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Navigating An Ocean of Policies

The Ramifications of Public Choice on Norwegian Seafood Production During a Pandemic

Master's thesis in European Studies

Supervisor: Viktoriya Fedorchak

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NTNU

Kunnskap for en bedre verden

Abstract

Seafood is an increasingly important source of food in the international society. During the pandemic, the stability of this sector experienced challenges, such as access to labour, transport, and, thereby, the market. Nonetheless, the industry has experienced high export rates and value creation during the pandemic. This thesis looks at how national and international politics and policy affect the room for manoeuvre for actors reliant on international trade and movement. By using rational and public choice theory, my thesis has found that the choices available for these types of actors are indeed shaped by public policy.

Sammendrag

Sjømat er i det internasjonale samfunnet en viktig kilde til mat. Under pandemien, har denne næringens stabilitet blitt utfordret, gjennom vanskeligere tilgang til arbeidskraft og markedet. Likevel har næringen hatt historisk høye eksporttall og høy verdiskapning. Denne oppgaven ser på hvordan nasjonal og internasjonal politikk påvirker handlingsrommet til aktører avhengig av internasjonal handel og bevegelse. Oppgaven har funnet at de rasjonelle valgene som er tatt av offentlige aktører i utformingen av policy har stor påvirkningskraft på valgene som tas av private aktører. Om utfallet av formingen er som ønskelig derimot, finner oppgaven gjennom å studere valgene bedrifter tar gjennom bruk av rational choice og public choice.

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We did it!

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Abbreviations

EU	European Union
EEA	European Economic Area
EFTA	European Free Trade Association
UIO	University in Oslo
NOFIMA	The Norwegian Institute of Food, Fisheries and Aquaculture Research
UN	United Nations
MDS	Most Different System Design
MFN	Most Favoured Nation
CAP	Common Agricultural Policy
CFP	Common Fishery Policy

“Our mission to protect the ocean needs to be as big as our shared responsibility. [...] Europe can make a huge contribution, as a maritime power. But only together can we step up protection and let our oceans teem with life again.” – *Ursula von der Leyen, One Ocean Summit, 11.02.22*

1 Introduction

Every state in the world relies on the import of goods, services, and labour for society's daily functions to run smoothly. Through trade, countries can supply enough food, resources, jobs, and welfare to their citizens. Thus, countries have a more significant opportunity to specialise in specific areas of production and import what they might need from other states that itself does not produce. The COVID-19 pandemic in 2020 provided the ultimate challenge to this system of trade-interconnectedness when the world had to lock down, and everything from production to transport to stores suffered large numbers of layoffs and sick leaves. The food production industry is also heavily reliant on this international system of interdependent trade. Food is an essential need that the entire world relies on having access to, as one relies on it to survive. Therefore, stable and efficient food production is necessary for the well-functioning of our societies.

As a small actor both in terms of population and area internationally, Norway is not exempt from this rule. Norway's primary sector specialisation has largely been fishing, as the harsh terrain covering most of the mainland has made it challenging for other primary sectors to prosper. The country's long coastline, and therefore broad access to a vast ocean, has allowed the industry to prosper from the furthest south to the far north. Fish and seafood have contributed to Norway becoming a giant provider of seafood internationally, as seafood is stapled as healthy, sustainable, and ethical due to its origins (Larsen, 2021).

The industry does face its set of challenges, however. Although fishing has been an ingrained part of the Norwegian culture, the last decades have been characterised by ever more globalised management of the resource and access to new, cheaper solutions. This has led to the local coastal communities struggling to keep their attractiveness amongst the youth; although the value generation is high, the attractiveness to work in fishery and seafood production is low. Additionally, access to cheaper labour from Europe made it a more equitable solution to send it out of state to finish production of the fish-raw material instead of producing it by the docks.

Because of the EEA-agreement, and the "fish letter" from 1973, as well as the compensation agreements from '95, '04 and '07, Norwegian fish meets differentiated export duties based on the grade of processing the product has experienced. Whole fish, or 'round fish,' has a virtually non-existent toll barrier compared to portion-cut/packed fillets (Melchior A. , 2020). The fish letter and EEA-agreement together establish the Norwegian preferences for toll (Melchior A. , 2020, p. 184). For example, a whole, fresh salmon has a tariff of 2%, while on the other hand a smoked salmon faces a tariff of 13% in 2018 (Ministry of Trade, Industry and Fisheries, 2018). One can therefore argue that it is incentivised by this agreement with between the EU and Norway where it is formalised that the Norwegian fish industry should send non-processed fish to Europe, instead of processing the fish near where its harvested.

This thesis investigates how the decisions made by public officials through how the shape of a policy contributes to how a private actor's manoeuvring space. This will be achieved by looking at how the Norwegian agreements with the EU, such as Schengen, the EEA

agreement, and “fish letters”, and whether the frameworks they establish or restrict or enable specific movements.

Understanding how Norway and Norwegian actors’ dependence on public goods behave in a globalised market can contribute to establishing empirical evidence of how the choices made by public actors in the shaping of a policy governing public goods have on society. Through studying public policy from a bottom-up perspective, one can understand how the policy is perceived by the industry which is affected by its creation.

The thesis aims to understand why businesses in the fish processing industry are increasingly choosing to modernize and establish production lines across the Norwegian coast after decades of focusing on establishing and branding themselves internationally. Using the theories of public choice and rational choice, the thesis analyses what available behaviour choices a cross-border actor has when considering location, profitability, and sustainability. The actors studied in this thesis are actors within the seafood production industry. *Seafood* is a term that covers all species sea native foods – white fish, pelagic fish, farmed fish, wild-caught fish, shellfish, crustaceans and so on. In this thesis, the focus will cover only wild-caught white fish and farmed salmon products because of the cases participating in this study.

Looking at the past five years, the analysis within this thesis can see developments in consumerist patterns, export patterns, and labour migration, and what changes affected the industry during the pandemic. Additionally, the broader cultural aspect will be explored within a wider historic context to provide a solid foundation for the thesis subject. Therefore, this thesis will also contribute to understand how EU legislation impacts the opportunities said enterprises have when facing the European market. Therefore, the thesis asks the following research questions:

- 1) *What assessments have led to the choice in localizing fish processing in the fishery and aquaculture industry along the Norwegian coast?*
- 2) *What consequences does this have for Norwegian coastal communities?*

To further narrow down the scope of the topic and increase the conciseness of the study at hand, I chose to include a couple of sub-research questions. These questions contribute to the analytical themes and structure, giving each section a question to resolve. The sub-research questions are as following:

1. *How does policy and infrastructure influence their choice?*
2. *How reliant are coastal communities on industrial activity from this sector?*
3. *How are policies and trade agreements with the EU shaping their rationales?*
4. *How important is sustainability in the assessments of actors utilizing a public good?*
5. *How did the pandemic affect the export market, and did consumer patterns change?*

These sub-research questions will contribute to shaping the structure of the content in this thesis, especially the analysis. This will contribute to establishing a coherent basis for discussion and conclusions for wrapping up the analysis.

Existing literature is abundant, but due to space limitations of this paper, all of it cannot be summarised all here. Therefore, the thesis will introduce pieces of literature deemed the most relevant for contextualising and explaining the thesis subject in the second chapter. The chapter will establish what scholars have written on Norwegian seafood

production, Norwegian perception of EU membership, Norwegian membership of the EEA agreement, regional policy and resource management, and sustainability of seafood production. Chapter 3 will introduce the theoretical framework of this thesis and explain the reasoning surrounding the choice of public and rational choice as the theoretical basis. Chapter 4 establishes the methodological framework and different methods used to gather data. For this thesis, a combination of in-depth, semi-structured interviews and document analysis is used to compare the two different industries, which is the subject of study in this thesis. Chapter 5 in the thesis will be devoted to contextualising the importance of fishery and why it is essential. This chapter will establish the historical importance of fishery in Norwegian society, the industry's current standing in society, how the industry shapes Norway's international interests, and Norway's international obligations to preserve a sustainable fishery. The analysis will take place in chapter 6, analysing the data from the in-depth, semi-structured interviews and documents. The analysis is structured thematically, looking at each of the sub-research questions above, one at a time. The analysis finds that the rationalisations of an actor using a public good is influenced by a plethora of factors.

2 Literature Review

Norwegian fisheries and seafood production export has been studied extensively. The role it played during the membership referendums in 1972 and 1994 significantly impacted the Norwegian debates and perspectives on whether membership in the EU would be the right choice for the Norwegian people. Protecting this primary industry's workplaces and natural resources has always been central in the debate. With the emergence of aquaculture as a contender against sea harvested fish from the 80's, new issues and perspectives have gradually emerged.

Norway and its fishery industry, as will be explored further throughout the thesis, has a close-knit history. One can therefore not disregard the importance this industry has had culturally, economically, and societally throughout the existence of the nation. The relations between Norwegian fishery interests and the EU have been studied since the membership referendums, and the strong emotions which tie into this debate. It has therefore throughout the research process become clear that the literature covering fishery and seafood production has an inherent interconnectedness.

In aiming to structure the literature researched for this thesis will in a coherent manner, this chapter be structured after their majority focus on either their historical, cultural, societal, economic, or trade-related coverage. These four topics stood out throughout the literature as the repeating core issues in existing literature, both in Norwegian and English. These topics will then be discussed, introducing which gaps might exist in the literature presented and whether the thesis will be able to fill said gaps with its research.

The literature for the thesis was gathered using databases such as Google Scholar and Idunn.no, using the following keywords and key sentences in both English and Norwegian translations: "Norwegian Fishery Export," "Fish processing Norway" and so on. These scholarly articles and books were then sifted through, weeding out the less relevant articles for the thesis. Gathering articles has been part of the process throughout, as there were still articles central to the study's quality being posted throughout the writing process.

2.1 Historical, cultural, and societal literature

When summarizing the literature from the Norwegian cultural, historical, and societal point of view, certain authors and perspectives stand out. First and foremost, when reviewing the sources it becomes apparent that the history and culture surrounding fishery and seafood is written much about. Ownership and access are the reoccurring themes.

Vik et al. (2020) for example, discuss the dissatisfaction and revolt happening in the rural areas of Norway. This dissatisfaction has grown because of a state which has increased its ownership but decreased its presence, leading to rural communities feeling less seen and heard by the state. Norway is a resourced-based economy, where most resources are found in the regions. Vik et al highlight campaigns such as "the farmers revolt" as examples of how the regional industries are not feeling seen or heard by the state. A similar centralization is taking place in fishery and seafood production as well. Fewer actors are producing larger quantities of seafood, largely because the profit is

higher as a larger business, and the costs quickly become overwhelmingly large for smaller actors. The rural industries are economically growing, but because of the structural changes, it ends up pushing actors out of the industry. Understanding which variables are leading to these changes and challenges are important in understanding why and who are capable to make the investments needed to survive and profit in the rural coastal areas. Here, the opportunity presents itself for my thesis to investigate how the industry perceives as the route to take in stimulating growth and activity in the rural communities.

The journal article written by Nils Aarsæther (2019) discusses the coastal paradox, and whether there is a future for the coastal communities. This is done by looking at the historical changes of the coastal fleet and industry on land since 2000, through analysing the driving forces behind these changes. Among Norwegian scholars, there is a consensus on that the coastal rural communities have experienced growth the past decades – with technological developments and a modernized economy. There is a paradox however: despite the economic growth and opportunity, the coastal communities are not attractive for the youth. Youth generally choose to move more centralized, and a decreasing amount of family establishment, leaves the coastal communities to consist of an aging Norwegian ethnic group. Both public and private sector struggle with recruitment, as few youths qualify for work in the coastal businesses. Therefore, this thesis has room to explore how these businesses are mitigating these issues, and especially during the pandemic setting.

Mørk (2009) explore this in his master thesis through a qualitative historical study, using in-depth interviews. Through looking at the broad strokes of history, from the Viking-age until modernity, Mørk establishes the “why” behind fishery and seafood’s important place in Norwegian international affairs. Resource management, economic aspects, and negotiation disagreements between Norway and the EU was what proved to be the greatest dividers in the debates. He argues that the importance of the fishery question in the debate was founded in its symbolical nature historically (Mørk, 2009, pp. 106-107). The interpretation of this symbolism was however the dividing factor between the yes and the no side in the Norwegian debate (Mørk, 2009, p. 107). He finds that because of the lack of compatibility between the Norwegian fishery system and the EU system (which became apparent through the EU/EEA-membership negotiation and its lack of success), the no-side took this as proof that Norwegian fishery and rural areas would be left without any guarantees for its future (Mørk, 2009, p. 107).

Chapter 7 in Melchior & Nilssen (2020), written by Henriksen (2020), covers the access to labour force with and without the EEA-agreement. As for example highlighted by Aarsæther (2019), the population in the rural areas are aging and dwindling. Having access to a free flow of workers from the EU is therefore vital for the Norwegian rural industries. The full-time employment of non-Norwegian workers between 2003 and 2018 rose from 12% to 50%, and during winter seasons the percentage is even higher (Henriksen E. , 2020). Import of competences are therefore important, and attractive to workers as they are entitled to the same terms of employment as a Norwegian worker (even though social dumping happens). There is a discussion whether work immigration is positive or negative for the Norwegian fishery industry, as they are increasingly dependent on labour migration to cover their recruitment issues. The fishery industry would therefore have to undergo drastic changes if Norway were to leave the EEA-agreement, to increase its attractiveness among the Norwegian working class.

What it all comes down to, is that the resource has great significance for Norway's economy. It will become apparent in the following section how it influences Norway's international positioning and agreements.

2.2 Profitability, resource management, and sustainability

What becomes very apparent is that the economics of the resource management is a recurring topic throughout almost all the literature on fisheries and seafood production. Most importantly, discussions on the management of natural resources and the sustainable usage of said resources have remained a significant element throughout the literature.

Maurseth & Medin (2020) sketch out how the agreements Norway and the EU have with each other restrict access to certain areas of policy and resources which they wish to protect. The tit-for-tat nature of the EEA-agreement both facilitates and hinders the investments made externally in the seafood industry. Fishery, along with agriculture, are areas with exemptions from the four freedoms, with their own agreements regulating market access. Norway limits free access to the fishery by implementing laws which regulate the ownership and operation of fishing vessels which is prioritized Norwegian citizens, and the EU protects its fishery industry by limiting the market access of Norwegian products (Maurseth & Medin, 2020, p. 233). The processing industry on the other hand is not a restricted area in terms of external investments, meaning that EU enterprises can invest in Norway, and Norwegian businesses can establish themselves in the EU. Whether this can be regarded as positive or negative for the industry can however be discussed.

The increased utilization of rest raw materials is according to Hjellnes, Rustad and Falch (2020) the recommended focus area for a sustainable and more profitable white fish value chain in the future. A value chain is often defined as a raw material's journey through production (NOU 2020: 12, p. 34). They underline the fact that more qualitative analysis of the white fish industry and how they utilize their rest raw materials are needed. These qualitative analyses, they argue, can be a useful tool in identifying and understanding the underlying mechanisms of current practices, and why there is such a low degree of utilization in the white fish sector (Hjellnes, Rustad, & Falch, 2020, p. 6). This thesis has thus ample room for exploring deeper how they as a white fish processing and exporting firm utilize their rest raw materials.

Norwegian fish processing industry see a regional specialization according to Fløysand & Jakobsen (2001). They argue that changes in the level of activity and profitability at the regional level can be linked to the characteristics of the regional production system in different areas, and by structuring the fish-processing industry around a regional specialization will encourage establishment of inter-firm relations and a more market-oriented industry. Regionalizing national policy would according to them be a sustainable way of stimulating long-term business strategies in the industry (Fløysand & Jakobsen, 2001). Even after 20 years, this article provides an insight into the structure of the Norwegian fish processing industry which is still relevant. They introduce four conditions which affect activities in a regional production system: Political, demand, regional industry, and factor conditions (Fløysand & Jakobsen, 2001, p. 18). Its age does however give room for evaluating its applicability on the industry in a modern timeframe, and through looking into more recent reports investigate whether any recommendations has been fulfilled or changed within the recent years.

2.3 Trade agreements and tolls

Toll has much to say for the Norwegian export to the EU. The current tolls on processed seafood and fish which are in place today can arguably be defined as discouraging for the processing within Norway and encouraging exporting the unprocessed raw materials to EU-member states. Through using a model-based analysis of the tariffs on Norwegian fish export to the EU, Melchior quantifies the economic impacts of tariffs and tariff rate quotas under the EEA, EU membership, and abolition of the EEA. Melchior's analysis is however a static analysis, which measures the changes in price affect trade in a given situation (Melchior A. , 2020, p. 207). The effects of dynamic effects from the industry adapting to the export market is on the other hand not considered in Melchior's analysis, which the analysis of interviews with industry actors in my thesis will cover.

Mathisen & Solvoll (2020) analyse the economic consequences of the transport of fresh salmon to the EU in several possible scenarios of status quo, a "NOEXIT", or gaining membership status (Mathisen & Solvoll, 2020, p. 155). Through the EEA-agreement, Norwegian salmon exports are exempt from veterinary controls and randomized controls with lab testing of the salmon products, and thus move more efficiently compared to no agreement (Mathisen & Solvoll, 2020). Their analysis proves to show that a higher transport coast through road transport, could increase the profitability of increasing further processing in Norway and rather using cheaper, slower modes of transport (Mathisen & Solvoll, 2020, p. 177). The costs of transport and time usage can influence whether an actor will choose to localise in a rural or central area.

The book "Interest Conflicts in Norwegian Trade Policy" (translated from Norwegian) from 2015 introduce and analyse the dilemma of how Norwegian international policy face dilemma. Offensive and competitive export industries such as the seafood industry demands a liberal trade policy to gain access to other states, whilst defensive industries such as agriculture fear competition and demands protection (Gaasland, 2015). This entire book introduces important perspectives for this thesis, as it covers everything from the economic to the historical to the trade-agreement topics. The following two chapters will be included in this literature review. The chapter "EU as a trade policy actor" in Melchior & Sverdrup (2015), looks at how the re-negotiation of market access for agricultural goods and seafood, as well as the renewal of Norway's/EFTA's contributions to social and economic equalization within the EU (the EEA-funds). This book was written at a time where the EU was a recently changed actor. As the number of member states went from 15 to 28 in 2004, which changed the positions, powers, and interests within the Union. This chapter is included in this literature review, because knowing how the EU has historically acted at the negotiation table with Norway is vital to understanding the relationship the countries have today. In chapter two in Melchior & Sverdrup's book, Ivar Gaasland (2015) argues that the Norwegian interest internationally weighs agricultural interest higher than fishery, as the agricultural value chain has more to gain through gain better access to the European market, which also is further underlined by the EU's wish to protect their fishery sector and thereby implementing toll barriers. Fishery and agriculture are therefore according to Gaasland areas which should be combined when negotiating with the EU.

2.4 Summary

Summing up, the literature shows that the industry itself as well as scholars are actively working to close knowledge gaps on the field of seafood production in Norway. Reflections surrounding automatization, sustainability, efficient use of raw material and

technological advancements are discussed throughout the writings of both older and more recent literary works.

There is little research done from the bottom-up perspective on the policies and agreements which shape the Norwegian fishery and seafood industry. Much of the research done on this subject cover quantitative data on export, on trade profitability, and on the broad scale consequences of the policies. The focus of study is also generally on either just aquaculture or the white fish industry. This thesis aims to fill this gap in literature and look at how recent global events such as the pandemic have had an impact on the industry as a whole's global trade opportunities.

3 Theory

In this thesis, the aim is to understand actors in a market space and their rationalisations surrounding their use of a public good. Since the thesis uses a mixed-methods approach through in-depth interviews and content analysis of primary sources documenting the effects of fishery policies, a combination of theories on rational choice and public choice was deemed an interesting approach.

Rational choice theory underlines the importance of the individual actor and how they, as representatives of states, deliberate rationally by considering others' actions/behaviour and agree only to terms that benefit themselves (Loužek & Smrčka, 2020, pp. 22-23). Working together, they can shape into life a system that creates opportunities for achieving set objectives (Loužek & Smrčka, 2020, p. 22). Any rational actor has the following features: preferences, power, ideas, and information, which are shaped by the priority the given actor ascribes to the alternatives in terms of external and internal factors (Loužek & Smrčka, 2020, pp. 22-23). The rational choice model assumes that a rational actor makes rational choices and actions based on what alternatives are deemed to be the most profitable for its society and welfare system (Røste, 2013, p. 162). Rational choice theory is generally applied to the study of actions and choices made by states, state representatives or bureaucrats (Loužek & Smrčka, 2020, pp. 22-23). A state or state representative makes rational choices based on their selections among options and which gives more significant gains. The theory looks for whether these actors are deliberating in their choices and assessing others' behaviour rationally (Loužek & Smrčka, 2020, pp. 22-23). Public choice is critical to rational models of a homogenous state but accepts that economic and geopolitical considerations highlighted in economic and security matters have a significant influence on the behaviour of the government (Loužek & Smrčka, 2020, p. 28).

Public choice theory, in a similar manner to rational choice, investigates through economic methods the behaviour of individuals in a political process. It is an economic analysis of politics, intending to be a more realistic political science approach in its belief that the behavioural drivers are the politicians' own interests (Loužek & Smrčka, 2020, p. 28). Public choice theory traditionally investigates the theory of the state, electoral rules, operation of institutions, voters' behaviour, bureaucracy, and special interest groups. In this thesis, this theory will be applied to actors that are market actors but make use of and profit off a public good. Public choice is a positivist political theory aiming to explain "what is" and can be used as a normative identifier to identify problems or come up with suggestions for change. Since the thesis will conduct a comparative study of in-depth case studies on how they as actors in a primary sector that is influenced by external policies from the EU, it is possible through this theory to investigate the costs and benefits surrounding the different options that exist for the management of resources.

I chose public choice theory for my analysis as its approach makes it possible to incorporate both economic and political factors into the same analysis, giving better explanation to why real situations are taking place compared to traditional models (Weck-Hannemann, 2001, p. 81). With fisheries and seafood production in focus, public choice gives room to systematically search for the conditions of which various solutions can be expected at both national and international levels (Weck-Hannemann, 2001, p.

81). It concerns itself with the effect of different decision rules or decision-making arrangements have on production of public goods and services (Ostrom & Ostrom, 1971, p. 205). This is the perspective which the thesis aims to uncover, and thus even further strengthen the reasoning for utilizing this theory. Of the many schools of public choice, this thesis will use the Indiana School, which is led by Elinor Ostrom. Ostrom's theories and concepts on the governing of a public good are used in my thesis analysis to understand actor rationalisations. In Elinor and Victor Ostrom's article on public choice, they introduce four basic assumptions about individual behaviour as tools for analysis: 1) Individuals are assumed to be self-interested. 2) Individuals are assumed to be rational, through the ability to rank all known alternatives available in a transitive manner. 3) Individuals are assumed to adopt maximising strategies, by consistently choosing alternatives which the individual deems the provider of the highest net benefit by their own preference. 4) The individual is well informed on their situation (Ostrom & Ostrom, 1971, p. 205). An individual which is self-interested, rational, and pursue maximising strategies will find themselves in situations where they are producing and consuming varieties of goods (Ostrom & Ostrom, 1971, p. 206). These goods can be distinguished as either a private or public good. A purely private good can be defined as goods and services that are highly divisible, with the ability to be packaged, contained, or measured in discreet units, and other consumers can be excluded from enjoying the good. A purely public good on the other hand, are indivisible goods and services, where others cannot be excluded from its enjoyment (Ostrom & Ostrom, 1971, p. 206). In between these pure definitions, one finds goods or services that are less definable. These types may involve spill-over effects or externalities which are not isolated and contained within a market transaction, for example how air pollution or a public park affect an area but is managed by a public entity.

A public good's impact may therefore be positive or negative, but nonetheless public goods create challenges for the individuals aiming to maximising their own profits through exploiting a public good. Often referred to as "the tragedy of the commons", the exploitation of public goods by individual actors who disregard the conservation or maintenance of quality of the good (Ostrom & Ostrom, 1971, p. 207). This ties up to Mancur Olson and his Logic of Collective Action which conclude that individuals cannot be expected to form large voluntary associations to pursue matters of public interest unless special conditions are met (Olson, 1965). Incentive for concentrated groups – such as fishers – to act in their own self-interest, combined with a lack of incentive or driving forces for larger groups to organize themselves, the legislation implemented will as a result benefit a small group rather than the public as a whole (Olson, 1965). Individual actors are likely to adopt a strategy where they pursue their own advantage and disregard the consequence which their action may bring upon others (Ostrom & Ostrom, 1971, p. 207). Some actors will avoid communicating their honest preferences for the management for a public good altogether, to be able to indicate their non-participation in the process and attempt to avoid paying their share of the costs. Voluntary associations will only be formed by individuals in pursuit of public interest when they derive spearable benefits of sufficient magnitude deemed justifiable from the cost of membership, or situations where they can be coerced into bearing the costs (Ostrom & Ostrom, 1971, p. 207). One can therefore assume that the individual, if they were to be a rational person, would calculate the probability of their action making a difference and choose to act accordingly (Ostrom & Ostrom, 1971, p. 207).

Hardin's introduction of the term "the Tragedy of the Commons" thought of users of public goods as trapped in the situation of over-utilisation of the good, as actors only

interested in short-term profit maximising who have the complete information and are homogenous in their assets, skills, discount rates and cultural views (Ostrom E. , 2008, p. 1). A common pool resource is a broad class of resources, which yield finite flows of benefits, such as fish, water, and firewood, where it is difficult to exclude other users (Ostrom E. , 2008, p. 1). It has been assumed that the resource generates a predictable, finite supply of the resource unit in each time period, and that the users of these common pool are short-term, profit-maximising actors with complete information and homogenous in terms of assets, skills, discount rates or cultural views (Ostrom E. , 2008, p. 1). According to Weck-Hanneman, globalisation is a challenge for public choice theory. Due to lower transaction costs through economic integration through increasing international factor mobility, it allows for the increasing possibility for differentiating between production processes and different production stages to be produced in different locations across the world (Weck-Hannemann, 2001, pp. 78-79). In addition to the geographic element, globalisation includes intense economic integration in factor, goods, financial and information markets (Weck-Hannemann, 2001, p. 80). How these actors are assessing their position in the globalised market in the context of using and producing a public good is the core reason for why this thesis has chosen to use public choice. The cases of the thesis are assessed as the individuals in this scenario, and that their choices as individual actors can be explained through the lens of public choice.

Thus, five assumptions will be examined in this thesis:

- A rational actor will choose the option in their self-interest.
- A rational actor will choose the option which gives opportunity for maximisation
- The actor will deliberate and observe other actors to assess their route of action
- The market will steer economic actors' interests through preferences caused by its structure
- Actors making use of a public good are trapped in a cycle of over-utilisation, if not interfered by external forces.

These five assumptions give the analysis opportunity to test for the characteristics of rationality and aspects of public choice, and whether how the policies surrounding their space of action are shaped are contributing to the encouragement or discouragement of certain choices.

3.1 Critiques of public and rational choice.

No theory as of yet has achieved perfection, and face critiques for their models, applicability, and assumptions (Mashaw, 2010). The theories included for this thesis are no exemption. Rational choice face criticism for being simply a descriptive phrase, used to describe any number of theories using assumptions as basis for rationality (Quackenbush, 2004, p. 92). Similarly, public choice is criticised for the non-verifiable hypotheses and models used, and that due to these hypotheses and models being developed and used on actions or institutions which are deemed to fit the model (Mashaw, 2010, p. 40). Others argue that some of the findings of public choice do not fit with public choice assumptions, for example how a politician interested in re-election should in theory be responding to the voter's preferences of the time, not to preserve the majority through an existing coalition majority (Mashaw, 2010, p. 41). It is also often pointed out that certain models leave out variables, for example the situation of a president in the legislative control explanation of administrative procedures (Mashaw, 2010, p. 41). The plausibility of the base assumptions in public choice theory that all political actors are self-interested and behave rationally and strategically is also put into

question (Mashaw, 2010, p. 42). The predictability of the theory has been weak, and the parallel to microeconomics far from perfect. The presumption that firms or individuals in a market will act in an environment of moderately vigorous competition, and in such an environment will not survive if they do not act in self-interest and rationally, is not always applicable as a firm is not always acting only out of survival (Mashaw, 2010, p. 43). Economic actors are also largely believed to have the market select for them what traits are to be rewarded and punishing those who don't display them, which is taking away the obligation to have internal perspectives in order to have predictive power (Mashaw, 2010, p. 43). Quackenbush (2004) argue that there are two forms of assumptions: one is unprovable, the other is used to generalize reality when constructing theory, and that the ultimate test of assumptions usefulness is to test the empirical validity of the resulting theory (p.101). Quackenbush defends rational choice theory that the critiques on rational choice are largely misunderstandings of the assumption of instrumental rationality, and that the theory lines up with behaviours constrained by institutions, cultural influences, or psychological limitations (Quackenbush, 2004, pp. 101-102).

I challenge these critiques in this thesis through using the theory in a context of a non-political actor, who still must take "individual" decisions and actions in regard to their maximising efforts and coordinate with other actors in order to fulfil their self-interests. I agree with Quackenbush's statement that rational choice is rather an approach to theory than one theory, as it is the falsifiability of individual theories that are the goal (Quackenbush, 2004, p. 102). Through combining rational and public choice with a microeconomic case study, it becomes possible to generate empirical data which the theory is criticized for lacking.

3.2 Differentiated integration

A concept which also should be mentioned for this thesis is differentiated integration. Differentiated integration is the possibility for member states and associated states to integrate in different functional, institutional, spatial/territorial, or temporal forms (Leruth, Gänzle, & Trondal, 2019). Norway, standing as an associated state in the EU, has integrated in the form of participating in the EEA-agreement, and being a member of EFTA. The differentiation of European integration has brought upon a more chaotic structure of the Union, compared to its beginnings as the Coal and Steel Union. According to Leruth Leruth, Gänzle and Trondal (2019, p.4), differentiated integration should on the other hand not be viewed as another response to crises, but a variant of integration (Leruth, Gänzle, & Trondal, 2019, p. 4). They argue that the EU is moving away from the concept of "an ever-closer Union" towards an "ever more differentiated Union", as the different integration paths chosen by members and non-members alike suggest that there indeed are viable alternatives to a full membership, even though temporary forms of differentiation are the more used and widely accepted model (Leruth, Gänzle, & Trondal, 2019). The increasing differentiation of attachment modes towards the EU is interesting in the perspective on the future of Norway's relationship with the Union. Integration is an important topic central to the understanding of the attachment model which Norway has to the EU today. The concept will not be included in the analysis due to the set limitations of the thesis, but as it provides context for why Norway's path has been allowed by the Union it must be mentioned.

4 Methodology

4.1 Case studies and interviews

In searching to understand why the phenomenon of increased investment along the Norwegian coast is taking place, the study will utilize a qualitative comparative case study, where the cases are analysed through conducting semi-structured in-depth interviews. The subjects interviewed in this study are representatives from the relevant industry. A semi-structured in-depth interview has been chosen for this thesis as it gives the researcher the possibility to gain knowledge on the informant's subjective perspectives and emotions from the prepared questions and give better room or opportunity for new topics which I as the researcher have not included in the prepared guide to be identified (Tjora, 2017, p. 30). In depth interviews study the informant's perception of a phenomenon, how they experienced the phenomenon and their reflections around it, gives possibility to create a nuanced impression of how the phenomenon was perceived by the subjects (Tjora, 2017, p. 114).

Using the method of interviews to study this phenomenon gives opportunity to fill the knowledge gaps which the annual reports and literature cannot explain. The informants from the businesses get the possibility to explain their experiences, the rationales they have behind the investments made, and how they view their role in establishing a sustainable value chain of fish processing. Through studying this in depth, the thesis will gain better opportunity to make recommendations on what future actions might be needed to take in order for the primary sector to see further development.

In the words of Hjellnes, Rustad and Falch (2020):

'For the white fish industry in Norway, qualitative analysis could be a useful tool to identify and understand the underlying mechanisms of current practice and the low degree of utilization [of rest raw material]. Qualitative research data can thus provide valuable information about opportunities and hurdles for implementing appropriate technology and new practices.'

Qualitative research on this topic is valuable in how it gives insightful information on how actors within this sector perceives public policy. It contributes to uncover the perceptions of the forces hindering or facilitating sustainable development and use of the resources.

To be able to conduct research which capture the interdisciplinary and dynamic nature of fishery and seafood production, the methods of semi-structured interviews and document study were chosen for the method of this thesis, as mentioned. The thesis will also be using a comparative method, allowing for tracing out possible causal mechanism in their natural contexts (Moses & Knutsen, 2019, p. 95). Comparative methods observe and compare carefully selected cases to find whether there are any influencing variables that are present or absent (Burnham, Gilland Lutz, Grant, & Layton-Henry, 2008, p. 73). The thesis will be using the Most Different System Design (MDSD) comparative method, also

known as the Method of Agreement, originally theorised by Mill (2002 [1891]). Due to the cases included in the thesis being contrastingly different but experiencing similar outcomes as through the investment increase happening in both industries, this method was deemed the most applicable. The two businesses included as cases in the thesis cover two different areas of market, one for aquaculture and one for sea fishing. Through choosing cases which share a common phenomenon in cases that are otherwise different, I can investigate explanatory factors behind a phenomenon, to be explained by the common presence of that factor (Moses & Knutsen, 2019, pp. 101-102). What these actors have in common is their choice of production in Norway, and export to the European market. What this thesis will investigate through the lens of public choice are which other variables are possible causal explanatory factors for the phenomenon.

I contacted SinkabergHansen through a local cluster, InnovArena. Jangaard export was contacted directly by me. Several other clusters and businesses were also contacted for participation, but these two were the ones which ended up being included. These cases were contacted as they were both Norwegian businesses, with locations within the country and exporting mainly to Europe. The cases were interviewed in person and through a Microsoft Teams call. During these interviews, I asked a set of questions which corresponded to the analytical topics of my thesis, which covered location choice, the pandemic, trade, and sustainability. For example, some of the questions asked surrounding choice of location were: "How has the areas infrastructure's quality influenced your choice in placement?" and "What do you think this choice has meant for the local community?" (Appendix). I was interested to analyse how they rationalised why they are operating in specifically these locations, and how they viewed their role as an actor making use of a public resource. Specifically how they assessed the importance of local acceptance. Since this industry is very influenced by Norway's international agreements, I included the following question: "What opportunities and hampers has the current trade agreements Norway has (through for example the EEA-agreement) given you?" (Appendix). This gives me the possibility to assess what their perception of these agreements are, as a rational actor. Understanding what they assess as profitable versus costly will give insight into who they are as an actor. And lastly, the questions covering how they handled the impact of the pandemic gives me insight into their prioritizations and cost calculations of what is important and what is not. Additionally, the question gives room to investigate whether they have experienced any change in consumer consumption patterns from before and after the pandemic.

The analysis is therefore structured after a similar set of thematic criteria as the interviews were, which will through a combination of the themes introduced in the literature review contribute to the analysis of the different influences behind the choice of location, pandemic ramifications, and sustainability. The context behind these topics will be further expanded upon in the next chapter, which cover the history, current standing in the Norwegian society, and international interest of fishery in Norway.

4.2 Document analysis

To understand the perspectives of the subjects, the thesis also undergoes document analysis as a supplementary method to the case studies. Documents such as annual reports and public inquiries give possibility to understand the deeper context surrounding why the subjects interviewed have certain perceptions of phenomena, and whether there are larger historical, cultural, or economic contexts which are under the surface of what is said. A document study is perceived as an unobtrusive method, where empirical data

can be generated without the involvement of non-researching participants (Tjora, 2017, p. 182). The case-specific documents that will be included in the analysis in this thesis, provide information surrounding a situation which is written at a specific time and place, with specific readers in mind – and thus need to provide context surrounding the source (Tjora, 2017, p. 183). As some of these studies also include quantitative analyses of seafood export and employment, which the thesis can thus use findings from their findings in the analysis and compare the data with statements from interviews. Let us go through the documents that are to be used as supplementary to the thesis analysis.

The Norwegian government funds public inquiries on a set of specific topics. These reports deep dive into the central debates on the appointed topic and sum up relevant research. Three public inquiries from the years 2012, 2020, and 2021 will be used in this thesis due to their relevance to the thesis topic. Firstly, in NOU 2012:2 "Utenfor og innenfor" sum up the history of attachments Norway has with the EU, and the country's differentiated integration are analysed. It discusses the issues with being a state which implements most of EU legislation, without having representation within the EU institutions and the decision-making process. The report is thus a vital source of contextual information on Norway's attachments to the EU, and what it means for Norwegian industry and people in being part of the EEA-agreement.

NOU 2020:12 "Næringslivets betydning for levende og bærekraftige lokalsamfunn" defines and classifies from 1 to 6 what can be defined as central and what is periphery, and outlines which areas of business are located in these peripheries and districts. The export from district Norway makes up much of the value creation of the regions and saw an increase between 2018 and 2019 (p.50). EU is the most important export market for Norway, as 80% of total export in 2019 went to the EU (NOU 2020:12). Fish is the third largest export good Norway exports, behind natural gas and raw oil (p.51). Approximately 30 percent of the workforce in Norway is employed by international businesses, which is equal to the other European countries (p.53). Norway stands out however by the fact that the investments are happening in the districts, and not in the capital regions, which is more common in the rest of Europe (p.54). The districts have seen a weak growth in population size, despite the economic growth the business areas have brought, and there is a movement stream from the peripheral areas towards the central areas (p.57). A population in the districts which are aging, and a diminishing number of birthing persons, further contributes to the dwindling number of inhabitants in the regions (p.63-64).

The 2021 NOU:9 "Den norske modellen og fremtidens arbeidsliv" studies the different attachment modes and structure of business in Norwegian employment through the lens of structural changes and external driving forces, and the Norwegian employment model. Technological development, globalization, change in population composition, and environmental and climate change are drawn out as the central driving forces which is driving the changes in the Norwegian employment model. The NOU also study the different employment modes of the current system, and the composition of workers. Chapter 4 of the NOU 2021:9 study describes the central driving forces and development features which affects employment. Technological advancements such as digitalization and automatization, but also international ownership and labour-immigration are important explanatory factors behind the current composition of the labour market. Therein lies the reason of why this source can contribute to the thesis' search to understand what the access to labour means for the fishery sector, and what it meant for this industry during the pandemic.

The Norwegian Government's Ministry of Industry and Fishery appointed a selection of researcher to produce a report, studying green value creation and the increased processing in the seafood industry, analysing the data from the past decade showing how the profitability and green shift in processing of sea harvested fish have developed over time. Tveiterås et al (2022) ties together the industry's status and development features, the framework conditions for seafood production industry, the central driving forces for future seafood production, and give recommendations for future change. This source, which although focus largely on white fish seafood production, proves a vital source in establishing and understanding the status of the sector and its frameworks. Tveiterås et al's recommendations and discussions establish data which this thesis can spring off from and continue their discussion from a qualitative case study perspective.

NOFIMA report from 2008 on the profitability of fish processing in Norway, reports that there was a decrease in profitability in fish processing in Norway between the late '90s and early 2000's, both concerning profitability, employment, etc. Substantial portions of Norway's industry are export oriented, and thus the Norwegian positioning has worked towards increasing free trade (where the agricultural industry is the exception) (Henriksen & Bendiksen, 2008, p. 17). They argue that even though parts of the national industry suffer because of the free-trade focus, the general perspective is that the nation profits from it because it stimulates export businesses and employment in sectors with low productivity is allocated to industries with higher productivity (Henriksen & Bendiksen, 2008, p. 17). If Norway wanted to protect and stimulate the internal industry, a common solution is to increase the toll barrier on products which are highly processed and lower the tariffs on the less processed products (Henriksen & Bendiksen, 2008, p. 17). They uncovered that the existing literature then had good knowledge of the industry's issues and value chain but uncovered that the following topics needed further research. One of these are the question of: how does organization of the value chains, both upstream and downstream, affect localization and profitability in the processing chain? This report gives context for both the aquacultural and wild-fish processing industry cases, and grounds for analysis on whether the hurdles they are facing remain the same.

4.3 Limitations

The limitations which follow the chosen methods and theories must be considered before moving on. Through choosing to have in-depth interviews, it is important to consider the subjectivity of myself as the interpreter of their responses to the questions I have posed. Interpreting the interviewees intent and what knowledge they possess is a guessing game as a researcher. However, through gathering information through content analyses of other primary sources such as reports, official documents and so on, provides the ability to cross-reference the data through different sources. This also contributes to a more fact-founded contextualization of the studied subject.

The chosen timeframe of the past five years is still relatively recent, and while writing this there is still research and articles being posted which are relevant to this study. The knowledge and perspectives surrounding the topic is still growing, although debates on membership, fishery, sustainability, and processing have been present for many years. It is impossible to know whether this thesis topic and its relevance might change after publication, which is something outside of anyone's power to predict or change. Its aim is on the other hand to introduce a general understanding of Norwegian seafood production's position, and how it fared during a pandemic. Questions of new referendums

in Norway are tentatively starting to emerge, as Europe faces turbulence anew and the question of who one is to stand closer to becomes just the more vital.

5 Contextual chapter

5.1 Historical importance of fishery in the Norwegian economy

Norway's primary industries are fishery agriculture. These industries are tough, as the country's geographic location and harsh landscape contributed to difficult farming. The fishers were for a lengthy period fishing in small vessels, making the already dangerous travel out into the Atlantic Ocean an even more perilous affair. Fishers were often lost at sea, but as the mainland left little to earn any profit from, many still had to choose to venture out at sea. Throughout the 19th century, it is claimed by historians that herring and potatoes were a contributing factor to Norway prospering through a period of food scarcity (Hjellnes, Rustad, & Falch, 2020, p. 2). But the easy access to fish was not just a dance on roses. Wild fish stocks are unstable, and therefore there was great importance in taking use of every single part of the resource to produce food (Hjellnes, Rustad, & Falch, 2020, p. 2). This unstable access to the resource throughout the industry's history has forced it to adapt, and vessels have thus quotas tied to its vessel covering more than one species of fish or shellfish to broaden their possibility for income. Therefore, one can argue that there has been great pride in having the title as fisher, and a strong want to strengthen and protect the industry from external actors. Strict rules imposed on who is approved as active fishers in the Norwegian economic zones were therefore early on established, with legislations prioritizing Norwegian natives/nationals as the owners of fishing vessels and purchasers of quotas. Fishery has been an important employment sector, where the number of full-time fishermen were between 20 to 30 thousand in the years between 1983 until 1993 (Fiskeridirektoratet, 2022). Employment rates in the production industry was challenging in the 1980's and 1990's as it was low, but this changed in the early 2000's as the implementation of the EEA-agreement and subsequent expansions of the EU in '04 and '07 brought an increase to foreign labour (Henriksen E. , 2020, p. 214). However, this increase was a consequence which was fervently discussed during the membership referendums.

Norway had public referendums for EU-membership twice, once in 1972 and once in 1994. Debates within Norway surrounding membership were split 50-50, dividing both political parties, families, and society internally in a ferocious debate on what would be the best outcome for Norway. The debate surrounding membership in the EU uncovered many worries in the Norwegian people. Concerns of moving the decision-making power away from the districts and nation to Brussels would lead to being steered in a direction not in tune with local customs and needs were salient (Mørk, 2009, pp. 33-37). The fear of losing control over the resource which already was vulnerable and unstable in numbers and giving access to a large fishing fleet which had already overfished its own waters were an understandable concern for those reliant on its stability and income. This sentiment was further strengthened by the establishment of the Common Fisheries Policy (CFP) in 1970, shortly after Norway had just begun to consider membership (NOU 2012:2, pp. 45-47) (Ingebrittsen, 1998). Following Britain was for many years Norway's European policy, due to the historically close relationship and cooperation the states had (NOU 2012:2). The referendums were however a change of pace in this relationship, as Norway chose to remain outside (NOU 2012:2).

5.2 Current standing in the Norwegian society

Despite the choice to remain outside the Union, the sector has experienced a decline in active fishermen. The sector today is far from the large employer it used to be back in the 18-1900's. From 1983/84, the number of registered fishers (with it as a full-time job) declined from approximately 23 thousand down to just under 10 thousand in 2021 (Fiskeridirektoratet, 2022). Reasons behind the decline can be explained by the large technological advancement and increased efficiency of the industry, as well as a general population which has experienced a vast increase in general income, and a wealthier state. This is a great example of how the structure of the industry and its attractiveness has changed over time but kept its value creation high.

Analysis by Seafood Norway on the year 2021 shows that there have been few dips in export of salmon, and that the largest importers of Norwegian fish are Poland, France, and Denmark (Seafood Norway, 2022). The stability of the export of fish coincides with the fact that the aquacultural industry has a much larger control over its resource, and more able to keep oversight over the health and wellbeing of the fish, and thereby keeping the number of fish which is ready for processing stable and high (Tveiterås, et al., 2022). The sea-caught fish is on the other hand more prone to unstable numbers, as the quota numbers are based on an estimate of how many young fish will be of age and large enough for harvest by the next season. Sea caught fish, which although have more freedom of movement and less exposure to for example lice infestations such as in the aquaculture industry, must in a much larger extent prioritize sustainability versus profitability. Technical innovation has made the fishing fleet extremely efficient, and therefore the possibility of overfishing extremely high. The technological advancements of the fishing vessels and equipment used give opportunity to gather more quotas on one vessel, and thus less fishers are needed (Tveiterås, et al., 2022). This is one of the explanatory factors behind the dwindling numbers of people employed as active full-time fishers. This has also led to the centralization of landing of fish and concentration of boats to more 'urban' areas, with more access to well evolved infrastructure and transport opportunities.

The difference between rural and central areas in Norway is distinct, both geographically and economically. In NOU 2020:12, areas are graded on centrality from 1 to 6 (1 is the highest density, 6 is the lowest) after population size within geographic areas, and are thereafter able to find which industries and employment one can find within central or peripheral areas. What they find is that 73.8% of all man-hours in seafood production take place in areas rated between 4 and 6 in centrality (NOU 2020: 12, p. 34). Similar developments happened during Europe's economic development after the 1950's, as it showed a distinct difference between rural and industrial areas. As the integration process started, the industrial Europe were leagues ahead of the rural areas. Therefore, rural policy has been a central concern for European policymakers in the process of European integration (Baldwin & Wyplosz, 2020, p. 233). Rich locations tend to locate themselves near each other. In addition, the wages in areas located further away from what is considered the 'heart' of Europe tend fall in relation to the centre (Baldwin & Wyplosz, 2020, p. 233). This happens across all manufacturing industries, as European integration has been accompanied by a modest relocation of industries. The movement tends to lean more in the direction of manufacturing activities having become more geographically dispersed across nations, not less, and the nations thus becoming more specialized on a sector-by-sector basis (Baldwin & Wyplosz, 2020, p. 237).

5.3 International interests

This close connection to fishery, through familial ties or the societal cultural ties, has also made an impact in Norwegian international positioning. Norway has established itself as a prominent figure in the harvesting of quality seafood. Through depictions of deep fjords, tall mountains, ice-blue water and scenic landing towns on scattered islands, Norway frames its products as something clean, sustainable, natural, and healthy (Larsen, 2021). Through creating this branding of Norwegian seafood, the products have gained passageways into cuisines all over the world as delicacies, staple-foods, and every-day meals (Larsen, 2021).

As member of the EEA-agreement, Norway gain access to the internal market of the EU and the "four freedoms", which was signed in 1994. A patchwork of numerous agreements makes up Norway's relationship with the EU, but this thesis will mainly focus on the EEA-agreement and relevant fishery agreements. How the numerous agreements have affected the Norwegian political system and the power relations and distributions of power could be a thesis in itself. Most important for this thesis, is how the agreements and close relationship with the EU influence power dynamics and interactions internally in Norway. And most importantly, the EEA-agreement does not include policies such as the Foreign Policy, Common Agricultural Policy (CAP), the Economic and Monetary Union, and most importantly not the Common Fishery Policy (CFP) (NOU 2012:2, p. 68). Still, they are through the EEA-agreement obliged to implement EU legislation for harmonization purposes to be allowed part of the internal market. Being tightly integrated with the Union's trade policies give both positives and negative impacts for Norway as a food exporter. For example: Through just being member of the EEA-agreement, Norway's export tolls significantly decreased, going from 2.3 billion NOK to 1 billion NOK (Melchior A. , 2020). Despite the sensitive nature of the fishery sector in the EU, which has been protected with heavy tariffs and import restrictions, Norway has been able to establish themselves as the key provider of seafood to the EU, with France and Denmark being two of the largest markets for Norway (Melchior A. , 2020, p. 183).

Through the EEA-agreement, Norway contribute substantial sums to the EEA-funds, as a trade-off for accessing the European market. In the period between 2014 and 2021 the total Norwegian contribution to the EEA-funds was €2,8 billion, which makes up about 97% of the total EEA-funds (Utenriksdepartementet, 2021). The EEA-funds are Norway, Iceland and Liechtenstein's contribution to mitigate social and economic differences in Europe, which has been in place since 1994 (Utenriksdepartementet, 2021). These projects are directly put into programmes, projects, and funds to less wealthy EEA-states. The goal of these projects is to strengthen bilateral cooperation between Norway and the receiving states (Utenriksdepartementet, 2021). Norway's close and long-standing relationship with the EU has on the other hand did not yield any perks in their fishery agreements, as Melchior highlights that other most favoured nation (MFN) states, including Iceland, ended up with better "fish-letters", terms, and agreements on tariffs and duties than Norway (Melchior A. , 2020, pp. 183-184). Every time the EU has enlarged (and now also decreased), the agreements between the Union and Norway are re-negotiated. This is an extensive process, as the EU has the world's most detailed classification system on seafood, where some of the classifications are only taken into use in specific trade policy situations (Melchior A. , 2020, p. 183). Despite this, the general toll rates have largely remained the same since the 1970s (Melchior A. , 2020, p. 183).

Fishery competes with agriculture in which industry is to be prioritised in Norwegian international interests, especially towards the EU. The agricultural value chain has more to gain from lobbying the EU and more channels to use, leading to its domination in the market for political influence and information towards the EU (Gaasland, 2015, p. 35). Thus, this leads to the Norwegian government's focus more easily turn towards agriculture rather than fishery. Gaasland (2015) argues that a true free movement of goods between Norway and the EU is not implemented due to the various distribution of profits among the countries are varied, and there will always be industries that end up as "losers" in a situation of mutual liberal access to each other's markets (Gaasland, 2015, p. 57). The agreements on agriculture and fishery have historically been negotiated separately, which has also contributed to eliminating the possibility of achieving an agreement where both sector's interest and needs are met (Gaasland, 2015, pp. 57-58).

Increased dependency on liberalised trade can be considered part of the globalization phenomenon, as it continues to facilitate continued interconnectedness between nation states. Trade between nations open for increased economic efficiency, as it allows for nations to 'do what they do best and import the rest' – through concentrating its productive resources in sectors where it has an edge over other nations (Baldwin & Wyplosz, 2020, p. 237). This is also called their competitive advantage and can have important effects on the location of industry because it encourages a nation-by-nation specialization through trade liberalisation (Baldwin & Wyplosz, 2020, p. 237). This specialization, when viewed upon through an international lens, the structural changes which result from it can look like a shift of production localisation (Baldwin & Wyplosz, 2020, p. 237). Specialisation in production and trade liberalisation between nations can lead to a decrease in the purchasing cost for the consumers of the product which their nation has not specialized in, and their exporting good can decrease the cost in the importing nation as well – which is considered a win-win situation for both these states. Globalization has enabled an unprecedented satisfaction of peoples wants and needs, by making the highest living standards of all time attainable and satisfying the desire for material goods (Grossman & Helpman, 2015). Loužek & Smrčka argues that because of these globalized benefits, the natural environments, social relations, ties with nation and traditional cultural contexts have taken the cost (Loužek & Smrčka, 2020, p. 190).

5.4 Management of natural resources & industry modernization

The globalisation of the global market poses a challenge for our ecosystem and natural resources. The planet's ecosystems are closely interdependent but still face the ravaging of a growing human population whose consumption culture has become wasteful and capitalistic (Steger, 2017, pp. 92-94). With a human population at the historically highest number, the strain on providing enough clean water and food from an ecosystem with finite resources becomes a global issue (Steger, 2017, pp. 92-94). Therefore, cooperation between nations is vital for sustainable management of food resources, especially the management of wild-caught fish, as this resource is vulnerable to predatory practices.

Norway is part of numerous bilateral and multilateral agreements to ensure sustainable management and preservation of the wild fish resources which migrate between their territories. The Norwegian government has highlighted three overarching goals in their participation in negotiation processes and international resource management forums: 1) to promote sustainable management of living marine resources based on available scientific knowledge and an ecosystem-based approach, 2) to secure Norway a fair share

in the distribution of quotas of jointly regulated stocks, 3) to secure satisfactory control and enforcement within the management regimes of which Norway participates (Norwegian Ministry of Trade, Industry and Fisheries, 2021). Through participation and representation in international resource management and regulation forums, Norway fulfils the obligation from UN implemented in 1995 that all coastal states who fish in international waters are to participate in managing cross-territorial migrating stocks.

Fish from aquaculture and sea harvest must go through a processing process before it ends up in our grocery stores. The grade of processing each product is put through varies, from the bare minimum gutting and slaying to fully prepared meals. This process generates rest raw material, whether it be from cut-offs from filleting, de-boning, et cetera. The utilisation of these rest raw materials could however be taken into use in a more efficient manner. Much of these rest-raw materials are processed into animal feed, but scholars highlight the importance that these rest materials are also used to make human food. The white fish industry is perhaps the industry with most potential of increased usage of rest raw material. Apparently, the whitefish industry utilises only approximately 44% of the rest raw material generated, compared to the 100% utilisation from aquacultural and pelagic which generate an equal amount of rest raw material (Hjellnes, Rustad, & Falch, 2020, p. 2). The hurdles in increasing the usage lie in the logistics, regulations, raw material generated, and current practices within the industry (Hjellnes, Rustad, & Falch, 2020, p. 7). Looking at the UN sustainability goals, a more efficient usage of the raw materials brought out of the sea can contribute to fulfilling goals such as 14) life below water, 12) Responsible consumption and production, and 2) zero hunger. Goal 14) Life below water aims to conserve and sustainably use the oceans, sea- and marine resources for sustainable development. The oceans are threatened by plastic marine pollution, ocean warming, eutrophication, acidification, and collapse of fishery. Therefore, almost half of the world's countries have adopted initiatives to support small-scale fisheries, which include value chains, post-harvest operations, and trade (United Nations, 2021, pp. 54-55). Goal 12) responsible consumption and production aims to reduce the lost food along the production chain from production to retail, decrease the amount of plastic waste produced, embrace the decoupling of economic growth from environmental degradation, and promote sustainable lifestyles (United Nations, 2021, pp. 50-51). Technological innovation and automation have for a long time been considered the solution to further integrate green innovation and sustainable fish processing for the future. If one is to achieve this however, the policies and requirements need to follow from the governmental agencies, with long term commitments from both producers and customers (Skjøndal Bar, 2015).

5.5 Summary

The context behind fishery and seafood production's place in the Norwegian society are as we have now seen intricate and long-lasting, with many influences and characteristics. We have now a better understanding of the context behind why fishery and seafood production matters, and its significance to the coastal communities. Knowing how its significance in society impacted the membership referendums in Norway, and thusly shaping Norway's attachment to the EU through the EEA-agreement, is important in seeing how the future for this sector could look like.

6 Analysis

Sparing the reader the journey of flipping back to the analytical frameworks, I will briefly repeat them here. In public choice, the perspective of a representative individual is the basis of analysis. The individual actor is assumed to be self-interested, rational, and pursuing maximising strategies (Ostrom & Ostrom, 1971). These assumptions give an analytical basis for whether the options and strategies available can be placed in an arranged order in terms of profitability, self-interest, rationality, and information on the topic. The aspects of these actors will, through a thematic structure, be introduced, analysing the statements and data from the primary sources and whether these actors are definable as rational or not. This analysis aims to understand how these actors rationalise their positions in profiting off a public good and whether their statements in the interviews are comparable to the criteria set by public choice theorist Ostrom.

Throughout the following sub-chapters, the analysis will make use of the following assumptions to examine the data gathered:

- A rational actor will choose the option in their self-interest.
- A rational actor will choose the option which gives opportunity for maximisation
- The actor will deliberate and observe other actors to assess their route of action
- The market will steer economic actors' interests through preferences caused by its structure
- Actors making use of a public good are trapped in a cycle of over-utilisation, if not interfered by external forces.

Analysing the information and data gathered will as presented in the introduction follow the structure of the sub-research questions.

1. *How can regional policy and infrastructure influence their choice?*
2. *How reliant are coastal communities on industrial activity from this sector?*
3. *How are policies and trade agreements with the EU shaping their rationales?*
4. *How important is sustainability in the assessments of actors utilizing a public good?*
5. *How did the pandemic affect the export market, and did consumer patterns change?*

The first section of this chapter will establish the specifics surrounding Norwegian seafood production and then introduce the cases, providing background information about them as individual actors. After that, the data generated through the interviews will be analysed and compared following the thematic criteria of the thesis.

6.1 On Norwegian seafood production

Before the analysis can commence, I will establish the framework surrounding Norway's harvest and production of fish. The frameworks for these two industries are different. For the analysis to be able to identify whether the actors are rational, self-interested, maximising actors, and to find their degree of knowledge, the same knowledge must be presented.

To be allowed to sell or export fish and fish products out of Norway, one must be registered as a member of Seafood Norway. Actors not registered as a member of Seafood Norway will be denied exporting their wares. The first-hand seller of wild-caught marine resources must either sell/distribute it or be approved by a Fishermen's Sales Organisation, consisting of fishermen or organisations of fishermen (Fiskesalagslova, 2014). These organisations ensure that the quality and quantity of fish delivered follow the set standards and quotas of legal catch. Through imposing these strict laws and regulations on the usage of and ability to sell and profit off a public good raw material such as fish, Norway protects the resource whilst still giving the sales groups opportunity to put down concrete terms for the first-hand sales (Tveiterås, et al., 2022, p. 78). The law does however not put any restrictions on fair competition for access to the raw material (Tveiterås, et al., 2022, p. 78).

The wild-caught Norwegian whitefish sector produces seafood largely out of fish such as cod, haddock, and saithe (Tveiterås, et al., 2022, p. 15). The harvest takes place both close to the coast and out on the far seas, and the fleet consists of diverse actors using different methods and tools. The processed products that the whitefish sector is mainly specialized in producing are dried or wet salted fish, stockfish and salt dried fish, which countries such as Portugal, Italy and Brazil have integrated the products as cultural food staples (Tveiterås, et al., 2022, p. 15). The long shelf life of these products makes them better suited for longer shipments and thus more attractive for these markets. Other products processed out of white fish are, of course, fillets, as well as fishcakes, -balls, and -gratins. Bi-products of whitefish are also a vital resource and are used to produce omega-3 oils. White fish export of processed products has declined from 80% to 50% since the '90s due to the decrease in export of fresh and frozen fillets and an increase in head-on, gutted fish that see minimal processing (Tveiterås, et al., 2022, pp. 15-19). Due to quota-sizes increasing, it was seen as safer to tie capital investments in exporting fresher fish than in processing products with slower turnover – such as stockfish and dried fish (Tveiterås, et al., 2022, p. 15). Additionally, the fishing fleet has increased its capabilities to freeze the fish on board. The aquaculture industry has different frameworks than the whitefish industry. Aquaculture has had the most success in the "red" fish sector, with species such as salmon and trout. Whitefish aquaculture has not had equal success, and while still producing low quantities it is predicted that Atlantic cod has possibility to grow (Tveiterås, et al., 2022, p. 22). The government strictly regulates its production capacity but has more room for actors to integrate both up- and downstream in the value chain (Tveiterås, et al., 2022, p. 22). Salmon exports today make up more than 70% of the export value of Norwegian fish and shellfish products. With the large amounts of fish being processed within aquaculture, more activity and employment follow (Tveiterås, et al., 2022, p. 22). The large values being generated from agriculture is a double-edged sword in that much of the value- generating work is moved out of state, as the food resource is moved out of state for processing.

The nature of food, and whether it is to be characterised as a public good can also be discussed in this context. It is established that the fish in the wild are regarded as a public good. Nevertheless, the question is, can the product made out of the fish also be regarded as such? Food is a public resource, which in theory is something everyone can access if they are willing to seek out or put in the efforts to create. Food is a basic need, and stable access to it is vital for survival. It is argued by scholars that because it is a human right to have access to food and water, that it therefore is to be categorised as a

public good. As food production in general is heavily reliant on the usage of other public goods through cultivating lands, fishing the oceans, and raising animals. At the same time, food in society today is a private good, in that it is restricted access to through how it must be purchased from a producer, from a grocery store, or a restaurant. If a customer does not have the money to make the purchase, and face legal action if one simply takes it without paying. The process of processing could therefore be regarded as a transition of a public to a private good.

6.2 SinkabergHansen

SinkabergHansen is an aquaculture business, which keep their salmon from small fish until adulthood. In 2021, during the Covid-19 pandemic, they expanded their operations, building facilities to be able to also include fileting as part of their production. This factory has capacity of producing approximately 35 tons of whole, gutted fish during an hour and about 300 tons a day (Sæthernes & Laukvik, 2022). From these 300 tons of fish, about 35-40 tons of this raw material is set aside for filet production (Sæthernes & Laukvik, 2022). The company has two locations in Norway, one location in Rørvik in Northern Trøndelag and in Bindal, Nordland (SinkabergHansen, N.D.). The company has been active in this region since the 1970's and can be described as a family business as the founders are still active in the company (SinkabergHansen, N.D.). The company provides products such as whole fish (often nicknamed as 'round fish'), filets packed in bulk and individually, and portion packages. On a contractual basis, SinkabergHansen provide products for the Lerøy-group (Sæthernes & Laukvik, 2022). The Lerøy-group is a seafood corporation which produce salmon and trout, catch and process whitefish. The group does marketing, sales, and distribution of seafood. With its head office in Bergen, Norway, and processing and packaging plants in Norway, Sweden, Denmark, Finland, France, The Netherlands, Portugal, Spain, and Turkey, Lerøy is established in many of the largest Norwegian fish markets for salmon. Because the customer orders largely come through Lerøy, it is through them the customer specifications are provided and sold (Sæthernes & Laukvik, 2022). The fish is mainly a pre-rigour fish product, with a small production line for post-rigour products (Sæthernes & Laukvik, 2022). The fish is trimmed in different categories, from just removing the spine, to trimming off the scales and skin, to industrial filets. Industrial filets are usually exported in bulk to Europe for further processing there, as the fish finish its maturing during its transportation south (Sæthernes & Laukvik, 2022). Most of their fish is sold and exported whole but have an aim towards increasing the amount of filet for the future.

6.3 Jangaard

Jangaard fish was founded in 1931 and is today one of the leading producers and exporters of wet and dried salted fish (Jangaard Export, N.D. 1) They own nine fish refinement grounds along the Norwegian coast: Two in Aalesund, two in Averøy, Røst, Stamsund, Henningsvær, Andenes, and Gjesvær. Their products are based on Cod, Saithe, Haddock, Ling, and Tusk. Jangaard buys fresh wild caught fish from the Norwegian medium- to small-vessel fishing fleet located in Northern Norway, who fish using longlines, purse seine and nets (Haagensen, 2022). The fish is brought to the processing plant located along the coast within hours of catch (Jangaard Export, N.D. 1). In addition, they import frozen fish from Hong Kong, Russia, and Canada (Haagensen, 2022). This company process 40,000 tonnes of raw material in a year, all the nine facilities combined (Jangaard, N.D. 2). Products such as stockfish are traditional products, made from cod or saithe, which traditionally has been salted and dried on the

rocks by the sea. Through modern technology, they can now utilize drying rooms set to the perfect temperature needed to achieve the desired dryness and quality, regardless of location (Jangaard Export, N.D. 1). As a work-around the duties imposed on processed fish, Jangaard has partnered with companies such for example BACCALAMONTI in Italy, where they have contributed to establishing the expertise in drying and salting the fish in the traditional Norwegian way. This has become possible due to the technological advancements in the drying processes, and thus creating the perfect conditions wherever on the planet. Since the products are sold across the world, Jangaard ensures the upkeep of quality control through daughter companies, such as West Norway located in China (Haagensen, 2022).

6.4 Thematic analysis

6.4.1 Considering location

When evaluating the determinants behind location of industry in Europe, it is necessary to understand why regional and national shares diverse types of manufacturing which vary with regional and national characteristics. Baldwin & Wyplosz (2020) divide these characteristics into three broad groups:

1. Relative labour supplies. Nations with a high share of skilled labourers can also be expected also to have a high percentage of manufacturing sectors requiring highly intensive proficient labour use. The same can be expected of the low- and medium-skilled workers/labour groups.
2. Economic geography. The spatial allocation of product demand affects the location of an industry as sectors where firms tend to concentrate production in specific areas will tend to favour sites close to large markets.
3. Regional policies affecting the industrial location can encourage the placement of certain types of sectors in an area, and the effect can either be dampened or amplify the impact of factor endowments and economic geography factors on the location of industry.

These characteristics can be argued to also act as contributing factors in the choices made by rational actors. A rational actor will need to assess whether the access to labour is close or attainable enough to the location placement and whether other industries complement or compete with their goals. An actor who needs high skill labour would choose to locate closer to areas that can provide said labour, close to the market, and an area with policies that are beneficial for its production. This is reflected in how Norwegian enterprise policy is closely interconnected to trade policy and regional policy because of its opportunity to influence localization and composition of the productions of goods (Røste, 2013, p. 169). These policies stimulate societal development different to what is perceived to happen if the state did not interfere – and since these activities are utilizing resources which alternatively could have been used in a different manner, they are imposed requirements that the policies are in fact contributing to a positive development (Røste, 2013, p. 169). Regional enterprise policy is shaped to distribute the geographic dispersion of economic activity in Norway, and since employment and settlement is closely intertwined, the policy thus also contributes to geographic population distribution (Røste, 2013, p. 220). Though, the Norwegian state is still reliant on the enterprises and businesses to choose to establish themselves there, as the state is not always equally successful in achieving solutions to local issues. The property and wealth taxes on industry, as well as the taxation on the company for profiting off of a natural resource,

contribute to the municipalities' funds (NOU 2020: 12, p. 181). Although they are far from substantial funds, they still attract attention as the inhabitant sizes in these municipalities are stereotypically small, making the income per inhabitant substantial (NOU 2020: 12, p. 181). It is argued in NOU 2020:12 that if the tax equalisation were to cover the incomes off of natural resources, this would increase the income for other municipalities, but could in turn end up discouraging the usage and processing of natural resources in the host municipality (p.181).

A regional policy affects the profitability of the production and export of products. Due to Norway's outstretched nature with limited space, the government aims to disperse activity in diverse areas. Norway's abundance of special regional policies are too numerous to introduce all here, but the general gist is that choosing the right location has a lot to say about the profitability that is attainable when establishing a business, with regards to appropriate premises, stable access to workers, access to infrastructure, and closeness to markets, which will, in reality, lead to centralisation (Røste, 2013, p. 187). Norway's prime example here is the tendency to converge in the southern or eastern Norway (Røste, 2013, p. 187). Fishery is slightly different in that landing prices are not standardised across the coast, leading to a "centralization" in landings in rural areas such as Lofoten has a higher price per kg on fish landed there. This is perceived as a negative by our cases, as the fishing vessels and fishers rather migrate northwards during the fishing seasons, which in turn removes the demand for landing facilities and processing factories in the other regions (Sæthernes & Laukvik, 2022). This assessment makes sense in a rational perspective, as it decreases the access to competition and other actors within the value chain. It decreases the access to the resource, since the resource is landed in the far north, increasing the distance to the resource for local production actors.

SinkabergHansen rationalises their choice of location due to the increased quality of the product as the processing takes place straight after the fish is killed, and the rigour mortis has yet to set in. This high quality of fish is, according to themselves, so significant that it could almost be possible to introduce a new quality grading of the fish (Sæthernes & Laukvik, 2022). It is not just the main product that sees quality increase. The rest raw materials that are generated from the production of the fish also see a significant quality boost due to the freshness and pre-rigour quality (Sæthernes & Laukvik, 2022). Increasing the quality of the product by placing the production close to the source can arguably be deemed a rational choice. It is irrational in the sense that it leads to an increase in costs and transportation management. At the same time, it is rational, as they then can maximise their product through establishing a 'new' category of higher quality products and thus increase the prices on both the product itself and the rest-raw material generated. It is also rational in the sense of marketability, where the product origin and treatment are also deemed of higher quality.

A truly self-interested, maximising actor would in theory choose to disregard the arguments of increased quality through closeness to production, and rather focus on quantity production. This type of actor would be standing with no obligation to any other than themselves and have all the opportunity to maximise their own profits off the resource. On the other hand, paying no regard to the resource's exhaustion will in the end lead to their own long-term losses since it would in the end lead to the annihilation of what their profits are based upon. This concept of "free riding" on the back of the resource without paying their share is an established concept within management of public goods.

As introduced earlier in the thesis, Olson (1965, in Ostrom, 2008, p.2) argue that smaller arrangements are more likely to find collective solutions to collective action problems rather than larger ones. Ostrom expands upon this, and argue that users of common pool resources will spend considerable time and energy in creating institutions that are workable for governing and managing common-pool resources. These actors will only follow rules so long as they believe that others also follow these rules, monitor each other's conformity with said rules, and impose sanctions on each other as a cost to themselves if they break them (Ostrom E. , 2008, p. 2). This is largely true in the cases of smaller groups, where the autonomy and authority to make own agreements exist (Ostrom E. , 2008, p. 2). In larger groups, there is more trouble in finding common governing ground, as usually size brings more difficulty in keeping low discount rates, finding homogenous interests, the cost of communication is higher and the cost of reaching binding and enforceable agreements are higher (Ostrom E. , 2008, p. 2). At the same time, if the large group is relatively homogenous with possibility of implementing mechanisms for agreeing on the management and resource use, even these large groups can regulate and coordinate their usage of the natural resources (Ostrom E. , 2008, pp. 2-3). Seeing how the fishery sector has organised itself through imposing restrictions on what is allowed to take out of the oceans and back to land, who is allowed to access it and sell it is a great example of how users of a public good mobilise. In the negotiation towards the EU, the agricultural industry was arguably better able to mobilise towards securing a stronger, more profitable deal within the EEA-agreement through engaging the public and public representatives (Gaasland, 2015). Gaasland (2015) argue that through a socio-economic perspective, the Norwegian trade policy on goods would be much more liberalised if Norway had not chosen the protectionist route for agriculture. It's also argued that the industries threatened by increased imports are more organised, therefore more efficient in achieving their goal, while on the other hand the effects of protectionism will be less apparent and more spread out (Gaasland, 2015). An example of large groups constellations is the Lerøy group.

The Lerøy group is large, representing almost all branches of seafood and fishery industry. Therefore representing a diverse set of interests and demands. Lerøy, which has a 'homogenous' groups in terms of all being actors in the fishery sector, has thus leverage in collectively implementing agreement mechanisms on their management and usage of resources. This also because the group has the 'exclusion' card to pull, as their services in providing market access and customers is more difficult to come by as a standalone actor. Therefore, it is rational for those in the group to aim for sustainable use of the resource and the surrounding environment. At the same time, the industries have very different needs and problems, especially coming to access and allowance of usage of natural resources. This is problematic, for when these groups are contributing to the process of establishing legislation, representing and assuring the interests of many individual actors with different situations along the coast to relate to becomes an impossible ordeal. Comparing to for example Jangaard, who acts more as a standalone actor, can make more choices in their own self-interest because they do not have a group to answer to (disregarding their obligatory membership of the seafood council). By making membership of the Norwegian Seafood Council obligatory is evidence of how actors in a group have been able to impose rules that is perceived that all are following, and the possibility of imposing sanctions on those who are observed to break them.

Taking care of the environment, which can be both considered the surrounding nature as well as the surrounding community, is important for a public actor. Since effects on local communities through localising enterprise activities there have ripple-effects across other

surrounding sectors as well. For example, it was argued by the representatives from SinkabergHansen that the local community would through the increased activity that follows from placing the processing operations there see an increase in activity elsewhere in the community as well. SinkabergHansen argue that the local communities will through the increased number of jobs see an increased need for infrastructure and public goods and services as the people working these jobs and their families will heighten the demand for such facilities (Sæthernes & Laukvik, 2022). Choosing to remain a local actor, the company can contribute to the maintenance and building of new facilities, and increasing the quality of available after school activities in the local community through building gym halls, stadiums, and so on (Haagensen, 2022) (Sæthernes & Laukvik, 2022). Thereby, its attractiveness for families increases, which arguably contributes to mitigating the issue of families and younger couples choosing to move away from the smaller coastal communities. Community building is highlighted as part of the central rationalisations for SinkabergHansen in keeping the production location in the local community. They argue that the long-term investment in creating jobs and stimulating the local economy make up for the short-term losses which follow the higher costs of keeping production in Norway (Sæthernes & Laukvik, 2022). Stimulating the local economy also increases the acceptance of utilising the public good that is the ocean areas which they nurture forwards their fish in (Sæthernes & Laukvik, 2022).

Jangaard, although being a company that exports substantial amounts of seafood product internationally, reinvest in the local communities where they are based. Even though they have all economic opportunity to invest in higher-equity cities as London (Haagensen, 2022). Jangaard argues that private companies have higher success in assisting the smaller communities in establishing and expanding local offers, as the municipalities and state actors have less success based on lack of funds (Haagensen, 2022). This awareness of their own situation relates to the level of how informed an actor is, and how an actor observes the action of others and assess what is the right course of action to preserve their own self-interests. Maintaining the local investments are more stable as previously established, but also partakes in creating goodwill for the activities they choose to have or not have there. Regional policy and the frameworks set by public officials incentivise location choice by lowering taxes, opening for the possibility of different spot prices in various locations. This contributes to distributing public funds to municipalities and counties allocated for infrastructure development. If a company that was profiting from the usage of said public good lost the acceptance of the local community, it would become just another profit maximising actor in the eyes of the local community. The public holds much power if they were to mobilise towards a common goal. That is how the agricultural industry was able to establish its current place in Norwegian foreign policy (Melchior A. , 2015, p. 24). Therefore, social acceptance for the usage of a public good is essential, as public goods are in the ownership of all in the area. The aquacultural industry was used as an example in NOU 2020:12, and the municipalities and districts had a legitimate claim of a share in the profits generated by handing out aquaculture permits (NOU 2020: 12, p. 181). Through implementing concessions and taxes on the activities and access to profit off a natural resource, the actors are "paying their share" of using the public good.

A centralised societal structure can give access to the desired education levels of labourers, closeness to market, but could bring increased labour costs due to higher demands and education levels. Spreading out the value creation and education over more areas can give positive social and economic consequences (NOU 2020: 12, p. 187). Decentralised structures can on the other hand also contribute to a less dynamic

research environment and international orientation, with fewer tools assisting them in the face of change (NOU 2020: 12, p. 187). I would therefore argue that in rural areas the industry activity in an area contribute to shaping the available education offers. Having opportunity to shape and access labour that is 'shaped' after the industry demands is a maximising, self-interest approach. The assessment for a public choice actor here would be to weigh the costs of further transportation distances against the lowered costs from a lower demand labour market. Through pointing their gaze internationally, their available options increase. But the increased focus on internationalisation and international cooperation can be challenging to face for smaller actors (NOU 2020: 12, p. 187). And thus beckons the question of whether the jobs should be located in Norway or in Europe.

6.4.2 Assessing trade policies and sustainability

It is argued that Norwegian industry is well equipped in meeting the climate goals which Norway has agreed to under the Paris agreement, due to the high level of education, well-functioning capital markets, and well-functioning institutions, and that Norwegian industry's carbon footprints are small compared to global emissions (NOU 2020: 12, pp. 173-174). Since the fishery industry is an industry directly affected by climate changes through changing migration patterns, diminishing stock sizes, and feeding grounds dying, it becomes rational for the industry to work towards its preservation as it would not be in their best self-interest exhausting this public good to extinction. With production largely taking place in the rural districts, export firms are reliant on efficient transportation solutions to move their products out to their markets. As Norway is a long-stretched country with far distances, the primary transport stages end up taking too much time if the solutions are not good enough, and in turn increase the amount of carbon emissions released (NOU 2020: 12, p. 174). With the current structure of the district industries and available transport solutions, the costs will over time increase more than in more central areas (NOU 2020: 12, p. 174).

Automatisation of the processing operations in seafood production has been driven forwards by the wish to reduce production costs, solving the recruitment issues, the competition from lower cost countries, and lessening the heavy manual labour (Tveiterås, et al., 2022, p. 35). Investing in the automation of the operations does still require large investments, and the technology is still not universally translatable to the entire value chain (Tveiterås, et al., 2022, pp. 35-36). At the same time, automating the processing operations contribute to increasing the competences required of workers (NOU 2021:9, p. 92). It is predicted in NOU 2021:9 that workers will need to adapt to the technological advancements, climate challenges, and demographic changes in the future, as new tasks and work environments will possibly change the structure of industry, employment, competency demands (NOU 2021:9, p. 92). To a more considerable degree, the gutting of the fish is taking place on land, which is positive because it allows the by-products and rest-raw materials to be used in processing of other food products and materials (Tveiterås, et al., 2022, p. 36). As earlier mentioned, the wild caught whitefish industry still operates with a low utilization of the rest-raw materials generated from production (Hjellnes, Rustad, & Falch, 2020). The culture on fishing boats has primarily been to throw overboard the cut-offs from the fish on boats with production lines on the vessel. Although this makes sense in the perspective of the quota-owner, who wishes to maximise their own opportunity to fill the quota they are entitled to, it is not a profitable practice for the owner of the fish flour producer who can use the raw material.

The tariffs imposed on exported goods therefore also contribute to influencing the choice of location, similarly to regional policies. One could define tariffs as a form of regional

policy, as they cover the movement of products in and out of certain areas and industries. International relations, trade agreements, and policies influence the scope of manoeuvre for the industry by putting on limitations on what can be deemed as profitable. Foreign investments are encouraged by tariffs, but raw material tariffs discourage it (Maurseth & Medin, 2020, p. 249).

Table 1: Duties for export to the EU, rates in %

<i>Product</i>	<i>Duty rates to the EU by product type, in %</i>
Saithe	Whole, fresh & frozen – 0% Filet, fresh – 0%* Filet, frozen – 0,9%* Dried - 3,6% Salt dried fish – 3,6% Whole, salted – 3,6%* Bi-products, unsalted/salted – 3,6%
Cod	Whole, fresh & whole frozen – 0% Filet, fresh – 0% Filet, frozen – 0,9%* Dried – 0% Salt dried fish – 3,9%* Whole, salted – 0% Bi-products, unsalted/salted – 3,9%*
Ling	Filet, salted – 0% Dried fish – 3,6% Salt dried fish – 3,6% Bi-products, unsalted/salted – 3,6%
Haddock	Dried fish – 3,6% Salt dried fish – 3,6% Whole, salted – 3,6%* Bi-products, unsalted/salted – 3,6%*
Salmon	Whole, fresh – 2%* Whole, frozen – 2%* Filet, fresh – 2%* Filet, frozen – 2% Smoked – 13%*

Source: (Seafood Norway, 2022). *Duty free/reduction within the tariff quota (meaning the tariff is either zero or reduced within a certain volume (Melchior A. , 2020, p. 184)).

As we can see, the tariff/duty follows the degree of which it is processed. One can see that fish-species which the EU has more incentive to want to import, has a lower tariff, and the products which are deemed competitive with EU products face higher tariffs. SinkabergHansen produce largely unprocessed filets, and therefore meet less tolls and restrictions compared to salted wet or dry fish. Their products can be placed on a trailer and sent southward within few hours of its slaughter, and thus becomes a high-volume, competitive product. Salmon filets face a 2% tariff on its export to Europe, as one can see in the table above. Jangaard’s fish products are mostly salted or dried, which means

many of the products are included as goods under the toll on processed fish as shown above.

Assuming that our cases are rational, maximising actors with their self-interests in mind, it makes sense when looking at these duties and tariffs imposed upon their products to choose to place production in other locations than Norway. Would the actors accept the cost increase on the product they produce to be worth it when the tariff increases by such significant amounts and becomes more complex? Because an actor are guided and dependent on the market to be able to sell their goods, a high market price would be detrimental to their consumer attractiveness. The solution for those finding a loophole in policy managing public goods, set in place to protect the processing market within its area, end up sabotaging the efforts of protecting the natural resources and public goods within another area. This further strengthens the assumption made by public choice scholars that public goods are stuck in a tragedy of the commons.

Internationalisation has the potential to be the solution to the problem, but also the source. As we know, bigger constellations of actors will have more trouble finding common ground to manage the resource. Increased internationalisation of Norwegian businesses in the last decades has led to that today, almost one-third of those employed in the private sector is working for a company controlled by foreign owners. The number of business groups has increased to now cover about half of all employment in Norway (NOU 2012:2, p. 14). International ownership can contribute to competition, increased productivity, and higher value creation, and international investors bring capital to the industry. At the same time, international investors will not be knowledgeable of the local circumstances and will therefore make different risk assessments with different profit requirements and higher thresholds for triggering investment decisions (NOU 2020: 12, p. 176). It is argued that smaller, more local constellations of firms have a stronger resilience when facing global shocks. As these smaller constellations have stronger investment ties in local communities, they are less vulnerable to global shocks (Amdam, Bjarnar, & Berge, 2020). Diverse ownership of local and international investors can contribute to stabilising local conjunctural fluctuations, but at the same time, showing that Norwegian investors maintain a higher growth during times of global recession (NOU 2020: 12, p. 176). Globalisation is an explanation behind the mechanisms for the shift towards increased international ownership and the reason why Norway can sell and export such large quantities of fish. The international market is vital for the prosperity of the Norwegian seafood industry and must, according to Digre et al., make use of its closeness to the market and stay competitive:

"Norway has an exceptionally good starting point with close proximity to substantial fish resources from fishery and aquaculture, combined with a short distance to profitable markets in Europe and Russia. At the same time, the seafood industry is operating in a raw material and finished product market, characterized by high competition. Industrial activity in a high-cost state poses specific demands for market orientation, technological development, and exploitation of natural advantages." (Digre, et al., 2013).

As mentioned earlier, transportation of goods in Norway can be a costly affair for actors located in the peripheral areas. Any rational actor would therefore look to decrease these costs and look for solutions to decrease transportation time and vehicles needed. Therefore, packaging sizes have become a growing theme, due to how it can contribute to the decrease in the need for freight vehicles to Europe. Calculating the number of trailers needed when sending unprocessed versus filleted fish, the number of trailers needed to move the product decreased by 6, and the rest raw material sent to the local treatment facility went from approximately 9 tonnes to 88 tonnes of rest raw material (Sæthernes & Laukvik, 2022). As the numbers back up the cost-benefit rationalisation of what is perceived as both more profitable and sustainable.

Table 2: Trade balance of Norwegian export of goods, billion NOK, 2018-2021

Year	Trade balance	Import, total	Export, total	Mainland export
2018	289,9	710,3	1000,3	458,2
2019	157,6	757,9	915,5	474,2
2020	13,5	764,8	778,3	443,4
2021	531,0	846,8	1377,8	541,1

Source: (SSB, 2022)

The trade balance in the table above shows how the interdependence of imported and exported goods has developed over the last four years. The trade balance tells a story of Norwegian goods' place in the international market and the reliance on imports back into the country. This begs the question of whether to value the profit and competitiveness or the sustainable management of the resource. Sub-research question number four questions how vital sustainability truly is in choosing a production location. The industry has made efforts to meet the sustainability goals by using more of the resource through technological innovation, routines for the usage of rest-raw material, and calculating the emissions which result from the transport of products.

6.4.3 Facing a pandemic

In March of 2020, the Covid-19 pandemic swept over the world. Two whole years were heavily influenced by lockdowns, quarantine, strict border controls and covid-testing. This has likely resulted in a global change in market consumption, whose long-term effects of the pandemic are unknown, but there is ample room to believe that the changes in the global market have come to stay (NOU 2020: 12). Fish export has steadily increased export profitability over the past years. From 2018 to 2021, the value of fish and fish products grew from 96,1 billion NOK to 116,6 billion NOK, despite the pandemic (SSB, 2022). Primarily, this means that this data shows our actors that there is value to attain from continuing their production and export. Before the pandemic (2018 – 2020), both white fish and salmon products saw a steady increase in the export of fresh, unprocessed whole fish (Tveiterås, et al., 2022, pp. 15-22). The amount of processed white fish has generally decreased, and on the other hand, there were 30% more processed salmon and trout exported in 2020 than white fish (Tveiterås, et al., 2022, p. 25). As seen in figure 1, the export market saw a dip across the board in 2020, with a sharp growth in 2021, despite being very much still affected by the pandemic.

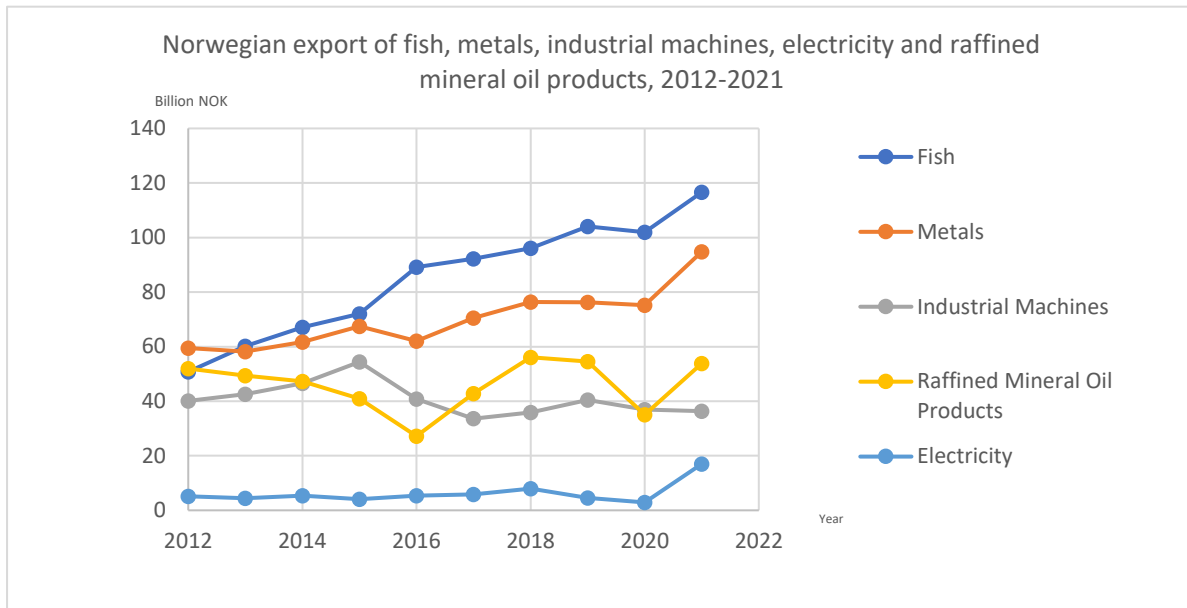


Figure 1: Norwegian export of fish, metals, industrial machines, refined mineral oil products and electricity, in billion NOK, 2012-2021

Source: (SSB, 2022).

The driving causes behind this record were multifaceted. Seafood has been recommended to consumers by scientists globally and has been marketed as a sustainable, convenient, healthy, and tasty product (Larsen, 2021). The consumption pattern shifted towards online shopping, deliveries, and takeaway, and since the confidence in cooking seafood at home increased, the demand for individually packaged products has followed (Larsen, 2021). Our cases tell us the same as according to both interviewee cases, at-home consumers have taken a stronger position as the purchasers of their products throughout this period. As hotels, restaurants and catering closed their doors, and people made more food at home, the demand for seafood increased. Since people making the food at home does not face the same portion-size regulations as for example in a restaurant, and generally tends to cook more food (Haagensen, 2022) (Sæthernes & Laukvik, 2022). A weak Norwegian Krone for an extended period after the pandemic broke out benefited the export (Larsen, 2021). Seafood production was prioritised as an essential societal function because it is a food-producing industry and therefore faced exemptions from the strict rules and regulations imposed by the Norwegian government to combat the pandemic. Marketing has been an important tool during the pandemic, and adapting to new channels to reach the consumer has been a task that the industry has risen to meet. Norwegian salmon, for example, has been awarded as the most popular fish, mackerel a national dish in South Korea, shellfish a staple food all over the world, and stockfish a delicacy enjoyed by many nations, making it a demanded product worldwide. Scientists recommending the increased consumption of seafood globally, Larsen underlines the importance of increasing cultivation and sustainable harvesting in the future to achieve the UN sustainability goals by 2030.

Therefore, it is a less complicated question to answer how the pandemic affected the market and consumer behaviour. The steady increase in fish product export shows us that demand remained high, even spiked, during the pandemic. However, what this will have to say for the resource for the future is a more complicated discussion. The

heightened demand for fish and seafood products will be mirrored the demand for an increased number of fish needed to be harvested. This is an example of the loop of over-consumption, which Olson argues that any actor using a public good is trapped within. Even if an actor aims for sustainable use of the public resource, the market demand for the product and the possibilities for profits remain the core goal. In a globalised, capitalistic market, this is behaviour that is given an incentive to have a profitability focus.

Heightened demand for products heightens the need for labour by the production line. The pandemic contributed to exposing the vulnerability of imported labour access. Since 2004, almost 200 000 workers have migrated from their EU-member states to Norway for work (NOU 2021:9, p. 87). Restrictions led to a sharp decrease in worker migration in 2020 compared to 2019, as less than 50 thousand workers arrived in 2020 compared to the over 60 thousand in 2019 (NOU 2021:9, pp. 87-88). Safeguarding the stability of access to labour was therefore a rational choice in the situation presented to the case-actors. To avoid cross-contamination between shifts, SinkabergHansen's administration implemented a two-shift solution, where the production line shut down in between shifts for cleaning and spacing out the worker's arrival times (Sæthernes & Laukvik, 2022). Shutting down and starting up production is a costly affair, which was deemed a necessary cost to avoid their employees getting sick (Sæthernes & Laukvik, 2022). During this period, the expansion of their facilities also took place, making the coordination work even more difficult (Sæthernes & Laukvik, 2022). The cost of shutting down production completely in between shifts would be higher than the risk of both shifts getting sick and would therefore be the rational choice to make. Through this solution, the company is still able to continue producing food, jobs and keeping up the income simultaneously. Since the market demand was increasing due to more people cooking at home, the actors had to continue producing the products while also meeting the heightened demands. Increased demand increases the prices of the product. Just in April 2022, the salmon export had record high export prices, which has affected the prices for restaurants (Eitrheim, 2022).

The transportation link faced challenges as well. Foreign trailer drivers were in 2021 exempt from border testing and entry quarantine, because they had few interactions with local populations compared to other entering people (Strand & Scharff Thommessen, 2021). This generated a worry for whether this could contribute to an unnecessary increase in infection rates, and a wish for mandatory testing on the borders which was met with scepticism from the industry (Strand & Scharff Thommessen, 2021).

With the recruitment issues plaguing the industry, imported work is a rational solution, which is further strengthened by the lower costs non-Nordic workers usually demand, in contrast to Norwegian wages which are significantly higher than the EU average (NOU 2021:9). At the same time, the technological advancements are increasingly becoming advanced enough to replace much of the manual work. Automatization of the sector lessen the number of jobs needed at the line, but increase the need for mechanics, engineers, and electricians. As a profit maximising actor, with their self-interests in mind, the choice of importing work can be deemed rational. However, the problem arises when met with unpredictable situations such as a global wide pandemic. One can therefore discuss whether these actors truly are – in the terms of public choice – fully informed in their choices. To be able to make a rational choice, it is assumed that an actor must have full knowledge of all the elements in a situation and rank the options they are presented

with according to what they deem the most positive for themselves, and with the least amount of cost.

7 Discussion of Findings

The situation surrounding a choice is multifaceted and complex. To define an action as either rational or irrational, maximising or not, and what is in an actor's self-interest is all weighed from circumstance, history, ownership, and profitability.

The thesis aimed at answering the following research questions:

What assessments have led to the choice in localizing fish processing in the fishery and aquaculture industry along the Norwegian coast?

What consequences does this have for Norwegian coastal communities?

Before I move on to assess whether these questions have been answered within this thesis' conclusion, I will sum up what has been found in the analysis and actualise the findings against the sub-research questions of the thesis. These were included to concretise the scope of the thesis and thereby simplifying the process of answering a set of very multifaceted questions.

1. *How do policy and infrastructure influence their choice?*

Policies shape whether an actor deems placement in an area profitable or costly. Policies can be at an international, regional, or local level. These regional policies, together with economic geography and labour access, contribute to shaping choices made by actors as it shapes the space of manoeuvre in a market. Labour access to workers with the needed competencies can be found in rural districts and closer to large industrial areas. Labour costs are an influencing factor as well. The availability of lower costs out of state is rational to use when in a capitalistic society. Norwegian fishery policy puts restrictions on who is allowed to act within the sector and how they are allowed to act. This has been found to be a rational solution to managing a public good, as it establishes reactions and sanctions on those who break the set of rules. Policies on aquaculture are less restrictive, opening for more international ownership and expansion up or down the value chain. Infrastructure in an area has much to say for the actors moving their product to the market over longer distances. Poor infrastructure leads to higher costs for the actors, and these increased costs can influence how the actor regards the gains of being closer to the raw material. The presence of the surrounding industry can also influence an actor's choice. Whether there is an opportunity for processing the raw material into other products we have seen is vital for our aquacultural actors.

Policies and infrastructure are perhaps the most potent tool for managing natural resources since it gives the possibility for repercussions when a truly self-interested actor decides to maximise their profits.

2. *How are trade agreements with the EU shaping their rationales?*

Trade agreements are shaping manoeuvre space the same way as any other regional policy. Looking at the agreements between Norway and the EU and the difference in tariffs imposed on the trade of products and raw materials, one can state that the trade agreements shape the actors' rationales. Closeness to the market is proving vital for the industry in the future. Historically high exports and demand for seafood in the global

market put pressure on the actors to maximise their production, and international presence and distribution provide an excellent opportunity for just that. Attractiveness on the market has been argued to be caused by creating an image of seafood being sustainable, healthy, and clean.

3. *How reliant are coastal communities on industrial activity from the seafood industry?*

Coastal communities struggle with attracting new inhabitants, and the government implements policies which give benefits for those deciding to move there. The activity of private industry generates substantial sums of value creation, which through taxation contributes to the municipality's funds, which trickles down upon the local community. One could therefore argue that coastal communities indeed are reliant on seafood industry, as although the raw materials taken out and processed are sent on out of state to be further treated, it still contributes to activity in the area.

4. *How important is sustainability in the assessments of actors utilizing a public good?*

As we have seen, actors utilising a public good is aware of the importance of sustainability and I argued that it would be in the best interest of actors to secure the conservation of the good. This is also important for how the actors present themselves to the international and national markets. As the sustainability focus is only growing in the consumerist society, it is rational for the industry to invest in sustainable solutions. Technological innovation and access to renewable energy gives Norwegian industry a solid head start in achieving the sustainability goals set by the UN and the EU. The large investments brought by the need to invest in the technology does however hinder the establishment of new actors within the industry, and could even possibly squeeze out the older, smaller existing industries.

5. *How did the pandemic affect the export market, and did consumer patterns change?*

Trade of food during the pandemic was sustained due to its vitality and fundamental need for survival. Seafood had a historically high export year in 2021. At-home consumers became a larger market, as restaurants, hotels, and catering had to comply with the restrictions posed upon society.

8 Conclusion

All things considered, these questions have shown that both Norway and the EU as international actors have implemented policies which aim to protect a primary sector. This primary sector – fishery – provides food and work across the world. This food source has the potential to become a vital part of the sustainability goals, as the reports included in the thesis underline repeatedly. What becomes problematic in the debate on the future of Norwegian seafood production is whether the current legislation and requirements truly encourage the investment and shift that needs to take place for true sustainability. Through the rules and regulations surrounding the transportation of these seafood products, it is more the less encouraged for the product to experience unnecessary movements to keep costs low. Is it truly the profit margins that determine whether the sustainability goals Europe has ratified are to be achieved or not? As mentioned already early in the thesis, the agreements and regulations which frame the EU-Norway trade relationship on fish are more the less unchanged from the past fifty years. This begs the question of whether the legislation is due for reassessment. What is clear is that Norway must take more concrete action towards securing the fishery interests and work on implementing policies that encourage increased activity in processing fish along the Norwegian coast. This is based on the long-term sustainability of moving these goods across the world.

Throughout the analysis, we have seen that the actors assess from a capitalistic point of view, as that is rational in light of how the global market economy is structured. The agreements greatly influence the rationality of placement, but the agreements implemented aim to protect the vulnerable resource and industry within its jurisdiction. The consequences of moving away the production sector from coastal communities have ramifications for activity both up- and downstream in the value chain.

More studies are needed on how the seafood industry can use representation surrounding EU and Norwegian legislation-makers to a more considerable degree. Establishing awareness, visibility, representation, and branding, like Innovation Norway and VisitNorway, are working towards, is a topic that could be explored further in a different thesis. Looking at interest groups representing a primary sector can provide a deeper understanding of how the preservation of natural resources is assessed by public actors and how influential these groups are.

As the question of membership within Norway is having its tentative resurgence at the time, the relevancy of fishery and resource management across states and institutions stays steadfast. Which of the paths Norway would take in such a scenario would be consequential for how this sector will be shaped and structured? The thesis has shown that the policy structure has influential power over how an industry is shaped over time but that the industry sees changes that need to be done to increase sustainability and efficiency successfully. Norway's numerous agreements with the EU and their effect on the Norwegian political system, power relations, and distribution of power continuously needs further study, as both society and the Union is ever changing.

9 Bibliography

- Amdam, R. P., Bjarnar, O., & Berge, D. M. (2020, September 28). Resilience and related variety: The role of family firms in an ocean-related Norwegian region. *Business History*, pp. 1-22. doi:<https://doi.org/10.1080/00076791.2020.1822329>
- Baldwin, R., & Wyplosz, C. (2020). *The Economics of European Integration* (Sixth ed.). London: McGraw-Hill.
- Burnham, P., Gilland Lutz, K., Grant, W., & Layton-Henry, Z. (2008). *Research Methods in Politics*. London: Red Globe Press.
- Digre, H., Skjøndal Bar, E. M., Mathiassen, J. R., Standal, D., Grimsmo, L., Henriksen, K., . . . Asche, F. (2013). *Lønnsom foredling av sjømat i Norge*. Trondheim: SINTEF. Retrieved from https://www.regjeringen.no/contentassets/00b7a7a3ebc141fdb9d62fbd2ca9ea6/rapport_sintef_nou.pdf
- Eitrheim, E. (2022, May 10). *Høye laksepriser setter restauranten i fare*. Retrieved from NRK: <https://www.nrk.no/norge/hoye-laksepriser-setter-restauranten-i-fare-1.15951797>
- Fiskeridirektoratet. (2022, 01 03). *Fiskermanntallet, Manntallstatus 1983-2021*. Retrieved from Fiskeridirektoratet: <https://www.fiskeridir.no/Yrkesfiske/Tall-og-analyse/Fiskere-fartoy-og-tillatelser/Fiskermanntallet/fiskere-fra-manntallet>
- Fiskesalslova. (2014, 01 01). *Lov om førstehandsomsetning av villlevande marine ressurser (LOV-2013-06-21-75)*. Retrieved from <https://lovdata.no/dokument/NL/lov/2013-06-21-75>
- Fløysand, A., & Jakobsen, S. E. (2001). Regional diversification in the Norwegian fish-processing industry. *Norsk Geografisk Tidsskrift/Norwegian Journal of Geography*, 55(1), 17-25. doi:10.1080/0091950116717
- Grossman, G. M., & Helpman, E. (2015). Globalization and Growth. *American Economic Review: Papers & Proceedings*, 5, pp. 100-104. doi:<http://dx.doi.org/10.1257/aer.p20151068>
- Gaasland, I. (2015). Kapittel 2. Fisk og jordbruk - hvem definerer Norges interesser? In A. Melchior, & U. Sverdrup, *Interessekonflikter i norsk handelspolitikk* (pp. 35-58). Oslo: Universitetsforlaget.
- Henriksen, E. (2020). 7. Tilgang på arbeidskraft til fiskeindustrien med og uten EØS-avtalen. In A. Melchior, & F. Nilssen, *Sjømatnæringen og Europa* (pp. 213-231). Oslo: Universitetsforlaget.
- Henriksen, E., & Bendiksen, B. I. (2008). *Rammebetingelser for lønnsomhet i norsk fiskeforedling - Empiriske funn og kunnskapshull*. NOFIMA. Retrieved from <https://nofima.brage.unit.no/nofima-xmlui/bitstream/handle/11250/2576849/Rapport%2b07-2008.pdf?sequence=1&isAllowed=y>
- Hjellnes, V., Rustad, T., & Falch, E. (2020). The value chain of the white fish industry in Norway: History, current status and possibilities for improvement - a review. *Regional Studies in Marine Science*, 36, 1-8. doi:<https://doi.org/10.1016/j.rsma.2020.101293>
- Haagensen, G. (2022, April 20). Jaangard. (T. Farstad Blindheimsvik, Interviewer)

- Ingebritgtsen, C. (1998). Chapter 7: Votes Count, Resources Decide. In *The Nordic States and European Unity* (pp. 167-183). Itaca, NY: Cornell University Press.
- Jangaard Export. (N.D. 1). *About us*. Retrieved from <http://jangaard.no/about-us>
- Jangaard. (N.D. 2). *Production Sites*. Retrieved from <http://jangaard.no/production-sites>
- Larsen, R. (2021, December 21). *Hvorfor ble 2021 et historisk godt eksportår?* Retrieved from Norges Sjømatråd: <https://seafood.no/aktuelt/Fisketanker/hvorfor-ble-2021-et-historisk-godt-eksportar/>
- Leruth, B., Gänzle, S., & Trondal, J. (2019). Differentiated Integration and Disintegration in the EU after Brexit: Risk versus Opportunities. *Journal of Common Market Studies*, 57(6), 1389-1394. doi:10.1111/jcms.12957
- Loužek, M., & Smrčka, L. (2020). *The European Integration Crisis*. Newcastle: Cambridge Scholars Publishing.
- Mashaw, J. (2010, July 30). Public Law and Public Choice: Critique and Rapprochement. *Public Law & Theory Research Paper Series*, pp. 1-58.
- Mathisen, T. A., & Solvoll, G. (2020). Økonomiske konsekvenser for eksport av fersk laks ved endret grensekontroll. In A. Melchior, & F. Nilssen, *Sjømatnæringen og Europa* (pp. 154-179). Oslo: Universitetsforlaget.
- Maurseth, P. B., & Medin, H. (2020). 8. Utenlandsinvesteringer i sjømatnæringen og norsk tilknytning til EU. In A. Melchior, & F. Nilssen, *Sjømatnæringen og Europa. EØS og alternativene*. (pp. 233-263). Oslo: Universitetsforlaget. doi:<https://doi.org/10.18261/9788215040080-2020-09>
- Melchior, A. (2015). Interessekonflikter i norsk handelspolitikk. In A. Melchior, & U. Sverdrup, *Interessekonflikter i norsk handelspolitikk* (pp. 15-34). Oslo: Universitetsforlaget.
- Melchior, A. (2020). 6. Fra "fiskebrevet" til EØS: Betydningen av toll for norsk sjømateksport til EU. In A. Melchior, F. Nilssen, A. Melchior, & F. Nilssen (Eds.), *Sjømatnæringen og Europa. EØS og alternativene*. Oslo: Universitetsforlaget. doi:<https://doi.org/10.18261/9788215040080-2020-07>
- Melchior, A., & Sverdrup, U. (2015). EU som handelspolitisk aktør. In A. Melchior, & U. Sverdrup (Eds.), *Interessekonflikter i norsk handelspolitikk* (pp. 59-85). Oslo: Universitetsforlaget.
- Mill, J. S. (2002 [1891]). *A System of Logic*. Honolulu: Universtiy Press of the Pacific.
- Ministry of Trade, Industry and Fisheries. (2018, 07 10). *Fisheries and trade in seafood*. Retrieved from <https://www.regjeringen.no/en/topics/food-fisheries-and-agriculture/fishing-and-aquaculture/1/fiskeri/internasjonalt-fiskerisamarbeid/internasjonalt/fish/id685828/#:~:text=Under%20Protocol%209%20of%20the,tariffs%20on%20many%20other%20products.>
- Moses, J. W., & Knutsen, L. T. (2019). *Ways of Knowing: Competing Methodologies in Social and Political Research*. London: Red Globe Press.
- Moses, J. W., & Knutsen, T. L. (2019). *Ways of Knowing: Competing Methodologies in Social and Political Research*. London: Macmillan international higher education & Red Globe Press.
- Mørk, G. (2009). Fisk og følelser. En kvalitativ historisk studie av hva som gjorde fiskerispørsmålet så sentralt i norsk EU-debatt i forkant av 1994-avstemmingen. Universitetet i Oslo: Institutt for arkeologi, konservering og historie. Retrieved from

- <https://www.duo.uio.no/bitstream/handle/10852/23763/MasteroppgavenxxGunnarMxrk.pdf?sequence=1&isAllowed=y>
- Norwegian Ministry of Trade, Industry and Fisheries. (2021, October 12). *Internasjonalt fiskerisamarbeid*. Retrieved from <https://www.regjeringen.no/no/tema/mat-fiske-og-landbruk/fiskeri-og-havbruk/1/fiskeri/internasjonalt-fiskerisamarbeid/id2578011/>
- NOU 2012:2. (n.d.). Utenfor og innenfor. Retrieved from <https://www.regjeringen.no/contentassets/5d3982d042a2472eb1b20639cd8b2341/no/pdfs/nou201220120002000dddpdfs.pdf>
- NOU 2020: 12. (n.d.). Næringslivets betydning for levende og bærekraftige lokalsamfunn. Retrieved from <https://www.regjeringen.no/contentassets/6e57b898abea46f1bde2108f82ce1796/no/pdfs/nou202020200012000dddpdfs.pdf>
- NOU 2021:9. (n.d.). Den norske modellen og fremtidens arbeidsliv. Retrieved from <https://www.regjeringen.no/contentassets/7b8fb44f93a4402981ed7f279b345dbe/no/pdfs/nou202120210009000dddpdfs.pdf>
- Olson, M. (1965). *The Logic of Collective Action*. Cambridge: Harvard University Press.
- Ostrom, E. (2008). Tragedy of the Commons. *The New Palgrave Dictionary of Economics*(2), 1-4. Retrieved from http://www.dictionaryofeconomics.com/article?id=pde2008_T000193&pr
- Ostrom, E., & Ostrom, V. (1971, March-April). Public Choice: A Different Approach to the Study of Public Administration. *Public Administration Review*, 2, pp. 203-216. Retrieved from <https://www.jstor.org/stable/974676>
- Quackenbush, S. (2004, October 18). The Rationality of Rational Choice Theory. *International Interactions*, 2, pp. 87-107. doi:10.1080/03050620490462595
- Røste, O. B. (2013). *Politikk og Økonomi for statsvitere*. Oslo: Gyldendal.
- Seafood Norway. (2022, February 1). *One Pagers*. Retrieved from Norges Sjømatråd: <https://insight.seafood.no/SASVisualAnalytics/?reportUri=%2Freports%2Freports%2Ffaea321a4-ab8f-4a45-983e-2adadba8c6c9§ionIndex=0&ssoguest=true&reportViewOnly=true&reportContextBar=false&pageNavigation=false&sas-welcome=false>
- Seafood Norway. (2022, April 5). *Tollsatsler hvitfisk (per april 2022)*. Retrieved from Tollsatsloversikter for utvalgte markeder: <https://sfd-seafood-prod.azureedge.net/496489/globalassets/markedsadgang/toll/tollsatsloversikt/2022/tollsatsler-hvitfisk-per-april-2022.pdf>
- Seafood Norway. (2022, April 5). *Tollsatsler konvensjonell (per april 2022)*. Retrieved from Tollsatsloversikter for utvalgte markeder: <https://sfd-seafood-prod.azureedge.net/498ba0/globalassets/markedsadgang/toll/tollsatsloversikt/2022/tollsatsler-konvensjonell-per-april-2022.pdf>
- Seafood Norway. (2022, April 5). *Tollsatsler laks og ørret (per januar 2022)*. Retrieved from Tollsatsloversikter for utvalgte markeder: <https://sfd-seafood-prod.azureedge.net/493207/globalassets/markedsadgang/toll/tollsatsloversikt/2022/tollsatsler-laks-og-orret-per-januar-2022-.pdf>
- Seafood Norway. (2022, April 5). *Tollsatsloversikter for utvalgte markeder*. Retrieved from <https://seafood.no/markedsadgang/Toll-opprinnelse-og-frihandelsavtaler/toll/tollsatsloversikter-for-utvalgte-markeder/>

- SinkabergHansen. (N.D.). *Historikk*. Retrieved from <https://sinkaberghansen.no/om-bedriften/historikk/>
- Skjøndal Bar, E. (2015). A case study of obstacles and enablers for green innovation within the fish processing equipment industry. *Journal of Cleaner Production*, 90(1), 234-243. doi:10.1016/j.jclepro.2014.11.055
- SSB. (2022, April 19). *External trade in goods*. Retrieved from Statistisk Sentralbyrå: <https://www.ssb.no/utenriksokonomi/utenrikshandel/statistikk/utenrikshandel-med-varer>
- SSB. (2022, January 17). *Tidenes største handelsoverskudd i 2021*. Retrieved from Statistisk Sentralbyrå: <https://www.ssb.no/muh>
- Steger, M. B. (2017). *Globalization: A Very Short Introduction*. Oxford: Oxford University Press.
- Strand, T., & Scharff Thommessen, L. (2021, April 12). *Frykter opptil 120 smittede utenlandske sjåførere kommer inn i Norge hver uke*. Retrieved from NRK: <https://www.nrk.no/norge/120-langtransportersjåførere-med-smitte-kan-komme-inn-i-landet-hver-uke-1.15448029>
- Sæthernes, R., & Laukvik, E. (2022, April 4). SinkabergHansen. (T. Farstad Blindheimsvik, Interviewer)
- Tjora, A. (2017). *Kvalitative Forskningsmetoder i praksis*. Oslo: Gyldendal.
- Tveiterås, K., Sperre, I.-M., Arhaug, J., Pedersen, M., Jensen, N., Gregussen, O., . . . Nergaard, Ø. (2022, march 8). *Grønn verdiskapning og økt bearbeidning i sjømatindustrien*. Retrieved from <https://www.regjeringen.no/contentassets/08e213d8875a40e6b16edde0b2b2b963/no/pdfs/w-0041-b-gronn-verdiskaping.pdf>
- United Nations. (2021). *Sustainable Development Goals Report 2021*. United Nations. Retrieved from <https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf>
- Utenriksdepartementet. (2021, December 9). *Norges økonomiske bidrag*. Retrieved from Regjeringen: <https://www.regjeringen.no/no/tema/europapolitikk/tema-norge-eu/okonomiske-bidrag/id684932/>
- Vik, J., Almås, R., Flø, B. E., & Fuglestad, E. M. (2020). Periferiens politiske økonomi i sentrum - nokre refleksjonar. *Ruralis*.
- Weck-Hannemann, H. (2001). Globalization as a challenge for public choice theory. *Public Choice*, pp. 77-92. Retrieved from <https://www.jstor.org/stable/pdf/974676.pdf>
- Aarsæther, N. (2019). Kyst-paradokset: Sterk økonomi, svak tiltrekking. *Plan 3*, 6-11. doi:10.18261/ISSN1504-3045-2019-03-03

Annex

Annex 1

Vil du delta i forskningsprosjektet

” Fiskeforedling i Norge: Tilbakevendingen til den Norske Kysten ”?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å forstå variablene bak hvorfor der har skjedd en økt satsing på foredling langs den norske kysten. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Dette prosjektet er en masteroppgave i Europastudier ved NTNU.

Masteroppgaven ønsker å forske på hvorfor det har skjedd en økt satsing på foredling langs den norske kysten. Dette er en interessant endring i trend, etter mange år med økt satsing på internasjonalisering, konkurranse fra utenlandsk import av ferdigforedlet fisk.

Fiskens spesielle rolle i den norske kulturen og samfunn er svært interessant, og noe jeg ønsker å forske mer på. Næringen og ressursen spilte en svært viktig rolle i medlemsforhandlingene med EU, og avtalene som har blitt opprettet deretter. Sentralt i debattene om EU-medlemskap har vært det å beskytte ressursen, arbeidsplassene, og kvaliteten på produktene som produseres av den norske fisken. Likevel har man sett at industrien har blitt mer og mer avhengig av et samarbeid med EU gjennom EØS, og som igjen har ført til endringer som man var tilbakeholden til under medlemskaps-forhandlingene.

Oppgaven vil ta for seg særlig de siste fem årene, og endringene som har skjedd fra før og under pandemien. Allerede før pandemien kom, var der en trend mot økt satsing på nasjonal foredlingsproduksjon. Derfor ønsker oppgaven å se på hvilke konsekvenser valget med lokasjon i Norge har hatt under pandemien.

Jeg er nysgjerrig på om trenden finnes i både akvakulturen og havfisket, og om grunnene for denne satsingen er lik eller ulik for sektorene.

Problemstillingene oppgaven ønsker å svare på er:

Hvilke faktorer har ført til den økte investeringen i plassering av foredling av fisk langs den norske kysten? Hvorfor skjer dette både i akvakulturen og havfisket?

Hvilke ringvirkninger har dette for lokalsamfunnene avhengige av industrien?

Hvem er ansvarlig for forskningsprosjektet?

Norges Tekniske og Naturvitenskapelige Universitet, Det Humanistiske Fakultet, Institutt for Historiske og Klassiske Studier er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Prosjektet har valgt to bedrifter/respondenter til å delta i studien, basert på relevansen av hva de produserer og hvilke innsikter de kan bidra fra enten akvakultur-sektor og havfiske-sektor.

Næringsklyngene Egga og InnovArena har bidratt til å komme i kontakt med dere for meg.

Hva innebærer det for deg å delta?

Oppgavens metode vil være et personlig intervju, som betyr at om dere deltar i studien vil kunne delta i et intervju på mellom 30-45 minutter. Dette intervjuet vil enten foregå i person eller digitalt via videoanrop. Intervjuspørsmålene vil inkludere spørsmål om temaer som for eksempel valg av produksjonssted, hvor mye eksporteres av rund fisk og foredlet fisk til EU, og spørsmål om bærekraften av eksport, og ringvirkningene av valgene på lokalsamfunnet.

Under dette intervjuet vil jeg ta opptak av samtalen, enten i form av lydopptak eller opptak av videosamtalen.

I tillegg vil jeg samle inn informasjon om bedriften deres fra deres nettsider for mer bakgrunnsinformasjon som ikke blir tatt opp i intervjuet.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. De eneste som vil ha tilgangen til informasjonen deres er Thea Farstad Blindheimsvik (student) og Viktoriya Fedorchak (veileder). Alt av materiale vil bli lagret på studentens OneDrive server under NTNU, som krever to-faktor autentisering for å få tilgang.

Studenten Thea vil være databehandler for studien, som vil samle inn, bearbeide og lagre dataen.

Du vil kunne bli gjenkjent i studien. All informasjon vil kunne anonymiseres dersom dette er ønsket av deltaker. Om data fra intervjuet blir brukt i oppgaven, vil navnet ditt og yrket ditt bli referert ut ifra svarene dine under intervjuet.

Listen over navn, kontaktinformasjon og respektive koder vil bli oppbevart separat fra resten av den samlede dataen.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen er rundt 6 juni 2022. Ved prosjektslutt vil datamaterialet ligge tilgjengelig ut 2022, for mulighet for videre forskning. Dette vil kun være tilgjengelig for prosjektleder og studenten involvert i dette prosjektet, og de involverte i studien dersom de ønsker dette.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra NTNU har Personverntjenester vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

- Norges Teknisk-naturvitenskapelige Universitet, via student Thea Farstad Blindheimsvik (theafbl@ntnu.no) eller veileder Viktoriya Fedorchak (viktoriya.fedorchak@ntnu.no)
- Vårt personvernombud: Thomas Helgesen (thomas.helgesen@ntnu.no)

Hvis du har spørsmål knyttet til Personverntjenester sin vurdering av prosjektet, kan du ta kontakt med:

- Personverntjenester på epost (personverntjenester@sikt.no) eller på telefon: 53 21 15 00.

Med vennlig hilsen

Viktoriya Fedorchak

Thea Farstad Blindheimsvik

Førsteamanuensis/veileder

Student

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet masteroppgave i Europastudier om foredling av fisk i Norge, og har fått anledning til å stille spørsmål. Jeg samtykker til:

- å delta i et personlig intervju
- at intervjuet blir tatt opp og lagret til prosjektets slutt
- at intervjuet blir transkribert
- at informasjon om meg blir publisert på et vis som kan bli gjenkjent (navn, yrke)
- å delta i spørreskjema

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

(Signert av prosjektdeltaker, dato)

Annex 2

Interview guide

Introduksjon:

Mitt navn er Thea Farstad Blindheimsvik, masterstudent ved NTNU. Datoen er [dato], og jeg intervjuer [navn på subjekt] på [sted]. Dette intervjuet blir tatt opp som en del av min masteroppgave i Europastudier ved NTNU, som handler om foredlingsindustrien av fisk i Norge.

Oppvarmingsspørsmål

Hva heter selskapet du jobber for? // Kan du fortelle litt om selskapet deres?

Hvor lenge har den vært i drift?

Hvilken stilling/rolle har du ved dette selskapet?

Hvilken type fisk og produkter produserer selskapet?

Hvordan har dere tilgang til råvaren?

Hvor er produksjonen deres basert?

Har dere andre lokasjoner i tillegg til denne? F.eks. i utlandet?

Har dere tilknytninger til utenlandske aktører?

Er dere eid av et større selskap/konsern?

Drøftingsspørsmål:

Lokasjon

Kan du fortelle meg litt om hvordan prosessen rundt valget om å plassere produksjonen her på [sted(er)] gikk fram? Hva det har betydd for bedriften?

Har det gjort produksjon enklere? Vanskeligere?

Har infrastrukturen i området vært en påvirkende faktor av valget (å plassere det på [sted])?

(Som tilgangen på tilrettelagte veier, eksportmuligheter via fly og skip)

Etter din mening, hva tror du dette valget har betydd for nærmiljøet?

Samarbeider dere med noen lokale aktører for bruk av restråstoff?

Vil du tro der er noen kulturelle forklaringer bak valget om plasseringen?

Antall år i nærområdet? Historisk tilknytning til området og næringen?

Pandemien

Hvordan traff pandemien dere?

Hvilke utfordringer møtte dere?

Hvordan løste dere de utfordringene?

Var disse utfordringene annerledes enn de dere møtte på før pandemien?

Har dere sett en endring i handelsmønster fra konsumentene?

Handel

Hvilke muligheter og hinder har de nåværende handelsavtalene Norge har (for eksempel gjennom EØS) gitt dere? (både før og under pandemien)

Hva gjør eksport lett for dere? Hva gjør det vanskelig?

Bærekraft

Hvilke tiltak har dere satt i verk for å sikre en bærekraftig produksjon?

Hvilken effekt har FoU ordningen hatt for deres bærekraftsmål til nå?

EU taksonomien

Hvilken rolle vil du si deres næring spiller på matsikkerhet i fremtiden?

Teknologi og automatisering

FNs bærekraftsmål - hvordan arbeider dere for å oppnå de?

Ansettelse og aktivitet i nærmiljøet?

Avrundning

Er der noen andre ting enn det jeg har tatt opp i intervjuet her du mener har hatt en innvirkende effekt på situasjonen deres? // Er der noe jeg ikke har tatt opp som du føler bør tas med?

Det var alt jeg hadde av spørsmål for i dag. Tusen takk for at du har vært villig til å stille til intervju, og for en god innsats!

Prosesen fremover nå vil være at jeg transkriberer opptaket, og begynner analysen min!

