Geller, M., Maidment, N., & Devitt, P. (17. August 2014). *Belarussian oysters anyone? EU food trade looks to sidestep Russian ban*. Hentet fra Reuters: https://www.reuters.com/article/ukraine-crisis-russia-traders/belarussian-oysters-anyone-eu-food-trade-looks-to-sidestep-russian-ban-idUSL2N0QI1XL20140817

Gill, G. (2002). The Failure of Democracy in Russia. *Perspectives on European Politics and Society, 3*(2), s. 169-197.

GMIS. (1. July 2019). *The Changing Landscape of Innovation in Russia.* Hentet fra Global Manufacturing and Industrialisation Summit: https://gmisummit.com/wp-content/uploads/2019/07/Innovation-in-Russia.pdf

Graham, J. (15. December 2019). *An iPhone made in America? Why building Apple's smartphone in the USA is a 'pipe dream'*. Hentet fra USA Today: https://eu.usatoday.com/story/tech/talkingtech/2019/07/26/trump-tariff-threats-apple-iphone-made-america-unlikely/1838958001/

Håkanson, L., & Ambos, B. (26. June 2010). The antecedents of psychic distance. *Journal of International Management*, s. 195-210.

Hilmersson, M., & Jansson, H. (2012). Reducing Uncertainty in the Emerging Market Entry Process: On the Relationship Among International Experiential Knowledge, Institutional DIstance, and Uncertainty. *Journal of International Marketing, 20*(4), s. 96-110.

Hodge, N. (25. August 2019). *Putin tried to smash the opposition. Instead protests have spiraled*. Hentet fra CNN: https://edition.cnn.com/2019/08/25/europe/russian-street-protests-leaders-intl/index.html

Hofstede Insights. (29. March 2020). *Compare countries*. Hentet fra Hofstede Insights: https://www.hofstede-insights.com/product/compare-countries/

Hohenstein, N.-O., Feisel, E., Hartmann, E., & Guinipero, L. (2015). Research on the phenomenon of supply chain resilience - A systematic review and paths for further investigation. *International Journal of Physical Distribution & Logistics Management, 45*(1/2), s. 90-117.

Howell, L. D., & Chaddick, B. (1994). Models of political risk for foreign investment and trade: An assessment of three approaches. *The Columbia Journal of World Business, 29*, s. 70-91.

Johanson, J., & Vahlne, J.-E. (1977). The Internationalization Process of the Firm: A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies, 8*(1), s. 23-32.

Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies, 40*, s. 1411-1431.

Karhunen, P. (2008). Managing international business operations in a changing institutional context: The case of the St. Petersburg hotel industry. *Journal of International Management, 14*, s. 28-45.

Kholodilin, K. A., & Netsunajev, A. (January 2019). Crimea and punishment: the impact of sanctions on Russian economy and economies of the euro area. *Baltic Journal of Economics*, s. 39-51.

Klinova, M., & Sidorova, E. (2016). Economics Sanctions and Their Impact of Russian Economic Relations with the European Union. *Problems of Economic Transition, 58*(3), s. 218-234.

Laskovaia, A., Marino, L., Shirokova, G., & Vale, W. (2019). Expect the unexpected: examining the shaping role of entrepreneurial orientation on causal and effectual decision-making logic during economic crisis. *Entrepreneurship & Regional Development, 31*, s. 456-475.

Lee, H., Biglaiser, G., & Staats, J. L. (2014). The Effects of Political Risk on Different Entry Modes of Foreign Direct Investment. *International Interactions, 40*(5), s. 683-710.

Li, J., & Li, Y. (2010). Flexibility versus commitment: MNEs' ownership strategy in China. *Journal of International Business Studies, 41*, s. 1550-1571.

López-Duarte, C., & Vidal-Suárez, M. M. (2010). External uncertainty and entry mode choice: Cultural distance, political risk and language diversity. *International Business Review, 19*, s. 575-588.

Luthan, F., & Doh, J. (2018). *International Management - Culture, Strategy, and Behavior* (10th udg.). New York: McGraw-Hill.

Macnab, G. (2. April 2018). *Why the frosty relationship between Russia and the West won't chill the movie industry*. Hentet fra The Independent: https://www.independent.co.uk/arts-entertainment/films/features/russia-west-relationship-us-film-industry-russian-films-a8285261.html

Madsen, O. B. (5. September 2018). *Oplæg for Folketingets transportudvalg 5.9.2018.* Hentet fra Folketinget: https://www.ft.dk/samling/20171/almdel/TRU/bilag/435/1940615.pdf

Mankiw, N. G., & Swagel, P. (7. March 2006). *The Politics and Economics of Offshore Outsourcing.* Hentet fra Harvard: https://scholar.harvard.edu/files/mankiw/files/outsourcing_-_march_7_2006.pdf

Markowitz, H. (March 1952). Portfolio Selection*. *Journal of Finance, 7*(1), s. 77-91.

Mascarenhas, B. (1982). Coping with Uncertainty in International Business. *Journal of International Business Studies, Fall*, s. 87-98.

Medvedev, D. (7. August 2014). *On measures for implementation of the Decree of the President of the Russian Federation dated August 6, 2014 No. 560 "On the application of certain special economic measures to ensure the security of the Russian Federation".* Hentet fra European Commission: https://ec.europa.eu/food/sites/food/files/safety/docs/ia_eu-russia_ru-eu-import-ban_20140807_unoff-trans-en.pdf

Mintzberg, H., & Waters, J. A. (1985). Of Strategies, Deliberate and Emergent. *Strategic Management Journal, 6*, s. 257-272.

Mygind, N. (September 2007). *PIE-model: Politics - Institutions - Economy - A simple model for analysis of the business environment.* Frederiksberg, Denmark: Center for East European Studies, Copenhagen Business School.

Nahernak, P., & Simpkins, J. (2008). The Russian Government and Gazprom. *Cornell International Affairs Review, 1*(2).

Newport, F. (2018). *Top Issues for Voters: Healthcare, Economy, Immigration.* Washington, D. C.: Gallup.

North, D. C. (Winter 1991). Institutions. *Journal of Economic Perspectives, 5*(1), s. 97-112.

Phillips, A. W. (November 1958). The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957. *Economica, 25*(100), s. 283-299.

Pilkington, H. A., Omel'chenko, E., Flynn, M., & Bliudina, U. (2002). *Looking West?: Cultural Globalization and Russian Youth Cultures.* Penn State University Press.

PRS Group. (2018). *Political Risk Yearbook Russia 2018.* East Syracuse: PRS Group.

Putin, V. (6. August 2014). *Decree of the President of the Russian Federation on the application of certain special economic measures to ensure the security of the Russian Federation.* Hentet fra European Commission: https://ec.europa.eu/food/sites/food/files/safety/docs/ia_eu-russia_ru-eu-import-ban_20140806_unoff-trans-en.pdf

Quinn, C. (11. March 2020). *Russia Paves Way For President Putin Until 2036*. Hentet fra Foreign Policy: https://foreignpolicy.com/2020/03/11/russia-president-putin-2036/

Rappeport, A. (28. August 2019). *Farmers' Frustration With Trump Grows as U.S. Escalates China Fight*. Hentet fra The New York Times: https://www.nytimes.com/2019/08/27/us/politics/trump-farmers-china-trade.html

Reus-Smit, C., & Snidal, D. (2008). *The Oxford Handbook of International Relations.* Oxford: Oxford University Press.

Reuters. (18. March 2020). *Russia faces $39 billion shortfall in 2020 from lower oil, gas revenues*. Hentet fra Reuters.com: https://www.reuters.com/article/us-russia-economy-budget/russia-faces-39-billion-budget-shortfall-in-2020-from-lower-oil-gas-revenues-idUSKBN2151VM

Rosenthal, S. B., & Thayer, H. S. (26. July 1999). *Pragmatism*. Hentet fra Encyclopædia Britannica: https://www.britannica.com/topic/pragmatism-philosophy

RT.com. (20. March 2014). *Sanctions tit-for-tat: Moscow strikes back against US officials*. Hentet fra RT.com: https://www.rt.com/news/foreign-ministry-russia-sanctions-133/

Rugman, A. M. (1976). Risk Reduction by International Diversification. *Journal of International Business Studies, 7*, s. 75-80.

Samokhvalov, V. (November 2015). Ukraine between Russia and the European Union: Triangle Revisited. *Europe-Asia Studies, 67*(9), s. 1371-1393.

Sanghi, A., & Yusuf, S. (17. September 2018). *Russia's Uphill Struggle with Innovation*. Hentet fra The World Bank: https://www.worldbank.org/en/news/opinion/2018/09/17/russias-uphill-struggle-with-innovation

Santangelo, G. D., & Meyer, K. E. (2011). Extending the internationalization process model: Increases and decreases of MNE commitment in emerging economies. *Journal of International Business Studies, 42*, s. 894-909.

Sennov, S. (8. January 2016). *Arla har fundet et hul i den russiske mur*. Hentet fra FødevareWatch: https://fodevarewatch.dk/article8352238.ece

Shagaida, N., & Uzun, V. (2017). The Food Embargo and Choice of Priorities. *Problems of Economic Transition, 59*, s. 202-217.

Soh, P.-H., & Yu, J. (2010). Institutional environment and complementary assets: Business Strategy in China's 3G development. *Asia Pacific Journal of Management, 27*, s. 647-675.

Swagel, P. (2019). *An Update to the Budget and Economic Outlook: 2019 to 2029.* Washington D.C.: Congress of the United States Congressional Budget Office.

Taylor, A. (26. November 2018). *Is there a link between Putin's approval rating and aggressive Russian foreign policy?* Hentet fra Washington Post: https://www.washingtonpost.com/world/2018/11/26/is-there-link-between-putins-approval-rating-aggressive-russian-foreign-policy/

Taylor, F. W. (1911). *The Principles of Scientific Management.* Philadelphia: Harper & Brothers.

The World Bank. (31. March 2019). *World Bank Open Data*. Hentet fra The World Bank: https://data.worldbank.org/

Thisted, J. (2011). *Forskningsmetode i praksis - projektorienteret videnskabsteori og forskningsmetodik* (1 udg.). København: Munksgaard Danmark.

Transparency International. (2018). *Transparency Perceptions Index 2018*. Hentet fra Transparency International: https://www.transparency.org/cpi2018

U.S. Energy Information Agency. (23. March 2020). *U.S. Crude Oil First Purchase Price*. Hentet fra U.S. Energy Information Agency: https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=F000000__3&f=A

UNSD. (17. March 2020). *Standard International Trade Classification (SITC) Revision 4*. Hentet fra United Nations Statistics Division: https://unstats.un.org/unsd/publications/catalogue?selectID=104

Walker, S., & Rankin, J. (7. August 2014). *Western food imports off the menu as Russia hits back over Ukraine sanctions*. Hentet fra The Guardian: https://www.theguardian.com/world/2014/aug/07/russia-bans-western-food-imports-retaliation-ukraine-sanctions

Warsaw Institute. (24. November 2019). *What's True About Russian Military Spending?* Hentet fra Warsaw Institute: https://warsawinstitute.org/whats-true-russian-military-spending/

Weinstein, A. (31. January 2018). *When More Women Join the Workforce, Wages Rise — Including for Men*. Hentet fra Harvard Business Review: https://hbr.org/2018/01/when-more-women-join-the-workforce-wages-rise-including-for-men

Williams, D. A., & Dupuy, K. (2016). *At the extremes: Corruption in natural resource management revisited*. Hentet fra Chr. Michelsen Institute: https://www.cmi.no/publications/5950-at-the-extremes-corruption-in-natural-resource

World Bank. (2020). *Doing Business 2020 - Russian Federation.* World Bank Group. Hentet fra Doing Busin: http://documents.worldbank.org/curated/en/184231575291681006/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies-Economy-Profile-of-Russian-Federation.pdf

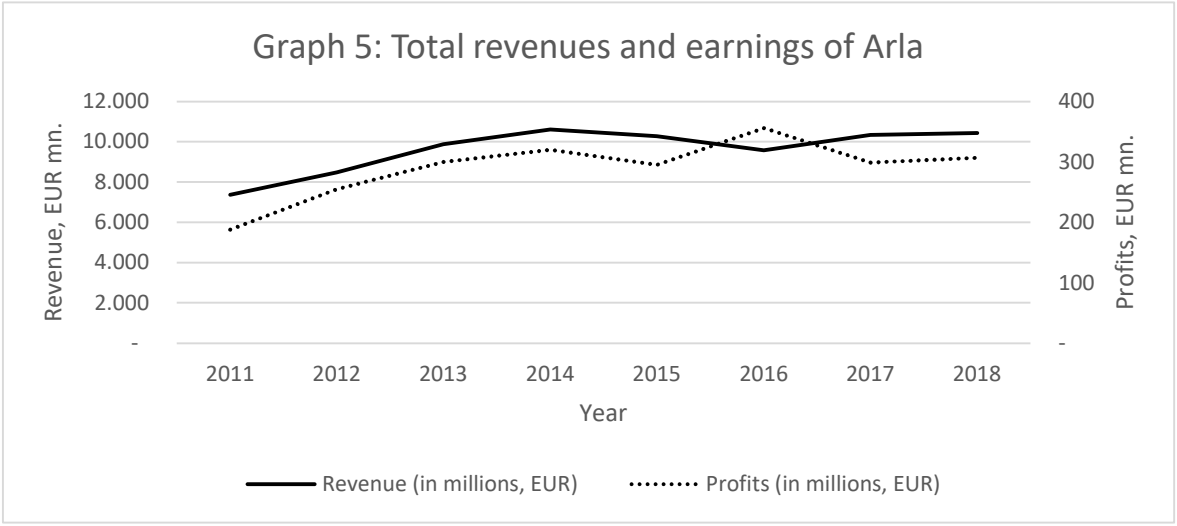
World Bank. (12. April 2020). *Labor force participation rate, female*. Hentet fra World Bank Data: https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?locations=RU

Zornitsa, K.-D. (8. May 2017). The economic impact of the Russian import ban: a CGE analysis. *International Economics and Economic Policy*, s. 537-552.

Appendix A

Results from Russian activities			
Year	Revenue (in DKK, mn.)	YOY Growth	Source
2011	484	N/A	Annual report 2012
2012	634	31%	Annual report 2012
2013	900	35%	Annual report 2013
2014	802,5	-11%	Annual report 2015
2015	292,5	-64%	Annual report 2015

Consolidated results			
Year	Revenue (in millions, EUR)	Profits (in millions, EUR)	Source
2011	7.368	188	Annual report 2011
2012	8.479	255	Annual report 2012
2013	9.870	300	Annual report 2013
2014	10.614	320	Annual report 2014
2015	10.262	295	Annual report 2015
2016	9.567	356	Annual report 2016
2017	10.338	299	Annual report 2017
2018	10.425	307	Annual report 2018



Appendix B

Cows'milk collection and products obtained - annual data [apro_mk_cola]

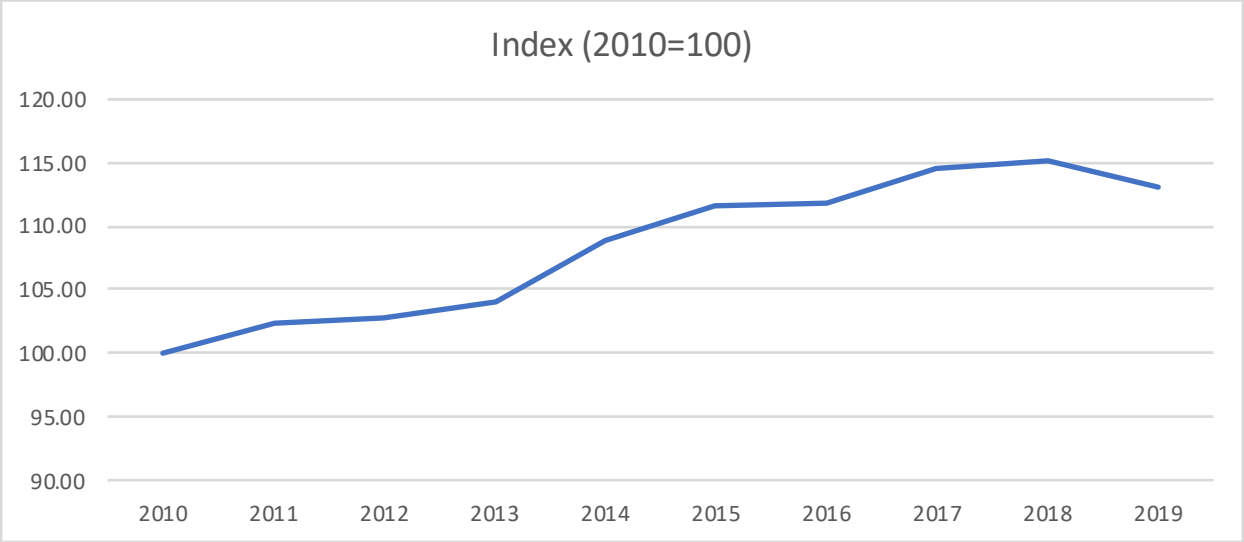
Last update
Extracted on
Source of data

03.03.2020
04.03.2020
Eurostat

DAIRYPROD
UNIT

Raw cows' milk delivered to dairies
Thousand tonnes

GEO/TIME	2010	2011	2012	2013	2014
Germany	28,659.07	29,339.35	29,701.78	30,301.42	31,375.28
France	23,375.29	24,630.98	24,535.96	23,988.94	25,308.50
United Kingdom	13,583.80	13,804.20	13,590.60	13,687.40	14,828.80
Netherlands	11,626.10	11,641.70	11,675.60	12,212.60	12,473.00
Italy	10,407.53	10,259.58	10,003.80	10,397.47	11,024.11
Poland	8,989.72	9,295.87	9,843.48	9,921.26	10,581.42
Spain	5,831.59	5,950.32	5,996.82	6,299.55	6,601.10
Ireland	5,327.02	5,536.68	5,379.70	5,583.69	5,816.23
Denmark	4,817.50	4,786.70	4,915.70	5,025.40	5,112.60
Belgium	3,066.64	3,446.37	3,412.02	3,474.76	3,689.44
Sweden	2,859.66	2,850.40	2,861.17	2,867.55	2,931.25
Austria	2,780.98	2,904.42	2,964.13	2,933.25	3,067.38
Czechia	2,316.87	2,366.20	2,446.13	2,382.13	2,414.15
Finland	2,288.56	2,255.31	2,254.04	2,286.81	2,357.15
Portugal	1,824.49	1,837.13	1,854.69	1,776.63	1,863.45
Hungary	1,321.86	1,307.92	1,398.24	1,364.23	1,470.19
Lithuania	1,278.25	1,317.42	1,359.90	1,339.49	1,435.50
Romania	900.89	891.52	883.71	879.07	995.38
Slovakia	799.95	811.5	851.25	826.73	843.69
Greece	687.73	638.09	663.73	652	619
Latvia	625.24	661.93	718.38	735.66	804.5
Croatia	623.88	626.45	602.16	503.85	522.69
Bulgaria	539.42	499.11	497.48	494.63	509.67
Slovenia	519.5	525.63	535.06	516.97	531.69
Luxembourg	281.78	281.04	277.33	286.91	305.54
Cyprus	150.96	152.62	153.44	156.67	163.64
Total milk production	**135,484.28**	**138,618.44**	**139,376.30**	**140,895.07**	**147,645.35**
Year	2010	2011	2012	2013	2014
Index (2010=100)	100.00	102.31	102.87	103.99	108.98



2015	2016	2017	2018	2019	TIME/GEO
31,879.11	31,972.73	31,937.03	32,490.94	32,442.21	Germany
25,374.92	24,453.33	24,629.49	24,542.54	24,499.29	France
15,191.30	14,542.00	15,144.70	15,188.10	15,428.20	United Kingdom
13,330.90	14,324.20	14,295.90	13,880.80	13,787.90	Netherlands
10,640.98	10,773.15	11,902.24	12,070.75	11,965.01	Italy
10,869.20	11,129.96	11,647.09	11,945.62	12,174.96	Poland
6,871.80	6,863.71	7,013.90	7,120.80	7,265.21	Spain
6,585.13	6,851.63	7,475.42	7,810.24	8,226.62	Ireland
5,277.60	5,376.29	5,494.18	5,615.21	5,614.69	Denmark
3,988.11	3,881.51	4,025.41	4,178.89	:	Belgium
2,933.16	2,861.99	2,816.65	2,760.23	2,704.39	Sweden
3,102.56	3,091.48	3,199.62	3,182.84	3,139.80	Austria
2,500.39	2,793.20	2,979.34	3,033.02	3,073.49	Czechia
2,394.32	2,389.53	2,365.92	2,353.69	2,329.67	Finland
1,927.98	1,842.76	1,850.79	1,894.21	1,892.01	Portugal
1,536.06	1,547.14	1,545.46	1,535.30	1,568.25	Hungary
1,438.03	1,416.31	1,403.06	1,366.59	1,358.09	Lithuania
915.95	953.41	1,028.33	1,109.31	1,122.33	Romania
864.63	822.74	825.89	818.22	814.73	Slovakia
612.4	619	614.3	620.2	631.1	Greece
807.66	814.01	813.46	780.64	785.2	Latvia
513.43	489.66	476.79	453.47	435.59	Croatia
505.4	530.09	592.49	648.8	658.77	Bulgaria
553.68	574.71	578.85	:	563.97	Slovenia
332.52	361.99	374.34	394.78	409.38	Luxembourg
162.31	200.41	216.26	228.08	238.76	Cyprus
151,109.53	**151,476.94**	**155,246.91**	**156,023.27**	**153,129.62**	**Total milk production**
2015	2016	2017	2018	2019	Year
111.53	111.80	114.59	115.16	113.02	Index (2010=100)