University of Zurich[UZH]

Working conditions on British fishing vessels

GEO 511 Master's Thesis

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Assessment and analysis of precarious working conditions in British fisheries

Cover picture: Fishing vessels in a small West Coast port (own picture, taken on 15.05.2019 – 19:00)

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I. Foreword and Acknowledgements

This master's thesis marked the end of my master's degree in human geography at the University of Zurich and was mainly written during the spring semester and fall semester 2019.

I chose the topic of working conditions as my interest in the social dimension of Economic Geography constantly grew during my studies. This interest originated in my bachelor's thesis about standards and labels in the palm oil industry and manifested in this master's thesis about working conditions on British fishing vessels. In collaboration with a representative of a Swiss retailer, the context of British fisheries was determined and pursued. This context presented an exciting starting point due to the topical relevance of working conditions aboard British fishing vessels with its various reports of precarious forms of work. This case study furthermore enabled me to get interesting first-hand insights into the topic of working conditions in global value chains.

The process of this thesis, from elaborating the research topic, through conducting the interviews in the UK, to writing this thesis, was not only a significant challenge for me but also a very instructive exercise. Planning, executing and writing this study always remained interesting and informative, with the field study in London and Scotland constituting the highlight of the whole thesis.

At this point, I would like to thank everyone that supported me during the whole process of this thesis. Above all, I would like to thank my supervisors Christian Berndt and particularly Christin Bernhold, who encouraged me to choose a topic according to my interests and gave me the freedom to pursue my own ideas. Furthermore, I appreciated the constructive feedbacks and inputs that have proven to be of valuable substance to my thesis.

Special thanks go to all the people who were available for an interview and established contacts to further interview partners. Without the 24 respondents, the accomplishment of this thesis would not have been possible in this form. I want to thank all the interview partners for taking their time to participate in many interesting and straightforward conversations and thus for enabling this thesis.

Furthermore, I would like to thank my friends, roommates and family for the motivating exchange and the continuous support during the last year. Special thanks go to Zoe Gerber, who not only proofread the thesis but was also a major support during the whole course of my master's thesis. Last, I would like to thank all people who have not been mentioned by name but supported me in the development of this thesis in any form.

Zurich, 30 January 2020 Dominic Rietmann

Table of contents

II. Figures

III. Tables

IV. Acronyms

ARCM	Asian Research Center for Migration
CFP	Common Fisheries Policy
EEA	European Economic Area
EEZ	Exclusive Economic Zone
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GBP	British pound sterling
GDP	Gross Domestic Product
GLAA	Gangmasters and Labour Abuse Authority
GT	Gigatonnes
GVC	Global Value Chain
HRAS	Human Rights at Sea
ibid	ibidem (refers to a source that has been mentioned in the previous reference)
ICES	International Council for the Exploration of the Sea
ILO	International Labour Organization
ILO188	ILO Work in Fishing Convention No. 188 (2007)
IP	Interview Partner
IUU fishing	Illegal, unreported and unregulated fishing
JSTAC	Joint Slavery and Trafficking Analysis Centre
kg	Kilogram
kW	Kilowatt
MAIB	Marine Accident Investigation Branch
MCA	Maritime and Coastguard Agency
MSY	Maximum Sustainable Yield
NCA	National Crime Agency
NGO	Non-Governmental Organization
NMDL	New Migrant Divisions of Labour
NRM	National Referral Mechanism
n.p.	No page (sources that have no page, such as websites)
PFD	Personal Flotation Device
PLB	Personal Locator Beacon
PO	Producers Organization
POEA	Philippine Overseas Employment Administration
TCA	Total Allowable Catch
UDHR	Universal Declaration of Human Rights
UK	United Kingdom of Great Britain and Northern Ireland
UNCLOS	United Nations Convention on the Law of the Sea
USD	US-Dollar
WWF	World Wildlife Fund

V. Abstract

The working conditions on global as well as on British fishing vessels are recently causing concern with allegations of human rights abuses, modern slavery and precarious forms of work. However, for a long time, researchers have hesitated to examine the role and conditions of workers in global fisheries, resulting in a significant research gap and low abundance of empirical data. This thesis presents evidence from the UK with particular focus on Scottish fishing vessels. It has been elaborated that the working conditions not only vary according to age, size and type of fishing vessel, but also according to the nationality and residential status of fishers. The results of this thesis have shown that precarious forms of work are paradigmatic in the British fishing industry, as domestic workers are hired as self-employed share fishers and most international fishers as temporary contracted workers. Particularly workers on the Scottish West Coast and international fishers seem to experience precarious working conditions, which manifest in low pay, extreme working hours, inadequate living conditions and high occupational health and safety risks. The question arises how these forms of precarious work are promoted and enabled, particularly when focusing on migrant workers, who seem to be exposed to higher risks of indecent working conditions. After embedding the analysis in the research field of labour geography and the theoretical concept of precarious work, three main factors have been elaborated that enable and actively promote precarious forms of work. These are (1) international and state regulations, (2) subcontracted employment driven by international labour market intermediaries and British employers and (3) inadequate forms of labour organization.

1 Introduction

Human societies face the tremendous challenge of providing food and livelihoods for 9 billion people by the middle of the twenty-first century while compensating the aggravating impacts on resources due to climate change and environmental degradation. Thereby, global fisheries play a crucial role in providing food, nutrition and livelihoods to the growing human population. In 2016, total fish production reached an all-time high of 171 million tonnes, wherefrom 88% was used for direct human consumption. This production volume resulted in a record-breaking per capita consumption of 20.3 kg fish in 2016. The annual global increase in fish consumption has been twice as high as population growth since 1961, demonstrating the crucial role of fisheries for global food security. Higher fish prices and demand compared to 2016 accelerated the value of global fish exports in 2017 to $152 billion (FAO, 2018: vi; vii). On a global scale, over 58 million people are engaged in the primary sector of capture fisheries and aquaculture, wherefrom 15 million work full-time on fishing vessels (ILO, 2019a). Including all fishing-related activities, such as processing fish or producing and maintaining fishing vessels, WorldFish estimates the number of 800 million people's livelihoods to be dependent on fisheries and aquaculture (WorldFish, 2019).

However, as impressing these numbers may be, global marine capture fisheries are in a state of crisis. The all-time high in fish production was achieved mainly due to the substantial increase in aquaculture production, while capture fisheries production has been stagnating for more than 30 years and was at 79.3 million tonnes in 2016, as *Figure 1* shows. In this context, the productivity of fishing has decreased tremendously despite introducing improved technologies and increasing fishing efforts (World Bank, 2017: 2, 10, 11).

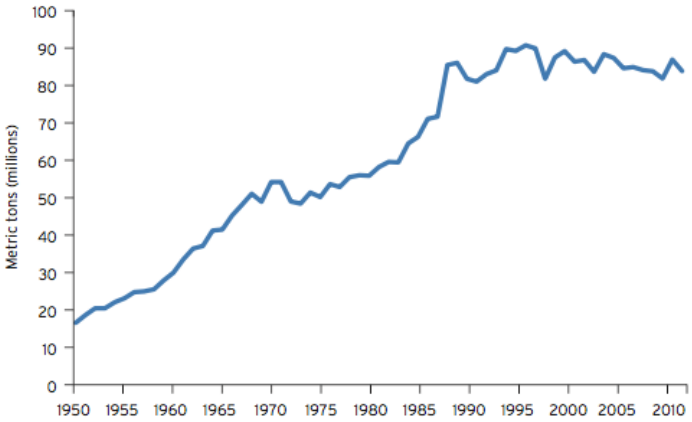

Figure 1: Global marine fish catches, 1950 – 2002 (World Bank, 2017: 11)

Global fisheries – particularly marine capture fisheries – do not only have implications on the economic level but also entail ecological and social consequences, which have been strongly discussed in academic literature and civil society. Particularly much attention has been given to the ecological dimension of global fisheries. The above-mentioned unproductivity and stagnation of marine capture fisheries are mainly attributed to the overfishing and depletion of fish stocks in recent decades (World

Bank, 2017: 3). A trend of overfished stocks is also captured by the Food and Agriculture Organization of the United Nations (FAO), that mentions an increase of maximally sustainably fished or overfished stocks from around 60% in 1975 to 93% in 2015 (FAO, 2018: 40). The trend of globally overfished stocks is illustrated in *Figure 2*. Overfished stocks have serious implications on the environment, as two-thirds of the large fish in the ocean has already been removed and one-third of all fish populations have collapsed since 1950 (Greenpeace, 2019). However, as mentioned above, the economic dimension is impaired as well, as overfished stocks led to an estimated annual lost revenue of $83 billion in 2012 due to stagnating or decreasing catches (World Bank, 2017: 3). Depleted stocks also manifest in the social dimension, as many organizations and researchers see food security and livelihood opportunities of global communities and particularly fishing communities threatened due to overfished stocks (e.g. Garcia and Rosenberg, 2010: 2878; World Bank, 2017: 58).

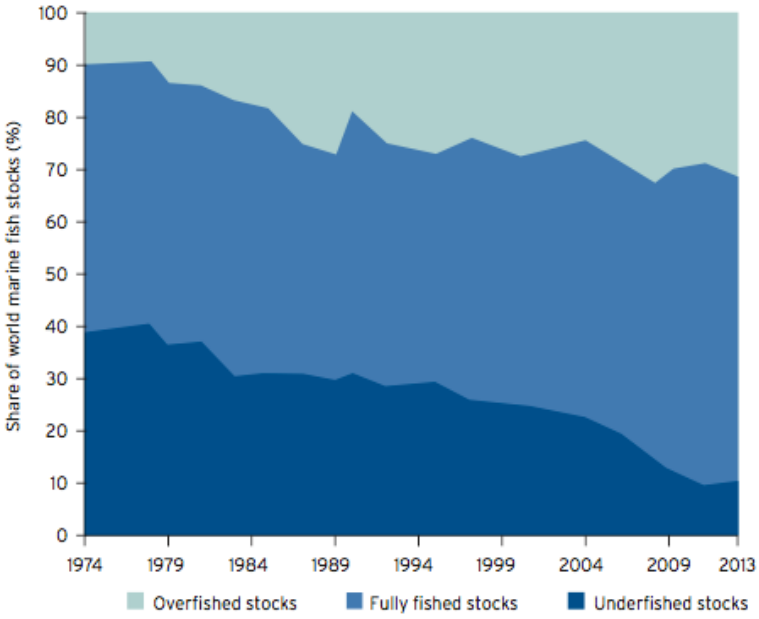

Figure 2: Global trends in biological states of fish stocks, 1974 – 2013 (World Bank, 2017: 10)

Because of the wide scope of global impacts on economic, ecological and social dimensions, diverse topics of global fisheries have been researched in academic literature. These include "*fisheries sustainability, contributions to economic development and coastal communities, changing technologies and more*" (Marschke & Vandergeest, 2016: 39). Ecological topics such as the impacts of fisheries on marine species, habitats, ecosystems and especially on vulnerable populations due to overfishing have been covered quite well (e.g. Hall & Mainprize, 2004; Goldsworthy et al., 2001; Allison et al., 2012). Considering the social aspects of the fish industry one can find much research on small-scale marine fisheries and their impacts on livelihoods of coastal communities (e.g. Ferrol-Schulte et al., 2013; Marschke & Betcherman, 2015). However, themes such as human rights abuses and the conditions under which employees on industrial fishing vessels work have been barely analysed (Marschke & Vandergeest, 2016: 39; Ratner et al., 2014: 122).

The existing literature on these topics focuses mainly on fishing vessels in South-East Asia thanks to a large-scale study, conducted by the International Labour Organization (ILO) and the Asian Research Centre for Migration (ARCM). In their research, the ILO and the ARCM have determined modern

slavery, human rights abuses and strong deficits in decent working conditions on Thai fishing vessels (Chantavanich et al., 2013; Chantavanich, Laodumrongchai and Stringer, 2016), which has been confirmed by several NGO reports (e.g. Murphy, 2018; Oxfam, 2018). Meanwhile, the topic of working conditions on board fishing vessels in Europe has been covered scarcely in academic literature. The few academic research that exists about working conditions on European fishing vessels mainly focuses on specific topics. Examples are the study from Jones et al. (2019) about pay gaps between international and domestic fishers[1] on Scottish fishing vessels, or Windle et al.'s (2008) study about health and safety aboard fishing vessels in different countries. Holistic approaches that try to include all different kind of aspects of working conditions on European fishing vessels are missing.

The low abundance of academic literature about working conditions on European fishing vessels has important implications for supermarkets and consumers. Discussions with representatives of a Swiss supermarket showed that European retailers are not aware of the working conditions on board European fishing vessels. This lack of knowledge is reinforced by the fact that almost no social standards for capture fisheries exist, as the control and audit mechanisms on fishing vessels are very challenging due to the isolation of fishing vessels at sea (Marschke and Vandergeest, 2016: 43). MSC for example, the best-known certification scheme for fish, focuses almost exclusively on environmental issues while ignoring social standards up to date (ibid). However, Chantavanich et al. (2016) argue that the availability of academic literature on this topic is crucial to inform policies in order to improve working conditions in the fishing industry. I am aware of the fact that not necessarily a lack of information, but also economic interests may be responsible for the ignorance towards social sustainability in global value chains. Still, the need for academic literature on working conditions aboard European fishing vessels was the main driver to conduct this study and the starting point for the development of this thesis.

While working conditions aboard European fishing vessels have been scarcely discussed in academic literature, several news articles have covered this topic and provided an insight on what problems in European fisheries can occur. Some articles about Latvian and Norwegian fisheries have shown how fishers – particularly migrant workers – are exposed to similar inadequate working conditions as workers in South-East Asia (e.g. Gedde-Dahl et al., 2018; Thorenfeldt et al., 2018). News articles from the UK suggest modern slavery, forced labour, human trafficking, physical and verbal abuse, breach of contract, inadequate living conditions and low safety standards for migrant workers on UK fishing vessels (e.g. Shebbeare, 2015; Moulds, 2017; Lawrence and Mcsweeney, 2018). Accordingly, esspecially migrant workers on a so-called transit visa are exposed to precarious working conditions on fishing vessels all over the UK. Statements from representatives of unions or charities that support

[1] In this thesis, the terms fishers and fishermen refer to workers on fishing vessels.

seafarers, imply that these issues are widespread within the UK fishing industry (e.g. Shebbeare, 2015; Moulds, 2017). Furthermore, it has been displayed how several charitable and other organizations stand up for UK fishers and are involved in supporting fishers to cope with current conditions (Shebbeare, 2015; HRAS, 2017: 27; Moulds, 2017).

In 2016, 4'000 fishing and fish processing businesses employed 24'000 people and contributed £1.4 billion to the UK economy, which accounts for 0.12% of total UK economic output (Ares, Rhodes and Ward, 2017: 4). With total landings of 724'000 tonnes of fish into the UK and abroad, the UK is one of the biggest fisheries in Europe (Elliott and Holden, 2018: 37). When it comes to the highest number of fishing vessels, the UK was seventh in the EU with 6'148 vessels in 2017. However, in terms of fleet capacity (gigatonnes), the UK ranks second after Spain and fourth when it comes to fleet power (kilowatt), indicating the high share of large-scale vessels within the British fleet. Within the UK, the Scottish fleet contributes the biggest share of the capacity (55%), thanks to the proximity to the North Sea and therefore the tendency to engage in larger scaled pelagic and demersal fisheries that cover large sea areas and catch hundreds tonnes of fish per trip (Elliott and Holden, 2018: 9-12). 4'799 of the 11'692 workers on UK fishing vessels are engaged in Scotland, whereby 72% are British, 20% nationals from countries outside the European Economic Area (EEA) and 8% EEA nationals (Marine Scotland Science, 2016: 4).

This thesis will specifically focus on working conditions aboard British – particularly Scottish – fishing vessels. As just described, the UK fishing industry is one of the biggest in Europe and contributes significantly to the UK economy. Several newspaper articles (e.g. Shebbeare, 2015; Moulds, 2017) and NGO reports (HRAS, 2017) suggested various issues with working conditions on British fishing vessels, as displayed above. With the recent implementation of the ILO Work in Fishing Convention (No. 188), working conditions aboard British fishing vessels are a current topic on the agenda of politics, economy and fishing charities (ILO, 2019b). Furthermore, NGO's, charities and federations that are actively engaged in protecting fishers' working rights seemed to be a good starting point to get access to interview partners. By choosing an English-speaking country, data collection and analysis was facilitated due to minimized language barriers. Furthermore, the next sub-chapter will reveal a significant research gap, when it comes to assessments and analysis of working conditions on British fishing vessels. Due to these manifold reasons, I decided to narrow the topic of this thesis from working conditions on European fishing vessels down to British and particularly Scottish fishing vessels. The next sub-chapter will review the existing literature on this topic.

1.1 Literature Review

The next sections review the existing academic, as well as non-academic literature about working conditions on fishing vessels. As mentioned above, other topics of global fisheries have been covered quite well by academic and non-academic researchers and authors. However, as the content of this thesis relates specifically to working conditions, the literature review will be limited to this matter.

Generally, only few studies are available that focus on the implications of fishers' conditions aboard fishing vessels. Still, after 2014, academic literature on working conditions aboard fishing vessels started to emerge, after media reports have exposed modern slavery on Thai fishing vessels (Marschke, Campbell and Armitage, 2019: 1). The few studies available involve an analysis about South Africa's squid industry, that illuminates how crew members are employed as private producers selling their catch to the vessel owners. This employment relationship can result in crew members earning nothing for a given fishing trip or even ending up owing the skipper money for the operational costs of the boat (Hara 2009: 516, 517). In their research about New Zealand's fishery, Simmons & Stringer (2014: 74) point out precarious working conditions aboard fishing vessels, including forced labour, abuse and non-payment of wages. A book recently written by Couper, Smith and Ciceri (2015) provides global examples for unfree labour and labour abuses in the fishing industry. As mentioned above, the ARCM and the ILO have carried out a large-scale survey (n=596) amongst Thai, Cambodian and Myanmar fishers (Chantavanich et al., 2013; Chantavanich, Laodumrongchai and Stringer, 2016). Insufficient supply of workers on fishing boats due to low wages and unsatisfactory working conditions led to *"deceptive and coercive labour practices*" (Chantavanich et al., 2013: ix), particularly forced labour and human trafficking. These practices also include "*restricted freedom of movement; retention of identity documents; threat of denunciation to the authorities; physical or psychological violence; debt bondage; illegal wage deductions; or, non-payment of wages*" (Chantavanich et al., 2013: xii). Other conditions reported were excessive working hours (sometimes 17-24 hours a day) with associated increase of fatigue and risk of accidents, no signed contracts, non-payment or deductions from wages, child labour and insufficient health and safety on board (Chantavanich et al., 2013: xi). Especially migrant workers are subject to exploitation as their irregular situation contributes to "*their willingness to accept poorer conditions*" (Chantavanich et al., 2013: xi). Several NGO reports confirm these findings (e.g. Murphy, 2018; Oxfam, 2018).

Although only few research has been conducted on working conditions aboard fishing vessels in general, one sub-category has been well studied in the past: health and safety aboard fishing vessels. Working long hours under extreme weather conditions with heavy machinery makes offshore fishing one of the most dangerous occupations with a high mortality rate among fishers (Matheson et al. 2001: 305). Various analyses on this topic have been conducted, especially in European countries such as

Norway, UK, Iceland and Denmark (e.g. Matheson et al., 2001; Jensen, Stage and Noer, 2005; Windle et al., 2008; Håvold, 2010; Roberts, 2010). For instance, Roberts (2010: 44) has analysed the 160 deaths from work-related accidents in UK fisheries between 1996 to 2005, wherefrom 86 involved fishing vessels and 74 arose from personal accidents. He has elaborated that fishing is the most hazardous occupation in the UK with almost four times more fatalities per 100'000 workers than the second-ranked occupation (dockers and stevedores). He concludes that "*prevention of fatal accidents should focus on increased use of personal flotation devices, reductions in lone fishing and the use of unstable, unseaworthy and badly maintained fishing vessels*" (Roberts, 2010: 44).

While safety on European fishing vessels is quite well covered, research that includes most or all relevant aspects of working conditions on European fishing vessels seems to be even less available than for other parts of the world, such as South-East Asia. As mentioned above, newspaper articles about Latvian vessels operating from the Norwegian shore have uncovered inhumane working conditions, extreme working hours, physical abuse and inadequate living conditions (Gedde-Dahl et al., 2018; Thorenfeldt et al., 2018). A deceased worker's wife, for instance, mentioned how *"the ship had so little food left that they had to eat bait right from the bucket*" (Thorenfeldt et al., 2018: n.p.). A further group of mothers and wives mentioned non-payment, 16-hour workdays, no resting times, unhygienic conditions, inadequate nutrition and missing working equipment. Some workers also mentioned how they had to pay high agency fees to get a job, were paid lower wages than agreed and were threatened to death, if they ever told anyone about the conditions aboard the Latvian vessels (ibid). An article published in the newspaper *Dagbladet* even reveals how Indonesian fishers were treated as slaves aboard Latvian and Russian vessels operating in the Barents Sea, with extreme working hours (18 hours per day), low pay ($1 per hour), deprivation of food and deduction of wages (Gedde-Dahl et al., 2018). Both articles show how employers hide their responsibilities behind complex corporate constructs and recruitment agencies, making it almost impossible for workers and their relatives to contact or prosecute the real employers (Gedde-Dahl et al., 2018; Thorenfeldt et al., 2018).

However, most literature about working conditions in European fisheries seems to be available for the UK fishing industry. Several news articles about the British fishing industry have reported inadequate working conditions on UK fishing vessels, including forced labour, human trafficking and modern slavery (e.g. Peachey, 2014; Shebbeare, 2015; Blackstock, 2017; Moulds, 2017; Lawrence and Mcsweeney, 2018). Those articles state how international fishers – mostly from the Philippines, Peru and Indonesia – have been attracted to work on UK fishing vessels based on a transit visa. Many news articles have stated that the regulatory framework of transit visas promotes the exploitation of migrant workers in the fishing industry (Shebbeare, 2015; Moulds, 2017). In this context, international fishers are only authorized to be in the UK for the transit to fishing vessels, meaning they cannot sleep and

live in the UK and are confined to the boat, sometimes for up to one year (Shebbeare, 2015). Most of those workers are unsure of their legal status and therefore are reluctant to report indecent working conditions, especially as some employers create a culture of fear for their international fishers (Moulds, 2017). The story of Marco, a Filipino worker on a British fishing vessel, shows how migrant workers are exposed to physical and verbal abuse, breach of contract, inadequate living conditions, low safety standards, occupational injuries and abandonment (Shebbeare, 2015). Other articles revealed extreme working hours with working days lasting 24 hours (Moulds, 2017) while having no resting times and no days off at all (Peachey, 2014). In this context, some did not receive any wages (Peachey, 2014; Shebbeare, 2015), while others were only paid a fraction of National Minimum Wage (Lawrence and Mcsweeney, 2018). Journalists have also reported that many international fishers paid sums of £2'500 or more for the arrangement of their employment. Those exorbitant agency fees bonded them to the job income and forced them to accept even the worst of conditions (Shebbeare, 2015; Moulds, 2017; Lawrence and Mcsweeney, 2018). Those conditions sometimes included physical and verbal abuse, high safety risks with according occupational accidents, and terrible living conditions in very confined spaces, such as wet beds, lack of food and freshwater, no electricity and no contact to the family for months (Peachey, 2014; Shebbeare, 2015; Lawrence and Mcsweeney, 2018).

Not only newspaper articles, but also NGO reports and few academic research have taken up the issue of working conditions on British fishing vessels. Beyond the topic of health and safety, they mainly focus on fishers' level of remuneration. A recent study shows how migrant workers in Scotland earn much less than the domestic fishers, even when doing the same work on the same boat (Jones et al., 2019). After evaluating the ethical and economic arguments of keeping or withdrawing such pay differences within the Scottish fishing industry, the authors have concluded that equal share of the revenues would be the justest distribution of wages (Jones et al., 2019: 1).

As a reaction to the sustained negative press articles, the Anglo-Northern Irish Fish Producers Organisation (ANIFPO) commissioned the independent charitable organization Human Rights at Sea (HRAS) to conduct a study about migrant workers' conditions on Northern Irish fishing vessels (HRAS, 2017). For this study, HRAS questioned 14 Filipino fishermen, which is 67% of the total non-EEA workforce of ANIFPO members (HRAS, 2017: 14). The study concludes that the "*findings were generally positive, although not without identified issues*" (HRAS, 2017: 2). The workers have been engaged as fishers voluntarily, which, according to the authors of the study, poses "*a strong indicator against any form of slavery, servitude or labour exploitation*" (HRAS, 2017: 31). The interviewees have stated that they were provided with adequate Personal Protective Equipment (PPE), received adequate health and safety training, that the living conditions were good and nutrition adequate (HRAS, 2017: 24, 25). However, the contracted level of remuneration was determined to be an area of concern, as it falls

below the National Living Wage for non-EEA nationals (HRAS, 2017: 31). Furthermore, there was "*a large degree of anxiety among the respondents*" about their present and future immigration status, as they highly depend "*on the work to meet their financial obligations and familial aspirations*" (HRAS, 2017: 27). Anecdotal accounts of non-EEA fishers allegedly experiencing physical and verbal abuse, uninhabitable living conditions and further illegal working conditions in other ports of Northern Ireland, further puts the positive results of the study into perspective (HRAS, 2017: 29). The study's limitations show in the small and local sample, as it contains only 14 respondents from one port (HRAS, 2017: 14). Furthermore, the study only stated the contracted number of working hours (48h per week), but not the real working hours of the respondents (HRAS, 2017: 22), although extreme working hours are an area of major concern on British fishing vessels (Peachey, 2014; Shebbeare, 2015; Moulds, 2017).

As seen in this chapter, precarious working conditions seem to occur on fishing vessels all over the world. Further authors have confirmed this picture, including McDowell, Batnitzky and Dyer (2009: 9) and Marschke, Campbell and Armitage (2019). Still, the latter have mentioned that the research field of labour geography and particularly the theoretical concept of precarious work, "*has not been applied in the context of fisheries-based work, even as working conditions in fisheries are emerging to be a real issue*" (Marschke, Campbell and Armitage, 2019: 1). Thus, they suggest to begin applying the concept of precarious work on fisheries, as it has emerged as an analytical and descriptive tool, that allows examining employment on British fishing vessels in a detailed manner.

This literature review revealed a significant research gap when it comes to academic literature about working conditions on British fishing vessels. Beyond the research on health and safety aboard fishing vessels, academic literature on this topic is rare. While the majority of organizations, newspapers and researchers focused on the working conditions aboard South-East Asian fishing vessels, only a few authors have covered the working conditions on European fishing vessels. This accounts for UK fisheries as well, although compared to other European countries, there seems to be more literature available. Still, the existing literature in the UK either focuses on specific aspects of working conditions such as health and safety (e.g. Roberts, 2010) and level of remuneration (Jones et al., 2019) or relies on a small and very local sample (HRAS, 2017). Therefore, holistic approaches that look at working conditions aboard British fishing vessels in its entirety and not only on specific aspects, have mostly been brought forward by media reports (Peachey, 2014; Shebbeare, 2015; Moulds, 2017). However, as Chantavanich et al. (2016) state, media reports cannot provide "*sufficient and robust empirical data to inform policies in the fishing industry on how to minimize or eradicate the abuse of fishers*" (Chantavanich et al., 2016: 1). They therefore highlight the importance of academic literature in the field of working conditions on board fishing vessels on a global scale. This literature review furthermore

revealed a significant research gap when it comes to applying the theoretical concept of precarious work in the context of employment on fishing vessels on a global scale. The next sub-chapter will now display how these research gaps formed the research questions of this thesis.

1.2 Research questions

Based on the above-mentioned reasons and particularly due to the significant research gap revealed in the literature review, the main goal of this thesis is to assess and analyse the working conditions on British fishing vessels. Therefore, the main research question of this thesis is the following:

How are the working conditions aboard British fishing vessels?

To analyse the working conditions in more detail, the main research question is supported by two sub-questions. While the main research question primarily aims at assessing the working conditions, the sub-questions aim at analysing the reasons and backgrounds for the existing working conditions. In order to be able to do so, this thesis will be embedded in the research field of labour geography, with particular focus on precarious work, a concept that will be introduced in chapter 2. This thesis, therefore, follows the above-mentioned suggestions and applies the concept of precarious work in the context of British capture fisheries. Thus, one sub-question will be the following:

To what extent and how is precarious work on British fishing vessels enabled and promoted?

The other sub-question goes back to the statements in several media reports and an academic study that revealed worse working conditions for marginalized employment groups such as migrant workers. As migrant workers seem to be of great importance to the British fishing industry, and significant differences in working conditions seem to occur, this thesis lays a special focus on the working conditions of international fishers. Thus, the following sub-question will help to pursue these statements and analyse if and why migrant workers experience worse working conditions than their domestic counterparts:

To what extent and why do migrant workers experience different working conditions on British fishing vessels than domestic fishers?

1.3 Overview

The above-mentioned research questions will be answered in the following six chapters. After the introduction in chapter 1, chapter 2 will introduce the research field of labour geography with particular focus on precarious forms of work. This concept will build the theoretical framework for this thesis. Then the applied methods, including the pre-study, the data collection and the data analysis, will be displayed and critically reflected in chapter 3. Chapter 4 will provide the context of global and British fisheries and their implications on the economic, environmental, social and political dimension. This chapter will provide the necessary background that is needed to understand the following chapters which present the results and analysis of this thesis. Thus, chapter 5 will answer the main research question by presenting the results of the interviews. In this chapter, the main focus will be laid on relevant topics such as living conditions, occupational safety and health, remuneration and working hours that form the basis to assess working conditions on British fishing vessels. Chapter 6 will then analyse the assessed results by interpreting the collected data through the lens of the research field labour geography and the concept of precarious work. This chapter will focus on answering the two sub-questions of this thesis. Last, chapter 7 forms the end of this thesis and provides a conclusion and an outlook on future research fields within British capture fisheries.

2 Labour geography and precarious work

I situate my thesis within a body of literature that has advanced the field of labour geography which helps me to guide the answering of the research questions. Particular focus will be drawn on the theoretical concept of precarious work. As described above, only few authors have written about precarious work on fishing vessels, thus some voices pledge for an increased application of this concept on fisheries-based research (Marschke, Campbell and Armitage, 2019: 1). This theoretical concept allows to detect and describe the empirical phenomena of working conditions on fishing vessels in an analytical approach and therefore was chosen as analytical guideline for this study. The introduction into this concept in the next sections will situate precarious work within the wider field of labour geography. Furthermore, it will introduce relevant concepts of labour geography and precarious work, such as labour agency, the segmentation of labour markets and the role of labour market intermediaries and migration.

2.1 Labour geography

Labour geography is a significant part of economic geography, which deals with the geographical dimension of economic activities. Economic geography includes the study of where economic activities are located, why they are located at this particular location, what the optimal location of these economic activities would be and what their local, regional and global impact is (Malecki, 2001: 4084). Thereby, economic geographers have long tended to look at workers in a passive manner or have even ignored their role in the making of the economic geography of capitalism (Herod, 1997: 1). In this context mainstream economic geographers have usually "*examined the spatial distribution of workers across the landscape to show how this affects the decision-making process of capitalists and, hence, the economic geography of capitalism*" (Herod, 1997: 3). Andrew Herod labels these traditional views of economic geography – where labour is primarily perceived in the form of how capital and the state base their investment decisions on the spatial distribution of labour supply – as a *geography of labour* (ibid: 2, 3). The field of *labour geography,* on the other hand, sees the making of geographies of capitalism "*through the eyes of labor*" (Herod, 1997: 3) and emphasizes on labour's proactive force in the shaping of geographies of capitalism. Labour geography portrays the workers as active agents in the creation of economic geography instead of conceiving of them only as factors of location (ibid). However, some authors emphasize that labour and capital are mutually dependent on each other and that the relationship between employee and employer can be conflictual, with the latter maintaining "*the upper hand by dominating the production process*" (Lier, 2007: 815). However, labour geographers have demonstrated that workers play a very significant role in shaping the economic geography of capitalism, even when they are not the only ones doing so (Castree, 2007: 855). Thus, embedding this thesis in the field of labour geography helps to assess the fishers' conditions by

perceiving them as an active agent in shaping their economic geography and by analysing the conditions through the workers' eyes.

While the workers' agency seems to be the central topic in the field of labour geography, several other sub-disciplines have evolved, with some of them playing a relevant role in this thesis. The next sections will therefore introduce the most relevant concepts for this thesis, which are workers' agency, precarious work, labour migration and labour intermediaries.

2.2 Labour agency

Within the current literature about labour geography, a central debate relates to the agency of workers and the role of labour in economic geography literature (Carswell and Neve, 2013: 63). As already mentioned above, traditional literature on economic geography is criticized by many authors for ignoring the labour force as an active player in shaping the economic geography of capitalism (Lier, 2007: 829). Coe and Jordhus-Lier (2010) emphasize in their review of labour agency, how literature on Global Production Networks (GPN) "*has remained notably silent on the issue of labour agency*", while "*workers are typically presented as passive victims of capital's inexorable global search for cheaper wages*" (Coe and Jordhus-Lier, 2010: 221). Also Carswell and Neve (2013) conclude that the GPN literature is lacking sophisticated analyses that recognize a labour agency, a concept that will be explained in more detail in the next sections.

2.2.1 Unpacking labour agency

Labour agency conceives of workers as active players in making and shaping their economic geographies. In order to provide more clarity as to what actually counts as labour agency, Coe (2012) pleads for an unpacking of the term agency, in combination with its reconnecting "*to the wider societal structures in which is embedded*" (Coe, 2012: 272). Many authors, including Cumbers, Helms and Swanson (2010), Coe (2012) and Carswell and De Neve (2013) build on Cindi Katz' classification of agency into strategies of resilience, reworking and resistance (Katz, 2004) in order to explain the concept of labour agency. *Resilience* could be summarized as "*small acts of 'getting by' that help individuals and groups cope with everyday realities but do not change existing social relations (e.g. the mobilization of social networks, networks of care)*" (Coe and Jordhus-Lier, 2010: 216). *Reworking* strategies, on the other hand, are explained as efforts which intent to materially improve the workers' conditions of existence by trying to "*recalibrate power relations and/or redistribute resources*" (Katz, 2004: 247). Such acts of reworking could contain strategies to leverage better working conditions or to subvert redevelopment schemes (Coe and Jordhus-Lier, 2010: 216). Resistance strategies are "*direct challenges to capitalist social relations*" (Coe and Jordhus-Lier, 2010: 216) such as the emergence of non-capitalist cooperatives or alternative currencies. According to Coe and Jordhus-Lier (2010: 216, 217), most literature on labour agency relates to reworking strategies, while resistance strategies are

much harder to find in reality than the two others. Thus, Coe and Jordhus-Lier (2010) promote for a notion of labour agency that is less concerned with coping strategies of resilience, but more "*with strategies that shift the capitalist status quo in favour of workers, even if only temporarily, rather than coping strategies designed to ameliorate its impacts*" (Coe and Jordhus-Lier, 2010: 216). However, even beyond this categorization into three different strategies, labour agency can occur in various forms, as Bezuidenhout and Buhlungu (2011) state: "*Worker agency can be informal or formal, individual or collective, spontaneous or goal directed, sporadic or sustained, and it can operate on different scales*" (Bezuidenhout and Buhlungu, 2011: 257). The next sections will discuss some of these variations.

2.2.2 Individual and collective agency

Many authors criticize the field of labour geography for focusing on collective agency while ignoring the fact that individual workers as such have an agency as well (e.g. Lier, 2007: 829; Coe, 2012: 273). While collective actions usually aim at "*promoting transnational labour rights and improved employment conditions*" (Cumbers, Nativel and Routledge, 2008: 369), there is also growing awareness of individual workers' agency performed on a daily basis (Coe, 2012: 273). Furthermore, Coe (2012: 273) argues that agency is not only shaped by worker identities as such, but also by a wider set of characteristics such as class, gender or race of individual workers. Rogaly (2009) for example shows how "*the spatial embeddedness of temporary migrant workers' everyday lives can be a resource for shaping landscapes (and ordinary histories) of capitalism, even though any changes may be short-lived and take place at the micro-scale*" (Rogaly, 2009: 1975). Such statements suggest that agency needs to be actively reconnected to the contextual societal structures in which it is embedded, such as the geographies of production and reproduction (Coe and Jordhus-Lier, 2010: 228). Therefore, Coe (2012: 273) suggests a more intense engagement "*between labour geography and the more traditional concerns of economic geography with respect to corporate strategies and restructuring*" (Coe, 2012: 273), and mentions how a dialogue between literature on Global Value Chains (GVC) and labour geography is starting to emerge. Even more so, when considering that GVC are not only interlinked systems of firms, but as much interlinked systems of embodied labour (Coe, 2012: 273).

2.2.3 Relation to Global Value Chains

The agency of workers is increasingly being used as a constitutive element in Global Value Chains (Coe, 2012: 274). Value chains have been defined as "*the full range of activities that firms and workers perform to bring a product from its conception to end use and beyond*", which includes activities such as "*design, production, marketing, distribution and support to the final consumer*" (Gereffi and Fernandez-Stark, 2011: 4). The Global Value Chain (GVC) approach, as described in Gereffi et al. (2001), provides a framework to analyse the governance and the structure of international trade and production networks. When it comes to the role of workers in GVC literature, for a long time, labour

was treated primarily as a factor of production, resulting in several authors criticizing GVC analysis for paying insufficient attention to the workers themselves (e.g. Barrientos et al., 2011: 322; Selwyn, 2013: 75). Selwyn (2012) thereby mentions the importance of analysing how the workers' structural power can be transformed into collective organization, which then constructs associational power and gives the ability to negotiate concessions from capital and/or the state. Riisgaard and Hammer (2011: 183) state how the ability to exert associational power is driven by GVC structures, as well as local and national institutional context and argue that the potential for worker agency depends on three factors. These are the overall level of 'drivenness' or strength of the driver in the chain, the characteristics of the chain as producer- or buyer-driven, and the nature of local union organizing and labour control regime (Riisgaard and Hammer, 2011: 183). In relation to their last point, they bring forward examples of the banana industry where regional trade unions "*provided the foundation for strategies within the banana value chain*" (Riisgaard and Hammer, 2011: 185), while international trade organizations in combination with Northern Labour NGOs created minimum labour standards in the flower packing value chain. Many other authors mentioned the importance of industry dynamics, the organization of labour networks and the significant role of the state in shaping the potential for labour agency (Bezuidenhout and Buhlungu, 2011; Coe, 2012: 274). These statements show how labour is produced and regulated in local as well as national contexts and suggest that "*labour agency needs to be re-embedded in state formations as much as it does in the global structures of capital*" (Coe, 2012: 274).

The theoretical concept of labour agency helps to understand individual and collective action that aims at improving workers' conditions in British fisheries. In this context, the connection to the GVC literature helps to understand how labour agency is shaped and affected by global processes.

2.3 Precarious work

While Labour agency has been undoubtedly a string of concern in labour geography, another has been the analysis of "*the unequal and highly segmented nature of contemporary labour markets, especially in advanced service economies"* (Coe, 2012: 274). In this context, the focus was set on the increasing occurrence of insecure forms of work across a range of sectors including construction, manufacturing, agriculture and consumer service sectors (Coe, 2012: 274). As displayed above, several authors have also mentioned forms of insecure or precarious work in fisheries around the globe, for instance in Jamaica (Marschke, Campbell and Armitage, 2019), as well as in the UK (McDowell, Batnitzky and Dyer, 2009: 9). Kalleberg and Hewison (2013: 271) define precarious work as uncertain and insecure work in which risks associated with work are shifted from employers to workers, who thereby receive limited social benefits and statutory entitlements. Precarious work is mostly characterized by temporary or part-time contracts, weak levels of union coverage, poor health and pension benefits and low wages (Coe, 2012: 274). Several drivers responsible for the growth of precarious work have been elaborated,

such as "*labour market deregulation, wage squeezes resulting from global competition, shrinking public-sector budgets, and the increased use of temporary and contractual employees*" (Coe, 2012: 275). The next sections will introduce into the concept of precarious work with a specific focus on the state's role in enabling and creating precarious work particularly for migrant workers, on subcontracted employment, on new forms of labour organization and on precarious work in the UK.

2.3.1 Migrant workers, national regulatory frameworks and precarious work

Labour geographers have increasingly begun to analyse the various interconnections between precarious work and migration (Coe, 2012: 275). Wills et al. (2009) have explored these relationships in the context of the Greater London economy and determined the concept of 'new migrant divisions of labour' (NMDL). The NMDL concept analyses the increasing immigration into the UK in the past two decades and how the countries of origins of migrants diversify (Wills et al., 2009; Coe, 2012: 275). Furthermore, this concept captures how migrant workers have been integrated mainly into low-paid sectors and how migration channels and routes have multiplied (Wills et al., 2009; Coe, 2012: 275). However, the main driver for NMDL is seen in state migration policies, as the inventors of the NMDL concept state:

> "*[…] far from acting to protect workers from the worst excesses of low-paid work […] policies of labour market deregulation, welfare 'reform' and 'managed migration' have helped create a new 'reserve army of labour' in London whose ranks are filled with a disproportionate number of migrant workers*" (May et al., 2007: 152).

A similar study, conducted by McDowell, Batnitzky and Dyer (2009: 3), focuses on the way migrant workers with diverse social characteristics and diverse residential statuses are differentially integrated in the competition for some of the poorest jobs in the British economy. The authors set a focus on staffing agency employees and conclude that they are "*perhaps the most significant category of precarious work and certainly the most exploitative"* (McDowell, Batnitzky and Dyer, 2009: 19). Researchers in the field of labour geography have more and more begun to pay attention to the way labour market intermediaries, and particularly temporary staffing agencies, produce precarious work and labour market segmentation (Coe, 2012: 276). Therefore, the role of labour market intermediaries in producing precarious work will be discussed in the next section.

2.3.2 Subcontracted employment and labour market intermediaries

Some authors see subcontracted employment as the central mechanism for precarious work. Jane Wills, for instance, argues that "*subcontracted employment is becoming paradigmatic*" and has "*stark consequences for traditional models of trade union organization that focus on collective bargaining with the employer*" (Wills, 2009: 441). She primarily sees challenges in identifying the real employer at

the top of the contract chains, resulting in "*serious implications for labor in terms of wages and conditions, employment experience, and power relations*" (Wills, 2009: 456). She concludes that alliance building with a set of interested parties, especially trade unions and community organizations, is the best way to gain enough power to target subcontracting organizations (Wills, 2009: 456, 457).

Many other authors perceive labour market intermediaries as strong drivers for precarious work. Coe (2012: 276) has categorized recent work on temporary staffing agencies within labour geography into the following three topics. First, it has been emphasized on the active labour market role which profit-oriented labour market intermediaries and staffing agencies seek to occupy (Coe, 2012: 276). Scholars have highlighted how staffing agencies seek to expand their market spaces as well as the social acceptance toward their activities through lobbyism and expanding strategies (e.g. Coe, Jones and Ward, 2010). Second, it has been analysed how a cadre of global staffing agencies have emerged and expanded globally since the 1990s (Coe, Johns and Ward, 2007) and how "*they have had to pursue highly spatially variable and territorially embedded corporate strategies*" (Coe, 2012: 276). Third, research highlighted how national regulatory frameworks strongly shape temporary staffing and how the existence of national markets for temporary staffing is characteristic for the global industry (Coe, 2012: 276). Despite the increased academic attention on the role of labour market intermediaries on labour market segmentation, Coe (2012: 276) argues that much remains to be done within this field. He does contribute to this research gap by "*exploring the evolving spatial strategies of collectively organized labour*" (Coe, 2012: 277), which will be discussed in the next section.

2.3.3 New forms of labour organization

The growth of precarious work within GVCs requires new forms of organizing labour force, as traditional modes of workplace unionism seem to be incapable to react to these mechanisms (Coe, 2012: 277). Thereby, the increasingly fragmented nature of staffing agency employees poses massive challenges (Lier, 2009: 12). Those workers are not only fragmented across space, but also administratively, due to the complex structure of the employment chain, contractually, due to different forms of contracts, and temporally, due to the increased occurrence of shift- and part-time work (Lier, 2009: 47). Coe (2012: 277, 278) promotes a multiscale approach with local action and a shift from traditional trade unionism to community unionism that involves civil society actors as well as trade unions. The necessity of a shift to community unionism is heavily supported by many authors, including economic geographers (Lier, 2009: 51ff). Wills (2009: 446) states how the broad collaboration of educational, community, faith and labour organizations can achieve impressively improved conditions for workers, as witnessed in the living wage movement in Baltimore. Accordingly, community unionism is also able to address to workers that usually would be excluded from traditional union activity, such as migrant workers, native people and self-employed (Coe, 2012: 278).

2.3.4 Precarious work in the UK

Melanie Simms' report about precarious work in the UK has elaborated five major categories of precarious work: Part-time work, Temporary contracts, Apprenticeship contracts, Temporary agency workers and Self-employed with a particular focus on dependent self-employed workers (Simms, 2011). Thereby, the term 'precarious' is used for "*those workers who do not have open-ended, full-time contracts of employment*" (Simms, 2011: 3). The report states how many precarious workers lack certain labour market protections and therefore are being paid less than National Minimum Wage and have no access to social security rights or labour rights (Simms, 2011: 9, 13). Migrant workers, young workers, women workers, workers with few qualifications and black and minority ethnic workers are most likely to be involved in precarious work (Simms, 2011: 4). The report mentions that up to 1.2 million temporary agency employees work on every single day in the UK. Thereby, especially migrant workers are at risk of precarity, as they are "*being recruited in their own country with false promises of good pay, conditions and housing, only to be confronted with poor conditions, low pay and breaches of employment rights*" (Simms, 2011: 8).

The concept of precarious work will help to analyse the existing working conditions on British fishing vessels. The theoretical basis of this concept will particularly support the analysis by focusing on the above-mentioned relevant topics of precarious work, which are state regulations, subcontracted employment and forms of labour organization.

2.4 Conclusion

Chapter 2 introduced the field of labour geography with a particular focus on labour agency and precarious work. Thereby, the implications of national regulatory frameworks, labour market intermediaries and labour organization on precarious working conditions – particularly for migrant workers – were highlighted. This thesis will display how international fishers in the UK and especially in Scotland are exposed to a high risk of precarious work, particularly low pay and a lack of labour market protections such as entitlement to National Minimum Wage. First, however, the applied methods in this thesis will be explained and discussed in more detail.

3 Methods

In this thesis, qualitative methods have been used to answer my research questions. A qualitative approach is suitable for analysing working conditions aboard British fishing vessels due to several reasons. First is the openness of qualitative research (Flick, Kardorff and Steinke, 2010: 17). Qualitative methods aim at providing as many new insights into a topic as possible and are open to new and unexpected information (Hohl, 2000). Quantitative methods, on the other hand, are useful for studying problems that are already known and allow to calculate frequencies and probabilities (ibid). Qualitative research furthermore aims at investigating a social phenomenon from the point of view of the involved actors (Malterud, 2001: 398), which corresponds to the goal of this thesis. As I decided not to work on a fishing vessel, this thesis aims at assessing the working conditions aboard British fishing vessels based on the experience and knowledge of involved actors, in combination with already existing reports and literature.

The present chapter introduces the research process of this thesis by unfolding the work steps and research methods that were used in order to answer the research questions. This exact documentation of the research process aims to ensure the intersubjective comprehensibility of the thesis (Steinke, 2000). The structure of this research project is based on the structure of research processes in empirical social sciences according to Gläser and Laudel (2009: 35).

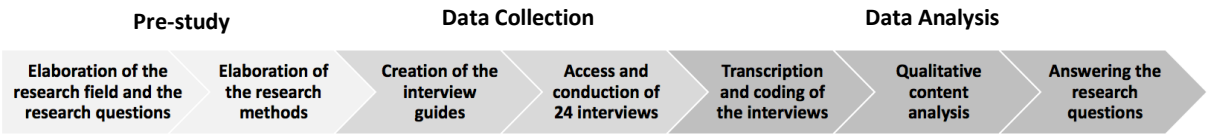

Figure 3: Research process (own illustration, based on Gläser and Laudel (2009: 35))

Figure 3 shows the research process, which consisted of a pre-study, the data collection and the data analysis. In the pre-study phase, I elaborated the research field, research questions and the research methods. Then the data collection process started by creating the interview guides and getting access to possible interview partners. After conducting the interviews, they were transcribed, coded and analysed with the method of qualitative content analysis. Finally, the results were interpreted and analysed in order to answer the research questions. The whole research process will now be explained in more detail.

3.1 Pre-study

The pre-study consisted of elaborating the general topic of this master's thesis. The research process started by reflecting on my personal aim of this thesis, which was twofold. First, I wanted to write a thesis about working conditions in global value chains. My interest in this topic grew mainly due to my Bachelor thesis about standards and certifications in the palm oil industry, where many social problems

– amongst others in working conditions – occur (e.g. Sinaga, 2013). Second, instead of writing a thesis that is read only by the supervisors, I wanted to write a thesis that is of interest and relevance to actors outside the academic world as well. Therefore, I contacted several civil society organizations and supermarkets in Switzerland, in order to find out about their interests, urgent questions and current issues related to working conditions. Finally, a representative of a Swiss retailer mentioned that they only have little knowledge of working conditions aboard European fishing vessels and would be interested in assessments and analyses of working conditions in this context. Thus, a loose collaboration with the retailer's representative emerged, with him providing contacts to the fishing industry. However, my independence as a researcher was given at any time, as the retailer's support was never bound to any conditions or services from my side.

After European fisheries were determined to be the main topic of this thesis, the scope was reduced to only one country, the UK. As mentioned above, many reasons substantiated this decision. Those included the language, the involvement of charitable organizations with according facilitated access to interview partners and the relative abundance of reports and articles about working conditions aboard British fishing vessels compared to other countries. As those reports mainly mentioned issues with migrant workers on middle- to large-scale vessels (e.g. Shebbeare, 2015; Moulds, 2017), the main focus was soon laid on Scottish fisheries. The Scottish fishing industry is shaped by a relatively big share of large-scale vessels (Elliott and Holden, 2018: 12) and high numbers of migrant workers within the fleet (Marine Scotland Science, 2016: 4).

In consultation with my supervisors and considering the research gaps within the field of working conditions in global fisheries, the temporary research questions and research methods were defined. However, during the course of this thesis, several research questions were excluded, while a new one emerged, as chapter 3.4 will show. The elaborated concept was presented and accepted in the research colloquium of the Economic Geography Unit within the Department of Geography at the University of Zurich, which meant that the process of data collection could be pursued.

3.2 Data collection

Data for this study has been collected by applying the problem-centred interview (PCI) according to Witzel (1985). Problem-centred interviews are particularly suitable to research socially relevant problems – such as decent working conditions – as they aim at gathering "*objective evidence on human behaviour as well as on subjective perceptions and ways of processing social reality*" (Witzel, 2000: n.p.). The PCI aims at representing a subjective approach to the problem, whereby imaginative and semi-structured prompts are employed to enrich the stimulated narratives. The PCI is a theory-generating method that uses an interplay of inductive and deductive approaches to increase the users' knowledge. The user's previous knowledge serves in the phase of data collection as a "*heuristic-*

analytical framework for ideas for questions during the dialogue between the interviewer and respondent" (Witzel, 2000: n.p.). At the same time, the user should aim to focus on what the respondent determines to be of relevance for the study. Theoretical frameworks are further developed in the analysis by implementing empirically based hypotheses from the collected data. Thus, this method ensures that "*the interviewer's/scientist's view of the problems being addressed does not simply overlap the respondent's and that the theory is not simply superimposed upon the collected data*" (Witzel, 2000: n.p.).

The PCI has been a very suitable method to collect the data, as existing theoretical concepts and conducted studies about working conditions on fishing vessels provided a starting point for the interviews and a theoretical framework to analyse the data. On the other hand, the PCI approach left space to stimulate the issues that have been determined to be important by the interview partners and therefore to supplement existing theories by new insights. The next sections will further elaborate on the interview guides, the sampling strategy, the final sampling of interview partners and the execution of the interviews.

3.2.1 Interview guides

Semi-structured interviews were conducted in order to collect data for this thesis. The semi-structured interview method was chosen as it is "*well suited for the exploration of the perceptions and opinions of respondents regarding complex and sometimes sensitive issues and enable probing for more information and clarification of answers*" (Barriball and While, 1994: 330). This method has been particularly suitable for the thesis, as it allows to elicit complete and sensitive information, clarify relevant issues and explore the respondent's opinions. Furthermore, the semi-structured interview leaves some space for varying questions between the interview partners, which was particularly important due to the varied professional, educational and social backgrounds of the interview partners (ibid).

3.2.1.1 Forming the interview guide

Interview guides were used to conduct these semi-structured interviews. Such guidelines are supportive devices "*to reinforce the interviewer's memory on the topics of research and provide a framework of orientation to ensure comparability of interviews*" (Witzel, 2000: n.p.). The guides can be seen as a form of handbook that captures the prepared questions and narrative prompts. Cornelia Helfferich's SPSS-approach[2] served as guidance to create these interview guides. This approach contained four steps. The questions were (1) systematically collected and (2) subsequently checked on

[2] The approach has been created in german, whereby the letters SPSS stand for the initial letters of the four steps: Sammeln (collecting), Prüfen (checking), Sortieren (sorting) and Subsumieren (subsuming) (Helfferich, 2019: 677/678)

suitability and phrasing, then they were (3) sorted and (4) subsumed (Helfferich, 2019: 677, 678). In the first step, I collected the interview questions with the help of a mind map, whereby I was guided by the research questions, theoretical frameworks and existing literature. Of particular help was the interview guide used by HRAS (2017: 37) to conduct their study about working conditions aboard Northern Irish fishing vessels.

After collecting the questions, they were checked on their relevance for the research and on their phrasing. In this context, the focus must be laid on open questions which allow new and unfamiliar aspects to be addressed by the interviewee. Questions that allow one-word answers, as well as suggestive questions were avoided. In a next step, the questions were sorted into the introductory questions and three main categories: "Working conditions on British fishing vessels", "Organization's interests and positions" and "British fishing industry". Within these categories, the questions were structured in several thematic sub-categories with each containing several questions that were subsumed under an open and narrative generating main question. This method created a non-suggestive interview atmosphere while leaving space for questioning particular aspects that have not been mentioned by the respondent (Helfferich, 2019: 677, 678).

However, after a first draft of the interview guide was created, it was adjusted several times during the data collection phase, as the next section will show.

3.2.1.2 Adjustments and pre-test

The interview guides were adjusted several times during the data collection phase, particularly due to the great variance in the professional backgrounds of the interview partners. Originally, I have generated an interview guide for each of the interviewed actor groups: Workers, Workers' representatives, Industry Representatives, Experts and Decision-Makers. However, as the backgrounds and topics of interests varied greatly even amongst the respondents from the same actor groups, the chosen interview guides often did not cover the most interesting and relevant issues. Thus, I recognized that a certain degree of flexibility within the interview guides was needed. Even more so, as some interviews were conducted very short-termed with a limited time range. Therefore, in the course of the data collection phase, one holistic interview guide was built that contained all the questions for most of the different actor groups. This interview guide contained an introductory question, which was slightly adjusted for each of the respondents and focused on their particular backgrounds, and the three categories as mentioned above with several blocks of questions each. Depending on the background of the interview partners and the time-range of the interview, whole blocks of questions or even whole categories were skipped. This flexibility allowed to focus on the particular expertise and knowledge of the interviewed person while ensuring that the most relevant issues were covered, especially when under time pressure. For the workers and the vessel owners –

who in this case were workers as well, as both of them worked on their vessel as skipper – two separate interview guides were created. The separate interview guides allowed to ask specific and more detailed questions about the particular workers' conditions and experiences in Scottish fisheries (workers), respectively about the conditions on their particular vessel (vessel owner). Each interview ended with a final question and space for the respondent to ask questions or to add something. Here, asking for contacts of possible further interview partners was of particular interest to me.

Initially, the first interview was considered a pre-test for the interview guide. Such a pre-test allows to check the guide regarding shortcomings, time-range, structure and comprehensibility of questions (Diekmann, 2009: 219, 422, 465) and reflects the functionality of the interview guide (Bogner, Littig and Menz, 2014: 34). The pre-test showed that some questions had indistinct wordings, that the interview guide was too extensive, as the interview lasted for about 100 minutes, and that a quiet location is highly important, especially when interviewing in a foreign language. However, in retrospective, not only the first interview but also several of the following interviews contained many learnings which resulted in adjustments of the interview guides. The holistic interview guide, as well as the interview guides for the workers and the vessel owners are attached in *Appendix 1*.

3.2.2 Sampling strategy

The selection of interview partners was based on the research questions. Therefore, I searched for actors that were involved in the British fishing industry and had first-hand, anecdotal or contextual knowledge on working conditions aboard British fishing vessels. As I intended to have a very broad and holistic view on working conditions aboard British fishing vessels, the involvement of all different actor groups was required. Even more so, as I initially intended to analyse the actors' interests and positions on motivation, necessity, problems and opportunities regarding their engagement in developing the workers' conditions (see chapter 3.4). After a broad online research, I initially constructed the following five actor groups, with the aim to interview about 3 to 5 actors per group:

- **Workers**: Domestic and international workers, skippers and employees, ...
- **Workers' representatives**: Trade unions, charitable organizations, NGOs, …
- **Experts**: Researchers, advisors, …
- **Decision-makers**: Government, International Organizations, certification schemes, ...
- **Representatives of the industry**: Vessel owners, producers organizations, industry bodies, retailers, ...

These five categories were restructured into four. The categories 'Decision-makers' and 'Experts' were merged into the category 'Experts', due to the various entanglements of the actors between these groups. I am aware of the fact that all respondents may be experts in their particular fields of interest.

However, I still decided to label this actor group 'Experts', due to the respondents' professional backgrounds, which include amongst others researchers and advisors, that provide them with insider information and particular expertise that exceeds the knowledge of many other respondents.

In order to conduct the interviews, I planned to go to the UK for 5 weeks, a timeframe which seemed suitable to conduct 15-25 interviews and fitted into my schedule. Thereby, I intended to go to London and Edinburgh to interview representatives of nation-wide institutions, and to various ports in Scotland in order to interview local fishers, employers and institution representatives. I assumed it to be more difficult to get in touch with fishers than with any other actors, as they do not have their contact details on the internet. Thus, I intended to get in contact with representatives of local charities and fishers centres, whose contact details are to be found online and who are well connected with local fishers. This sampling strategy is called 'snowball sampling' according to Patton (1990: 176). Within this method, well-situated people are asked for information-rich contacts: "*By asking a number of people who else to talk with, the snowball gets bigger and bigger as you accumulate new information-rich cases*" (Patton, 1990: 176). However, in order to get in contact with these well-situated actors, I used the strategy of 'intensity sampling' that "*consists of information-rich cases that manifest the phenomenon of interest intensely*" (Patton, 1990: 171). Therefore, I aimed to schedule some interviews with well-situated actors before arriving in the UK, in order to have a starting point for the snowball sampling method.

The first interview partners were searched online, whereby the seemingly most relevant actors of each group were contacted. The principle of informed consent according to Gläser and Laudel (2009: 159) was applied, meaning that the contacted actors were informed about the aims of the study and about the implications of participating in the study. Although I sent more than thirty E-Mails, there was only little feedback with seven positive answers. Thankfully, the first interview partner was a well-connected and very helpful advisor of the British fish industry, who convinced several further actors to meet me in the UK. Before my departure to the UK, I already conducted two interviews in Switzerland. One with the just-mentioned advisor that was in Switzerland by chance, and one with my contact to the representative of a Swiss retailer. At the time, I had seven further interviews scheduled in the UK. The first interview in the UK – the one that was arranged thanks to the advisor – triggered a veritable chain reaction with eight further interviews following, all of them with local workers or workers' representatives in Scottish ports. Two further interviews were arranged spontaneously via contacts of other interview partners and an additional five interview partners were spontaneously asked if they were available for an interview in the ports of Scotland, without a contact presenting me to the respondents. Those included one skipper, a group of workers and three industry representatives. In total, more than half of my interview partners were accessed thanks to the snowball strategy.

3.2.3 Sampling and interviews

The sampling strategy resulted in a total of 24 interviews with six workers, six workers' representatives, nine industry representatives and three experts. For privacy reasons, the names of the respondents and their representative organization are treated anonymously in this thesis. Therefore, only few information about the interview partners can be provided. *Table 1* shows which backgrounds were involved in the interviews.

Table 1: Backgrounds of the respondents per actor group

Workers	Filipino workers on the East Coast (2)
	Ghanaian workers on the West Coast (2)
	Domestic workers on the West Coast, including an employed skipper (2)
Workers' representatives	National representatives of a charitable organization (2)
	Representatives of local fishers' centres (4)
Industry representatives	Representative of a retailer (1)
	Representative of a certification scheme (1)
	Representative of a producers organization (1)
	Representative of a port authority (1)
	Representative of an industry body (1)
	Skippers / Vessel owners (2)
	Vessel agents (2)
Experts	Advisors (2)
	Researcher (1)

The classification into these four categories provides an overall view of the backgrounds of the interviewed actors and is used in the thesis to differentiate between the respondents. All interview partners that are employed on a British fishing vessel have been classified as *workers*. Representatives from charitable organizations that aim to support fishers have been labelled *workers' representatives* as they actively stand up for the workers' rights and represent them towards other interest groups. All representatives from institutions, organizations or associations that financially profit from the fishing industry or that represent and support such an institution, have been classified as *industry representatives*. The other actors, namely advisors and researchers of the British fishing industry, have been labelled *experts*. The classification for skippers is not coherent as some skippers are employed by the vessel owners, and some skippers own the vessels and therefore are employers themselves. The ones who are employed have been classified as workers; the ones who own the vessels have been classified as industry representatives. The list of the interview partners in *Appendix 2* gives a more precise overview of the background of each of the respondents and further details such as date, duration and place of the interview. From here, respondents are labelled 'IPx' in this thesis, whereby

'IP' stands for 'Interview Partner' and 'x' for the identification number of the particular respondent, as shown in the list in *Appendix 2*. The number behind the colon indicates the particular line in the transcript, where the statement can be found (for example, *(IPx: 27)*). When it comes to in-text references, the line in the transcript is indicated in brackets (for example, *IPx (27) states that …*)

3.2.4 Interviews

The interviews were conducted between March and June 2019 and lasted about 50 minutes on average, with the shortest being five minutes and the longest 103 minutes. While two interviews were conducted in Switzerland and two via Skype, the rest were conducted in the UK. In this context, I conducted three interviews in London, one in Edinburgh, eight in two different ports on the East Coast of Scotland and another eight in two different ports on the West Coast of Scotland. While most interviews were conducted at the particular workplace of the respondent (office, vessel, port, etc.), three interviews took place in restaurants or cafés, one in a library, and three in local fishers centres in the ports in Scotland. Eight of these interviews contained more than one interview partner, varying from two to six respondents at a time. In these cases, the individual interview partners were distinguished in the transcriptions in all interviews except for one interview with six Filipino workers, as I was unable to tell them apart in the recordings. However, in the thesis, the participants of the same interview have not been differentiated, as all of them each represented the same institution or opinion and a distinction would have worsened the readability. The interviews were conducted with the help of the interview guide, whereby the questions and their order varied according to the background of the interview partners, as intended by Bogner, Littig and Menz (2014: 28ff). 21 interviews were captured with a recording device or a smartphone as suggested by Witzel (2000). The recordings allowed *"for an authentic and precise record of the communication process*" (Witzel, 2000: n.p.), and enabled me to concentrate completely on the interview. Before the interview, all respondents were asked for their consent to record the interview. Two interview partners denied consent of recording and one interview was not recorded due to a manual application error from my side. However, as notes of the conversations were taken immediately after talking to the respondents, many important statements have been captured.

3.3 Data analysis

The next sections will further elaborate on the analysis of the data material, which includes the transcription of the interviews and the qualitative content analysis of the data.

3.3.1 Transcripts

The recordings of the interviews were transcribed in order to permanently capture them in a written copy and to use them for scientific analysis (Kowall and O'Connell, 2003: 438). There are no universally applicable rules for the transcription of interviews, but the researcher him-/herself can legislate and

consequently follow his/her own rules (Gläser and Laudel, 2009: 193). Therefore, I decided to transcribe the interviews smoothly, meaning there is no verbatim transcription of the conducted interviews. This method seemed suitable, as the content of the statements is important in this study, rather than the manner of how the statements were made. Thus, the interviews were transcribed as readable as possible with some sentences having been adjusted. Thereby, I made sure that no important information was lost and that the content of the statements was entirely reflected in the transcript. All interviews except for one were conducted and transcribed in English, with the exceptional one being conducted in Swiss German and transcribed in High German for better readability. In several interviews – particularly the ones which involved either Scottish respondents or migrant fishers – some passages could not be understood due to language difficulties and therefore were marked in the text. Furthermore, specific situations, vocalizations and intonations were only highlighted in cases that seemed to be of particular relevance to the content of the statement. *Table 2* contains all the rules of transcription and the meaning of the symbols that were used in the transcripts.

Table 2: Rules of transcription

Symbol / Term	**Meaning**
I:	Passage of the **i**nterviewer
P:	Passage of the interview **p**artner
P1, P2,…:	Passage of further interview **p**artners, in case of several respondents
(?)	Placeholder for incomprehensible words or passages
(The phone rings)	Description of special situations
(hesitates)	Description of special behaviour that seemed to be of relevance
…	Unfinished or continued sentences

The transcripts of the interviews are displayed in *Appendix 3*.

3.3.2 Qualitative content analysis

I used the 'Qualitative Content Analysis' to analyse my interviews. Mayring (2000) defines this concept as follows: "*Qualitative content analysis defines itself within this framework as an approach of empirical, methodological controlled analysis of texts within their context of communication, following content analytical rules and step by step models, without rash quantification*" (Mayring, 2000: n.p.). Within the qualitative content analysis, the data material is to be analysed step by step, whereby rules of procedure have to be followed that devise the data into content analytical units. These units, which are called categories and are determined via a coding process, are in the centre of the analysis. The inductive category development and the deductive category application are central within the

procedures of qualitative content analysis (ibid). In this study, the categories were first developed in a deductive process. Here, the research questions and interview guides, which were developed with the help of existing theories and literature, served as a template to form relevant categories. Then, the material was revised step by step, which led to the formulation of new inductive categories and the subsumption or deleting of old deductive categories. This combination of deductive procedure in a first step, combined with inductive category development in a second step is prevalent within qualitative content analysis (Kuckartz, 2016: 97). The categories have then been represented in a category system (see *Appendix 4*), that contains all categories and their relationships to each other (Bogner, Littig and Menz, 2014: 73ff). As shown in *Figure 4*, my category system contains the following four main categories with various sub-categories: Working Conditions, Migrant Workers, Actors and British Fish Industry. A list that contains all the categories and the numbers of codings per category, is to be found in *Appendix 4*.

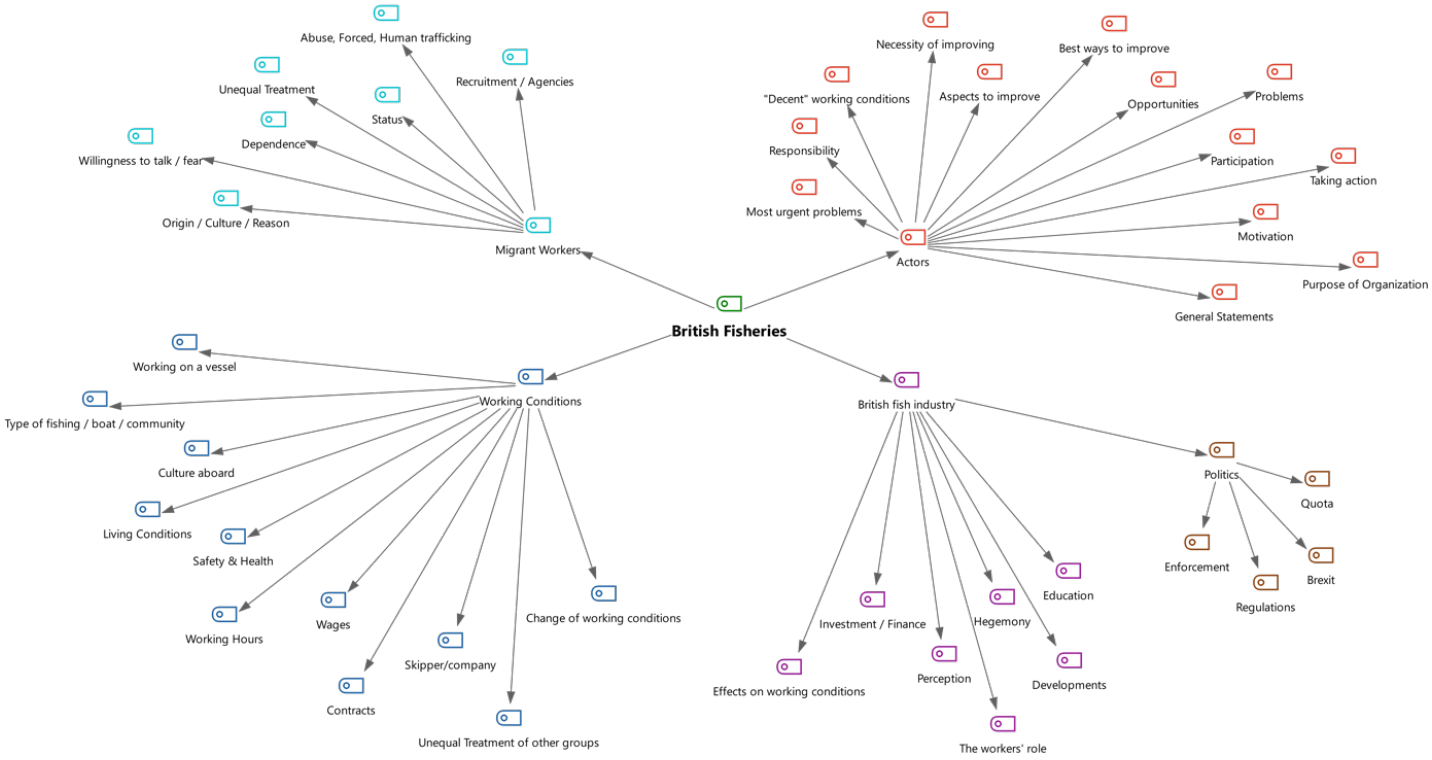

Figure 4: Coding tree of the qualitative content analysis (own illustration, created with MAXQDA)

In a next step, all the collected data was coded on the basis of the developed category system. Coding is a complex interpretative process, whereby text passages are assigned to particular categories (Kruse, 2014: 387). Thereby, some text passages were assigned to several categories due to their ambivalent content, a procedure which is common within this method, according to Kuckartz (2016: 111ff).

Based on the category system and the content of the coded data material, the overall structure of the thesis with its chapters and sub-chapters was generated. Particularly relevant categories were assigned to each subchapter to ensure that all of the relevant data material is included in the particular subchapter. Then, case-related thematic summaries of the categories have been created as suggested by Kuckartz (2016: 111ff). The summaries have been completed with comparisons to existing studies, articles, reports and other sources in order to check the reliability of data and to fulfil the pretension of intersubjective comprehensibility (Mayring, 2000). These completed summaries formed the basis for the analysis of the data and the answering of the research questions of the study. The whole process of data analysis was supported by the softwares Wreally and MAXQDA.

3.4 Reflection of the methods

Overall, my research process worked well and I am content with the methodologies of this thesis, especially when it comes to the sampling, sampling strategy and the qualitative content analysis. However, some aspects left room for improvement, particularly the interview guides and the scope of the original research design, as discussed in the next sections.

3.4.1 Reflection on the pre-study

As mentioned above, my original research design was very broad. The following research questions were originally meant to be answered in this thesis:

How do involved actors in the fishing industry assess the working conditions on industrial fishing vessels in Great Britain?

- What problems are perceived as the most urgent ones by the different actors?
- To what extent are migrant workers exposed to a higher risk of indecent working conditions and why?
- What processes in the British fishing industry led to the current working conditions?
- What interests do the actors represent concerning the necessity and motivation of improving working conditions?
- What opportunities and problems do the involved actors see in order to achieve improved working conditions?

In retrospect, those research questions were too many and particularly too broad. During the analysis of the data material, I realized that I am not able to answer all the research questions to a satisfactory extent in the scope of this thesis. Therefore, I skipped several research questions, adjusted the remaining ones and added a new one relating to the theoretical concept in which the thesis is embedded, as discussed in chapter 1.

Thus, particularly the main research question was adjusted, as chapter 1 showed. Therefore, no precise focus will be laid on the difference between the statements of the respondents, but rather on the content, in order to assess the working conditions. Still, the statements of the different respondents are weighed up against each other and compared to additional literature in order to evaluate and analyse them. The assessments of the respondents are supported by other sources such as academic papers, media articles and reports from industry associations, charities and the government, to provide the reader with a preferably holistic analysis.

While minimizing the scope of the research design in retrospect seems to be suitable and adequate to reduce the scope of the whole thesis, the broad scope of the research design had several implications for other aspects of the study. Due to the extent of the research design, the interview guides were very broad and contained many questions, including the ones related to the later skipped research questions. Therefore, many interviews contained irrelevant information. This is particularly unfortunate since many respondents set a maximum time frame, meaning that not all questions could be asked. If the research design would have been kept tight from the beginning, I most likely would have been better able to focus on the relevant topics. In order to analyse the used data material in a satisfactory way, a remarkable part of the collected data has not been analysed in this thesis and is due to be analysed in future studies.

3.4.2 Reflection on the data collection

Generally, I am happy with the number and quality of interviews I conducted. A topic that was addressed several times in the phase of my pre-study is the idea of doing ethnographic research by attending fishing trips on the vessels. This would have provided me with a first-hand experience of working conditions. However, after intensive online research, this idea was not pursued actively. This is mainly due to the obligation to attend safety training in order to be allowed to go to sea. A second reason is that fishing vessels are relatively dangerous working environments. Furthermore, employers are not keen to take an inexperienced student along on a fishing trip. My interlocutors mentioned several times how dangerous the maritime environment is and remembered me to watch out and to be careful, even though the vessel was not operating and was secured in the calm port. Therefore, I decided to plan a field trip to the ports on the Scottish Coast and try to find fishers and other involved actors there, to conduct interviews and to find out about their experiences and situations. In the next sections, the sampling strategy, the sampling and the interviews with these actors are critically reflected.

3.4.2.1 Reflection on the sampling strategy

I am very content with the applied sampling strategy of this thesis. Access to interview partners was first gained via researching and contacting possible respondents online. Although the response rate

was quite low, still a remarkable amount of contacts responded. As chance would have it, IP1 was available for an interview in Switzerland right at the beginning of my data collection phase. As he was very interested in my thesis, he helped me by contacting several well-connected actors of the British fishing industry. One of those contacts enabled me access to local fishers' centres, which then again enabled access to fishers. I also interviewed some fishers that I spontaneously asked for an interview at the port (IP7, IP15, IP17), but those interviews were very superficial and short. On the other hand, the interviews with workers that were launched by workers' representatives were more detailed. However, the strategy of spontaneously asking actors for an interview in some cases turned out to generate very interesting conversations with a lot of sensitive insider information, for instance when IP11 – a vessel agent – showed me a contract of a Filipino worker.

3.4.2.2 Reflection on the sampling

In general, I am very happy with the amount and quality of interviews as well as interview partners. I was able to consult many relevant actors that have a great knowledge of the British fishing industry. However, considering the shrinking of the scope of the research design, some interviews (IP2, IP4, IP10, IP22) seem to be less relevant than others. When also considering the three conversations that only lasted for about 5 minutes, the number of relevant interviews is around 17, rather than the stated number of 24 interviews. However, as all of them have been referred to in this thesis, they are represented in the official list of interview partners.

The composition of the sample is quite satisfactory, as, in my opinion, every relevant actor group is represented in an adequate number and quality. Still, when looking at the number of interview-minutes or pages of transcripts, the workers – especially the domestic ones – are underrepresented in this study. This is particularly critical, as this thesis aims to assess the workers' conditions, and therefore should give them a strong voice. As described above, finding access to workers was difficult and therefore, I decided to support their voice by interviewing many representatives of charitable organizations in fishers' favour. Their knowledge is particularly valuable, as they have a more holistic view and sometimes know tendencies and developments of conditions better than the workers themselves. Furthermore, industry representatives are maybe a bit underrepresented as well. Although the number of industry representatives is high (9 out of 24), the gained information was often irrelevant, as in the case of the four above mentioned interview partners (IP2, IP4, IP10, IP22), who were mostly asked questions that are not relevant to the updated research design. The interviews with representatives of vessel agencies were quite specific about the recruitment of workers and the role of agencies in this process. Therefore, only three voices (IP5, IP6, IP20) really represented the industry side on the more holistic questions about working conditions on British fishing vessels.

However, in general, I think the sample for this study is adequate and all different interest groups of the British fishing industry are represented.

3.4.2.3 Reflection on the interviews

In general, I am quite content with the way I conducted the interviews. However, there is also room for improvement. This mainly concerns the interview guides. The broad spectrum of interview partners did not allow to use the same interview guide for everyone, as their backgrounds varied greatly. Therefore, I started to create an interview guide for each of the actor groups. However, I soon realized that the backgrounds within the categories are so diverse, that I even needed different interview guides within these categories. For instance, a vessel owner and a representative of a retailer have both been classified as industry representatives within this thesis. When interviewing a vessel owner, I was particularly interested in detailed information about the fishers and the vessel, how the conditions of the workers are or what difficulties a vessel owner perceives in granting decent working conditions. In the interview with a representative of a retailer however, I was more interested in how they perceive the working conditions aboard British fishing vessels or how they actively participate in shaping those conditions. Due to these vast differences within the respondents' backgrounds, I started to adjust the interview guides for each interview individually. As some interviews in the ports were arranged quite spontaneously and the individual adjustment took a lot of time, I decided to create one holistic interview guide that contained all the possible questions for all the interview partners. This allowed to be more spontaneous and more flexible in appointing interviews, as I had the questions ready all the time. On the other hand, it was very difficult during the interviews, as I had to decide spontaneously which questions were to be asked. In retrospect, I would try to better classify the respondents within different groups, in order to be able to use the same interview guide for each particular actor group. Still, I think that I managed to ask the most relevant questions, resulting in a lot of very interesting data material for this study.

In my opinion, the interviews were generally conducted in a professional and purposeful manner. I received many positive feedbacks and felt like I built a positive and sympathetic relationship to most of the respondents during the interviews. Still, I made some mistakes. First, several of the interviews were conducted in a noisy environment, particularly in public restaurants or on vessels in operating ports. The noise did not only make it more difficult to understand the statements of the interview partners during the interviews – especially since the vast majority of the interviews were conducted in English, which is a foreign language to me – but also to transcribe them. In a similar vein, interruptions occurred when I conducted interviews in my respondents' offices, for instance, when they are points of contact for many fishers as in the case of representatives of local fishers' centres. This led to interruptions to the flow of conversation and often to an abrupt change of topics. Furthermore,

technical problems occurred in two interviews. In the interview with IP12, the battery of the recording device died, resulting in a bearable loss of about one minute of conversation. The interview with IP22 was conducted via Skype and due to a user error from my side, the entire interview was not recorded. Although I took notes of the conversation right after detecting the mistake, still a lot of information was lost. In retrospect, I should have tested the recording function of Skype in order to ensure no data loss.

Some interviews with international fishers were difficult to conduct due to language barriers. As English was not their mother tongue, some respondents had difficulties to express themselves and mainly gave short answers. This was the case with IP7, IP9 and particularly with IP19, where luckily another Ghanaian fisherman translated occasionally and explained the most important statements.

However, not only language barriers hindered the respondents to speak openly about the working conditions on British fishing vessels. Many respondents confirmed the delicacy of this topic and therefore hesitated to speak about problems within the British fishing industry. This, for instance, manifested in the interview with IP7, who is a Filipino fisher. Due to the presence of his employer (IP6) during the interview, I felt like he was not willing to open up to me and only gave short and general answers. Generally, I felt that those respondents with whom I built the most trustworthy relations, were the ones that opened up the most and were more likely willing to share also sensitive information. Creating a sympathetic relationship turned out to be easier with respondents where access was enabled through a person the respondents knew and in whom they trust. Building a positive and trustful atmosphere and relationship with the interview partners was a crucial point in the data collection and is highly interconnected with the personality of all involved actors, including mine. In general, I think I was very lucky to meet such kind and helpful interview partners, that often took their time to answer my questions patiently and sometimes strongly supported me to find other respondents.

4 The context of global fisheries

Fish are a crucial source of both food and income for many people all around the world. Its peculiar features make fish a unique commodity that is challenging to analyse. As Campling, Havice and McCall Howard (2012) state, fish are a renewable resource and "*the last hunted commodity on the planet*" (Campling, Havice and McCall Howard, 2012: 179). The term "fish" has several meanings and traditionally does not solely refer to finfish (fish that have fins) but to all aquatic organisms that are harvested, such as mackerel, tuna or sea turtles (Lackey, 2005: 122). However, unless otherwise specified, this thesis will refer to the definition advanced by the Food and Agriculture Organization of the United Nations (FAO): "[…] *the term "fish" indicates fish, crustaceans, molluscs and other aquatic animals, but excludes aquatic mammals, reptiles, seaweeds and other aquatic plants*" (FAO, 2018: 2).

The present chapter provides important background information that are relevant for the further course of this thesis. First, different forms of fisheries with numbers and figures are presented, before discussing the economic dimension to global and British fisheries, including the fishing fleet, employment in fishing, consumption and trade. Then the ecological impacts such as overfishing and by-catch are discussed. In a next step, the impacts of fishing on human beings are discussed with particular focus on small-scale fisheries and food security. Finally, the political dimension with its various attempts to lead fishing in the direction of a sustainable industry on a global level, is presented.

4.1 Different forms of fisheries

Various types of fisheries can be differentiated by their type of environment, harvest and access permitted, by their purpose, degree of wildness and by their organism of concern (Lackey, 2005: 122). Generally, fisheries are defined as systems containing "*three interacting components: the aquatic biota, the aquatic habitat, and the human users of these renewable natural resources*" (Lackey, 2005: 122). However, global fish production is mostly driven by capture fisheries and culture fisheries (aquaculture), which are explained in more detail in the next sections (FAO, 2018: 2).

4.1.1 Capture fisheries

In capture fisheries, fish are caught "*in wild marine or freshwater ecosystems using techniques ranging from spears, traps and hooks, to massive nets guided by sophisticated fish-finding sonar technologies*" (Campling et al., 2012: 178). The most common forms of fishing are longline fishing (45%), purse seining (17%) and trawling (9.4%). Longliners display transoceanic movements with an average trip length of about 7100km, while purse seiners (750km) and trawlers (510km) are operating on a more regional scale (Kroodsma et al., 2018: 905). The different types of fishing gears are displayed in *Figure 5*. For a more detailed overview of the various fishing types, see Couper, Smith and Ciceri (2015: 16-21). 53% of globally produced fish in 2016, or 90.9 million tonnes, was from global capture fisheries.

Capture fisheries can be separated in inland waters and marine fisheries, which represent respectively 12.8% and 87.2% (FAO, 2018: 8). The following sections will further elaborate on marine and inland water capture fisheries.

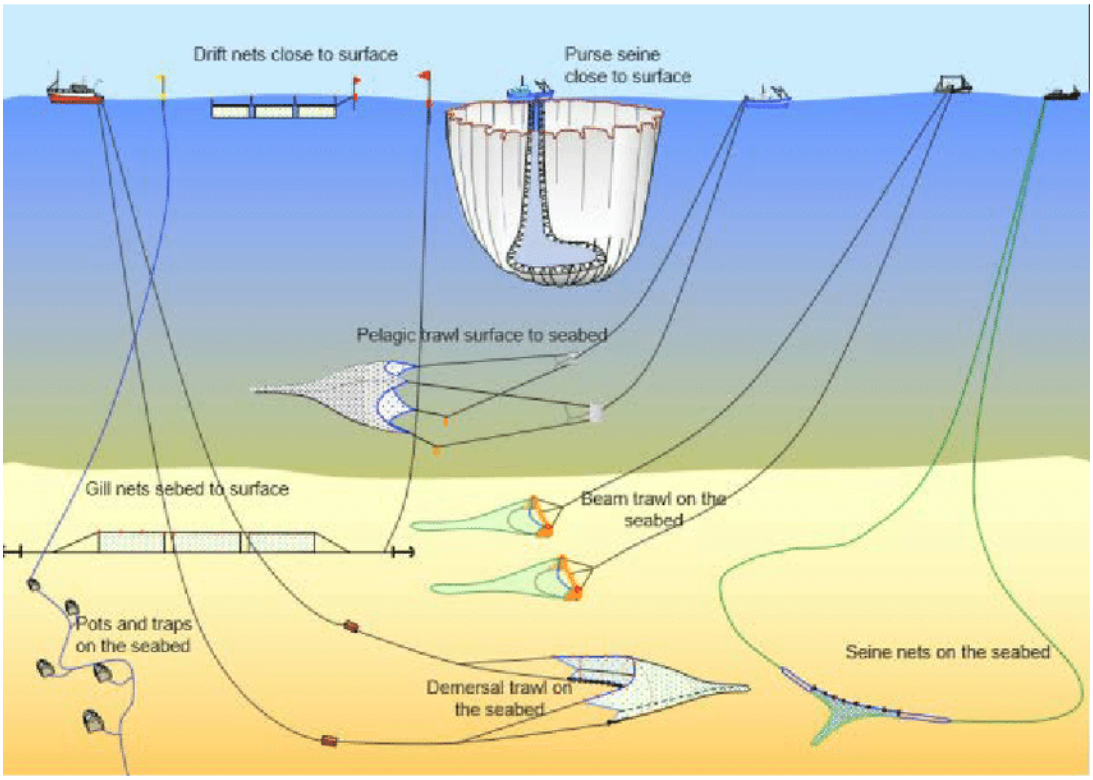

Figure 5: Different types of fishing gear (Grieve, Brady and Polet, 2014: 34)

4.1.1.1 Marine capture fisheries

Global marine catches are stagnating since the late 1980s and reached 79.3 million tonnes in 2016 (FAO, 2018: 8), although total fishing effort[3] has increased in the same time frame (World Bank, 2017: 11, 12). *Figure 6* shows how the average reported catch per capture fisher declined by more than 50%, from about 5 tonnes per year in 1970 to about 2.3 tonnes annually in 2012, although remarkable technological advances have taken place. Technologies such as large-scale motorization of traditional small-scale fishing boats, increased use of active fishing gear, increasingly sophisticated navigation and fish-finding equipment and modern means of communication certainly increased labour productivity. However, "*the increasing number of entrants into the sector (due to poor governance), combined with*

[3] Fishing effort is defined by the World Bank as follows: "*Fishing effort is a composite indicator of fishing activity, including the number, type and power of fishing vessels; the type and amount of fishing gear; the contribution of navigation and fish-finding equipment; and the skill of the skipper and fishing crew*" (World Bank, 2017: 12).

decreasing catches (due to depressed state of fishery resources)" (World Bank, 2017: 14) cemented the stagnation in catches. Thus, the World Bank (2017: 10) and other authors (e.g. Urquhart, Acott and Zhao, 2013: 1) have stated that global fisheries are in a state of crisis. The stagnating catches are explained by overfished stocks and fish quotas to reduce fishing effort in order to allow depressed fish stocks to recover (World Bank, 2017: 11).

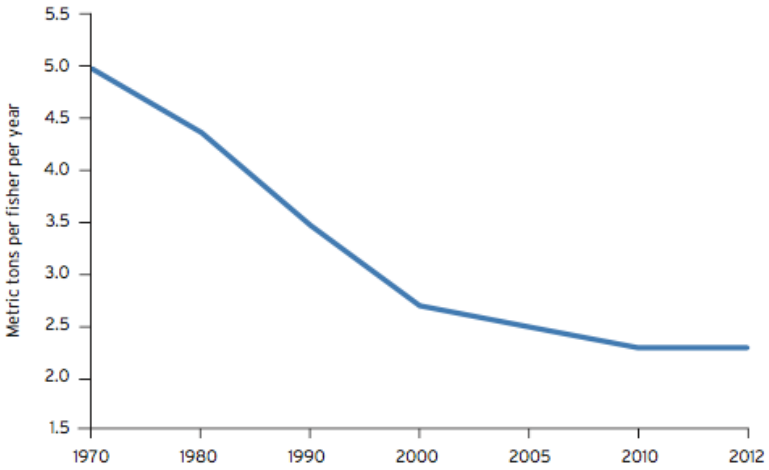

Figure 6: Average catch per fisher per year, 1970 - 2012 (World Bank, 2017: 14)

A considerable part of the global marine catches is low-quality fish that is mainly used to produce feed such as fishmeal and fish oil for animal production including aquaculture (World Bank, 2017: 16, 17). The main caught species was Alaska pollock (3.5 million tonnes) which outran Anchoveta (3.2 million tonnes) and Skipjack tuna (2.8 million tonnes) with the highest catches since 1998. The three major squid species accounted for a combined loss of about 1.2 million tonnes compared to the previous year, while capture production of other mollusc groups, such as oysters, clams and mussels, has been declining for decades as a possible result of pollution and increased aquaculture production (FAO, 2018: 11). Catches of the low-priced small pelagic[4] fish, "*which in many developing countries are important for food security but in other are largely processed into fishmeal and fish oil*" (FAO, 2018: 12), accounted for about 15 million tonnes and have been stable in recent years.

In 2017, the British fishing fleet landed a total of 724 thousand tonnes of sea fish in the UK (60%) and abroad (40%), with a value of £980 million. Most fish landed were pelagic fish (394'800 tonnes), followed by demersal fish (182'300 tonnes) and shellfish (150'400 tonnes). However, the landed shellfish was more valuable (£368.1 million), than demersal (£354.7 million) and pelagic (£257.2 million), showing that shellfish and demersal fish are high-price products, while pelagic fish are low-priced but high in volumes (Elliott and Holden, 2018: 37-39). The key pelagic species in UK fisheries are Mackerel and Herring, the key demersal species are cod, haddock and anglerfish and key shellfish species are Nephrops, crabs and scallops. In 2017, a total of 482'500 tonnes was landed into the UK by

[4] Pelagic fish live in the pelagic zone of the sea, which includes the surface layers of coastal and oceanic waters. In contrast, demersal fish live on or near the bottom and reef fish along coral reefs. Pelagic fish range from small anchovies and sardines (less than 10 cm) through coastal mackerels and barracudas to large tuna up to 500 kg in weight (Lal & Fortune, 2000: 8).

UK and foreign vessels. This number indicates a stark decline in British fisheries, as 1.135 million tonnes of fish were landed in the year 1938 (ibid: 49-57).

Scottish vessels accounted for 64% of the 434'000 tonnes landed in the UK by UK vessels, and for 57% of the value of those landings. Pelagic fish had the highest share of landings in Scotland (47%) due to the increase in mackerel quota since 2014. Demersal fish accounted for 36% of landings, while shellfish, which are mostly exempt from quotas, accounted for the remaining 17% of the weight of landed fish (Elliott and Holden, 2018: 37-39).

4.1.1.2 Geography of marine capture fisheries

The major fishing areas in 2016 were Northwest Pacific (22.4 million tonnes), Western Central Pacific (12.7 million tonnes) which includes parts of Australia and Indonesia and Northeast Atlantic (8.3 million tonnes) which includes the European countries (FAO, 2018: 12-14). Despite a decrease of 6.7% of catches by European Union countries in 2016, "*the economic performance of the European Union fleet has improved considerably and its profits are increasing*" (FAO, 2018: 12). The question arises how it is possible that fishing companies increase their profits while fishing less than before. This question will not be answered in the scope of this thesis but should be in mind when talking about the globalization of labour supply in European countries. This thesis will show that migrant workers were recently introduced into the British fishing industry and earn significantly less than their domestic counterparts.

When it comes to the fishing effort, global hot spots are to be found in the northwest Pacific (China, Japan, Russia) and northeast Atlantic (Europe) (Kroodsma et al., 2018: 905). This reflects in the biggest producers by country, as China was by far the top producer with about 15.2 million tonnes of landed marine fish in 2016, followed by Indonesian (6.1 million tonnes), American (4.9 million tonnes), Russian (4.5 million tonnes) and Peruvian (3.8 million tonnes) producers. However, Chinese production has a predicted decrease of more than 5 million tonnes by the year 2020 due to their inclusion of a catch reduction policy. The biggest European marine fish producer is Norway (2 million tonnes), followed by Iceland, Spain, the UK and Denmark (FAO, 2018: 8, 9).

Within the UK fisheries, there are vast geographical differences. While shellfish formed the majority of landings by UK fleet into England, Wales and Northern Ireland, pelagic fish had the highest share of landings into Scotland (Elliott and Holden, 2018: 38). This is due to the relative closeness of Scotland to the North Sea, where Scottish vessels catch the low-priced pelagic fish in large quantities, while the rest of the UK fleet often engages in fisheries near the shore. However, even within Scotland, the fisheries differ majorly. While the numbers of vessels are distributed quite evenly along the coast of Scotland, the east coast has far bigger proportions of capacity and power of the Scottish fleet (ibid: 16-18). The reason for this lies in the geography of Scotland and its waters. While the large-scale vessels

from the east coast can fish in the relatively shallow North Sea, the vessels from the West coast would have to go to the Atlantic Ocean, which is a far more dangerous and challenging area. Therefore, most vessels stay near the West Coast in areas that are particularly good fishing grounds for langoustines, which are mostly caught with small-scale vessels (Stevenson, 2018). A report of Marine Scotland shows that pot and trap vessels, which amongst others catch Nephrops such as langoustines, are by far the least efficient with average revenues of £42'075 per vessel per year (Marine Scotland Science, 2016: 1). Pelagic vessels, which operate from the East Coast, on the other hand, are by far the most efficient with average revenues of over £10.5 million per vessel (Marine Scotland, 2019: 5, 7), followed by demersal vessels (over 24m) with average annual revenues of £1.4 million (Marine Scotland Science, 2016: 1). These numbers explain why the revenues on the West Coast of Scotland are much lower than those on the East Coast. As many of my interlocutors mentioned, this has strong impacts on investment in vessels and therefore on working conditions (e.g. IP8: 39, IP12: 33; IP14: 485, IP18: 376). Still, the langoustine catch in Scotland contributes around £80 million to the economy each year, and it is estimated that one-third of total world landings are made in Scotland (Williams, 2019b).

4.1.1.3 Inland water fisheries

Numbers of inland waters capture production show an increasing trend in 2016, with a surplus of 10.5% in comparison to the 2005-2014 average. According to the FAO, this trend may be misleading as it is attributable to improved reporting and not entirely to increased production. In 2016 the global catch in inland waters was 11.6 million tonnes, which is a share of 12.6% of total global capture production. Most fish from inland waters is produced in Asian (China, India, Bangladesh,…) and in African (Uganda, Nigeria, Tanzania,…) countries, where inland catches are a key food source and are important for food security to local communities (FAO, 2018: 15). As this thesis will focus on marine waters capture fish production, the production of inland waters fish will not be specified.

4.1.2 Culture fisheries

Culture fisheries or aquacultures include "*fish grown in ponds, cages, hatcheries*" (Lackey, 2005: 123). Aquaculture already contributes to 47% of food fish production and the global first sale value of aquaculture products is estimated at USD 232 billion compared to the USD 130 billion of capture fisheries (FAO, 2018: 2). The total aquaculture production is mostly composed of 80 million tonnes of food fish (USD 232 billion) and 30.1 million tonnes of aquatic plants (USD 11.7 billion) such as seaweed (ibid: 17).

The main centres of production are in Asia, where mostly Tilapia and shrimp are produced in coastal production sites that often are combined with other types of farming. Meanwhile, in Europe and North America, species like salmon and shellfish such as oysters and mussels are produced in large-scale marine production sites. One of the major issues of aquaculture is its "*dependence on fishmeal*

produced from the major small pelagic species, which with present technology will be a strong limiting factor in further expansion" (Couper, Smith and Ciceri, 2015: 26), as 1 kg of cultured fish requires 5 kg of fish meal. Further problems of aquaculture that have been discussed in the literature are "*related to the environment, waste-product pollution, chemicals, veterinary products (antibiotics, hormones) and intensive feeding systems*" (Wilkinson, 2006: 141). The implications of the emerging aquaculture industry are manyfold and worth discussing in academic literature. However, this thesis will focus on marine capture fisheries and therefore, aquaculture will not be further elaborated here.

4.2 Economic dimension of fisheries

This subchapter will focus on discussing the economic implications of global and British fisheries. Thereby, growth of fisheries, employment in fishing, the fishing fleet and trade and consumption of fish will be explained in more detail.

4.2.1 Development of fisheries

For thousands of years, fish have played an important role in human society. Already 90'000 years before present, fish spears have been used for fishing. In the middle Ages, commercial, large-scale fishing evolved as transportation and preservation techniques such as salting, smoking and drying improved (Lackey, 2005: 122, 123). However, the global level of fishing has only developed during the last 100 years, as *"mechanized fishing techniques and refrigeration, enabled the large-scale industrial fisheries that still exist today*" (Lackey, 2005: 123). Today, "*more than 4'000 species of aquatic animals are harvested worldwide*" (Lackey, 2005: 123), and the global fish production reached its peak of approximately 171 million tonnes in 2016 (FAO, 2018: vii, 2). This all-time high was achieved "*thanks*

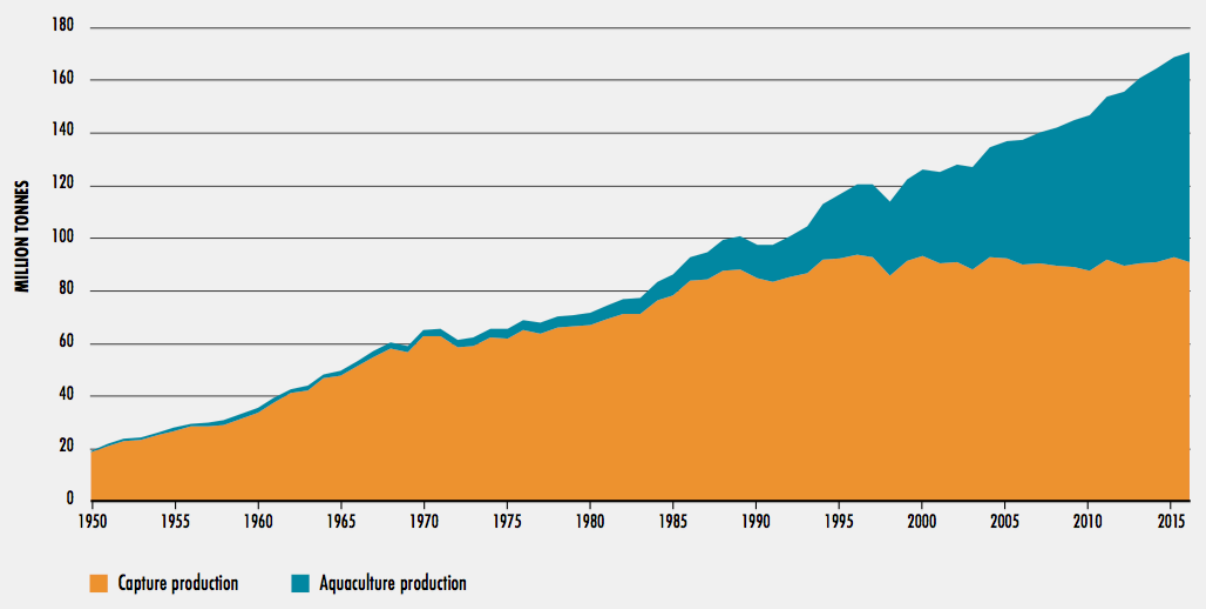

Figure 7: Total global production of capture fisheries and aquaculture, 1950 – 2016 (FAO, 2018: 3)

to relatively stable capture fisheries production, reduced wastage and continued aquaculture growth" (FAO, 2018: vii), as *Figure 7* shows.

A significantly increasing share in recent decades of 88% (over 151 million tonnes) of the global fish production was food fish[5] and therefore exploited for direct human consumption in 2016, while most of the other 12% was utilized for fishmeal and fish oil (FAO, 2018: 6). Fishmeal and fish oil are "*still considered the most nutritious and most digestible ingredients for farmed fish feeds*" (FAO, 2018: 7), but they have shown to be used more selectively in aquaculture production resulting in a global production decrease from 30 million tonnes in 1994 to around 20 million tonnes in 2016 (ibid: 6, 7).

4.2.2 Employment in fisheries

Fishing activities around the world do not only generate food, but they also provide a source for income and livelihood. In 2016, 59.6 million people were engaged in the primary sector of fisheries, wherefrom 14% were female workers[6]. 40.3 million workers or 68% of the workforce in the primary sector of fisheries accounted to capture fisheries in 2016 compared to 83% in 1990, indicating an increased share of the workforce in aquaculture. Asian workers make up 85% of the workforce engaged in the global production of fish, followed by workers from Africa (10%) and Latin America and the Caribbean (4%), while North America, Europe and Oceania account for less than 1% of the global population engaged in fishing (FAO, 2018: 5, 30, 31). According to Urquhart, Acott and Zhao (2013: 11), small-scale marine and inland fisheries[7] employ more than 90% of global capture fishers and thereby account for over half of global fish catch.

In 1995 only about 36.2 million people were employed in global fisheries, showing an increasing trend in employment for fishers in recent decades. Particularly employment in African and Asian fisheries increased noteworthily due to its higher population growth and increasing economically active populations in agriculture. Meanwhile, the numbers of fishers in Europe decreased from 0.78 million in the year 2000 to 0.45 million in 2016 (FAO, 2018: 5, 30, 31). The World Bank sees a trend of declining numbers of fishers in industrial economies due to low remunerations, high-risk and difficult working conditions, growing investment in labour-saving technology and declining fish stocks combined with increasingly restrictive fisheries management measures (World Bank, 2017: 13).

[5] The term "food fish" will be used as reference to fish intended for human consumption, excluding fish for non-food uses such as reduction to fishmeal and fish oil (FAO, 2018: 2).
[6] According to the FAO (2018: 31), the workforce is evenly divided between men and women, when both, the primary and secondary sectors of fisheries are considered.
[7] Urquhart, Acott and Zhao (2013) distinguish between "*large-scale (large high capacity vessels that generally fish off-shore and are at sea for multiple days) and small-scale (small – often under 10m – vessels that generally fish in coastal waters for periods of less than 24h)*" (Urquhart, Acott and Zhao, 2013: 1) fisheries.

The case of UK fisheries confirms the declining trend of numbers of fishers in industrial economies, as the number of fishers in the UK fishing fleet decreased by 9% in the last decade. Compared to 1938, the numbers of fishers even decreased by 76% to an all-time low in 2017 with 11'692 fishers being engaged on UK registered vessels. 4'799 or 41% of these fishers were engaged on Scottish fishing vessels (MMO, 2018: 22-24). Almost 99% of fishers in Scotland are male (Motova and Quintana, 2019: 21) and the average fisher in Scotland is about 40 years old and is in this profession for about 5.6 years (Marine Scotland Science, 2016: 7, 10). In 2018, 83% of fishers in Scotland were regularly employed, while the rest was employed on an irregular basis (part-time) (Marine Scotland, 2019: 33).

Out of the 4'799 fishers on Scottish vessels, about 72% were British, and about 8% came from countries within the European Economic Area (EEA) such as Romania (3.9%) and Latvia (2.8%). The remaining 20% came from non-EEA countries such as the Philippines (15.4%), Ghana (2.9%), Sri Lanka (0.9%) and others. Therefore, about 28% or more than 1'320 fishers in Scotland are non-UK nationals. The vast majority of EEA nationals is engaged in the West of Scotland, while the vast majority of non-EEA nationals works on boats that predominantly fish in the North Sea and are located on the East Coast. Statistics show that none of the non-EEA and only 1% of the EEA crewmembers were engaged as skippers, while the vast majority of international fishers was either engaged as deckhand or engineer (Marine Scotland Science, 2016: 4, 5). According to IP5, until the turn of the century, only a few crewmembers originated from outside local fishing communities (IP5: 310). However, nowadays more than one-fourth of the total labour force in Scottish fisheries are non-UK nationals, which has several reasons.

Many interview partners mentioned that employers struggle to find crewmembers for their fishing vessels and therefore are highly dependent on the more than 1'320 international fishers (IP5: 312; IP6: 33; IP10: 75; IP12: 55; IP18: 404; IP24: 17). In this context, particularly industry representatives determine fleet decommissioning schemes to be responsible for the industry's recruitment problems:

> "*Fleet decommissioning schemes in 2001 and again in 2003 removed a vast number of vessels from the fleet and a vast number of men from the sector. The insecurity for crew at that time led to many taking work in the booming oil sectors, which was based on the doorstep of a large number of men. Seen as far more secure work, the legacy of decline was the increasing trail of school leavers to the oil sector*" (IP5: 312).

Besides the "*competition with other, better paying, marine industries especially oil and gas*" (Marine Scotland Science, 2014: 33), two further key issues around recruitment of crew in Scottish fisheries were determined. These are low pay for fishers and "*an unwillingness for local crews to work in what is a physically demanding industry requiring unsocial working hours*" (Marine Scotland Science, 2014:

33). In a survey, the majority of skippers stated that they preferred domestic crewmembers due to safety reasons concerning communication, better working atmosphere and the thought of supporting local communities (ibid: 39). Furthermore, IP5 (318) sees disadvantages when employing foreign fishers such as the reduction in the number of young domestic potential skippers entering the industry and the limitation to only operating outside UK territorial waters when employing non-EEA nationals on a transit visa (see chapter 4.5). On the other hand, foreign crew members are preferred due to lower costs in wages compared to local fishers, the good work ethic associated with migrant fishers and the improved maintenance of the vessel due to foreign crew living on the vessel while in harbour (Marine Scotland Science, 2014: 40; IP5: 318).

4.2.3 The fishing fleet

4.2.3.1 Global fishing fleet

An estimated number of 4.6 million fishing vessels were accountable for the global fish catch, wherefrom 3.5 million, or 75% were Asian vessels, 14% African, 6.4% from Latin America and the Caribbean, 2.1% European and 1.8% from North America. 61% or about 2.8 million of the global fleet were engine-powered vessels in 2016. The share of engine-powered vessels decreased from 65% in 2014, probably due to improved estimations. In a maritime environment, motorized vessels make up a higher proportion than in the inland water fleet. The share of motorized vessels accounts to a bit more than 20% in the African fleet, about 65% in the Asian fleet and almost 80% in the Latin American and Caribbean fleet. Europe has the highest percentage of motorized vessels (99.8%) in the world but its fleet has continued to decline steadily since 2000 as a result of interventions to reduce the fleet capacity (see chapter 4.5) (FAO, 2018: 35-37).

About 86% of the engine-powered fishing vessels were less than 12m long in 2016 and about 44’600 vessels or 2% of all engine-powered fishing vessels were 24m or longer. While the small vessels dominated in all regions, the proportion for the larger boats was highest in Oceania, Europe and North America. However, estimates of the numbers of small vessels are likely to be less accurate than numbers of bigger vessels, as they are often not required to be registered (FAO, 2018: 35-37).

4.2.3.2 *The UK fishing fleet*

The UK fishing fleet contained 6'148 vessels in 2017, wherefrom more than half were built before 1991 and more than 20% before 1971. The oldest vessels were built before 1960. The UK was seventh within the European Union when it comes to the number of fishing vessels, with Greece leading (14'977 vessels) and Italy, Spain, Portugal, Croatia and France following. When it comes to capacity (in gigatonnes, GT) and power (in kilowatts, kW), the UK fishing fleet is ranked 2nd and 4th amongst the EU nations, showing their higher percentage of large and powerful vessels compared to other nations. Compared to 1996, there was a 29% decrease in numbers of fishing vessels in the UK as *Figure 8* shows, while fleet capacity (GT) and power (kW) dropped to a similar extent in the same time frame. This downward trend is associated with reduced fishing opportunities as well as decommissioning exercises (see chapter 4.5). UK fisheries administrations implemented fishery management plans in order to withdraw some of the capacity and effort from British fisheries to allow for a sustainable future for the British fishing industry (Elliott and Holden, 2018: 9, 10, 19).

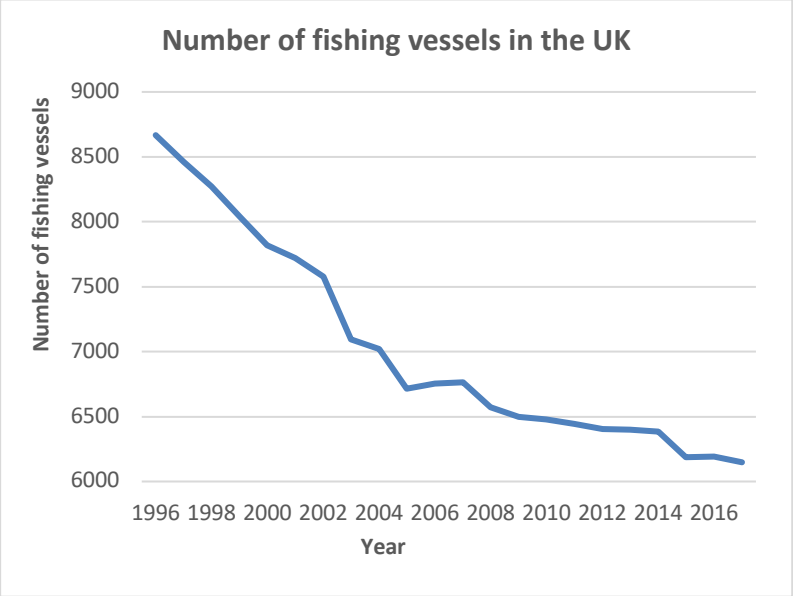

Figure 8: Number of fishing vessels in the UK, 1996 – 2016 (own illustration, based on Elliott and Holden (2018: 10))

In 2017, 2'065 or 34% of the UK fleet were Scottish vessels, which accounted for 55% of UK fleet capacity (GT). This discrepancy is explained by the higher proportion of vessels that are longer than 10m in Scotland (28%), compared to the rest of the UK (20%). These differences show the different fishing opportunities the fleets are engaged in. As mentioned above, the Scottish fleet engages far more in pelagic and demersal fisheries that are high volume but low price, such as herring and mackerel which are caught West of Scotland waters and in the North Sea: "*The Scottish fleet has moved towards having higher capacity vessels, which, for economic viability, cover large sea areas and can catch several hundred tonnes of fish per trip*" (Elliott and Holden, 2018: 12). While the vessels over 24m only make up 4% of the total UK fleet, they account for about 60% in capacity, showing their large impact on the British fishing industry. Thereby, the capacity of the 356 Scottish vessels over 15m in length, which make up 6% of all UK vessels, equals the capacity of the rest of the British fishing fleet combined (ibid: 11-14).

4.2.4 Trade and consumption of fish

4.2.4.1 Global trade and consumption

Global fish prices in capture fisheries rose steadily in recent decades, but less than prices in aquaculture, where more high-valued fish species such as shrimp and salmon are produced. Fish prices depend on several factors, such as the state of fish stocks, the reduction of discards at sea with increased landings of lower-priced bycatch (see chapter 4.3) and the amount of produced farmed fish. However, according to the World Bank (2017: 15), the upward trend in fish prices is attributed to an increasing global consumption demand due to three key factors: Population growth, higher incomes (especially in middle-income countries) and the increasing globalization of seafood markets (ibid: 15, 16).

According to the FAO, "*fish and fish products are some of the most traded food items in the world today*" (FAO, 2018: 7). About 35% of the global fish production was traded internationally either for human consumption or for further non-edible purposes. Total export of fish and fish products was about 60 million tonnes which represents a 245% increase over 1976, while the value of these exports increased from USD 8 billion in 1976 to USD 143 billion in 2016. China is not only the main fish producer but also the largest exporter of fish since 2002, followed by Norway, Vietnam and Thailand. For the past 40 years, the rate of growth of exports has been remarkably faster in developing countries due to regional trade agreements and increased regionalization of fish trade, as regional trade flows increased faster than external. In 2016 the European Union was the biggest single market for fish and fish products, followed by the US and Japan, with those three importing 64% of the total value of fish imports (ibid).

About 45% of food fish was sold as live, fresh or chilled fish, 31% as frozen fish (FAO, 2018: 6) and the rest as canned and other fish (Murray & Fofana, 2002: 335). Per capita food fish consumption has more than doubled in the last 55 years. It increased from 9.0 kg in 1961 to 20.2 kg in 2015, as *Figure 9* shows. The highest per capita fish consumption occurs in several small island states with more than 50kg per year, while the lowest is found in Central Asia and other landlocked countries with a consumption of just above 2 kg. For about 3.2 billion people worldwide, fish accounted for almost 20% of their per capita consumption of animal protein. However, wastage and loss between landing and consumption of fish still accounted for an estimated 27% of landed fish in 2015, despite improvements in fish processing and distribution (FAO, 2018: 2, 6).

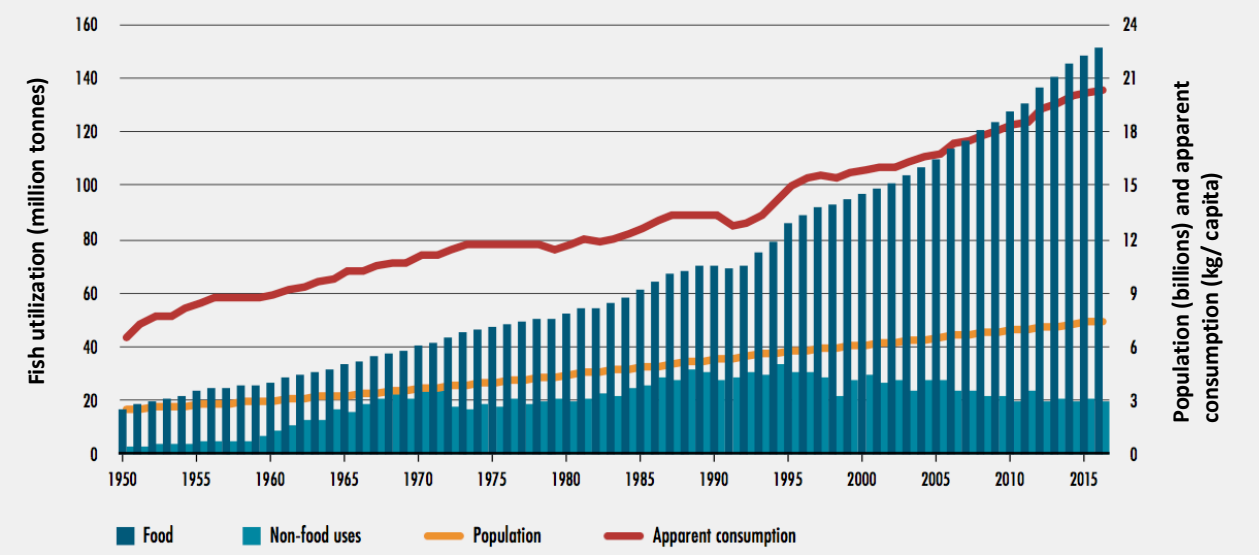

Figure 9: Global fish utilization and consumption, 1950 – 2016 (self-edited illustration, based on FAO (2018: 3))

4.2.4.2 Trade and consumption of British fish

The prices of UK fish followed the global trend and rose by 6% in 2016. In the meantime, household consumption of fish fell by 5% to 467'000 tonnes in 2016. Consume expenditure on fish as a proportion of total food was 5.3% in 2016. Even though the UK has a flourishing fishing industry, it imported 705'000 tonnes of fish in 2017 with a total value of £3'199 million. In 2017 the UK exported 460'000 tonnes of fish worth £1'906 million, which is more in terms of weight than total landings into the UK by UK vessels (402'000 tonnes). The surplus in exports is made up of aquaculture and inland fisheries products, where total production was not estimated. Most exports were made to France, Netherlands and Spain, and most fish imports came from China, Iceland and Germany. Tuna, Cod, Shrimps and Prawns and Haddock had a great surplus in imports compared to exports, while Salmon, Mackerel, Herring, Nephrops and Scallops were more exported than imported in 2017 (Elliott and Holden, 2018: 76-78, 88).

4.3 Environmental dimension

Environmental impacts of marine fishing occur in almost all components of related species and ecosystems (Dayton et al., 1995: 224). A recent study by Kroodsma et al. (2018) shows that more than 55% of the global ocean area is being exploited by industrial fishing vessels. Thus, the area used for fishing (200 million km^2) is four times higher than the area used for agriculture (50 million km^2), which makes up about 34% of the total landmass. The authors of the study even stated that the total area fished was likely to be at around 73% of total ocean area in 2016, as regions with poor satellite coverage and vessels without signal transmitters were not included in the study (Kroodsma et al., 2018: 905). According to Couper, Smith and Ciceri (2015: 21-25), the environmental impacts of marine

capture fisheries have three main manifestations: Overfishing, bycatch and destructive fishing gears. The next subchapter will focus on these ecological impacts of marine fishing.

4.3.1 Overfishing

Overfishing enhances various economic, ecological and social problems. The inclusion of a target for regulating harvesting, ending overfishing and restoring stocks in the United Nations Sustainable Development Goals (SDGs) shows that overfished oceans are a great global concern (FAO, 2018: 6). While birth and death rates are usually evenly balanced in a population unaffected by fishing, death rates strongly increase in affected populations. Depending on the fishing gear, the larger (and usually older) fish of a population are more likely to be caught in greater quantity first. When the numbers of larger fish decline, economic pressure will urge fishers into fishing for smaller fish – also those that never reach breeding age, resulting in a situation of accelerating stock reduction (Couper, Smith and Ciceri, 2015: 21-25).

4.3.1.1 Definition of overfished stocks

To measure overfished populations, the Food and Agriculture Organization separates stocks into three categories: Overfished, maximally sustainably fished (or fully fished) and underfished populations. The classification in either of these categories is dependent on whether the stocks are above, at or below the level needed to produce maximum sustainable yield (MSY)[8]. Stocks with abundance above the level that can produce MSY (underfished stocks) and stocks with abundance close to or at the level of MSY (maximally sustainably fished or fully fished stocks) are fished within biologically sustainable levels.

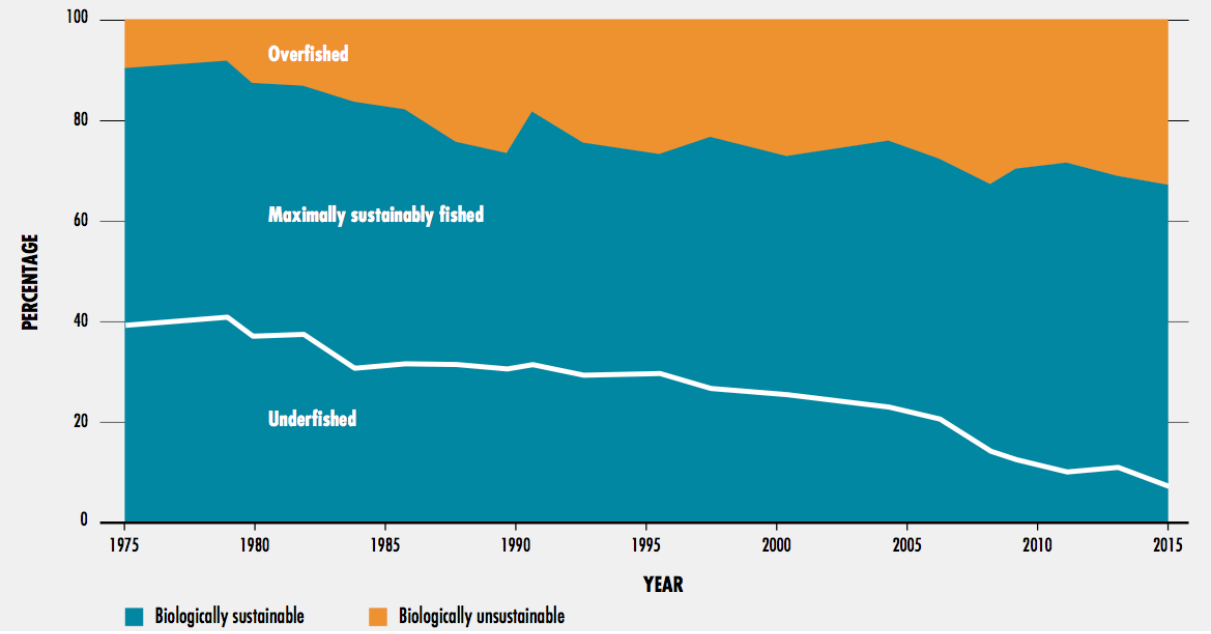

Figure 10: Trends of global marine fish stocks, 1974 – 2015 (FAO, 2018: 40)

[8] The European Commission defines maximum sustainable yield (MSY) as follows: "*The highest equilibrium yield that can be continuously taken (on average) from a stock under existing (average) environmental conditions without affecting significantly the reproduction process*" (European Commission, 2019).

Stocks with abundance lower than MSY (overfished stocks) are fished at biologically unsustainable levels. *Figure 10* shows that the share of fish species that are overfished increased from 10.0% in 1974 to 33.1% in 2015. Another 59.9% of stocks were maximally sustainably fished or fully fished, while only 7.0% were underfished in 2015. In this context, the sustainability of fish stocks varies geographically. 58.8% or more of the stocks are overfished in the Mediterranean and Black sea, the Southeast Pacific and the Southwest Atlantic. While the Northeast Atlantic (European waters) has more than 25% of its fish stocks overfished, the Eastern central pacific, northeast pacific and northwest pacific had the lowest proportions (13-17%) of fish stocks at a biologically unsustainable level (FAO, 2018: 39-41).

4.3.1.2 Impacts of overfishing

With more than 90% of the stocks fully or overfished, global fisheries are said to be in a state of crisis, as for instance Colin W. Clark in his book "*The Worldwide Crisis in Fisheries*" and The World Bank in their report "*The sunken billions*" mention (Clark, 2006; World Bank, 2017). The World Bank focuses on the financial effects of overfishing and suggests that the fully fished and overfished populations lead to lost economic benefits of approximately $83 billion a year. The report also shows that the "*productivity of global fisheries decreased tremendously*" (World Bank, 2017: 2) by pointing at the fact that the global catches did not nearly keep up with the increasing level of fishing effort (size of fleet and number of fishers). The Food and Agriculture Organization of the United Nations (FAO) found that catches of overfished populations decrease due to management measures to improve the stock status and due to less abundance of the stocks while increasing catches are likely to be associated with an improvement of stocks (FAO, 2018: 39-41). Furthermore, fish stocks are not only threatened by global fisheries, but also by climate change impacts such as "*sea-level rise, rising ocean temperatures, acidification, and changes in patterns of the currents*" (World Bank, 2017: 2) that represent a source of uncertainty for fish stocks around the world.

The FAO sees a huge potential of sustainable global fishing in increasing its contribution "*to the food security, economies and well-being of coastal communities*" (FAO, 2018: 45) and therefore pledges for rebuilding the world's marine fish stocks. The World Bank suggest a short-term reduction of fishing effort in order to rebuild overexploited fish stocks and increase harvests in the longer term by transitioning to a sustainable level of fishing (World Bank, 2017: 2). According to the World Bank, this should be achieved by drastically improving fisheries' governance and management (ibid: 17), a topic that will be discussed in chapter 4.5 of this thesis.

Besides the financial impacts of overexploiting fish stocks, the World Wildlife Fund (WWF) argues that fishing is also "*one of the most significant drivers of declines in ocean wildlife populations*" (WWF, 2019). According to Marine Science Today, overfishing can have negative impacts on marine biodiversity, destroy the environment and completely disrupt the food chain, as overexploiting one

population can have adverse effects on populations relying on their overexploited prey species (Jetson, 2014). Overfishing is also in strong relation to catching unwanted sea life while fishing for different species, the so-called bycatch which will be discussed in the next chapter (WWF, 2019).

4.3.2 Bycatch

Bycatches and discards of fish frame another major impact of fisheries on marine ecosystems (Dayton et al., 1995; Coleman and Williams, 2002; Couper, Smith and Ciceri, 2015). A typical catch of an individual fishing vessel might include species and sizes of fish that were not targeted on this particular haul, that are not legal to land or that might be uneconomic. Such unwanted fish are called bycatch and are often discarded, thus are thrown back into the sea, often already dead (Couper, Smith and Ciceri, 2015: 24). Particular species then consume the discarded bycatch, while species that do not utilize this resource are put at a "*competitive disadvantage*" (Dayton et al., 1995: 214), resulting in an imbalanced ecosystem and therefore bycatch negatively affects "*the overall operation of the system*" (Couper, Smith and Ciceri, 2015: 24).

Bycatch also has direct impacts on stocks, especially on mammals, turtles and birds that are high profile species and protected by law. For instance, the tuna purse seine fishery in the pacific has killed over an estimated 6 million porpoises by 1987, resulting in a substantial reduction of porpoise populations (Dayton et al., 1995: 207). While improved technology is said to reduce bycatch and improve the efficiency of the fishing gear, these developments are challenged by technological progress that increases overall catches (ibid: 206). Some studies suggest that very high proportions of bycatch can occur in some fisheries and that the discarded biomass often even exceeds that of the landings (ibid: 214, 215). A review by Jones (1992: 62) shows that for 500 tonnes of landed prawns 3000 tonnes of organic material such as crustaceans and echinoderms were discarded on Australian prawn trawlers in 1990.

4.3.3 Other environmental impacts of global fisheries

Another major impact results from the use of destructive fishing gears. Especially certain demersal fisheries do not only decrease fish stocks but also destroy habitats on the seabed by dragging beam trawls along the bottoms of the ocean, where the most commercial fish stocks occur (Couper, Smith and Ciceri, 2015: 24). The bottom is scraped and ploughed to depths of 30 cm, resulting in resuspended sediments and many destroyed bottom organisms (Jones, 1992: 61) such as the disappearing coral reefs (Dayton et al., 1995: 214).

Abandoned, lost or otherwise discarded fishing gear is another concern for the marine ecosystem (Dayton et al., 1995; FAO, 2009). The left-behind fishing gear continues catching target and non-target species, including endangered species such as turtles, seabirds and marine mammals. Furthermore, it

impacts the benthos, introduces synthetic material into the aquatic food chain, interferes with navigational technics and generates additional costs through clean-up operations and impacts on business activities (FAO, 2009: 29).

A topic that has been mostly ignored from a policy and management perspective is the dependence of marine fisheries on fossil fuel and its role in global greenhouse gas emissions (Ruiz Leotaud, 2019). A recent study concluded that 207 tonnes of CO_2 were emitted by marine fishing vessels in 2016 (Greer et al., 2019: 5). Marine capture fisheries, therefore, accounted for more than 0.5% of global CO_2 emissions, showing fisheries' major impact on the greenhouse effect and climate warming (Ruiz Leotaud, 2019).

4.3.4 The environmental dimension of British fisheries

As already mentioned above, fleet size, the number of fishers and fish landings in the UK decreased in recent decades, due to measures that aimed at protecting the British fish stocks. Fish stocks around the UK were on the brink of collapse and were being regulated by EU's Common Fishery Policy (CFP), which will be explained in chapter 4.5. The International Council for the Exploration of the Sea (ICES) monitors and assesses global fish stocks. In 2017, nine of the thirteen main British fish stocks were assessed as being at full reproductive capacity and being harvested sustainably, while three were assessed as overfished. In a report for the year 2017, North Sea Cod and Northeast Atlantic Mackerel were assessed as being fished sustainably, while West Scotland Cod and Celtic Sea Cod were being overfished (Elliott and Holden, 2018: 91ff).

However, recent reports from the ICES suggest that the North Sea Cod and the Northeast Atlantic Mackerel are heavily overfished (Gabbatiss, 2019; Sherwood, 2019). Mackerel populations have decreased by more than 40% since 2011 and experts advise that current catches have to decrease by over two-thirds for the stock to be able to recover to a sustainable level in the next two years. The Mackerel fishery is responsible for about a third of seafood landed in the UK and its value exceeds £200 million, showing the great importance of the sustainability of its stocks. Suggested to be responsible for this development are the EU and neighbouring nations that consistently set quotas far higher than ICES guidelines (Gabbatiss, 2019). These reports show that some fish stocks in waters exploited by British fishing vessels are far from sustainable and overfished British waters is a serious issue for the environment, as well as for the British fishing industry.

Chapter 4.3 focused on the environmental implications of global and British fisheries. Although fisheries' impacts on the environment are severe, this thesis will not further elaborate on these issues as the main focus is laid on working conditions. However, according to several authors (see Dayton et al., 1995; Coleman and Williams, 2002; Couper, Smith and Ciceri, 2015) the above-discussed topics

form fishing's biggest impacts on marine ecosystems. This chapter has shown how the environmental dimension of fisheries is heavily interconnected with the social and financial dimensions. The depletion of fish stocks is not only a global issue but is threatening the UK fishing industry as well, as the stock abundance of North Sea Cod and Northeast Atlantic Mackerel decreased heavily in recent years. How overfished stocks can have severe impacts on fishing communities and other social aspects of global and British fisheries are discussed in the next chapter.

4.4 Social dimension of fisheries

While the environmental and economic impacts of global marine fisheries are much noticed in fisheries policy and management, their social and cultural aspects are often overlooked (Urquhart, Acott and Zhao, 2013: 1). However, the importance of the social dimension manifests in the impacts of the so-called crisis of global fisheries on the livelihoods and way of life of fishers and fishing communities. Therefore, some authors emphasize on the necessity to take environmental, economic and social dimensions of global fisheries into account, when trying to achieve sustainable fisheries (Urquhart, Acott and Zhao, 2013: 1). The following chapter will focus on the social dimension and elaborate on the implications of global fisheries on food security, livelihoods and fishing communities.

4.4.1 Food security

According to Garcia and Rosenberg (2010: 2869), food security is of major societal and international concern, as the world population is growing and hunger and malnutrition recurrently plague many communities, particularly in South Asia and Sub-Saharan Africa. The FAO defines food security as follows:

> *"Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life"* (FAO, 2002).

Fisheries may contribute to food security directly as a source of essential nutrients, or indirectly as a source of income to be able to buy food. Fish is an important source of vitamins, micronutrients and proteins, especially in many low-income countries and rural areas (Garcia and Rosenberg, 2010: 2872, 2869). According to WorldFish, *"more than 1 billion people obtain most of their animal protein from fish and 800 million depend on fisheries and aquaculture for their livelihoods*" (WorldFish, 2019: n.p.). The number of 800 million includes indirect activities such as boat building, vessel supplies, equipment and maintenance, processing, trade and logistics, as well as family members whose livelihood depends on the income of the person involved with fisheries (Garcia and Rosenberg, 2010: 2872; WorldFish, 2019). Healthy fisheries also may contribute to poverty reduction by generating revenues and wealth at the community level as well as by contributing to economic growth at the state level (Garcia and

Rosenberg, 2010: 2872). The above-mentioned numbers show the major impact of fisheries on food security, and therefore the importance of healthy and sustainable fish stocks for the well-being of a big part of the earth's population.

The UK is slightly above the global average in terms of per capita fish consumption, with an average of 20.76 kg of fish in 2013 (Our World in Data, 2019). However, when it comes to the number of fishing dependent livelihoods, the number is suggested to be relatively small in the UK. According to Ares, Rhodes and Ward (2017: 4), about 16'000 people work in the processing sector of fish in the UK, which, in addition to the 11'692 fishers (Elliott and Holden, 2018: 9) sums up to about 28'000 people engaged in the primary and second sector of fishing. It is not known how many additional workers are engaged in fishing-related activities, as it is also not known, how many livelihoods are dependent on fisheries. However, compared to the more than 66 million inhabitants of the UK (ONS, 2019), this number seems to be relatively low. Even in Scotland, where about 4'800 (Elliott and Holden, 2018: 24) of the 5.4 million inhabitants (ONS, 2019) are fishers, the number of livelihoods dependent on fisheries seems to be quite low. Still, as the next sections will show, some individual fishing communities are heavily dependent on fishing, not only on a global level but also in the UK and particularly in Scotland.

4.4.2 Fishing communities

The global fishing crisis reflects in the well-being of fisheries-dependent communities, as for instance emphasized in a special issue of *Marine Policy* about Social and cultural impacts on marine fisheries (Urquhart, Acott and Zhao, 2013: 2). The authors discuss how the way of life and livelihoods of small-scale fisheries are increasingly under threat, "*as they struggle to cope with dwindling fish stocks and an increasing regulatory regime*" (Urquhart, Acott and Zhao, 2013: 1), resulting in prevalent poverty particularly in Southeast Asia and Sub-Saharan Africa. Especially rural small-scale fisheries are perceived as "*a vulnerable group with limited access to capital, market and services needed to support their livelihoods*" (Kadfak, 2019: 1) by some authors. Local fishing communities can be subject to powerful global forces (Jönsson, 2019: 14). Fishing communities on the coast of West Africa for instance, are being pressurized by foreign fishing operations due to their extremely fertile waters (Jönsson, 2019: 8). These foreign fleets have the capacity to catch a multiple of the sustainable level, leading to scarce fish stocks affecting local communities (ibid: 8). In a local Senegalese fishing community, the overfished waters have led to hunger and various social problems, "*such as unemployment, poverty, lack of health and educational opportunities, frustration and social tensions between local populations*" (Jönsson, 2019: 9). These circumstances force many young people to emigrate to large cities, neighbouring countries or even to Europe, with vessels that now are not anymore used for fishing, but for transporting people to Europe (ibid: 10).

Fishing-dependent communities also exist in countries of the global North such as the UK. Shetland, for instance, a small island in the North-East of Scotland, is highly dependent on the fishing industry, as fisheries were estimated to contribute about 41% to the island's total gross domestic product (GDP) in 2001. 22% of all jobs were estimated to be in fisheries-related industries including fishing itself, supply, repair or equipment. Despite the decline of the fishing industry, Shetland continued to bind its future essentially to the fishing industry, by implementing investment strategies such as creating financial assistance to aid fishers to modernise and expand their businesses. However, strategies in coping with the decline of the industry are manifold between fisheries-dependent communities, as the example of other fishing communities bordering the North Sea in the UK show. While Shetland continued to focus on fishing, particularly communities with lower fishery-dependencies, coped by applying strategies of economic diversification. Some of them, for instance, used the fishing industry as a cultural emblem to attract visitors and tourists by opening tourist centres or museums (Brookfield, Gray and Hatchard, 2005: 61-67).

Some authors also emphasized on the role of women within British fishing communities, and how women are mostly engaged in invisible and unpaid work, such as paperwork, diversification of business and looking after the family (Urquhart, Acott and Zhao, 2013: 2). However, the role of women within British fisheries will not be discussed in this thesis due to the small numbers of female workers engaged on British fishing vessels. A topic that will be discussed in more detail in chapter 5 is how the well-being of fishing communities affects working conditions. While healthy fishing communities are able to invest in newer technologies and newer vessels, unhealthy fishing communities are not able to do so, which can manifest in inadequate working conditions and poverty.

Chapter 4.4 showed the big impacts of global fisheries on food security, livelihoods and the way of living of fishing communities. It displayed, the importance of sustainable fish stocks and healthy fisheries, as they heavily impact global food security and render a major number of individuals dependent on the commodity fish. Although it is part of the social dimension, the aspect of working conditions has been left out in this chapter, as it is already explained in more detail in chapter 1. However, how workers' conditions are regulated on a global level and in the British context, and how fisheries are regulated in general, will be discussed in more detail in the next sub-chapter.

4.5 Political dimension

In the last three chapters, I discussed the economic, environmental and social dimensions of fisheries. One dimension that shapes and affects all of them, is the political dimension. Many authors and institutions pledge for implementing more sustainable governance of global fisheries in order to go back to sustainable fish stocks (e.g. Dayton et al., 1995: 224; World Bank, 2017: 3). However, the main focus in this sub-chapter will lay on regulating the social dimension, particularly the fishers' working

conditions, while mentioning other relevant concepts only briefly. First, international conventions, policies and issues will be highlighted, before focusing on specific UK regulations.

4.5.1 International regulatory Frameworks

The most important international regulatory frameworks are the United Nations Convention on the Law of the Sea (UNCLOS), European Union's Common Fishery Policy (CFP) and International Labour Organization's Working in Fishing Convention No. 188 (ILO188). Those three frameworks will be presented in this subchapter, together with the problem of illegal, unreported and unregulated (IUU) fishing.

4.5.1.1 United Nations Convention on the Law of the Sea (UNCLOS)

Activities at sea are regulated by the United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS defines the sea area less than 12 miles from the coast as territorial sea that underlies the sovereignty of the coastal state (UNCLOS, 1982: Art. 3). 12 to 200 miles from the coast of the particular state is the Exclusive Economic Zone (EEZ). Within their EEZ, coastal states have the right to exploit, manage, develop and conserve all resources, such as fish, gas, oil, wind or water (Ares, Rhodes and Ward, 2017: 7). In these zones, the states are also responsible to "*prevent and limit pollution and to facilitate marine scientific research*" (Ares, Rhodes and Ward, 2017: 7). Furthermore, the states have the responsibility of jurisdiction for the preservation and protection of the marine environment within their EEZ. Within the EU, the access to fishing grounds within its EEZ is currently shared between its member states and regulated by the Common Fisheries Policy (CFP) (ibid). Sea areas further than 200 miles from the coastline are high seas that are open to all states and do not belong to any state's jurisdiction (UNCLOS, 1982: Art. 86ff). In these areas, the respective flag state[9] of the vessel is responsible to exercise its jurisdiction and control administrative, technical and social matters on the ship (ibid: Art. 94).

4.5.1.2 Common Fisheries Policy (CFP)

Fisheries in the EU and therefore also in the UK are currently regulated under the Common Fisheries Policy (CFP). The CFP "*aims to ensure that fishing is 'environmentally, economically and socially sustainable' and to allow fair competition between fishers*" (Ares, Rhodes and Ward, 2017: 2). In this context, the CFP longs to define catch limits between 2015 and 2020 at a sustainable level and to preserve fish stocks in the long-term. Based on scientific advice on sustainable catch levels, the European Commission annually proposes a Total Allowable Catch (TAC) for each area within the EEZ

[9] Flag states are states that sail ships flying its flag on the high seas. They have the duty to "*effectively exercise ist jurisdiction and control in administrative, technical and social matters over ships flying its flag*" (UNCLOS, 1982: Art. 94).

and for each commercial species. Then, the TAC is shared between the EU countries in terms of national quotas (ibid: 2, 3).

4.5.1.3 Regulatory frameworks for social issues

While the environmental and economic dimensions seem to be regulated quite precise, until recently international regulations regarding social issues in a maritime environment have been quite scarce (Urquhart, Acott and Zhao, 2013: 1). As mentioned above, UNCLOS transmits the responsibility of the protection of human beings on high seas to the flag state of the according vessel. Thus, UNCLOS only mentions who is responsible for the well-being of human beings on international waters, but it does not stipulate how they should be protected. Therefore, the only certain regulatory protection for human beings on high seas consists of existing international regulation, particularly the Universal Declaration of Human Rights (UDHR, 1948). In the UDHR, only Article 23 focuses on work and contains the following content:

> *(1) Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment.*
> *(2) Everyone, without any discrimination, has the right to equal pay for equal work.*
> *(3) Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.*
> *(4) Everyone has the right to form and to join trade unions for the protection of his interests.*
> (UDHR, 1948: Art. 23)

While further articles express fundamental characteristics of human rights such as the right to life (ibid: Art. 1), and the prohibition of slavery (ibid: Art. 4), torture, inhuman treatment and punishment (ibid: Art. 5), the UDHR remains vague. Stricter regulations that deal more specifically on labour rights depend on the particular flag state. However, to fill this loophole in labour rights, the ILO created an international convention that focuses on the social dimension of global capture fisheries and will be discussed in the next section.

4.5.1.4 ILO188

The ILO Work in Fishing Convention No.188 (2007) (ILO188) came into force on 16 November 2017 and has been ratified by 15 countries up to now, including Argentina, France, Norway, Portugal and the UK (ILO, 2019b). ILO188 is a holistic approach that aims at promoting decent conditions by setting an international standard for fishers' living and working conditions and their health and safety (ILO, 2019c): "*ILO 188 entitles all fishermen to written terms and conditions of employment […], decent accommodation and food, medical care, regulated working time, repatriation, social protection and*

health and safety on board" (GOV.UK, 2019a). On 11 January 2019, the UK ratified ILO188, which entered into force for the United Kingdom on 11 January 2020 (ILO, 2019b). With this date, the regulations of ILO188 became binding for the UK, meaning the country finally implemented a regulatory framework for the working conditions. Before this date, only few regulations on the working conditions on British fishing vessels existed, as chapter 4.5.2 shows. The content of ILO188 and its implications for fishers' conditions will be discussed in more detail in chapters 5 and 6. However, even if ILO188 constitutes a relevant improvement in protecting fishers at their working place, a significant amount of fish is caught illegally and therefore outside of regulatory boundaries, as the next sections will show.

4.5.1.5 Illegal, unreported and unregulated (IUU) fishing

International and state regulations, which aim at managing and regulating global fisheries, face the major challenge of illegal, unreported and unregulated (IUU) fishing. In 2003 the total IUU catch was estimated between 11 million and 26 million tonnes of fish. Some experts suggest that "*10 to 30 percent more fish are being taken from the ocean than what is accounted for by legal fishing*" (Cutlip, 2016). According to FAO, IUU fishing "*remains one of the greatest threats to marine ecosystems due to its potent ability to undermine national and regional efforts to manage fisheries sustainably as well as endeavours to conserve marine biodiversity"* (FAO, 2019: n.p.). Actors participating in IUU fishing exploit weak management regimes and take advantage of corrupt administrations, particularly in developing countries that lack the capacity to effectively monitor fishing activities (ibid).

IUU fishing is particularly relevant to this thesis due to its implications for the social dimension of global fisheries. IUU fishing can affect local and small-scale fishing communities by generating poverty, harming livelihoods, and threatening food security (FAO, 2019). However, much more relevant for this study are the implications for fishers' working conditions. Recent reports have linked IUU fishing to the following consequences:

> "[…] *substandard working conditions on board, exploitation of migrant fishers, unacceptable forms of work such as forced labour and human trafficking. IUU fishing vessels tend to evade legal authorities, and this means that such matters as lack of safety equipment, poor hygiene standards and inadequate food and accommodation provisions on board may also go unchecked*" (Kumar, 2017: 5).

While FAO (2019) emphasized on developing countries being particularly at risk of IUU fishing, the global IUU Fishing Index shows that countries like China and Russia are amongst the 5 worst-scoring states when it comes to "*vulnerability, prevalence and response to IUU fishing*" (Global Initiative, 2019: n.p.). The UK's IUU Fishing index is minimally better than the average of 152 rated countries, with the

UK landing on the 58th place on a global scale. However, compared to the other European countries, the UK lands on the 21st place of 31 countries and is significantly below average (ibid). One reason for this below-average ranking can be found in the "Black Fish Scandal" that shattered the British fishing industry in the 2000s. At the time, three different companies disrespected regulations and quotas, resulting in total landings of illegal fish worth £63 million (Smith, 2015: 199). The following sections discuss how the UK regulates its fisheries beyond the international regulatory frameworks.

4.5.2 Regulatory frameworks in the UK

According to the researcher IP13 (63), no regulations on working conditions for fishers – except for health and safety requirements – existed until ILO188 was implemented in the UK. Fishers were often explicitly excluded from existing labour market regulations such as National Minimum Wage (GOV.UK, 2019d) or maximum weekly working hours (GOV.UK, 2019b). However, regulations on the employment of international fishers and regulations concerning the protection from modern slavery already existed before the implementation of ILO188 (Green, 2017). This chapter will give an introduction on existing regulations for fisheries in the UK, including health and safety requirements, visa regulations, modern slavery protection and quotas.

4.5.2.1 Regulations on health and safety

The industry body Seafish is "*responsible for the development, delivery and certification of mandatory safety training throughout the UK for commercial fishers*" (Green, 2017: 8). All commercial fishers are obliged to complete four basic safety training courses, including Sea Survival, Health & Safety, First Aid and Fire Fighting. Within two years, all crewmembers furthermore have to complete the module Safety Awareness. Skippers and engineers working on vessels larger than 16.5m are required to hold additional Deck and Engineer Officer Certificates of Competency. While these courses are provided by a network of Seafish approved training providers, the Maritime and Coastguard Agency (MCA) is responsible for the enforcement of health and safety regulation and certificate inspection. These health and safety requirements have been the only rules created specifically for regulating labour on British fishing vessels until recently (ibid). However, some general labour regulations can be applied to the fishing industry, as the next sections will show.

4.5.2.2 Transit Visa

Citizens of EU/EEA member states and Swiss citizens have the right of residence in the UK and therefore the right to live and work in the UK. As long as fishers from such countries are in compliance with the UK basic safety training requirements, they are allowed to work as fishers and live in the UK without applying for permission to work. Non-EEA nationals, on the other hand, have no automatic legal entitlement to work in the UK or in its territorial waters. Those citizens require a transit visa that allows them to transit through the UK to join a vessel which is currently located in the UK and operates outside

of UK territorial waters (outside 12 nautical miles) (Green, 2017: 5, 6). As those ships do not operate in UK territorial waters, fishers on a transit visa do not need permission to work in the UK. The transit visa for international fishers is *"issued only when a Border Force official overseas, or on the border, is satisfied that the applicant meets the requirements of the rules*" (Green, 2017: 6).

Some of my interlocutors stated that the transit visa was originally introduced for international workers in the oil and gas industry and on merchant vessels and was not designed for fishers (e.g. IP12: 65). This manifests in the common belief that fishers on a transit visa are not allowed to reside in the UK and therefore have to live and sleep on their vessel. In this vein, many interview partners – including workers' representatives as well as industry representatives – indicated that fishers on a transit visa are allowed to set foot on British ground but cannot reside ashore (e.g. IP3: 25; IP5: 103; IP6: 69; IP8:15; IP24: 19). However, this ruling is very controversial and leaves room for interpretation. Several institutions or experts stated otherwise and recently suggested that fishers on a transit visa generally are allowed to stay and live in the UK between fishing trips (Green, 2017: 5-7; McGuinness and Pepin, 2018; Stevenson, 2018; IP3: 139; IP13: 15).

4.5.2.3 Modern Slavery Act (2015) and Immigration Act (2016)

Besides of ILO188, Seafish only mentions The Modern Slavery Act 2015 and the Immigration Act 2016 as national measures to ensure fishers having "*minimum standards and decent conditions of work on board fishing vessels*" (Green, 2017: 10). The latter two have not been specifically designed for fisheries but can be applied to them since international fishers were integrated into the labour force. The Modern Slavery Act, which came into force in March 2015, aims to increase the transparency of labour practices in value chains and to prevent all forms of labour exploitation. For instance, one clause takes organizations in responsibility by requiring them *"to report on the processes and due diligence taken to ensure that their supply chains are slavery free*" (Green, 2017: 10). Furthermore, this Act gives the law enforcement bodies greater powers to investigate cases at sea, as they are now allowed to arrest anyone on a UK ship if reasonable grounds to suspect a committed offence are given. The Immigration Act on the other hand, "*introduces new sanctions on illegal working, prevent illegal migrants accessing services and introduce new measures to enforce immigration laws*" (Green, 2017: 10). This act, however, seems to aim more at punishing illegally entered migrant workers, rather than ensuring they have decent working conditions.

4.5.2.4 The Seafish Responsible Fishing Scheme (RFS)

As a supporting measure, the voluntary Responsible Fishing Scheme (RFS) aims at "*certifying high standards of crew welfare and responsible catching practices on fishing vessels*" (Green, 2017: 16). This scheme requires more concessions from its certified vessels regarding modern slavery, human trafficking, forced labour, labour exploitation and written contracts (ibid) and therefore could be a

valuable supporting measure for the existing regulations, according to several respondents (e.g. IP2: 99; IP12: 171; IP23: 159, 177; IP24: 105). Even more so, since the RFS is strongly supported and implemented by major UK retailers, that long for fish that is harvested to industry-agreed best-practice standards (Green, 2017: 16).

32% of the UK fleets landings by weight and 26% of landings by value have been RFS certified in 2017. However, these shares are made up by only 120 of the 6'148 UK vessels, meaning that only a bit more than 2% of UK vessels are RFS certified. This indicates that large-scale vessels rather than small-scale vessels are more likely to be RFS certified and the big majority of vessels is not part of RFS, due to its status as a voluntary certification scheme (Platt and Duggan, 2018: 4). Furthermore, while some aspects of this scheme seem to be of great importance, it misses many important factors such as the introduction of a minimum wage or maximum working hours and therefore cannot be seen as a holistic law-replacing approach.

4.5.2.5 Quotas

As explained above, TAC is shared between European countries as national quota. In the UK, quotas are distributed on the basis of historical catch records for sector vessels, whereby it is distinguished between sector vessels that are members of Producer Organisations (PO) and non-sector vessels that are managed by one of the four UK administrations (England, Wales, Northern Ireland and Scotland) (Ares, Rhodes and Ward, 2017: 9). A 2017 report of the New Economics Foundation (Carpenter and Kleinjans, 2017) states that the UK shows a mixed performance across their indicators of the quota system. Thereby, high performance is assessed "*in providing secure and flexible fishing access*" and poor performance "*in making fishing opportunities accessible to new fishers and allocating fairly to the inshore fleet*" (Carpenter and Kleinjans, 2017: 312). This is due to the allocation system of British quotas, which are distributed on the basis of historical catch records for sector vessels, while "*monthly individual catch limits are rationed equally to the non-sector*" (Carpenter and Kleinjans, 2017: 316). In this context, sector vessel quota can be easily leased and temporally swapped and even permanently transferred (ibid). The report criticizes this system as quotas can "*potentially be used by non-fishers as a financial asset or can be leased out by non-active fishers*" (Carpenter and Kleinjans, 2017: 325). This report also refers to a Greenpeace UK analysis which reveals that "*quotas have become concentrated in the hands of a small number of multi-million pound companies*" (Greenpeace UK, 2019). Just five families control nearly a third of UK fishing quotas and more than two-thirds are controlled by 25 companies. This has serious implications on British stocks and economies, as according to Greenpeace, large-scale companies use less sustainable fishing methods, employ fewer people and generate less money for local economies than smaller fishing operations (Greenpeace UK, 2019).

4.5.2.6 Brexit

According to Ares, Rhodes and Ward (2017: 2) and many interview partners (e.g. IP4: 79; IP10: 109; IP18: 418; IP24: 127), the significance of Brexit for UK fisheries is highly uncertain, as it depends on future UK policy and future negotiations with the EU. Apparently, the government intends to introduce a Fisheries Bill which will "*enable the UK to control access to its waters and set UK fishing quotas once it has left the EU*" (Ares, Rhodes and Ward, 2017: 1). Many involved actors hope that the UK can obtain exclusive national fishing rights in its territorial waters and EEZ, even if some of these rights might be traded in order to get access to EU's sea area or to the EU fish market (ibid: 2). However, after Brexit, access to fishing grounds in the UK will no longer be regulated by European Law, but by the international treaty commitment UNCLOS. UNCLOS allows for resources to be shared amongst nations and requires historical fishing records and rights to be considered. This implies the UK to be sovereign over its fisheries resources and to be able to determine its own harvesting capacity. It also means that access to third countries must be given to the surplus of stocks, particularly by those who have habitually fished in this area (Ares, Rhodes and Ward, 2017: 8).

The outcomes of Brexit are not only highly uncertain regarding stock allocations and quotas, but also when it comes to working permits for EEA nationals. According to several interview partners, many EEA fishers are insecure about their future in British fisheries with some having the UK already left behind (IP14: 335; IP18: 21). This is particularly problematic for fisheries on the West Coast of Scotland, which are not able to engage non-EEA nationals, as they mostly engage in fisheries within the territorial waters of the UK and therefore depend on EEA nationals even more (IP14: 34, 467; IP18: 21).

4.5.2.7 Enforcement

The enforcement of the Modern Slavery Act and the Immigration Act is carried out by Border Force, National Crime Agency (NCA) and several multi-agency organizations. Green (2017) state that "*Border Force is a law enforcement command within the Home Office to secure the UK border by carrying out immigration and customs controls for people and goods entering the UK*" (Green, 2017: 12). Border Force thereby patrol UK waters, monitor vessels, gather information and intervene when necessary and appropriate. While Border Force are concerned specifically with the enforcement of the immigration regulations, they still report issues regarding employment rights or health and safety to the according agencies, such as the MCA. The Joint Slavery and Trafficking Analysis Centre (JSTAC) is an elite multi-agency intelligence with a focus on tackling cross-border and domestic slavery. JSTAC consists of analysts from Border Force, the National Crime Agency (NCA) and others. The NCA emphasizes on tackling serious and organised crime, strengthening UK borders and protecting young people and children from exploitation and sexual abuse. The NCA also leads the Modern Slavery Human Trafficking Unit (MSHTU), another multi-agency organisation, that mainly aims "*to provide a*

central point of expertise, support and coordination for the UK's response to modern slavery and the trafficking of human beings" (Green, 2017: 13).

Potential victims of Modern Slavery are "*identified, referred, assessed and supported*" (Green, 2017: 14) with the help of the National Referral Mechanism (NRM), provided by the Government of the UK. After spotting signs of modern slavery, the so-called first responders – UK Police forces, NCA, Home Office, Border Force, Local Authorities, Children's Services, Gangmasters Licensing Authority, and designated NGOs – can refer individuals to the Competent Authorities, which are UK Human Trafficking Centre and Home Office UK Visas and Immigration. If the suspicion seems to be reasonable, the individual is "*eligible for support during 45 days, while a conclusive decision is taken*" (Green, 2017: 15). Thereby, the individual is given psychological and physical support and safe accommodation and cannot be removed from the UK during this time. The potential victim can decide if he or she wants to report to the police and support the investigation. After these 45 days, the competent authorities decide whether there are sufficient reasons to decide that the individual is a victim of Modern Slavery (ibid: 14, 15).

Chapter 4.5 has displayed how international and national regulations, conventions and voluntary certifications aim at regulating and managing fisheries. Regulations on social matters have long been scarce and today, they are highly dependent on state regulations. However, with the implementation of ILO188, the International Labour Organization aimed to create a global minimum standard for fishers' working conditions. Furthermore, IUU fishing is a major challenge to global and British fisheries.

4.6 Conclusion

Chapter 4 aimed at introducing into the context of global and British fisheries. It discussed the crisis of global fisheries due to fully fished or overfished stocks resulting in stagnating catches and decreasing efficiency. Furthermore, the importance of the social dimension of global fisheries has been highlighted. IUU fishing, indecent working conditions as well as depleting stocks urge for the implementation of regulatory frameworks. Such regulatory frameworks, particularly concerning working conditions, are very rare, explaining the implementation of ILO188, which intends to counteract this situation. This chapter served as preparation for the continuation of this thesis. With this background information on the context of global and British fisheries in mind, the next chapters will now present the results of this thesis.

5 Working conditions on British fishing vessels

Chapter 5 presents the results of this study. It is designed to answer the main research question of this thesis:

How are the working conditions aboard British fishing vessels?

This chapter focuses on working conditions aboard British vessels. It is followed by a critical discussion of the main results through the lens of the research field labour geography and the concept precarious work (see chapter 2) in order to emphasize on 'why' the working conditions are as they are. As I previously argued, my analysis relates mainly to the context of Scottish fisheries. For instance, information about the East Coast or the West Coast relate to the Scottish coastlines and not to the UK in general, if not stated otherwise. International fishers have an important role in this chapter, as almost 30% of the workforce in Scottish marine capture fisheries are from foreign countries (Marine Scotland Science, 2016: 4). They often work under other – some actors would say more difficult – circumstances than the local workforce. Due to these given differences, there is often a particular focus on migrant workers in the following subchapters, which are designed to assess all kinds of factors that affect the working conditions of fishers on British fishing vessels, including living conditions, safety, remuneration, working hours and human rights abuses. The next sections explain what working on a vessel means and what general statements were made regarding working conditions on British fishing vessels.

5.1 Working on a vessel

Before assessing the working conditions on British fishing vessels, it is important to know how British fisheries work. Therefore, the following sections elaborate on what working on a fishing vessel generally means and what differences can occur on different boats. As these differences occur, it is important to mention that it is quite difficult to generalize statements that are valid for the whole industry. As already explained in chapter 4, within the British fishing fleet, there is a great variety in size, age and type of fishing vessels. Depending on what species is to be caught and on the size and age of the vessel, different ways of working can occur. Nevertheless, there are also some similarities. This section will elaborate on who is working on the vessels and on what has to be done on a fishing vessel.

For the skipper, the fishing trip starts long before the vessels leave the port, with tasks such as "*making sure they [the workers] have got the right insurance or they got the right landing gear, that everything works, that the vessel is seaworthy, that they know the area they're fishing*" (IP1: 25). According to IP5, a former skipper and current representative of a producer organization, the role allocation on the vessel seems to be clear: While the skippers and owners of the vessel usually are Scottish, the

engineers and especially the deckhands origin from countries across the globe (IP5: 40). This statement is supported by official statistics, which state that around 30% of the workforce on Scottish fishing vessels are foreigners, who are almost exclusively engaged as engineers and deckhands (Marine Scotland Science, 2016: 5).

According to the advisor IP1, most vessels in the British fishing industry are run by 1 to 20 crewmembers and their fishing trips last from 1 day to 4 weeks (IP1: 17). However, most workers I talked to were engaged on vessels with 4 to 8 crew members (IP6: 15; IP15: 5; IP9: 21, 23, 25: IP20: 11) being out at sea for 1 to 10 days (IP5: 20; IP6: 11; IP15: 9; IP20:25).

A normal fishing trip starts with getting the boat ready for going out to the fishing ground. After the food is packed, the boxes are piled and the nets and ropes are maintained, the skipper leads the ship to the fishing ground, perhaps with a crewmember doing the night watch while the skipper has a rest. When the vessel reaches the fishing spot, the actual fishing begins: shooting and hauling the gear and processing, icing and boxing the catch (IP6: 25). On IP20's 30 years old vessel, which he labels as "*very modern*" (IP20: 3) compared to many other fishing vessels in Scotland, no manual labour – besides lifting the packed boxes – is involved in working on the deck (IP20: 23). The hardest work is done by hydraulic winches and net drums that lift the catch on the vessel. However, this does not mean that fishing is an easy job, as the skipper IP20 explained: "*The strenuous part of the job is standing, tailing prawns and cutting fish. It's labour-intensive. It's time-consuming, sore. You can be standing for 2 hours or 20 hours. It's what it is*" (IP20: 23). When the skipper and his crew are satisfied with the catch, the vessel heads back to the port, where the catch is to be landed, the vessel is to be cleaned, the nets to be mended and the ropes to be spliced. When both, crew and vessel are ready to sail again, the vessel leaves the port for its next haul (IP6: 25).

Many interview partners described this way of fishing in a similar manner. However, it is important to mention that the above-explained process of fishing is a major simplification of actual procedures and is not valid for every fishing vessel of the whole industry. The goal of this section was to give the reader an idea of how today's fishing works in general. However, the variety of vessels in size, age and type of fishing is enormous, and so are the fishing processes and the working conditions. To give a broader idea of how working conditions aboard British fishing vessels vary, the next section will look at them in a more general manner.

5.2 General statements on working conditions

Before I discuss individual aspects of working conditions, this section aims at showing how the interview partners generally describe working conditions on British fishing vessels. On the following pages, four important aspects to this question will be discussed in particular: (1) The variability of

working conditions, (2) the mediocrity of working conditions on British fishing vessels, (3) the differences between the assessments of the interview partners, and (4) the absence of trade unions in British fisheries. Many aspects addressed in this chapter will be discussed in more detail in the following chapters.

5.2.1 Variability of working conditions

When asked to assess working conditions aboard British fishing vessels in general, most of the interview partners stated that working conditions aboard British fishing vessels "*vary greatly*" (IP8: 45). Two points seem to be crucial for the standard of working conditions: age and size of the vessel, and the investment available to the vessel owner, which greatly depends on the type of fishery and the geographical location of the said fishery. IP3, a nationwide representative of a charitable organization that works with fishers, perceives the most problems with medium-sized older vessels:

"At the top end of the market are big boats that make a lot of money. They're very modern and they're built to the highest possible specification. So living conditions are fab. […] Then you come down. The smaller the vessel gets, the conditions get more cramped. But in the more modern boats, the living conditions are still good. And then you get into what I would call a challenging population, which is the older boats and that's 25 to 30 years plus old, some as old as 45, 50 years" (IP3: 11, 13)

The differences between the vessels became obvious to me when I had the chance to go aboard a new demersal vessel (2 years old) on the East Coast and aboard two older prawn vessels (27 and 30 years old) on the West Coast. Everything seemed older, dirtier and rustier on the two older boats, there was much less space to eat, rest and sleep, the showers and toilets were installed in retrospect and seemed very improvised and on one boat, the toilet did not work (IP15: 7; IP20). However, not only the living conditions are perceived to be better on the newer and bigger boats, but also the working process itself is seen as much easier, as "*everything is mechanized on the boat*" (IP8: 33) and "*there's no manual labour involved in working in the deck now*" (IP20: 23). Furthermore, the newer vessels are perceived as safer, "*because on the older boats, margins of profits are very small and the temptation is always to make savings on things you don't really have to spend money on. One of those is safety, the other is living conditions*" (IP3: 21). Many interview partners stated that investing in newer vessels could improve working and living conditions in the British fishing fleet strongly and would make it more efficient (IP18: 416; IP13: 79). However, although the working process is described to be easier on newer vessels, this thesis will show that working hours seem to be a more severe problem on the East Coast with its newer vessels, than on the West Coast where vessels tend to be older.

Whether a skipper and/or vessel owner is able to buy a new and big boat, highly depends on the availability of resources to invest in a vessel (IP18: 376). Amongst others, this availability depends

strongly on the type of fisheries the vessel owner is involved in and on the geographical location the vessel is located. Thereby, pelagic fisheries with their new and big vessels are perceived as financially strongest fisheries (IP8: 63; IP23: 123), which is confirmed by official statistics that show that pelagic vessels are by far the most efficient with more than £10.5 million of revenues per vessel per year (Marine Scotland, 2019: 5, 9). Also the financial gap between the East and the West Coast has been thematized by multiple actors (IP8: 45; IP12: 33; IP14: 485). It is explained by less catch on the West Coast due to less efficient boats (IP14: 120), scarce fish stocks (IP14: 18, 428) and the geographical nature of the West Coast with the small islands (IP14: 125) compared to the Northern East coast which is positioned "*on the edge of the North Sea*" (IP10: 131). These geographical differences were already explained in chapter 4.1.1.2 and confirm the statements of the respondents (see Stevenson, 2018).

5.2.2 Mediocrity of working conditions

After making clear that there is a wide variety in working conditions aboard British fishing vessels, many interview partners stated that the conditions overall are "*good but not brilliant*" (IP14: 61) or "*better than some, worse than others*" (IP13: 7). Thereby, working conditions were often compared to other regions such as Southeast Asia, where people are said to be "*jumping off the vessels and try to swim ashore to leave the vessel*" (IP12: 39). However, most of these statements were weakened by stating that one has always to bear in mind the context of fishing: "*But on the whole, I would say that the conditions […] are good. But that is relative in the sense that fishing is the most dangerous occupation*" (IP24: 15). Compared to other jobs, some interview partners argued, fishing is "*not the best job*" (IP14: 72), as it "*isn't office-based work*" (IP24: 15) with a normal day's work from 9 to 5 (IP6: 39; IP18: 257). During my research I visited four ports all over Scotland and everywhere the fishing industry struggled to find local crewmembers that were willing to go fishing at sea, as the representative of a local charity states:

> "*[…] we do have local crew. Yes, but it's very difficult to find them and to encourage people to come into the profession. Because the hours are long, the pay could be very uncertain. […] If you want to have a stable home life and go back to your family at night, it doesn't work that way at all*" (IP18: 33).

The struggle of finding enough and adequate labour supply could be another indicator that working conditions on British fishing vessels are indecent, although many respondents labelled them as mediocre.

5.2.3 Differences between the actors

The assessment of the working conditions on British fishing vessels varied amongst the different interest groups. Experts and workers' representatives first stated that most of the skippers treat their employees well (IP24: 15) and that things are "*generally okay*" (IP23: 133) but everyone is "*aware of some exceptions*" (IP24: 135). When asked in detail, they acknowledged problems throughout the industry, especially when it comes to migrant workers, living conditions, working hours and wages, as explained in the next subchapters.

Two local workers mentioned in a five-minute discussion that fishing is a "*shite job*" as it is hard work and as they are away from their family all the time (IP 17: 5). Also all migrant workers I talked to, mentioned that it is "*hard*" and "*dangerous*" work (IP9: 74, 334), but in contrast to their local counterparts, they think "*it is ok*" (IP9: 301) the way it is. The ones that used to be involved in cases of modern slavery are "*very happy now*" (IP21: 209) and acknowledge fishing as "*good work*" as long as the skipper treats them well (IP19: 27). Chapter 6 will further elaborate on the question why migrant workers tend to look at indecent working conditions in a more positive way compared to domestic workers.

Industry representatives from the East Coast highlighted that everything is fine on their boats, that they are above standard and that they do not know about the rest of the Scottish fleet (IP5: 28, 29; IP10: 23, 25, 76). When asked how working conditions could be improved, one representative of a producers organization stated: "*I can't see that there's too much more you can do from our side*" (IP5: 205). When confronted with the newspapers articles about human rights abuses and modern slavery aboard British fishing vessels (e.g. Shebbeare, 2015; Moulds, 2017), particularly some industry representatives mentioned that no such thing is happening in the UK. They even blamed the potential victims of modern slavery by stating that they experienced the same working conditions as anyone else, but they were just not used to working hard: "*But some of these guys I think it was just okay, they would like a tea break every 15 minutes I think. That doesn't happen. And if we've got work to do, the work's done. Then we eat, but that's for everyone*" (IP6: 57). All other actors, including workers' representatives, confirmed these cases but highlighted that such cases were the rare exceptions and occurred mainly with employees of one particular company on the West Coast (IP3: 81; IP8: 82; IP12: 93; IP18: 350; IP24: 73).

These responses have shown that industry representatives tend to ameliorate the picture of working conditions. However, all of the involved actors were solicitous to display the British fishing industry in its best light, and even workers' representatives tended to hesitate and only described issues with working conditions when asked in more detail. One representative of a producers organization was "*quite happy*" (IP5: 32) to participate as respondent in this study because he wanted to promote the

good practice of the industry after some newspapers articles (e.g. Shebbeare, 2015; Moulds, 2017) had accused the industry of modern slavery and indecent working conditions: "W*e have got to promote our industry as meeting the requirements of the marketplace*" (IP5: 32). It is obvious that besides the workers, all involved actors try to improve the public perception of the British fish industry – including the workers' representatives. However, in the further course of this thesis, the reader will recognize that the vast majority of them mentioned a diverse set of problems for fishers in the UK when asked more detailed questions.

5.2.4 The absence of trade unions in fisheries

Generally, the workers' representatives seemed to have very good relations to both, employers and employees. This was particularly striking on the smaller West Coast ports, where I perceived strong solidarity within the fishing community amongst employers, employees and workers' representatives, allowing the latter to bridge a possible gap between employers and workers. However, the proximity of the workers' representatives to the vessel owners probably makes them a bit more hesitant to address existing problems more consequently. This was confirmed by a local workers' representative on the East Coast, who told me that he hesitated to do an interview with me, in order to protect the big majority who treat their employees well: *"[…] it's not about hiding anything. You just have to be very careful because there's so much portrayed. It's not helpful for the people who do the right things"* (IP12: 150). Although some NGOs and charities are already lobbying the government in order to improve fishers' conditions, they are often doing so within industry bodies such as the "Fishing Industry Safety Group", or the "Fishermen's Welfare Alliance" (IP3: 87; IP24: 101), whose members probably have different, particularly profit-oriented interests than they have. Furthermore, at least one the charitable organizations that support fishers all over the UK is partly financially supported by vessel owning companies (The Fishermen's Mission, 2020). Therefore, some of the most important workers' representatives in the UK are not fully independent from the industry.

According to an expert of the British fishing industry, the only trade union active in British capture fisheries is the International Transport Workers Federation (ITF), that is originally involved in seafarer's issues (IP1: 153) and is now just starting to get involved with fishers, as they begin to realize that there are problems with fishers' welfare (IP24: 107). Therefore, "*there's little recourse to highlight abuses*" (IP1: 145), which is currently done mostly by welfare organizations. Representatives of such welfare organizations explain the absence of trade unions by the fact that most fishers are self-employed, a concept that is seen "*as part of the problem*" (IP3: 109) by trade unions. Two national representatives of such welfare organizations stated that they think it is important for trade unions to become *"more vocal in support of the welfare of fishermen"* (IP24: 107) in order to create *"better terms and conditions" (IP3: 107)* for fishers in Scotland. The absence of unions also makes it more difficult for

tripartite working – as it was the case in the elaboration of the ILO convention 188 – because no one knew who was able to represent the fishers, as the advisor IP23 (49) mentioned. Further voices argued that the union approach can be a good way for workers to assert their rights, but doubted that it is effective in fisheries, as the workers often only have part-time contracts (IP4: 75) and as the British fishing industry does not seem to be big enough to be a strong voice (IP13: 113). The statement of the advisor IP1 (49), who mentioned that industry representatives do not want British fisheries to be unionized, is confirmed by IP5, a representative of a producers organization, who sees no need for unions to be in the fishing industry (IP5: 184). It can at least be questioned, to what extent trade unions would be able to push the British fishing industry into decent working conditions more consequently than it is being done now. This topic will be discussed in more detail in chapter 6.

This subchapter provided a first glimpse into the variety of working conditions aboard British fishing vessels. Many actors mentioned that working conditions were basic and moderate in British marine capture fisheries. However, the statements differed between the various actor groups, with industry representatives mainly highlighting the positive sides while workers' representatives mentioned several issues after initial hesitation. Furthermore, this subchapter has highlighted the absence of trade unions and related implications for British fisheries. After the more general assessments of working conditions, the next subchapters will focus on assessing working condition aboard British fishing vessels in more details.

5.3 Living conditions

The following sections will focus on one of the most important aspects of working conditions on British fishing vessels, the living conditions. Their fishing vessel is often not only the fishers' working place but also their home, as many fishers live on the vessel. The results, again, show differences in living conditions between East Coast and West Coast boats, between older and newer vessels and between larger and smaller vessels. Especially for those workers that live on the vessel for up to ten months – mostly non-EEA migrant workers on a transit visa – missing facilities such as showers, washing machines and cooking areas, make them dependent on onshore facilities such as local fishers centres provided by charities. The following sections will focus on the variety of living conditions, on migrant workers' living conditions, on the social welfare of fishers and their dependence on onshore facilities.

5.3.1 General issues of living conditions

According to a representative of a charity in fishers favour (IP3: 35) and several newspaper articles (Peachey, 2014; Shebbeare, 2015; Lawrence and Mcsweeney, 2018), the most concerning aspects of living conditions are the absence of toilets, showers, adequate sleeping arrangements, cooking facilities, electricity and enough freshwater as well as the right type and amount of food on board. However, again the living conditions aboard British fishing vessels vary in age and size of the vessels.

As mentioned above, investment opportunities in the bigger ports on the East Coast seem better available than in the smaller ports on the West Coast and therefore a certain distinction can be made between these two coastlines. On the East Coast, vessels are generally newer and bigger than on the West Coast, as the following sections show.

5.3.1.1 Differences between the East Coast and the West Coast

The vessels on the East Coast are generally newer and bigger than on the West Coast (Elliott and Holden, 2018: 16-18; IP12: 33) – characteristics that usually are associated with better living conditions, as this section will show. New, large pelagic vessels are seen as "*five star hotels*" (IP12: 33) and very palatial with separate ensuite cabins, carpets, nice lounges, leather sofas, big galleys and proper cooks (IP8: 23) and are concentrated on the East Coast of Scotland or in Shetland[10] (Marine Scotland, 2019: 30). These vessels can cost about 40 million pounds, are 78m long (IP5: 276-278), and their interior indeed looks very luxurious as *Figure 11* shows.

Figure 11: Living area (left) and dining area (right) on a pelagic fishing vessel (Karstensens, 2020)

In a port on the East Coast, a skipper showed me around his two years old, 26.5m long demersal vessel that is normally on fishing trips for four to ten days (IP6: 7-11). It was very clean and has toilets, showers, ten beds in separate single-, two- and four-bed-rooms looking like hotel rooms, with a big dining area and galley and was equipped with Sky TV, Wi-Fi, a karaoke machine, washing machine and a dryer (IP6: 40-49; 104-110; 131) (see *Figure 12*). A Filipino employee working on this vessel called it a "*good lifestyle*" on this "*nice boat*" (IP7: 34). Both industry representatives and workers from the East Coast agreed that every vessel in their particular ports has toilets, showers and cooking facilities (IP5: 103-112; IP9: 351), while workers' representatives emphasized that especially older boats sometimes lack showers and washing machines (IP12: 29; IP8: 41).

[10] All the Scottish vessels that are members of the Scottish Pelagic Sustainability Group are either located in a port on the East Coast of Scotland or in Shetland, an island north-east of Scotland (SPSG, 2019). This composition indicates that all Scottish pelagic vessels are located on the East Coast or in Shetland.

Figure 12: Living and dining area (left) and the clean working area (right) on the demersal vessel of IP6 (own pictures, taken on 30 April 2019 – 18:00h)

In contrast to the new pelagic and demersal vessels, there are the older boats, which are at least 25-50 years old and called the "*challenging population*" (IP3: 13) by IP3. These vessels occur more often on the West Coast than on the East Coast and they can have very poor and bare minimum facilities with no toilets, showers or washing machines, no freshwater, no dedicated sleeping bunks, sometimes wet beds and in wintertime no heating, no power and nowhere to cook (IP3: 13-25; IP6: 79; IP12: 29-33). They also become harder to refit (IP23: 141), for example to meet ILO188 regulations, as they simply "*cannot meet the criteria*" (IP6: 79). A skipper from a small port on the West Coast explained how he bought a 50 years old vessel only five years ago, which was "*very cramped, very confined*" and had "*no toilet, or shower, or anything […] not even hot running water, just cold running water*" and the "*eating area was in amongst the sleeping area*" (IP20: 7). Meanwhile, he upgraded to a 30 years old boat, which "*is a very modern boat*" compared to "*the other boats in the harbour*" (IP20: 7), and has "*hot and cold running water with a shower and toilet*", which does not seem to "*sound like much but when you come down to the level of fishing boats, older boats especially don't have that*" (IP20: 23). Another skipper in another small port at the West Coast showed me the 16m long, 27 years old prawn boat he worked on. The vessel had one small bedroom with 5 bunks, a non-working toilet, a shower, cooking facilities and a small table to eat. *Figure 13* shows that everything was much older, dirtier and rustier than on IP6's vessel on the East Coast, with prawns lying around all over the boat (IP15: 5-7).

Figure 13: Working area (left) and living and dining area (right) on the prawn vessel of IP15 (own pictures, taken on 16 May 2019 – 11:30h)

The workers' representatives and skippers of the West Coast confirmed my experience, as they all agreed that the living conditions on the boats on the West Coast are normally very basic, as their boats are smaller, more confined, less fancy, less luxurious and nothing like the East Coast (IP14: 69, 268). One of my interlocutors compared sleeping facilities to coffins (IP18: 326-339). Only the biggest vessels have TVs, which can be more important than it seems, because "*if you can just sit and get the news and get the weather forecast in the morning, it goes a long way*" (IP20: 68). Although most of them have basic facilities such as toilets, showers and cooking facilities, some older and smaller vessels do not (IP18: 220-226). However, the representatives of a local charity in a small fishing port on the West Coast stated that the workers do not complain when they are three days without toilets and showers, as they "*know the conditions, they understand the conditions*" (IP18: 226). The skipper that upgraded to a newer vessel is not happy about boats having no toilets onboard: "*Now in this day and age, if you can't fit a toilet on board the boat somewhere […] that's bad*" (IP20: 68). IP21, a Ghanaian migrant worker, lives on a prawn vessel that does have toilets and cooking facilities but no showers and is therefore dependent on onshore facilities (IP21: 315-319). The next section will show how especially migrant workers on a transit visa depend on these shore facilities and what other specific concerns they have.

5.3.2 Social welfare of migrant workers

Workers who do not live in the port where their vessel is located, do often live on said vessel. Although non-EEA migrant workers on a transit visa (e.g. IP7 and IP9) are allowed to go ashore and be on land, after common knowledge they are not allowed to reside there and have to live and sleep on the vessel. But also EEA migrants that are not able to or do not want to afford a flat and some British workers from vessels that go fishing in other parts of the country to have better catch due to seasonal fluctuations, live on their vessels for up to one year. As long as the crew is out at sea catching fish, which usually lasts between 1 day and 4 weeks, the vessel is also the home of all other UK nationals (IP1: 17). The following sections will show that those workers that live on a vessel with poor facilities are dependent on onshore facilities. Unfamiliar nutrition and connectivity on board are further concerns for migrant workers, as the next sections will show.

5.3.2.1 Food

Normally, the food aboard a fishing vessel is provided by the owner, which can lead to problems as multiple skippers, workers' representatives and workers explained (IP24: 99; IP12: 39; IP3: 27; IP9: 93; IP20: 60; IP18: 326 – 339). Or as a charity representative puts it: *"[…] it's not that there's no food. It's just the wrong food*" (IP12: 39). A representative of a charitable organization mentioned how Filipino fishers "*love their rice*" and are happy "*as long as you give them plenty rice, maybe some fish*" (IP12: 39), while some skippers only provide them with Scottish food and no rice. A Filipino worker that knows of such situations on other boats confirms: *"[…] Filipinos are born for rice. And you know, the Scottish are born for potato*" (IP9: 235). According to the workers' representative IP24, adapting the nutrition to the cultural backgrounds of the workers is a "*relatively modest*" initiative, but makes "*significant difference to fishermen's sense of being valued*" (IP24: 99). IP12 confirms this statement by emphasizing that migrant workers live 8 to 10 months on a vessel and "*food is quite an important part of their life*" (IP12: 39). Furthermore, unfamiliar nutrition can result in health problems, as "*they're not used to maybe cooking in fat and so they end up with health problems*" (IP12: 39). However, the same interview partner emphasized that this is an "*educational thing*" (IP12: 39) and that the situation is improving, as his organization often goes to owners and makes them aware of what kind of food should be provided (IP12: 39). None of the workers or skippers I interviewed had direct experience with such situations, as the skipper always ask their employees what they want to eat (IP9: 235), or as the workers "*like to cook their own food*" (IP5: 106). The respondents from the West Coast do not seem to have such problems at all, as IP18 stated: "*They're well fed and well treated […] We don't have any complaints about the food at all*" (IP18: 331-337). Often the workers buy their food with the vessel owner's money, which can lead to high food bills as IP20, a skipper on the West Coast explains: "*We will spend 200 pounds a week in food. But that's four men, tea, coffee, milk, cereal, breakfast, lunch, dinner, chocolate biscuits. Nothing more you'd have at home*" (IP20: 60). Still, according to IP14, the

owners do not complain about high food bills "*because they [the owners] always say, if they [the workers] are well-fed, you know, they've got more energy to work*" (IP14: 276).

5.3.2.2 Connectivity

Several actors mentioned that many international fishers struggle a lot with the situation of being separated from their families for a long time (e.g. IP8: 45; IP21: 139). Thus, particularly for migrant workers that live up to ten months of a year away from their family, but also for all the other workers on board, communication with their family and friends is an important factor of their social welfare (IP8: 45; IP24: 99). The fishing industry is trying to cope with that need, as IP8, the operator of a local fishers centre on the East Coast, explains:

> *"[…] the Wi-Fi is freely available. They can come in here and get Wi-Fi. The boats all have Wi-Fi. […] They don't have to wait till they come ashore to be able to speak their wife and family. […] Now that's maintained better than it used to be*" (IP8: 45).

Also all Filipino migrant workers I talked to on the East Coast emphasized that all their boats were equipped with Wi-Fi (IP7:37; IP9: 80). However, while a Filipino worker – who answered my questions in the presence of his skipper – mentioned no problems with contacting his family, six Filipino workers in another port on the East Coast mentioned some problems with contacting their families. To the question, if they have Wi-Fi aboard their vessels, the answer was the following: "*Sometimes. But limited. Only 100MB per day. This is only, uses one call. Sometimes 10 days no call the family"* (IP9: 85). This statement was reinforced later on when mentioning that the Wi-Fi sometimes does not work and that they do not always have time to call their families: "*While you're on the sea, you're busy for job. Sometimes plenty catch, no chance, no time to contact your family*" (IP9: 199). IP21, a Ghanaian employee who works on a boat on the West Coast, which goes out fishing Monday and comes back to port on Friday, is in regular contact with his family as well, although he hasn't got Wi-Fi onboard. He uses the Wi-Fi at his local fishers centre that is operated by a nationwide charitable organization (IP21: 334-339). However, IP21 is not the only international fisher who relies on such fishers centres, as the next section will show.

5.3.2.3 Dependence of migrant workers

Like IP21, a lot of other fishers in Scotland depend on onshore facilities, mostly provided by charitable organizations. Especially in the bigger ports, charitable organizations have built centres for fishers which are "*open 24 hours a day for […] fishermen*" (IP8: 9). According to the operators of these centres (IP8: 9; IP14: 7; IP12: 111; IP18: 5), most of them provide toilets, showers, a kitchen, living area, computers, Wi-Fi, and a TV. They are seen as a place that fishers can "*use as home, somewhere to relax*" (IP18: 9). IP12 explains that especially the migrant workers use these facilities, "*just to get off*

the boat" (IP12: 111). The Filipino interview partners confirmed that they liked to use these fishers centres and go there a lot (IP9: 229) because it also gives them room to meet their friends from other vessels (IP7: 40). However, many workers depend highly on these facilities, as already mentioned before. The fishers that live on vessels that are not equipped with toilets, showers, cookers, power or Wi-Fi, only have onshore facilities to cope with the lack of these essential facilities (IP6: 79; IP12: 118). Although most fishers depending on these facilities have access to them (IP14: 399), there are still some smaller ports on the West Coast that do not have onshore facilities, meaning that the fishers "*probably go to the pub*" to "*try and use the facilities there*" (IP12: 22-24). In general, the workers seemed very grateful for these facilities, as the example of IP19, a Ghanaian worker from a small port on the West Coast shows, who calls his local centre the best place in Scotland: "*Because I sleep here, I eat here, bath here, everything I do here for free*" (IP19: 384).

5.3.2.4 Integration of migrant workers

In their study about migrant workers in the Grampian, Scotland, De Lima *et al.* (2007) "*found little evidence of integration among migrants working in the fishing industry as they had few opportunities to engage with local communities, mainly because of lack of time, poor English, a lack of activities and the need to save as much money as possible. In practice, most socialising took place with other migrant workers and the migrants remained relatively isolated and marginalised overall*" (Allamby *et al.*, 2011: 34). This picture is partially confirmed in this study. Some interview partners mentioned that the international fishers go to the bars sometimes (IP7: 38; IP9: 219), or even go for a shopping trip to a big city several hours away (IP14: 85). Some skippers are said to be very engaged and make trips with the international fishers such as attending a football game, go-karting or having dinner at a restaurant (IP8: 45; IP9: 267). Some fisher villages do have Filipino churches which are visited by many international fishers, as well as the local fishers centres, where most international fishers seem to appreciate the support and contact to the employees (IP9: 227; IP19: 378, 384).

However, engagement with local communities does not really seem to exist beyond the international fishers' relationships to their co-workers, skippers and contact persons in their local fishers' centres. This was also my perception during my stays in the various fisher villages. International fishers only occasionally left the port and were never met in a pub or in the streets talking to locals. Many of them spend most their free time on their boats or in local fishers' centres, together with other international fishers, as several respondents (IP7: 40; IP9: 223, 229, 363) and HRAS (2017: 27) confirmed. Therefore, international fishers do not seem to be very well integrated. They rather live isolated from local communities.

In general, chapter 5.3 has shown that the living conditions on British fishing vessels vary greatly – from very basic to very luxurious. Workers who live on the vessels for up to one year are particularly vulnerable to inadequate living conditions. Especially migrant fishers sometimes rely on onshore facilities for their basic needs such as showering, washing and cooking. Further issues that have been mentioned, are inadequate food, non-existing connectivity and the isolation of migrant fishers.

5.4 Safety and health

Due to the nature of fishing, where fishers are exposed to unpredictable weather conditions and heavy waves on an open deck, safety and health aboard fishing vessels is an ongoing topic in the British fish industry. The following sections will elaborate further on the culture and existing differences around safety and health, and the additional safety risks migrant workers are exposed to.

5.4.1 Overview safety and health

Six fishermen lost their lives while practising their profession in the UK in 2018 and five of those fatalities occurred in Scottish waters (MAIB, 2019: 1). Considering the number of deaths per 100'000 workers, fishing is "*the most dangerous occupation, by a factor of 10*" (MAIB, 2019: 2) in the UK, as *Figure 14* shows. My interview partners agreed that fishing is "*the most dangerous job*" (IP5: 136) especially due to the possible exposure to heavy weather conditions (IP 5: 136; IP13: 13). Furthermore, high-powered gear with lots of ropes on an open deck favour body parts to get caught in the gear. Consequences include jammed body parts and falling over board (IP3: 33; IP8: 75; IP23: 77). According to Seafish, 78% of fishers confirmed that their families are worried about them while they are at sea (Seafish, 2019b).

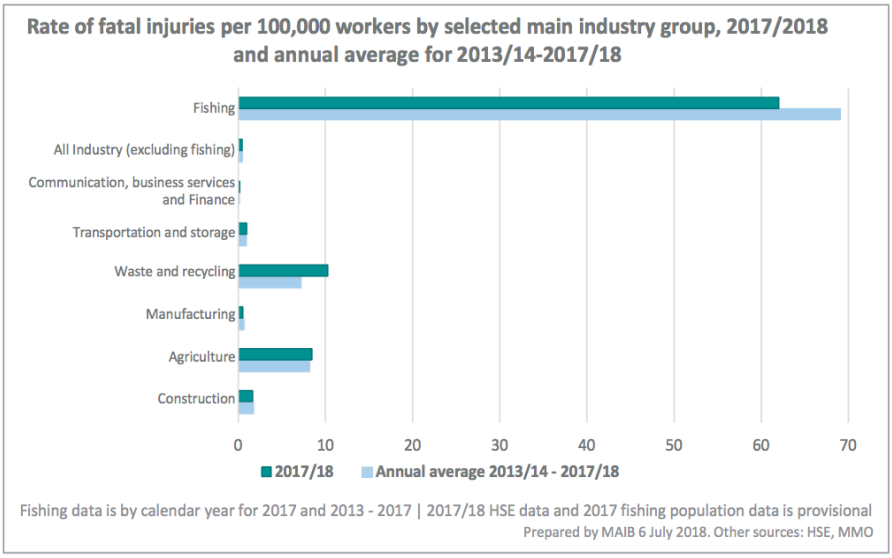

Figure 14: Rate of fatal injuries per 100'000 workers by selected industry groups (MAIB, 2019a: 2)

In this vein, workers, workers' representatives and a skipper told me a lot of stories of accidents and injuries that they have heard of or experienced themselves. Especially workers' representatives from the East Coast described how fishers have died recently due to carbon dioxide poisoning (IP3: 33) and how falls resulted in fatal head injuries (IP8: 5; IP12: 47) or drowning (IP8: 94). On top of the fatal accidents also a lot of other incidents occur, especially such involving gear resulting in lost fingers (IP8:

75; IP12: 14, 49; IP14: 255) or head injuries (IP8: 75) and falls into the water (IP14: 262). A skipper from the West Coast sums up his fishing incidents as follows: "*I have been over the side of a boat twice. I've numerous smashed up fingers and knees and all the rest. It's not nice when that happens*" (IP20: 23). Those statements are confirmed by official statistics that mention 151 accidents, 6 lost vessels and 32 work-related injuries in the British fishing industry only in 2017 (Elliott and Holden, 2018: 27).

Despite these worrying statements and numbers, several interviewees – both workers' representatives and industry representatives – stated that health and safety was a bigger issue in the past (IP5: 134; IP6: 43; IP24: 51) and that it has improved a lot thanks to newer technologies such as better Personal Flotation Devices (PFD), Personal Location Beacons (PLB) (IP1: 49) and cradles to lift fishers out of the water (IP24: 51). Official statistics of the last decade confirm this perception, as the number of vessel losses and injuries, as well as accidents (see *Figure 15*), decreased significantly (Elliott and Holden, 2018: 27). However, when it comes to fatalities, only a small decreasing tendency is perceptible, as *Figure 16* shows. Several respondents also attributed this improving tendency to better awareness and a better culture around safety and health (IP14: 248; IP24: 51), a topic which will be discussed in the next sections.

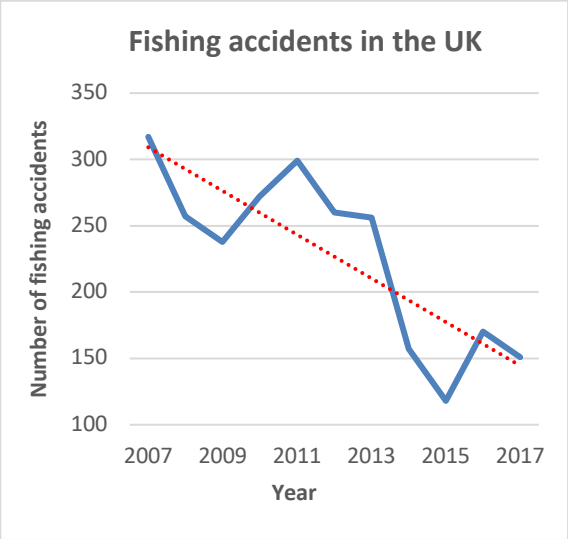

Figure 15: Annual fishing accidents in the UK, 2007 – 2017 (own illustration, based on Elliott and Holden (2018: 27))

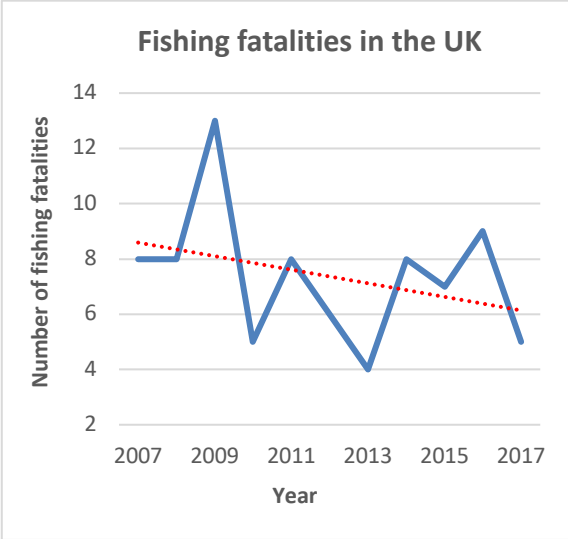

Figure 16: Annual fishing fatalities in the UK, 2007 – 2017 (own illustration, based on Elliott and Holden (2018: 27))

5.4.2 Culture and education around safety and health

IP24 (51), a national representative of a charitable organization, sees a need to educate and inform about safety issues, a matter which is already tackled by several industrial organizations. Seafish, a non-departmental public body that was set up to support the British fish industry, offers four mandatory courses, which are sea survival, first aid, firefighting and safety awareness (Seafish, 2019a). Therefore, "*no fisherman, either trainee or experienced, can legally sail on any vessel regardless of its*

length or capacity without first having completed these statutory training courses" (MAIB, 2019b: 34). IP5, who teaches these four mandatory Seafish courses for the members of his producers organization, mentions the big emphasis on health and safety from the industry side and explains that fishers get "*quite a lot of education*" (IP5: 70). In addition to the mandatory Seafish courses, there are navigation, engineer, watchkeeping and stability trainings (IP5: 82). Some workers' representatives recognize these developments and state that *"there's a stronger awareness and culture around health and safety*" (IP24: 51) and "*they've got much better at wearing life jackets here. They were horrendous. No one wore it, no one did it*" (IP14: 248). The skippers I talked to, emphasized that wearing hard hats and life jackets is mandatory on their vessels (IP6: 43) and if someone does not do so correctly, all operations are stopped: "*It's if I see them, it's not correct. If I see it's got a twist on it, if they're not wearing it, everything stops until that's sorted. […] safety is first and foremost on a boat*" (IP20: 23). Wearing lifejackets is even more important for fishers when considering that it is not mandatory for them to be able to swim and that many fishers in fact cannot swim, as a local workers' representative explained (IP14: 249). Six Filipino workers who are employed on the East Coast confirmed that they "*always use life jackets during work*" (IP9: 347) and that they feel well prepared and trained, as their skipper makes a training session every week (IP9: 161). Furthermore, they mentioned that they did the Seafish courses and IP14, a workers' representative from the East Coast, states that "*they've all got their certificates*" (IP14: 244) in her port.

However, this process of improving safety and health aboard Scottish fishing vessels is still ongoing as it takes time to change an industry that was "*pretty loose on things*" (IP6: 43). Especially workers' representatives emphasized on the need "*to promote a stronger health and safety culture*" (IP24: 127), as the current atmosphere aboard Scottish fishing vessels is still described as an "*alpha male culture*" (IP3: 33) or "*macho culture that acts as a barrier to the implementation of some standard health and safety practices*" (IP24: 15). This manifests mainly in workers not wearing life jackets as is not only confirmed by workers' representatives (IP18: 297; IP24: 51; IP 8: 75) but also by a Skipper who mentions that the wearing of hard hats and personal flotation devices (PFDs) could be "*a little bit better on some other vessels*" (IP6: 43). According to the Marine Accidents Investigation Branch (MAIB), "*small fishing vessel stability and lifejacket wear stand out as areas where improvements could significantly enhance safety*" (MAIB, 2019a: 2), which confirms the concerns mentioned above by workers' representatives. Stability of vessels and unauthorized changes on fishing vessels have also been mentioned as top priorities by a workers' representative and an expert, who explained how vessel owners, "*driven by desire to catch*" (IP3: 33), make unauthorized changes to their vessels such as modifying the winches' automatic shut-offs (IP3:33) and buying "*new trawling equipment that's bigger and taller*" (IP23: 83), without doing "*the stability checks*" (IP23: 83). According to a news article,

for instance, a company was fined £150'000 because it made unauthorised modifications and thereby risked the crewmembers safety for additional financial gain (Urquhart, 2013).

The numbers of MAIB show that these problems occur mostly on smaller fishing vessels, as all eight lost vessels in the year 2018 were less than 15m long (MAIB, 2019a: 82). Other differences concerning health and safety on British fishing vessels are discussed in the next section.

5.4.3 Differences around safety and health

Not only the size of fishing vessels, but again the age is important, as IP3 mentions, who states that the safety on older fishing vessels is a big problem due to lower safety margins and the urge to save money by not spending it on things that do not seem to be necessary, such as infrastructure that improves safety (IP3: 21). IP8 confirms this by stating that she never had to deal with an accident on the bigger pelagic vessels (IP8: 61), and when accidents happen on these vessels, it is usually due to unfortunate circumstances such as working in a noxious atmosphere in refrigerated saltwater tanks (MAIB, 2019b: 60). The two workers' representatives from the West Coast (IP14 and IP 18) emphasized that they witnessed no major injuries so far (IP18: 303) and that at their port there are "*not more injuries that you wouldn't get at any other workplace*" (IP14: 254). IP14 even stated that all injuries in her port apart from one occurred on vessels that were visiting from the East Coast (IP14: 262). According to her, this is due to the smaller community at her port, compared to the bigger East Coast ports: "*It's such a small community here that you wouldn't get away with what you would get away with, down the East Coast. […] Because they [the workers] usually come up and tell you*" (IP14: 261). Unfortunately, I could whether confirm nor deny these statements with adequate sources. However, one port-specific problem seems to be the employment of "*people with acute drug and alcohol issues*" (IP18: 354) in a port on the West Coast, where "*even one or two skippers are into hard drugs*" (IP18: 354), especially cocaine, heroin and marijuana. Due to shortages in labour-supply, the skippers employ basically anyone they find, also drug- and alcohol-addicted people, resulting in massive safety risks (IP18: 354, 356). Drugs were also mentioned by IP24 who stated that some workers take amphetamines to stay awake, as they have extensive working hours – a topic that will be discussed in the next chapter – and emphasizes on the importance of rest periods for workers (IP24: 45). When it comes to safety and health of migrant workers, some particular risks consist throughout the industry, as the next sections will show.

5.4.4 Safety and health of migrant workers

Once again, migrant workers seem to have the biggest safety and health issues, especially the ones living on the vessel. The workers who arrived on a transit visa are told that they are not allowed to sleep ashore and therefore they live on their vessel that is tied up in the harbour as long as it is not at sea. However, that does not mean that they cannot set foot on Scottish ground and depending on the

port, they go to bars, to the church, to fishers centres (IP9: 219-229) or even on a shopping trip to Glasgow (IP14: 85). Thereby, they board the vessel multiple times a day, setting them at risk every single time, but especially at night and especially when they consumed alcohol (IP8: 94). Just last Christmas a non-EEA migrant worker died on the East Coast when he wanted to board his vessel:

> "*He'd had a drink. And he went back to his boat. […] It was about 1:00 in the morning. So it was dark. There is lighting in the harbour but you know, it was still dark. And he was crossing to go to his boat and missed his foot and he went down between the boat and the pier and drowned. By the time his friends got the […] emergency ring, seconds, that's all had passed, he disappeared from view*" (IP8: 94).

This danger of boarding the vessel is confirmed by MAIB (2019b), especially when alcohol is involved: "*Between 1994 and 2016, there were 24 fatal accidents involving fishermen boarding UK fishing vessels. Alcohol consumption was identified as a contributing factor in 17 of those accidents*" (MAIB, 2019b: 36).

But living on the vessel enhances also other potential risks, especially on boats with old and/or malfunctioning infrastructure, as IP3 explains:

> "*We lost two guys this time last year trying to heat themselves on a cold night. So turned the stove on, stove wasn't burning correctly and they died of carbon monoxide poisoning*. *Why? Because the carbon monoxide alarm had been disabled because it kept on going off*"[11] (IP3: 33).

An expert of the British fishing industry claimed that "*one in three people that died at sea in the UK are non-EEA workers, because most of them are killed on fires on the boats in port*" (IP13: 15). While I cannot verify this particular statement, a 2008 newspaper article reports that two Filipino and one Latvian fisher died in a fire on a vessel in Fraserburgh (Kelbie, 2008). Related to this case, claims were made that "*vessel owners shut down electrical generators in port to safe fuel at night, effectively forcing their crew to use bottled gas in confined spaces for cooking and light*" (Kelbie, 2008). This again reinforces the danger of living on such a vessel.

Further mentioned issues with migrant workers concerning safety and health are language barriers that can lead to dangerous situations at sea (IP5: 140), and too short time for acclimatization after visiting their home country for several months, leaving them "*more vulnerable in that early stage*" (IP12: 47). Furthermore, the fact that migrant workers mostly work as deckhands and engineers and therefore on deck, while local workers also drive the boat in the safer wheelhouse (Marine Scotland

[11] No official source was found for this particular accident. However, a MAIB report confirms fatalities due to carbon monoxide poisoning on board a UK scallop-dredger (MAIB, 2014).

Science, 2016: 6), leaves them proportionately more at risk according to IP12 (49). The fact that working on deck may be a bit riskier is also confirmed by a Filipino worker who claims that it is important to always "*watch yourself*" (IP9: 341) and IP8 who states that daydreaming on a boat can be fatal as "*you could get hit by a wrench. It's a fact*" (IP8: 75).

Chapter 5.4 aimed at discussing the issues around safety and health aboard British fishing vessels. The culture around safety and health aboard fishing vessels is perceived to have improved over the last years, which is confirmed by official statistics that show a declining trend in accidents, injuries and vessel losses over the last decade. However, this improving tendency cannot be perceived when it comes to fatalities, meaning that fishing is still the most dangerous job in the UK. This chapter has shown that the safety of fishers depends on various factors, such as the vessel, the community the vessel is located in and whether the fisher lives on the vessel or not. Again, additional risks have been perceived for migrant workers, who are exposed to more sever safety risks as they have to live on the vessel all the time and as they usually do the most dangerous jobs on a vessel. A further problem is the safety risk of fatigue crewmembers due to low resting times and excessive working hours. This topic will be discussed in the next chapter.

5.5 Working hours

Almost all interview partners, no matter their background, identify the long working hours of fishers as a problem or a difficulty of the British fishing industry. However, most of them justified the long working hours by accounting them to "*the nature of the fishing*" (IP12: 59), as for instance a local workers' representative (IP12). Other workers' representatives and experts mentioned that once the crew is out at sea fishing, they stay "*in the fish, and keep working*" (IP3: 31) until the job is done, in order to maximize catch time while at sea (IP1: 39). The fuel to get to the fishing ground is very expensive and every additional day at sea is costing the vessel owner a lot of money, so they want to fish as efficient as possible (IP8: 59; IP13: 13). A skipper mentioned that they do not make money if they do not haul the net while at sea, and then the workers "*don't have a job anyway*" (IP6: 37). Furthermore, due to the above-mentioned fact that fishing is dangerous and the crew is "*faced with challenging weather conditions*" (IP13: 13), vessel owners want to minimize days at sea, according to the researcher IP13. A lot of interview partners mentioned that it is not possible to work a regular 9-to-5 working day as in a bank or in an NGO (IP1: 39) because "*you would lose your business just like that, overnight […]*" (IP6: 39), as the skipper IP6 states. In this chapter, the working hours of fishers on British fishing vessels will be discussed in greater depth and possible solutions, existing problems and upcoming ILO regulations will be discussed.

5.5.1 Way of working

To be able to analyse working conditions, it is first important to know how fishing works, which is explained in this section. The workers and skippers begin with their duty when they start to pack and prepare the vessel. During the steaming time, which is the time the vessel needs to sail to the fishing ground, most crewmembers can rest, while the skipper sails the boat (IP6: 39; IP8: 73). Depending on the location, steaming time could be up to 18 hours, as for the bigger boats on the East Coast (IP6: 37). As soon as they reach the fishing ground, the crew starts hauling the net, a process which is repeated about every four hours on many vessels (IP5: 68; IP6: 111; IP8: 73; IP20: 29). As soon as the catch is hauled, it has to be processed, boxed and chilled, "*or else the quality is disaster*" (IP5: 66), "*because it deteriorates quickly*" (IP23: 205). This has to be done as long as it takes (IP5: 68), whereby the duration is highly dependent on the catch, as a skipper explains: *"[…] the nets come up every four hours. They could be 10 minutes work, there could be 2 hours work, could be 4 hours work"* (IP20: 29-31). Especially on older vessels, where processing is a lot more labour intensive (IP6: 111), or in general, when the catch is very good, the workers might not have finished processing the catch before the next net comes up, as the skipper states:

> "*Sometimes we work round the clock, just sleep when we can, catch, sleep when we can. Sometimes we do stop at night. It all depends how heavy the fishing is, where we are, conditions, catch rate. But there is times that you'll go 24 hours a day from Sunday night to […] Friday. […] You just keep working. Coffee and cigarettes do a lot*" (IP20: 25-32).

Unforeseen incidents, such as when the gear gets stuck, can result in even longer working hours for the crew, as IP6, a skipper, explains:

> *"[…] you could be a long time on the deck, maybe 10 hours sometimes, trying to get the thing free, to get your gear out of the snags. You can't just decide okay stop for a coffee break, and you've maybe 40,000 pounds worth of gear lying here and you're not doing... so you've got to be realistic*" (IP6: 57).

In general, I determined a naturalization of excessive working hours by many actors of the British fishing industry. These justification strategies will not be discussed in the scope of this thesis and are due to further research on British fisheries. However, again there are differences between the different vessels and types of fishing, which manifest in the differences between the West and the East Coast. These differences and working hours on British fishing vessels in general will be explained in the next subchapter.

5.5.2 Working hours on British fishing vessels

Assessing working hours of fishers turned out to be quite difficult. None of the respondents was able to name a particular number of hours that he or any fisher at all works per week or per month. Statistics, reports or newspaper articles, however, do not mention specific numbers. Marine Scotland, for instance, elaborated that most fisheries had an average of 12 working hours per day, with some maximal working hours of 20 hours per day (Marine Scotland Science, 2016: 20). Still, the study indicates an average of only 40.6 to 47.8 working hours per week, as most vessels had only between 150 to 191 fishing days per year. The only exception of the researched fisheries were pot and trap vessels that only had an average of 19.8 hours per week, due to the few fishing days per year (119 days). However, it seems to be questionable to what extent the calculation of average working hours per week makes sense, when the vessels only fish for four to six months a year. Furthermore, these numbers are not based on statistical surveys but on descriptive data on work patterns of those fisheries (Marine Scotland Science, 2016: 20). Human Rights at Sea (HRAS) do not mention any hours of work in their study about fishers in Northern Ireland: "*The contract of employment states a working week of 48 hours. How many hours in a week respondents actually work is not known. Respondents stated that they work until the task is complete*" (HRAS, 2017: 22). During my stay in Scotland, I was shown a standard contract for Filipino fishers that stated a working week of 48 hours as well (IP11: 53). However, working hours in some parts of British fisheries seem to be much longer than those 48 hours. Reports from Ireland stated that 80.7% of sampled non-EEA fishers worked more than 60 hours per week and 65.3% worked more than 100 hours per week (MRCI, 2017: 6). Those numbers seem to be more realistic, at least for some parts and some individuals within the British fishing industry, as the next sections will show.

5.5.2.1 Working hours on the West Coast

The workers' representatives of the West Coast highlighted that long working hours has "*not been something that they've [the workers] complained about*" (IP14: 241), because *"the men know that the hours are difficult. It's part of life at Sea*" (IP18: 287). This has been confirmed by all workers I interviewed on the West Coast. Two English workers mentioned that they usually get enough rest while out at sea, as they only have to work about eight to nine hours per day, but that it could be up to twenty hours of work in special occasions (IP17: 4). However, it could be questioned to what extent resting hours at sea are in fact working hours (IP8: 73), as the workers cannot leave the vessel and could be away from their family for twenty days of the month (IP17: 4). IP21 is a Ghanaian worker who is away from his family for ten months at a time and was involved in a case of modern slavery where he had to work non-stop for more than two months (IP21: 49). He stated that he is now very happy on his new vessel, as he usually gets "*more than enough*" (IP21: 279) rest when working at sea – which in his case is about 12 hours of rest and 12 hours of work per day (IP21: 277). As almost all workers in his

port, he has the weekends off (IP 18: 289; IP21: 261) and works about 60 hours a week[12], except in summertime, when the catch is usually bigger for about 3 months: "*[…] in the season, you don't have enough rest. But it's okay, it's normal*" (IP21: 281). Most other vessels in that port are day-boats that leave the port at about 4 am (IP18: 212) and are back to land the catch at about 8 pm, leaving them with about 4 hours of rest and 12 hours of hard work while at sea, including tailing and sorting the catch (IP18: 291). IP19, another Ghanaian worker, confirms this procedure and states that he has no resting hours if there are a lot of fish, but usually has about two hours of rest within four hours cycles (IP19: 356-362). However, working hours on the West Coast can also be longer, as IP20, who was cited above, is a skipper from the West Coast whose crew sometimes has to work 24 hours per day from Sunday night to Friday (IP20: 25). These examples show, that working hours on the West Coast are not low even though no worker seems to be complaining about them. In contrary, working hours can be very long on the West Coast, especially when comparing to the legally determined maximum weekly working hours of 48 hours that apply to almost any job in the UK – except for fishing and a few others (GOV.UK, 2019b).

5.5.3 Working hours on the East Coast

The bigger vessels on the East Coast are usually out at sea for seven to ten days, meaning their crew has no resting hours in the night, as the crewmembers of the day-boats have (IP5: 20). Therefore, working hours are seen as a much bigger problem by the interview partners on the East Coast, than it is by those of the West Coast. Fishing is "*very, very long hours*" and hauls can last "*up to 23, 24 hours at times*" (IP8: 73), as a workers' representative of the East Coast states. This is confirmed by other workers' representatives and experts who stated that sometimes workers only have 2 hours of sleep per day (IP1: 39) and that working for up to 22 hours without a break is nothing unusual "*in the bad boats*" (IP3: 31). While such situations seemed to be the exception on the West Coast, IP8's colleague from another port on the East Coast confirmed her statement and mentioned that sometimes the crew works even longer, sometimes "*for about 48 hours without any break*" (IP12: 63). The six Filipino workers, who seemed very cautious in the content of their statements, criticized the long working hours when asked about it: "*That's a problem*" (IP9: 121). When at sea, they mentioned that 24 hours per day is work in case of a good catch, leaving them with no or only few sleep and that the working hours per week have "*no limit*" (IP9: 141). However, only seconds later they contradicted their initial statement and mentioned that not sleeping is no problem for them and the local crew works that many hours as well: "*No problem, that's part of the job. […] Same like the Scottish*" (IP9: 149-151). Due to the low abundance of stocks in particular seasons, some boats stay in the harbour for several weeks, resulting in low working hours for the workers (IP9: 301), as a Filipino worker jokingly said: "*That guy*

[12] This is an own estimation based on the statement that he works 5 days a week and that they have to work the catch for about 2 hours in every four hours, meaning they have about 12 hours of work per day.

(points on one of the workers), maybe 10 months and only 3 times go to sea" (IP9: 305). This section showed that manly the workers' representatives perceive the working hours on the East Coast to be a bigger problem than on the West Coast. When it comes to the workers themselves, they again play down the long working hours and state that they are part of their job. Some workers' representatives mentioned their hope that the new ILO188 regulations will improve the working hours of fishers (e.g. IP12: 63), as the next sections will display.

5.5.4 ILO regulations

The ILO188 convention stipulates the following minimum hours of rest to be provided for fishers on fishing vessels remaining at sea for more than three days: "*ten hours in any 24-hour period*" and "*77 hours in any seven-day period*" (ILO, 2007: Art. 14). Exceptions can be permitted by the competent authority under the condition that "*compensatory periods of rest as soon as practicable*" (ILO, 2007: Art. 14) are provided. With other words, any vessel remaining at sea for less than three days can legally make their employees work all the time during these three days, as there is no other legislation for fishers at sea in place (Green, 2017; IP13: 63). Although with the new ILO convention there is legislation in place for vessels remaining at sea for more than three days, still several problems remain. First of all, it is very difficult for the skippers to plan the operating times and resting hours of the crew. The skippers usually do not exactly know for how many days they are going to be at sea when they leave the harbour (IP5: 68) because they just don't know what catch they are going to make and "*what the day will bring*" (IP6: 57). Second, the skipper from the East Coast stated – under the belief that the new ILO convention stipulates seven and not ten or eleven hours of rest per day – that "*it's not realistic at this job*" to give the workers even only seven hours of rest per day (IP6: 37). Third, although ideas for possible solutions to make these numbers of minimum resting hours possible are available, they seem quite unrealistic for the British fishing industry, as long as the industry is not willing to change their way of fishing. The next sections will further elaborate on possible solutions to reduce working hours according to ILO188 and on how those solutions conflict with the current way of fishing.

5.5.4.1 Solution possibilities to reduce working hours according to ILO188

Possible solutions to provide the workers enough resting time include, amongst others, to use the steaming time for getting to the fishing ground and back (IP5: 68; IP6: 37; IP8: 73; IP23: 209), where the workers "*may be asleep 10, 20 hours*" (IP6: 37). It is at least questionable if it makes sense that the workers get their hours of rest at the beginning of a fishing trip when they usually just had a considerable time of rest, and at the end of a trip, when they are usually just about to have a considerable time of rest. Much more, it would be important for the workers to get rest between the steaming time when they are working at full speed for six or more days.

A further solution would be some sort of shift pattern where the vessels carry an extra crewmember, "*so someone's always having a rest*" (IP12: 61). The problems mostly start with not having enough crewmembers aboard, as a skipper states, who always sails with seven or eight crewmen, while some similar vessels only take along five: "*That's when you get the problems, small crews catching a lot of fish*" (IP6: 111). However, I doubt if this solution is going to find a lot of support, as the big majority of crewmembers is employed on a share basis and does not want to carry extra crewmembers because then the revenues of the catch would have to be shared with an additional fisher and "*everyone gets less*" (IP6: 111). Furthermore, some of the boats – especially older ones – do not have the capacity to accommodate another crewmember (IP12: 63).

IP23, an advisor who is involved in the implementation of the ILO188 in the UK, sees the above-mentioned rule of exceptional compensatory rest as a possible solution for the skippers and boat owners to comply with ILO188 (IP23: 209). In practice, this means that "*if you have a hard trip and nobody has got any rest, then maybe you have to stay in port a couple of days, you know and have some rest before you go out again*" (IP23: 209). Considering the statements of the other interview partners, it is questionable to what extent this compensatory regulation will remain an exception or whether it will become the norm with the current way of fishing.

Furthermore, many vessels do not want to stay in port for long, as they want to catch fish and make money as IP5 states: "*And what they do is, they come and land, quick turnaround, the boat's away again*" (IP5: 20). To still comply with the compensatory rule, vessels such as the one of IP6 have rotating crew, where seven employees work "*on the ship and two rotate at home*" (IP6: 15). While this procedure seems rational and considerate for the local crew, it is not for the migrant workers that are employed on the basis of a transit visa and, in practice, are not allowed to stay ashore (IP12: 59; IP13: 13): "*So the workers have rotation, but if they've got Filipino guys on there, these guys are on every trip until they go home. And that, that sometimes can, just fatigue. Because they don't have the same rest time*" (IP12: 59). While the working hours aboard the vessel usually are the same for everyone, no matter whether foreign or local crew (IP8: 59; IP12: 63), the resting hours for migrant workers between the trips can be very short, as "*some of the boats […] are working very hard and […] don't stay in port for long*" (IP12: 59). To give them some rest, some skippers "*put the foreign guys ashore […] for a trip, […] just to give the guys a res*t" (IP12: 59). As many think that this is against the law, the skippers usually send the workers in a guest house and "*kind of hide them away somewhere*" (IP12: 59). The compensatory regulation and associated need of rotating crew can, therefore, lead to even fewer resting hours for the non-EEA migrant workers on a transit visa and sometimes even to supposed violations against the transit visa, leaving the affected workers in the risk of losing their visa and

therefore their livelihood. It again seems questionable whether these effects make sense for the affected workers.

5.5.5 Additional problems

Further problems concerning working hours are mealtimes, safety, the dependence on individual skippers and monitoring working hours, as this section will show.

First, the skipper IP6 mentions the problem that it sometimes can be a long time between two meals, as the workers have to process the fish: "*There's time to make money and there's time to eat and […] you just have to get the right balance*" (IP6: 57). However, they always try "*snacking between*" and they "*are never more than four to six hours without getting a cup of tea or something to eat*" (IP6: 57). Still, according to IP6 (57), this can be worse on other boats, which brings us to the next problem: The dependence of the workers on the particular skipper or vessel owner. Several interview partners mentioned that the working hours depend on the fleet, crew and skipper (IP1: 39) and that especially the "*marginal guys*" and those "*that aren't particularly good fishermen*" (IP3: 31) provide their workers with extreme little resting hours. Also the skipper IP6 acknowledges differences between the fleets and draws attention to "*the big factor ships and places like that where they're, basically slave labour, they're working them all the time*" (IP6: 37).

Such exploitative situations are of great concern also in a health and safety perspective, as several interview partners mention that the performance of the workers and skippers drops after 12 hours, they get fatigued (IP3:31) and "*things can happen, things can go wrong*" (IP6: 39). That's why IP6 states that he sends his workers to bed for two, three hours if he sees "*someone's getting tired out*" (IP6: 39). However, not only are some workers taking amphetamines to stay awake according to one worker representative (IP24: 45), but the researcher IP13 also knows of a "*Ghanaian fisherman, that […] was killed due to extreme fatigue*" (IP13: 17). This statement resonates with a newspaper article according to which the death of a Ghanaian fisherman in 2015, who was catapulted overboard, was amongst others favoured by the "*crew suffering from tiredness and fatigue*" (Windle, 2016: n.p.). The investigation also "*revealed that the crew worked long hours without the minimum legal amount of rest or leave"* (Windle, 2016: n.p.), leading us to the next problem, the monitoring of working hours. To get the vessels to comply with ILO188, the authorities have stipulated that "*the crews have now got to fill out timesheets*" (IP11: 54). When asked, how these timesheets are going to be verified, IP23 stated that the authorities will have to rely "*on their honesty*" (IP23: 219). This answer shows that the monitoring of working hours is practically impossible on fishing vessels, as they are out at sea and one would have to install CCTV to control it (IP3: 3). IP24 also perceives this as a big issue: "*And I think it's a challenge for the industry in terms of monitoring hours and ensuring that people get adequate rest and safe working environment is provided*" (IP24: 47).

As this subchapter showed, working hours aboard British fishing vessels are a big issue across the whole industry. Although new ILO regulations have been ratified, they seem to be extremely difficult to implement and monitor, leaving the British fishing industry with a big problem. The vessel owners' perception of the need for efficient fishing while out at sea leads to exploitative circumstances, which are even worse for migrant workers that are not allowed to stay ashore and participate in the rotating procedure. However, despite the very long working hours of fishers, many actors trivialized this way of fishing and justified it by stating that this lies in the nature of fishing, is normal and part of the job. The skipper IP6 stated that it must be difficult to understand the fishing industry for people that are not involved in fishing: "*If you're not a fisherman, and you've no background of it and you come aboard, you think it's prehistoric I suppose. Because there's no other industry like it*" (IP6: 57). Contracts and wages are highly related to working hours and will be discussed in the next subchapter.

5.6 Employment relationships and remuneration

This chapter will focus on contracts and wages of workers on British fishing vessels. These two topics are covered in the same chapter, because the wages are highly interconnected with the type of employment. In the British fishing industry, there are generally two types of employment: Share fishing and contracted fishing. The remuneration between and within these two types of employment varies greatly, as does the origin of the workforce. While the UK nationals are usually employed as share fishers (IP6: 29; IP12: 51; IP13: 109; IP16: 15; IP18: 247), the migrant workers are usually employed under a contract basis with monthly payment (IP5: 4; IP8: 45; IP16: 15; Jones et al., 2019: 5). This subchapter will show the characteristics of both types of employment, including advantages, disadvantages and amounts of remuneration, before talking about overall problems of employment relationships and remuneration.

5.6.1 Share fishers

Within the system of sharing the value of the catch between the crewmembers, the fishers are self-employed and do not have a regular wage, but their wages depend on the catch of their vessel (IP3: 107; IP12: 51). As the share system is a long-standing tradition within the British fishing industry (IP24: 37; IP12: 51), most of the UK nationals work within such employment relationships as many respondents stated (IP6: 29; IP12: 51; IP13: 109; IP16: 15; IP18: 247). This is confirmed by Jones *et al.* (2019: 5) who state that 94.8% of sampled British crew are remunerated via a share agreement. Due to their visa regulations, non-EEA migrant workers are not allowed to work on a share basis and are obliged to have fixed wages in their contract, according to a workers' representative and an expert (IP3: 148; IP13: 150). However, especially on the West Coast, there are non-EEA migrant workers that were involved in supposed cases of modern slavery and therefore were granted with the "leave to remain" status for the duration of the investigation (IP21: 183). This status allows them to live ashore

and to work as self-employed share fishermen and explains why 2.7% of non-EEA fishers are remunerated through a share system (Jones et al., 2019: 5). Furthermore, EEA migrant workers – mostly from Romania – are allowed to work as share fishers as well, which is taken advantage of by more than two-thirds, according to Jones et al. (2019: 5). The following sections will explain this system in more detail.

5.6.1.1 Wages for share fishers

Within the share system, the sales amount of the catch is shared between the crew members and the vessel owner, after deducting the expenses of running costs (IP5: 60; IP16: 15; Jones et al., 2019: 5). The running costs consist out of fuel for transport, food for the crew, ice for boxing the fish, hiring of the fish quota, freshwater, harbour fee, crew travel, shore labour, bait and a fee for the fish auctioning (which is 3% in the case of IP6s vessel) (IP6: 29; IP16: 13; Jones et al., 2019: 5; Marine Scotland Science, 2016: 30). These expenses have been estimated by a representative of a producers organization and former skipper at about a third of the sales value of the catch (IP5: 60). This estimation is supported by a survey of Marine Scotland Science (2016: 30). The remaining two-thirds of the catch value is split between the crew members and the vessel owners, whereby both sides are estimated to get half of this remaining amount (IP6: 29; IP16: 13; Marine Scotland Science, 2016: 30). The vessel owners reinvest some of the revenues into the vessel, as a representative of a fishing agency states, who is responsible for the accounting of several fishing vessels on the West Coast: *"[…] the owners account is used for say repairs, buying gear, nets, that kind of things*" (IP16: 13). Marine Scotland Science (2016: 30) state that 75% of the vessel owners' share is used for legal fees, hire and maintenance, repairs, gear and insurance, while 25% is operating profit. The remaining amount, about a third of the total sales value, is shared between the crewmembers (IP5: 60; Marine Scotland Science, 2016: 30), whereby the skipper usually gets 50% more than the crewmembers (P14: 216; P15: 9). Not only the position but also other factors determine the share of each individual fisher, such as length of service or responsibilities (Jones et al., 2019: 5).

While in prior days 30'000 pounds in sales value a week were realistic, today "*some of these boats are making a hundred thousand for a trip*" (IP5: 60). Using this number, combined with the above-mentioned vessel costs, a share fisher on the vessel of IP6 would earn £5'661 for a single trip of about 7 to 10 days [13]. Although this calculation is only based on assumptions, it shows that share fishers on the vessel of IP6 receive significantly higher remuneration than Filipino workers, who earn $1'450 per month on the same vessel (IP9: 49). This is also confirmed by those Filipino workers who state that the

[13] This example is calculated for the vessel of IP6, who usually sails with 7 crewmembers, wherefrom 2 are Filipinos working for about £1'100 a month (IP6: 15, IP9: 49).
£100'000 (revenue of the catch) - £33'334 (expenses) - £33'333 (vessel owner) - £2'200 (Filipino workers) = £31'133 (crew share); £31'133 / 5.5 (7 crewmembers – 2 Filipino + 0.5 share for skipper) = £5'661 (share)

Scottish workers sometimes earn £2'000 to £3'000 a week and therefore have to work "*only one week*" (IP9: 137-139) to earn what they get for one month of work. IP5 confirms that the share fishers on the East Coast are very happy with their wages: "*So they're making good money. There's nobody complaining*" (IP5: 60). However, the situation is again different on the west coast, where the wages are massively lower. While IP21 mentioned that he earns about £2'000 per month (IP21: 219), sometimes more, his colleague from another vessel stated that his average monthly pay is between £1'200 and £1'500 (IP19: 354, 364). A skipper from the West Coast told me that they usually land fish worth about £10'000 a week, whereby every crewmember gets 15% after expenses, except himself who gets 22% as he is the skipper of the vessel (P15: 9). Provided that expenses are one-third of the sales value, every crewmember gets about £1'000 (£6'666*0.15) per week, the skipper £1'500 (£6'666*0.22). Within the sharing system, no wage gap between UK nationals and migrant workers could be identified, as a workers' representative from the West Coast (IP18: 259) and a Ghanaian worker from the same port confirmed (IP21: 295), who added that it would also be okay for him if there were a gap, as his remuneration is satisfactory for him: "*Even if it is not the same, it's okay, it's enough*" (IP21: 295).

Jones et al. (2019: 7) confirm the big differences in crew share remuneration between particular sectors. While the median remuneration for share fishers spans from £2'310 per month for deckhands to £4'000 for engineers, vast differences can be found between individual sectors. While a share fisher on a pot or trap vessel (<10m) earns an average of £1'375 per month, the median remuneration for share fishers on a demersal fishing vessel (<24m) is £5'600 per month (Jones et al., 2019: 11). This number confirms the Filipino fishers who stated that domestic workers on their demersal vessel earn more in a week than they do in a month (IP9: 137).

5.6.1.2 Problems for share fishers

According to Jones et al. (2019: 5), the crew share agreement is linked to the financial performance of the vessel and its crew and allows *"flexibility for crews to move if a vessel's skipper is underperforming*" (Jones et al., 2019: 5). This flexibility is confirmed by several interview partners who stated, that share fishers are self-employed and therefore do not have contracts as such (IP12: 51; IP18: 245). Also IP21, a Ghanaian fisher on the West Coast, confirms that he does not have a contract (IP21: 289). A skipper from the West Coast makes his employees sign a health and safety agreement that states "*the working practices on board and the maintenance schedule and things like that*" (IP20: 40), but his employees do not sign a contract that states the duration or the wage because "*the boys are all shared basis*" (IP20: 40). One of the main problems of share fishing is that the workers depend on the fairness and transparency of the skippers to give them a fair share of the catch, as a workers' representative mentions: *"[…] where you have a good skipper who takes the welfare of the crew seriously, then the*

share fishermen operation works well" (IP24: 37). IP18 sometimes observes a lack of transparency when the workers complain that they did not get a high wage, despite the big catch they landed (IP18: 251, 253). ILO188 tackles this problem by making the existence of a contract for every fisher obligatory (IP12: 51; IP18: 245; ILO, 2007: Art. 16), to ensure higher transparency of the method of calculation for the crewmembers' share (IP23: 242). A producers organization has already implemented this new regulation and made the share calculations "*all transparent*" as the statement of IP5 shows: *"[…] because of ILO coming on the go, we have active, now got a contract written up through a lawyer, which the skipper and the crewmen have to sign*" (IP5: 42).

A much bigger problem for share fishers seems to be the dependency on the catch, especially on the West Coast, where the catches decreased in the last couple of years (IP14: 18; IP16: 29). The workers have no guaranteed income and depend highly on catching a lot of fish (IP18: 33), as an industry representative states: *"[…] the share fishermen, if I went out there and the boat broke down, I don't get any pay. That's the difference right. […] If you don't catch anything, you don't get paid*" (IP5: 44). While breaking boats is a very rare problem (IP5: 46), small or no catches due to bad weather conditions – especially in the wintertime – are a bigger problem, as a workers' representative from the West Coast states:

> "*So in the summertime just now, it's pretty good. They can make what you probably wouldn't consider to be great money, but it's okay compared to the winter. In the winter, when the weather is bad, they can earn nothing. There can be times, there can be weeks after week after week when the boats cannot go to sea because of the poor weather. And they can have no money at all*" (IP18: 33).

For the fishers, this means they "*have to try to budget and save for the poor times*" (IP18: 33). But this seems to be a problem for many families because they never had to budget before, as IP14, another workers' representative from the West Coast states:

> "*The fishing here used to be big money. Now, it's not. And the fishermen have never had to budget. […] years ago they didn't need to worry about next month not having a wage. But as now they do. But they're not very good at you know, keeping track of... or even saving money, you know. What comes in goes straight back out, because that's what they've always done. So they're not very good at budgeting*" (IP14: 18).

Further voices indicate how unstable income leads to "*chaotic*" (IP3: 7) families, how debts and rent arrears are built up in the winter months (IP14: 18; IP18: 271) and how the fishers sometimes depend on external help: "*So very sadly sometimes our fishermen, we have to send them to food banks, in the wintertime. Which is terrible. […] never thought that would happen*" (IP18: 33). In cases of emergency,

Maritime Charities are there to financially step in and help the poor families out, as happened in the winter four years ago when "*for about three months there have been little or no fishing because of the weather*", leaving "*many many families […] having a hard time*" (IP18: 273). However, none of these statements was made by a representative from the East Coast. Generally, the level of shared wages on the East Coast seems to be higher than on the West Coast, as already mentioned above. IP5 states, that poverty is not a problem at all in his port, as the fishers "*are getting a lot of money, they're paying a lot of tax*" (IP5: 62). The financial uncertainty of share fishers is a concrete example of precarious forms of work in British fisheries and will be shortly discussed in chapter 6.

Further problems emerge from the share system when it comes to social benefits. Share fishers are self-employed so they are responsible for paying taxes and insurances, while the contracted workers do not have to deal with this (IP5: 50; IP 18: 325). According to IP18, most share fishers in her port do have a health insurance number that entitles them to free health care, but only a few pay their contributions, as also only a few pay their taxes (IP18: 325). However, she also stated, that in her career as representative of a local maritime charity, all the fishers that needed medical treatment were treated under the national health insurance and "*there has never been a question of payment to the health service*" (IP18: 315) and "*they are all given all the medical care that they require*" (18: 321). Still, as a contracted worker confirmed, he gets paid his fixed-wage also in case of sickness (IP9: 213), while a share fisher confirmed that he does not earn any money if he is not able to work and go to sea (IP21: 345). Furthermore, share fishers need to put up pension schemes for themselves, resulting in many retired fishers to struggle financially (IP8: 5). Therefore, share fishers generally seem to be responsible themselves to pay for important financial institutions, resulting in a lack of social benefits.

5.6.2 Contract workers

The term "contract workers" technically would apply for most fishers, as the new ILO regulations stipulate the share fishers to have a contract as well. However, there still seems to be a widespread understanding in the industry to only describe workers with fixed monthly payments as contract workers. During my stay in the UK, I have not encountered one single example of a UK national to work on the basis of a fixed monthly pay – an observation that is confirmed by Jones et al. (2019: 5), who state that only "*5.2% of sampled British crews were remunerated through contracts*" (Jones et al., 2019: 5). The emergence of contracted fixed wages is a relatively new phenomenon due to migrant workers entering the labour force: "*The contracts only have existed since we had migrant fishermen*" (IP8:67). Non-EEA migrant workers who are allowed to work on UK vessels based on a transit visa are obliged to have a contract for a particular vessel with a more or less fixed duration and a fixed monthly wage (IP3: 148; IP5: 4; IP13: 150), which is why the vast majority (97.3%) is employed on a contract basis (Jones et al., 2019: 5). Although EEA-workers would have the same rights as UK workers and therefore

would be allowed to work as self-employed share fishers, 32.8% still work on a fixed wage basis (Jones et al., 2019: 5), even though no contracts as such are involved (IP16: 23). Jones et al. (2019) recognize two different types of contracts: "*contracts direct with a vessel; and contracts through a recruitment (manning) agency*" (Jones et al., 2019: 5). The next sections will discuss this observation and explain the characteristics of contracts in the British fishing industry.

5.6.2.1 Wages of contract workers

As mentioned above, contracted workers can be distinguished roughly in non-EEA and EEA workers. The big difference is that non-EEA workers need a transit visa to be able to work in the UK as fishers. To get such a visa, the workers have to apply to a recruitment agency in their home country, who then either search for a vessel directly or via an agency in their destination country (IP11: 48). The remuneration for labour in such agency contracts is often paid to the agent, who then pays the individual employee after deducting an agency fee (Jones et al., 2019: 5). The wages depend on the particular home country of the fishers (ibid), as well as on the destination country, according to a representative of a producers organization. He is in regular exchange with a manning agency in Manila and stated that the Filipino fishers get more money in Scotland "*than they get anywhere else in the world*" (IP5: 95). He states that Taiwanese fishing vessels pay the Filipino workers only $250 a month with a three-year contract, while in Scotland, "*they get paid minimum $1'400*" (IP5: 95) with a maximum duration of twelve months. However, also the origin country of the international workers plays an important role, as IP11 explains. In Scotland, he says, Filipino workers earn more than their counterparts of Sri Lanka (IP11: 106, 108). According to him, the governmental body Philippine Overseas Employment Administration (POEA) was involved in determining the level of remuneration for their Filipino workers (IP11: 106). Adding to that, IP13 mentions the strong lobbying power of the Philippines in setting higher rates of pay for their workers in Scotland (IP13: 113). These statements resonate with Jones et al. (2019: 9), who highlight the important role of unions from labour supplying countries in negotiating higher rates of remuneration for employees of their respective countries.

When it comes to numbers, the following examples will show that a regular Filipino fisher in Scotland seems to earn $1'450 per month, and therefore a bit more than those originating from other countries. IP11 showed me a contract of a Filipino worker who earned $1'450 (=£1'088[14]) per month, wherefrom $300 were fixed overtime compensation and $150 a bonus for vacation leave (IP11: 56-58; HRAS, 2017: 22). The 6 Filipino workers I talked to in a group interview confirmed this number (IP9: 49), as well as Human Rights at Sea's study about working conditions on Northern Iris fishing vessels (HRAS, 2017: 22). According to IP11, Sri Lankans are paid £1'000 ($1'330) per month in the same port (IP11: 58). Two

[14] This calculation, as well as all future calculations in this thesis that involve conversions from GBP (£) to USD ($) or vice versa, are based on XE's exchange rate on 1 January 2020: 1 GBP = 1.33 USD (XE, 2020).

Ghanaian workers who were involved in supposed cases of modern slavery on the West Coast of Scotland mentioned a contracted wage of £650 (=$865; IP21: 25) and £900 (=$1'197; IP19: 203). However, not only the nationality but also different experience, skills and work tasks aboard a boat lead to different wages (IP5: 42; IP18: 261). The skipper IP6 and the vessel agent IP11 confirmed these statements, as they both mentioned that Filipino engineers are paid $1'800 (=£1'350) per month (IP6: 31; IP11:32), while the deckhands get only $1'450 per month. Also the duration of ten plus/minus two months is confirmed by the migrant workers from the East Coast (IP7: 7; IP9: 287) and representatives from the industry (IP5: 4; IP6: 93; IP11: 52), which means the workers are separated from their families for up to 1 year, compared to their Filipino colleagues working on Taiwanese fishing vessels who are "*away from home for three years*" (IP5: 95).

When it comes to the EEA workers, similar levels of remuneration were stated by the interview partners. A workers' representative from the west coast mentioned that the average wage for the mostly Romanian EEA workers is about £900-£1'400 ($1'197 - $1'862) per month (IP14: 162), while IP16, a fishing agent from the same port, mentioned an average wage of £1'200 ($1'596) per month (IP16: 25). According to him, some Romanian workers do not have a contract, as they have detached from their Romanian agencies to save the agent's fee and are now on vessel contracts: "*Some of them are on a, obviously fixed salary but there's no actual contract as such. Some of them come as freelance guys on their own*" (IP16: 23).

Jones et al. (2019: 7) come to similar conclusions. They have elaborated the median cost to vessels for deckhands (£1'201 for agency contracts; £1'250 for vessel contracts) and for engineers (£1'250 for agency contracts; £1'750 for vessel contracts). These numbers show that workers on a vessel contract earn slightly more than those on an agency contract. However, no matter what kind of contract the workers are on, the wages for contracted workers obviously are lower than those for share fishers, as illustrated in *Figure 17*. When considering that a portion of costs to the vessels with agency contracts consists of the manning agency's recruitment fees, the wage gap is even bigger than displayed in *Figure 17*[15].

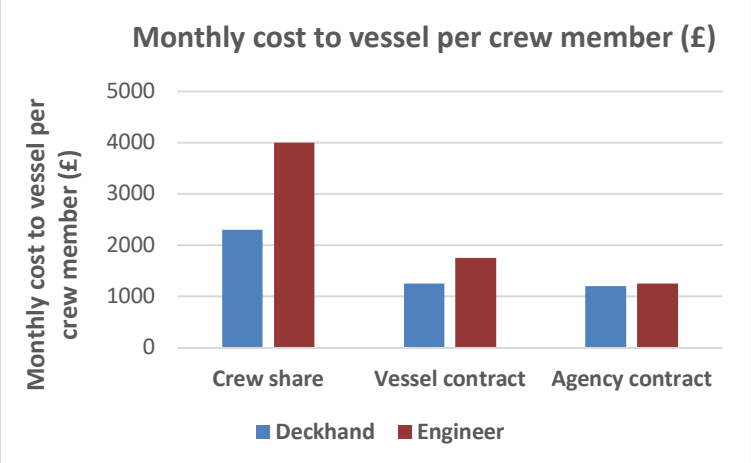

Figure 17: Median gross monthly cost to vessel per crew member on different remuneration arrangements (own illustration, based on Jones et al. (2019: 7))

[15] HRAS (2017: 22) state that a commission of $75 per Filipino worker and month is paid to the agent by the vessel owner.

5.6.2.2 Bonus for contract workers

Industry representatives, as well as workers' representatives, stated that some skippers do not only pay their crew the contracted wage (IP6: 31; IP11: 27; IP12: 69), but also "*a bonus depending on the catch*" (IP3: 27). IP11 mentions that some skippers save money every trip to hand it over to their contracted workers at the end of the contract duration: "*And when they go home, some of them are maybe going home with 1'000 pounds, 2'000 pounds of a bonus*" (IP11: 30). The skipper from the East Coast confirms this procedure as he handed his workers their bonus for the last fishing trip in my presence: "*But also we pay them bonuses which you've seen just now. We give them money every week. […] But not every ship has that. And they also get bonuses when they go home again, they're giving their family*" (IP6: 31). Also the 6 Filipino workers mentioned that some skippers hand out bonuses: "*Depends on the skipper. […] If good skipper, he gives extra money*" (IP9: 133). When asked if they have such "*good*" skippers that pay them extra money, they denied with laughter: "*Skipper is greedy, no money. They hold the money tight. Very tight. Always in the pocket*" (IP9: 135). Always included seems to be the accommodation and the food aboard the vessel for the whole duration of the contract and the working equipment such as oilskins, gloves and boots (IP: 5: 54; IP9: 233; IP11: 32; IP20: 44). Some skippers also provide their crew with extras such as cigarettes (IP14: 270), "*phone cards and stuff like that*" (IP11: 32) and some take their crewmembers out to enjoy themselves in the cinema or on the go-kart tracks (IP8: 45), or treat them food and drinks in a restaurant, as some migrant workers stated (IP9: 269).

5.6.2.3 Problems of contract workers

Several interview partners stated occasional problems with wages being not paid at all (IP8: 69; IP14: 200; IP18: 100), or with workers being paid less than they have agreed upon (IP12: 51; 14: 202; IP18: 100; IP24: 39). This problem occurs mostly with migrant workers who, once they arrive in Scotland, are presented a different contract than they agreed upon in their home country (IP31: 33). In the context of manning agencies, several further problems were mentioned when it comes to contracts and wages, such as agency fees (IP19: 75; IP11: 26), wages being paid to the agencies but not forwarded to the fishers account (IP3: 27; IP21: 103) and workers not knowing how much they were going to earn in Scotland until the arrival on the vessel (IP19: 124-133). However, as manning agencies play an important role in the social welfare of migrant workers, this matter will be discussed in more detail in chapter 5.7 and chapter 6.

5.6.3 Level of remuneration

The National Minimum Wage of the United Kingdom, which is set at £8.21 per hour (GOV.UK, 2019c), does whether apply for international fishers working outside UK territorial waters (IP5: 48-50; IP24: 41), nor for self-employed share fishers (GOV.UK, 2019d). With other words, the vast majority of

fishers working in the UK are not entitled to national minimum wage, a fact that is criticized by several interview partners (IP5: 48-50; IP12: 69; IP14: 184; IP23: 247; IP24: 43). Also the new ILO regulations do not entitle the employees to a certain minimum wage, as the only intention of the lawmaker was to ensure that both parties agree on a certain level of remuneration through a contract. The advisor IP23 states: "*No there isn't [a minimum wage]. […], it's about both parties being in agreement*" (IP23: 237). It is difficult to estimate to what extent fishers in the UK receive remuneration on the level of the National Minimum Wage, as their working hours are not transparent and the National Minimum Wage is expressed in hourly wage. Furthermore, some fishers are provided accommodation and nutrition on the vessel and sometimes additional benefits, making it difficult to calculate their real pay. However, a worker with a 40 hours work week would be entitled to remunerations of about £1'400 per month under the national minimum wage (£8.21*40*(52/12)), an amount that is higher than the wages of most contract workers in British fisheries. For instance, a Filipino fisher earns £1'088 ($1'450) for a contractually agreed 48 hours of work per week (HRAS, 2017: 23). This amounts to approximately £5.23 per hour (£1'088 / (52/12*48))[16], which is significantly lower than the National Minimum Wage. This is even more concerning when considering that overtime is included in the monthly salary and therefore any additional hours worked further reduce the hourly rate (HRAS, 2017: 23).

These findings are confirmed by news articles that state that many fishers on a transit visa are being paid a fraction of the UK National minimum wage (Lawrence and Mcsweeney, 2018), with examples of workers earning as little as £3 per hour (Moulds, 2017). The fact that international fishers are not entitled to National Minimum Wage is even more questionable since they are obligated to pay taxes since recently. This is not only criticized by some interview partners (IP5: 50), but also by Jones et al., (2019) who argue that if international fishers are classified for taxation, "*they should equally qualify for […] minimal wage standards and potentially the living wage*" (Jones et al., 2019: 10).

However, according to the interview partners, the migrant contract workers seem to be content with the level of remuneration they get (e.g. IP8: 45). 6 Filipino workers, who work on a fixed wage basis, confirmed this by stating that it is a "*big salary*" and "*good money*", especially in contrast to the "*small salary*" in their home country (IP9: 41, 43). Still, it is striking that those non-EEA migrant workers, that were given the opportunity to be employed as share fishers, are now employed as such (IP18: 230). IP14 stated that two EEA migrant workers wanted to change from a fixed wage to a share basis, as they hoped to get away better with it (IP14: 166). Two representatives from the West Coast stated that the pay gap between contracted and share fishers decreased in recent years due to decreased catches

[16] The hourly wage for a Filipino worker calculated in this study (£5.23) differs from the one calculated in the study of Human Rights at Sea (£6.10) due to changes in exchange rates. HRAS utilized an exchange rate of USD 1.23 to GBP 1, while this thesis utilizes the current exchange rate of USD 1.33 to GBP 1 (HRAS, 2017: 23).

(IP14: 190; IP16: 31), and others mentioned that being a share fisher can be a gamble due to the dependence on the catch (IP5: 60; IP16: 31). However, especially experts and workers' representatives mentioned the obvious wage gap between share fishers and contracted fishers and therefore primarily between UK workers and migrant workers (IP12: 57; IP13: 85). These voices are supported by Jones et al. (2019: 7) who elaborated a significant wage gap between share fishers (average of £2'301/month for a deckhand) and contract fishers (average of £1'250/month for a deckhand) and therefore between domestic and international workers.

The last subchapters have displayed a significant wage gap between share fishers and contract workers on one side and between domestic and international fishers on the other. The next subchapter will elaborate on the reasons for those remuneration differentials.

5.6.4 Justification for remuneration differentials

IP13 weighs ethical versus economic arguments against each other and questions to what extent it is justifiable to pay certain groups of workers – in this case particularly non-EEA migrant workers on a transit visa – a fraction of what other workers earn for the same work (IP13: 85). As money seems to be the main factor for international fishers to go work in the UK (IP3: 27; IP9: 41; IP14: 290), I want to take up this discussion and analyse the justifications for the remuneration differentials in the British fishing industry. Thereby, this analysis will be oriented to the work of Jones et al. (2019), who discussed this matter for Scottish fishing vessels in their work '*Pay Gaps Between Domestic and International Fishers: an Economic or Ethical issue?'.* Therefore, the next sections will compare the most important arguments for and against remuneration differentials on British fishing vessels according to Jones et al. (2019) to the answers of the respondents of this thesis, in order to analyse the reasons for the remuneration differentials in the British fishing industry.

5.6.4.1 Arguments to maintain remuneration differentials

Jones et al. (2019) mentioned four arguments to maintain remuneration differentials on Scottish fishing vessels that could be brought forward: "*relative differences in the cost of living; economic risk sharing; labour abundance; and productivity*" (Jones et al., 2019: 6).

The first argument states that the living costs of non-EEA migrant workers are usually lower than those of domestic workers, as they are not allowed to live in the UK and therefore their families still reside in their home countries (Jones et al., 2019: 6). This argument also popped up in an interview with a representative of a producers organization: "*It's all relative, right. […] A thousand pounds is an awful lot of money when you can build a house there for 12,000 pounds. So it's a lot of money in their hometown*" (IP5: 50).

The second argument takes into account that "*profit sharing or crew share workers are exposed to greater economic risks than contract workers*" (Jones et al., 2019: 7), an argument that was brought up multiple times during the interviews (IP5: 44; IP14: 18; IP16: 29; IP18: 33). Jones et al. (2019) conclude that "*the potential economic risks of low catches and therefore low wages are minimal compared to the actual daily risk of operations, especially given the fact that vessels are unlikely to operate for long if fish cannot be found*" (Jones et al., 2019: 8). Additionally, I argue that even if the potential economic risks were high enough to justify remuneration differentials, it does so only for the difference between share fishers and contract workers, while it most certainly does not for different nationalities of the employees. This argument therefore misses the point that non-EEA fishers are only allowed to work as contract workers and are not permitted to the share system.

A third argument that was brought forward in the interviews is the fact that industry representatives justify the significantly lower wages for migrant workers to themselves by saying that "*these people are happy to be here*" and that "*they're earning a lot more than they ever did at home*" as the researcher IP13 (85) states. Indeed, this argument popped up in the discussion with a representative of a fishing agency, who argues that many international fishers come back every year to work on Scottish fishing vessels and therefore certainly are happy with the conditions: "*[…] a lot of these guys, they've been coming to these boats for five, six, seven, ten years some of them. So, you know they wouldn't keep coming back if it was a bad experience*" (IP11: 28). Jones et al. (2019: 8) explain the willingness of international fishers to sign contracts paying less than the UK minimum wage and especially less than others on the same vessel by the significantly lower wage levels in their home country. Lower wage levels are explained by the tendency of lower remuneration in nations where the labour force is more abundant, compared to those nations where the labour force is scarce (Jones et al., 2019: 8). In the case of Scottish fisheries and its labour supplying countries, this theory is confirmed by the significantly higher national minimum wage in the UK than in its labour supplying countries. While national minimum wage was at $1'595 in the UK in 2013, it was at $72 in Ghana, $286 in the Philippines and $240 in Romania (ILOSTAT, 2020). The respondents confirmed this picture by stating almost no jobs were available in their home countries and that the salary there was massively lower than in the UK (IP9: 35, 43; IP19: 53; IP21: 233).

The fourth argument assumes that share fishers work more productive than contract workers as their wage depends on their productivity while the contract workers earn the same, no matter how hard they work (Jones et al., 2019: 8). This argument was not only absent in the interviews, but I perceived a very positive and grateful attitude towards the migrant contract workers. HRAS states that the vessel owners "*value the contribution the Filipino workers make to the success of their businesses and highlight their work ethic in relation to other workers in the industry as a major advantage*" (HRAS,

2017: 28). The outstanding work ethic of foreign workers is also highlighted by Marine Scotland Science in their survey about employment in Scottish fisheries that questioned various skippers: "*Many respondents also commented on the high quality seamenship and good work ethic associated with foreign crews*" (Marine Scotland Science, 2014: 40).

5.6.4.2 Removing remuneration differentials

Jones et al. (2019: 9) also bring forward five arguments for removing remuneration differentials on Scottish fishing vessels: "*These are (1) international fishers' dissatisfaction at wage differentials; (2) the role and practices of international employment agencies; (3) public pressure to reduce differentials; (4) advocacy of living wage policies; and (5) national versus global justice*" (Jones et al., 2019: 9).

First, it is argued that wage differentials can cause significant dissatisfaction and affect the "*material and psychological well-being of crews and may heighten the risks of further exploitation, discrimination and marginalization due to uneven relationships of power on board"* (Jones et al., 2019: 9). Although most international fishers I interviewed were happy with their wage (e.g. IP8: 45; IP9: 41, 43) and did not mind earning less than domestic workers (IP21: 295), some voices emphasized in a rather unhappy tone, that domestic fishers only have to work one week to earn what they earn in a month's work (IP9: 137-139).

The second argument emphasizes that recruitment manning agencies tend to value labour based on the wages that employees are willing to work for, reflected by the supply country's unemployment rate. However, agencies could or even should value labour based on the wages that employers are willing to pay, which is reflected by the demand country's unemployment rate (Jones et al., 2019: 9). This statement seems to be quite accurate, given the fact that all the International fishers I talked to were willing to work for lower wages than their domestic counterparts (e.g. IP21: 295). However, I argue that Scottish employers would most likely be willing to pay higher wages to international fishers if they had to, given the fact that labour demand is very high (e.g. IP5: 312; IP6: 33; IP24: 17) and some International fishers already work as share fishers and thereby get paid the same wage as their domestic counterparts (IP21: 291-295).

In a third argument, Jones et al. (2019: 9) argue that public pressure on decent working conditions and respecting human rights in fisheries increased rapidly in recent years, especially due to publicly highlighted cases of abuse and forced labour on Thai fishing vessels. Raised consumer awareness through negative media exposure could be an incentive for fishing companies to reduce remuneration differentials "*in order to ensure they comply with exploitation legislation and thereby avoid losing the respect and trust of their customers*" (Jones *et al.*, 2019: 10). With "*exploitation legislation*" Jones et al. (2019: 9) amongst others refer to recently implemented regulations such as the Modern Slavery Act

(2015) that obliges major organizations to ensure that no labour abuses occur in their supply chains through recently implemented regulations (see chapter 4.5.2.3). Many industry representatives confirmed this fear of bad press in the interviews and emphasized their intentions to follow best practice (IP2: 109; IP4: 3; IP5: 32; IP22: 4, 13-23). However, as long as employers are legally allowed to pay International fishers less than national minimum wage and as long migrant workers are willing to work for significantly lower wages, I doubt that these pay differentials will be scandalized through public pressure.

The next argument follows the Scottish Government's employment policy which entails a shift from National Minimum Wage to the National Living Wage[17]. Jones et al. (2019: 10) argue that the living wage approach is appropriate to tackle issues of poverty and inequality and refer to a study that suggests to living wage-related benefits for employees and employers "*through increased productivity, reduced absenteeism and improved staff morale*" (Jones et al., 2019: 10). I will not deny, that reduced remuneration differentials could enhance these benefits, still, I don't think that the living wage approach is an appropriate argument to remove remuneration differentials. On the contrary, in my opinion, the living wage approach could be seen as an argument to maintain remuneration differentials. The living wage is defined as the remuneration a worker needs "*to afford a decent standard of living for the worker and her or his family*" (Global Living Wage Coalition, 2020). Therefore, the living wage argument actually promotes maintaining remuneration differentials, as the living costs in the home country of non-EEA workers and their families often are significantly lower than in the UK (see the first argument in chapter 5.6.4.1). However, in this argument, global inequalities in general have not been considered. The fact that migrant workers are forced to work abroad and leave their homes and their families should be taken into account when talking about lower living costs in labour supplying countries.

The last argument emphasizes the view that "*domestic principles of fairness and equality should be promoted and supported not just nationally but across transnational boundaries to promote more universal standards*" (Jones et al., 2019: 10). Especially in cases where people are living and working across borders – as in this case – domestic principles of fairness should invoke transnational regulations, according to (Jones et al., 2019: 10). The authors argue that fair labour is not well defined and very challenging to audit on a global scale, which is why Scotland "*should try to influence international frameworks for fair labour with the labour standards that it affords to Scottish citizens*" (Jones et al., 2019: 10) instead of adopting the standards of the particular labour supplying countries.

[17] The distinction between National Minimum Wage (£7.70 per hour for workers aged 21 to 24) and National Living Wage (£8.21 per hour for workers aged 25 and over) is based solely on the age of the worker. National Living Wage is paid to any worker that is over 25 years old (GOV.UK, 2019c).

However, instead of protecting migrant workers with regulations about pay – such as a minimum wage – I argue that the UK regulations marginalize non-EEA migrant workers by forbidding them to work as share fishers, resulting in significantly lower wages than their domestic counterparts.

5.6.4.3 Concluding thoughts on remuneration differentials

Jones et al. (2019) conclude that "*the criterion of equal share, which entitles international fishers to equal pay is the most just outcome*" (Jones et al., 2019: 10). Amongst others, they argue that international fishers' contribution to Scottish economies and societies should be remunerated in ways that reflect the norms and values of those economies and societies. Especially as unequal pay can result in dissatisfaction and decreased well-being among fishers and therefore in associated risks of marginalization and discrimination. Furthermore, they criticize the lack of transparency in the activities of recruitment agencies that reduce the value of labour in Scotland to a level comparable to the value of labour in the particular labour supplying countries (Jones et al., 2019: 10, 11).

This analysis helped to understand why employers pay international fishers lower wages than domestic workers. The simple answer to this question is because they profit from lower remuneration costs and because they are able to do so, as the researcher IP13 states: "*They just, they can get them cheaper. They're happy to work for cheaper. So they come up with a deal*" (IP13: 29). Therefore, the interesting question is: Why is it possible for vessel owners to employ international fishers for significantly lower pay than domestic workers, even if they do the same work on the same vessel?

Chapter 5.6.4 answered this question to a certain extent. Due to the low labour demand in countries with high unemployment rates and low remuneration levels, many international fishers are willing to work in the UK for significantly lower pay than domestic workers. Furthermore, agencies promote the level of remuneration that workers are willing to work for, instead of promoting remuneration that employers are willing to pay for. In addition, national legislation fails to protect international fishers from low pay by excluding them from national labour regulation due to their visa status, as chapter 4.5 has shown. However, I argue that – above all – there is a pay gap between share and contract fishers and not between domestic and international fishers. This is confirmed by several interview partners who state that international share fishers are paid the same wages in Scotland as their domestic counterparts (e.g. IP18: 259; IP21: 295). The fact that the pay gap between share and contract fishers is projected on nationalities is attributable to existing regulations that promote the pay gaps between domestic and international fishers by forbidding non-EEA fishers to be employed as share fishers (IP3: 148; IP13: 150). This analysis is confirmed by several statements in the interviews that mentioned the negative impacts of transit visa regulations on migrant workers (e.g. IP3: 95; IP24: 17). I argue that the low wages are not the only factor for employers to employ migrant workers since the demand for labour on British fishing vessels is higher than the supply (e.g. IP5: 312; IP6: 33; Marine Scotland

Science, 2014: 33). This argument is supported by the fact that over two-thirds of EEA workers and some non-EEA workers are employed as share fishers (Jones et al., 2019: 5) and therefore earn the same as their domestic counterparts. Furthermore, the fact that the vast majority of International fishers come from the Philippines (Marine Scotland Science, 2016: 4), although they seem to be the ones with the highest wages amongst non-EEA fishers (IP11: 106-108), shows that employers are willing to pay more than the absolute minimum, as long as they are supplied with satisfactory labour. However, whether the current market situation nor the existing regulations force them to do so.

Jones et al. (2019) conclude that " *'equal share' – equal pay for equal work – is the most just criterion for international fishers' pay and one that employers and governing institutions should in principle adhere to*" (Jones et al., 2019: 2). In contrast to Jones et al. (2019), I will not make a convincing statement for the complete removal of remuneration differentials, as I understand that International fishers have much lower living costs and are willed to work for lower pay. However, I certainly agree with the last part of the citation, as my analysis just showed that particularly governing institutions in the UK are the ones that prevent equal pay on British fishing vessels by forbidding non-EEA migrant workers to be employed as share fishers. I strongly argue that international fishers should at least be entitled to the same working rights as all other employees who contribute to the same economy and society. This means that international fishers should at least be protected by frameworks regulating their remuneration, including a minimum wage, and not be marginalized by regulatory frameworks.

5.7 Human rights abuses

Many newspapers articles, reports from NGOs and published scientific work highlighted severe human rights abuses – such as modern slavery, exploitation, forced labour or human trafficking – aboard fishing vessels (e.g. Urbina, 2015; Chantavanich, Laodumrongchai and Stringer, 2016; Murphy, 2018). While these reports mostly focused on the extreme working conditions on Thai fishing vessels, the British fishing industry has not been immune to reports of human rights abuses aboard their fishing vessels (e.g. Shebbeare, 2015; Blackstock, 2017). One of the most mentioned human rights abuses in these articles is modern slavery. Although there is no single definition of modern slavery, Mende (2019) reviewed the existing work on this matter so far and concluded that the common image of modern slavery amongst policies, activist approaches and academic literature contains three denominators: "*These denominators are, first, the control of a person over another, second, an involuntary aspect in their relation, and third, the element of exploitation*" (Mende, 2019: 233). The human rights organization 'Anti-Slavery International' highlights six forms of modern slavery (Anti-Slavery International, 2019), wherefrom the following three have been related to the British fishing industry, as this chapter will show: Forced labour, debt bondage and human trafficking. The review of articles, reports and interview transcripts showed that the other three forms of modern slavery do not seem

to occur on British fishing vessels: Descent-based slavery (where people are born into slavery), child slavery and forced and/or early marriage. This chapter will take up on human rights abuses on British fishing vessels by analysing the interviewees' assessments and existing reports on this issue. First, the topic of human rights abuses on British fishing vessels in general will be introduced, followed by a detailed description of a case of supposed modern slavery which involved two interview partners (IP19 and IP21).

5.7.1 Regularity of human rights abuses

Only a few of the interview partners denied the occurrence of human rights abuses on British fishing vessels. Yet, statements about amounts of incidents and their severity varied between the different actor groups. This chapter will assess to what extent human rights abuses occur in the British fishing industry and how the statements of the interview partners differ. First, I will show how the majority of interview partners emphasized on the fact that human rights abuses are the rare exception in the British fishing industry, then I will elaborate on why the public perception differs from that "reality" before mentioning how especially workers' representatives still had a lot of information on abuses.

5.7.1.1 Exceptionality of Human Rights Abuses

As mentioned above, most actors agreed that human rights abuses on British fishing vessels are the rare exception. Especially industry representatives were stating that human rights abuses such as human trafficking, physical and verbal abuse or modern slavery are very exceptional and that most of the skippers and vessel companies treat their employees well (IP5: 114; IP6: 57). IP5, a representative of a producers organization, denied the occurrence of slavery in the industry and questioned the definition of slavery: "*I guess it depends definitions. Doesn't it? You know our definition of slave trading and everything. No, we're not seeing anything of that order*" (IP5: 114). Although he admitted that certain vessels maybe do not pay the crew "*for a period of time*" or perhaps do not feed the crewmembers "*the way they should*", he legitimizes it by labelling it as "*not normal and […] not widespread*" (IP5: 114) in the industry. The skipper and vessel owner IP6 (57) states that the British fishing industry does not have a general problem with human rights abuses, as only a few incidents are known. He follows IP5's argumentation about definitions of slavery by stating that some of the known incidents have to be questioned as some of the supposed victims have "*never been aboard a boat*" before and were not used to the life as fishers (IP6: 57).

Their statements about human rights abuses not being a general problem in the industry were supported by most of the other interview partners, including workers, their representatives and experts. For instance, the advisor IP1 stated that "*one or two cases where people have not been treated as well as they should have been*" (IP1: 69) occurred in the industry but he is not seeing the "*Thai-model*" (fishers being abused and exploited throughout the industry) being translated into the UK (IP1:

69). This was confirmed by the researcher IP13 who is "*sure there are individual cases, but they're very much the exception rather than the rule*" (IP13: 29). Also all workers' representatives represented this opinion and emphasized the exceptionality of such cases, which according to them, are attributable to one single company (company A)[18] on the West Coast (IP3: 81; IP8: 82; IP12: 93; IP18: 350; IP24: 73). IP3 sees a modest risk of modern slavery in fisheries compared to other industries (IP3: 81). In his argumentation, he is relating to a study (GLAA, 2018) which, according to IP3, concludes that fishing is not represented in the top ten, when it comes to risk of modern slavery at the workplace in the UK (IP3: 81). Also IP8 compares fishing to other industries by stating that exceptions occur in any industry, not just in fisheries (IP8: 82).

These statements of modern slavery and human rights abuses being the rare exception in the British fishing industry, rather than the norm, are confirmed by official statistics, as only 4 (HM Government, 2017) of the 3'804 (HM Government, 2018: 11) potential victims, who referred to the National Referral Mechanism (NRM), were allocated to marine capture fisheries in the year 2016. The above-mentioned study conducted by the Gangmasters and Labour Abuse Authority (GLAA) did not specifically assess the fishing industry and therefore did not list it amongst the top sectors when it comes to risk of modern slavery (GLAA, 2018). However, it mentions the maritime industry as a whole and the fishing industry in particular as an area of concern (GLAA, 2018: 28). This is confirmed by an article that lists fishing amongst the 17 sectors that are "*high-risk for mistreatment ranging from wages theft to slavery*" (Lawrence, 2018: n.p.). HRAS (2017) elaborated a major area of concern when it comes to widespread labour exploitation in the fishing industry, as "*obligations under the new National Living Wage are seemingly not being met*" (HRAS, 2017: 31). Otherwise, no Human Rights abuses were found in their study about migrant workers in Northern Irish fisheries.

5.7.1.2 Public perception

While most respondents emphasized that human rights abuses on British fishing vessels were highly exceptional, articles and statistics show that although several areas of concern exist, fishing is not amongst the riskiest industries when it comes to the potential of modern slavery. However, media coverage of the few cases of human rights abuses on British fishing vessels was quite strong, (e.g. Peachey, 2014; Shebbeare, 2015; Blackstock, 2017; Moulds, 2017; Lawrence and Mcsweeney, 2018; Williams, 2019). The media coverage and public perception of the British fish industry was a big topic amongst the interview partners. Especially representatives from maritime charities such as IP8 mentioned that these individual cases of human rights abuses were excessively represented in the media: "*I don't think there's a big issue. […] I think it's been a well reported issue and therefore people*

[18] The real name of the company is mentioned in the transcript of various respondents and will not be mentioned in this thesis due to data protection reasons.

perceive it to be a big issue. […] I think it's happened though with one particular, one specific boat company" (IP8: 82). Also the advisor IP1 criticizes the media for this overrepresentation and refuses to overvalue these articles with a sigh: "*I have said it to a lot of people and I said it to the government and I've said it to the National Crime Agency: Beware of the sensationalism*" (IP1: 69). The nationwide representative of a charitable organization IP3 warns caution as well, as he fears about the reputation of the industry due to the alleged cases of modern slavery that were reported in the media: *"[…] it's an ongoing police investigation and I think it's a massive threat to the reputation of the UK fishing industry*" (IP3: 41). However, overrepresented or not, human rights abuses aboard British fishing vessels do occur as the next sections will show, and therefore they will be discussed in more detail in this thesis. To get a hold of what human rights abuses mean on British fishing vessels, the next chapter will assess the experiences of a Ghanaian fisherman who was involved in a supposed case of modern slavery.

5.7.2 Cases of modern slavery in the British fishing industry

A lot has been written about modern slavery on British fishing vessels. This chapter summarizes the findings from my interviews and further information from reports and news articles about this matter. Generally, many actors emphasized that the cases of modern slavery that were reported in the media were attributable to one single company – company A from the West Coast (IP3: 39; IP18: 71, 206; IP24: 63). The first wave of supposed cases of modern slavery with company A came to light in 2012 (IP3: 41; IP18: 63; IP24: 57). This wave involved 42 fishers, of whom 26 stayed in Scotland to support the investigations (IP18: 69). After this first wave, several isolated cases occurred on vessels of company A, before the second wave of alleged modern slavery was discovered in 2017, with 15 involved potential victims (IP3: 41; IP18: 174). In total, about 60 fishers were involved in these cases of modern slavery, of which most were Ghanaians and Filipinos, as the nationwide representative of a charitable organization that supported the alleged victims states (IP3: 39-43).

This chapter will analyse the experiences of IP21, a Ghanaian fisher who was part of the first wave of supposed modern slavery on the vessels of company A. His experiences are compared to media articles, to statements of IP19, another Ghanaian worker who experienced almost the same conditions as IP21 three years later, and IP18, a workers' representative who was strongly involved in supporting the victims and the investigation of these cases. The goal of analysing this case study is to reveal the backgrounds of involved actors – both victims and perpetrators – and the structures that enable such processes. After emphasizing on the preparations in Ghana, the journey and the arrival in the UK, the working conditions will be assessed before stating why and how the police got involved in this matter and how the story ended.

5.7.2.1 Recruitment Manning Agency

IP21 is a young fisherman from Ghana. As he had difficulties to find a vessel to work on due to the low labour demand in his home country, IP21 approached an agent to go fishing in Scotland after learning that "*there are many boats here and they need crew to work with*" (IP21: 13). In addition to his flight ticket, which he was told was going to be repaid by the Scottish fishing company, he had to pay about £1'000 agency fee to the Ghanaian agent upfront (IP21: 15, 17). It was only after taking two loans in the bank – one to pay the agency fee, one to pay the flight ticket (IP21: 23) – when he was shown a written contract with the following content:

> "*The contract says I'm going to be paid £650 per month. To my choice of any bank. Yeah. And they are going to provide working clothes and all that. Which is good, so I accepted and then signed the contract. Which is supposed to be 12 months*" (IP21: 25).

After paying the fee, the agent told IP21 to be ready to fly to Scotland two days later (IP21: 25). However, the next day he received a call that ordered him to the airport immediately, leaving him no time to say goodbye to his family: "*I should leave my family unprepared. But no problem, I'm desperate for the job, I said ok no problem*" (IP21: 27). IP21 met with another Ghanaian and together, they began their journey to the UK (IP21: 27).

According to media articles (Shebbeare, 2015; Moulds, 2017; Lawrence and Mcsweeney, 2018) and some of my interlocutors (IP12: 75; IP18: 84; IP19: 105), there are several cases of international fishers who were forced to take out loans in order to pay agency fees. Stated sums of agency payments varied from £1'500 (IP19: 115), £2'500 (Moulds, 2017), up to "*thousands of pounds*" (IP18: 86).

5.7.2.2 Arrival in the UK

IP21 was told he was going to be picked up by company A from the airport London Heathrow, but when they arrived, no one was there, leaving them in great distress:

> "*We arrived there, nobody to pick us up. Unfortunately, we don't have phone on us to phone the company. But we have their number on the contract. So we beg one of the securities in the airport to phone the company for us, to come for us*" (IP21: 29).

After the call, Company A arranged a bus ticket for them, to get to the West Coast of Scotland. On the next morning, so merely 24 hours after arriving in London Heathrow, they arrived at their destination. As they did not have any money on them, they were not able to buy something to eat or drink for 24 hours: "*And we don't have any money on us, to even buy water or something. We were hungry, but no problem*" (IP21: 29). When arrived on the bus stop of the small Scottish town, there was no one to pick them up, and after begging someone to phone the company once more, they were finally picked up

and brought to the company office (IP21: 31). However, the stay in the company office was of short duration, as they were transferred to a port on the East Coast of Scotland shortly after (IP21: 33). Just after arrival, they were given working clothes and were told to help to discharge a vessel that was not mentioned in their contract: "*We were going to discharge that boat. Yeah. Which we are not supposed to, because that was not the boat, the vessel that we are going to work on*" (IP21: 33). After this first breach of the law – working on another vessel than mentioned in the transit visa is classified as human trafficking (IP3: 45) – they finally arrived on their designated vessel (IP21: 35).

IP19 (143, 149) experienced the same procedure when arriving in the UK, with waiting time at the airport of 12 hours. However, some even waited for three days at the airport, without any money and depending on airport employees to buy them food, as IP18 states:

> "*Now, we know that some of them were in Heathrow Airport with no money at all. They came with nothing. And they were there for two or three days before any contact was made with them by company A. And there was one particular Filipino who worked in Heathrow Airport who looked out for these men. Because he knew what happened. And he would give them sandwiches, he would get sandwiches, and they would go and get water to drink from the toilets*" (IP18: 90).

5.7.2.3 Working conditions

IP21 perceived the working conditions aboard this vessel as very poor. Although he was indeed equipped with working clothes, the oilskin was torn, meaning he was wet all the time, and he had two different sized working boots which were very difficult and uncomfortable to work with (IP21: 39, 45). While at sea, IP21 and his fellow crew members did not have time to eat something:

> "*No time for food. […] No it's very bad. Very terrible. If you can eat something, you have to sneak your way, go for bread. Take one or two slice of bread and then fast you come back for work. Working all day all night. Working all day all night*" (IP21: 45, 49).

The crew was not able to "*sleep more than 1.5 hours*" (IP21: 57) per day, with the rest of the day being hard work (IP21: 61). The vessel was fishing out at sea for seven days, but there was no resting time when they arrived in the port as they went back to sea just after discharging and preparing the vessel: "*After we finish [preparing the vessel, we went], back to sail. Back to sea*" (IP21: 55).

In a similar vein, several news articles reported the extremely long working hours, although the workers' contracts involved only 48 hours of work per week (Shebbeare, 2015). The reports involved statements that varied from 18 to 20 working hours per day and no resting days in between (Shebbeare, 2015; Lawrence and Mcsweeney, 2018), to unlimited working hours with almost no rest at all (Peachey, 2014). IP19 experienced unlimited working hours on British fishing vessels too (IP19:

219). As a worker for company A, he says, he had little or no time to eat (IP19: 213) and he was not allowed to leave the vessel when in the harbour (IP19: 272). And IP18 seconds that *"[…] they weren't fed properly, they weren't even given enough water to drink […]*" (IP18: 94). While IP19 and IP21 did not complain about their living conditions aboard the vessel, a citation of a worker in a media article shows miserable conditions: "*The accommodation was like a coffin. You cannot sleep because of the noise of the engine and the smell of diesel. When it rained, water dropped through on to my face while I was sleeping*" (Shebbeare, 2015).

In addition to the extreme working hours, IP21s remuneration was much lower than the contract stated: "*My first week, my first full week, seven days, my pay was £15, for the whole of the week*" (IP21: 85). With a 7-days working week and 22.5 hours of work per day, this sums up to remuneration of less than £0.1 per hour[19]. After the first week, IP21 was meant to sign a contract that would entitle him to cash remuneration of £50 per month (IP21: 91). He was told that the rest of the money would be sent to his Ghanaian agent, which left IP21 in great despair:

> *"They said, the rest of the money will be sent to my agent. Which I said no. No way. […] This is not right. I don't have any contract that says my pay should be sent to my agent. It's wrong. How, what if I don't meet the agent at home? What if the agent is dead, when I come back?*" (IP21: 93).

IP21 protested and achieved that his skipper talked to the boss of company A, but all his efforts were of no avail:

> "*Later on he [the skipper] told me he has spoken to him [the company boss]. And he said he refused to change that. He says, the boss said he has nothing to do with me. […] He's dealing with the agent*" (IP21: 93).

Up to this day, IP21 does not know whether the company has ever transferred his wages to the Ghanaian agency or not (IP21: 103), as he has never received his contracted remuneration (IP21: 201). Altogether, IP21 was remunerated a total of £115: "*The only money I received was that first week £15, first month £50, the second month was £50 again. So 115 altogether. For two months and 1 week*" (IP21: 107).

The contract of IP19, who worked for company A three years later, contained a monthly remuneration of £850 directly on his bank account and £50 in cash (IP19: 203). Except for the first two months – in which company A kept the money arguing that they would use it to pay IP19s flight back home – IP19 always received his wages (IP19: 181, 187). In IP18's experience, however, many employees of company A earned little to nothing for working unlimited hours (IP18: 94, 99). Media articles also state

[19] £15 / (7d*22.5h) = 0.095 £/h

how international fishers were paid around the same amount as IP21 (Peachey, 2014) or were not paid at all (Shebbeare, 2015), and those who were paid still earned less than half of UK minimum wage, sometimes only 3£ per hour (Moulds, 2017).

Not knowing whether the money will ever arrive on his bank account so he could pay back the loan in order to keep his family out of trouble was very stressful for IP21, resulting in strong homesickness:

> "*So it was very difficult. Very very difficult. Very terrible. I was, sometimes I was crying. I wanted to go back home. But I was also thinking about the loan I went in. It's going up. I have to pay the loan and pay the interests as well*" (IP21: 93).

Although he was not forced to stay on the vessel and would have been able to leave the UK anytime as he always had his passport on him (IP21: 99), in fact, he had no other option than recouping the money spent for the agency fee and the flight ticket, which by the way was never paid back by the company (IP21: 145): *"I could have left, yeah. But I have no choice. […] My family will be in trouble if I don't pay that money*" (IP21: 99, 101).

Also IP19 struggled with the uncertainty of his financial situation (IP19: 408). Sometimes he was feeling miserable and had to hide away to be able to cry, especially after racist insults and verbal abuses (IP19: 408, 426). But his debts, accumulated by the loan for the flight ticket, and the associated problems for his family, forced him to stay on the vessel and continue working (IP19: 408). While IP21 and IP19 (244) could keep their passports, some media articles stated how employees had to surrender their identity documents to the company and therefore were forced to stay in Scotland (Peachey, 2014; Moulds, 2017). Furthermore, IP18 and some articles did not only confirm verbal and racial abuse – an employer apparently told his Ghanaian worker repeatedly things like "*you are a black slave, work!*" (Lawrence and Mcsweeney, 2018: n.p.) – but also physical abuse such as beating (IP18: 94; Shebbeare, 2015).

5.7.3.4 Decision to leave

After a month on his contract vessel, IP21 was brought back to the office of company A where he stayed for three days, all the time cleaning and doing all sort of jobs while sleeping on the passenger seat in a van behind the building (IP21: 69, 77). Then he and a Lithuanian fisherman were brought to another scallop vessel in England, which again was against the contract, as was working and staying in the office (IP21: 77). The conditions on this vessel were not better at all, the skipper made them work all the time and when in port he told the workers that they are not allowed to go ashore, which of course is wrong as described in chapter 4.5.2.2:

"*The skipper only told us we should be careful, we don't have to go anywhere, because the police can arrest us. So because of that we […] don't go anywhere. Because he says when we go away, the police will arrest us*" (IP21: 131).

Therefore, they did not know about the existence of the local maritime charity that would have been able to help them (IP21: 129), showing the lack of information of international fishers. However, IP21 states that the skipper aboard this second vessel treated the crew well: "*The skipper was ok. […] He is doing his job, so he can't help us. He has no power to help us. Which I think is true. He can't do anything*" (IP21: 111). Still, the skipper made his crew work around the clock, which eventually was too much for IP21:

"*Working non-stop. Yeah. So it was too much for me. So I decide, I go home anyway, whatever happens. […] Because it was too much. I can't bear it anymore. I was thinking about my family […] what I'm going through was terrible. Was terrible*" (IP21: 109).

The fact that he was not able to contact his family for more than two months aggravated the situation even more and he decided to go home:

"*I don't even have phone to phone my family. […] I don't know what is going on, I don't know how they manage to eat. So it was too much […] It was unbearable. So I decided to go anyway*" (IP21: 139).

IP18 confirmed that employees had to do "*repairs and paint work*" (IP18: 137) at a work shed of company A and mentioned the terrible conditions with workers being unable to leave due to a security entrance: "*[…] they were kept there [in the shed] and it was a closed compound with a security entrance to it and they were not allowed to leave. So they were treated as slaves*" (IP18: 137). But also when working on the vessel, many workers were denied leaving the boat when in port (IP19: 272) and had to stay on their vessel all the time: *"They were prisoners on the boat, they were not allowed to leave the boat"* (IP18: 120). This lack of information is confirmed by Moulds (2017) who cites an expert that emphasizes the uncertainty of international fishers regarding their legal status and mentions a culture of fear to come forward and seek for help. Furthermore, the allegation of human trafficking for workers being deployed on different vessels than their contract stated is confirmed by IP18 (94), IP19 (175) and a news article that mentions official statistics stating a number of 24 maritime workers being potential victims of trafficking in 2013 (Peachey, 2014).

5.7.3.5 Police investigation

The end of the employment relationship between IP21 and company A was as resinous as the beginning. First, IP21 had to work another week to pay for the flight ticket home, then the company

boss did not want to organize a transfer to the airport which eventually resulted in IP21 going to the police in his despair:

"*Not even a penny he gave me. I asked him and […] he didn't even mind me at all. He just gave me the ticket, that's it, I should go. So I was, I was confused, don't know what to do. So the only thing that came to my mind, was to try and see if the police can help me get some money from him*" (IP21: 161).

The police recognized IP21's difficult situation, reported him to the National Referral Mechanism and started investigating his and several other potential victims' cases. During this time, IP21 "*desperately wanted to go home*", as his family had to borrow money to get food, he also knew that he would not be able to pay back his debt with the little money he could earn in Ghana (IP21: 169). So the police were able to calm him down and convinced him to stay in the UK to assist the investigations against company A (IP21: 179). IP21 stayed in the NRM for 40 days, where he was paid money for food every week and even "*managed to save some of that money to send to them [the family in Ghana] for food*" (IP21: 181).

While IP21 had to stay in NRM only for 40 days, other statements involve workers waiting for a decision for six (Lawrence and Mcsweeney, 2018) to nine (IP18: 45) months. This is problematic insofar as, during that time, the protected fishers are not allowed to work and therefore are barely able to send money home to their families who are often in great debts because of the loans (IP18: 47).

5.7.3.6 Aftermath

IP21 was granted the Leave to Remain visa, that allows him to stay and work in the UK in order to further assist the authorities with the ongoing investigation (IP21: 183). IP21 states that he only stayed in the UK because IP18, promised to find a vessel with better conditions and a good skipper – which she did (IP21: 189). IP21 recognized that not all fishing companies are like company A and that life in Scotland can be very nice as well: "*Now I'm very happy now. Very happy now*" (IP21: 209). However, in December 2018 the visas of the workers involved in this first wave of modern slavery aboard vessels of company A have not been renewed as their assistance is no longer needed by the police (IP18: 152). Ever since, the workers are fighting in collaboration with IP18's organization and a lawyer in order to stay at least until the case has come to court and managed to extend the departure until the end of April 2019 (IP18: 152). At the moment, the application for another visa of these workers is pending, but the damage is already done, as every worker had to pay more than £2'250 for application fees and legal costs (IP18: 158). IP18 cannot understand why these victims who have waited and worked in Scotland for more than seven years, all of a sudden have to leave the country in a hurry and why this case still has not come to court: "*It's very […] dreadful. […] it's taken seven years and the case has not*

come to court. […] While the perpetrator is still continuing to do what he was doing. It's not good, really isn't good" (IP18: 204).

Indeed, the consequences for company A do not seem to be very harsh, as only four years after this first wave of supposed modern slavery, a second wave with the same company was detected and is now investigated by the authorities (IP18: 43). IP18 states how skippers, vessel owners and workers think that company A "*should not be allowed to get away with it*" and are "*angry about the way this reflects of the fishing industry in Scotland*" (IP18: 206). Some interview partners stated that they are sure that this company is still practising modern slavery on their vessels (IP18: 168; IP21: 357), which does not seem erroneous, given the example of IP19, who started working for company A almost three years after the police started investigating IP21s case and was treated almost the same way as IP21. It is even more surprising to see company A continuing to operate as usual, given the fact that this company has been fined several times before, due to serious vessel safety breaches (Urquhart, 2013). A media article from last July – two months after my interviews with the involved actors – confirms the fact that they are still operating and employing non-EEA crew members, as it reported a fatal accident of an Indonesian fisher on one of their vessels (Williams, 2019a). IP24 even doubts that the allegations against company A are ever brought to court, as he states in his interview (IP24: 57), which would result in the company continuing their practice as before.

Chapter 5.7 highlighted the backgrounds of cases that involve several forms of modern slavery such as human trafficking[20], debt bondage or bonded labour[21] and sometimes even forced labour[22]. Several interview partners and reports also confirmed the exceptional occurrence of human trafficking (IP3: 51; IP12: 75; IP13: 59; IP14: 200), debt bondage or bonded labour (IP13: 59; IP12: 84-91) and forced labour (Skrivankova, 2014: 14; Moulds, 2017) beyond the cases of company A. This case study furthermore explained the situation of international fishers who were and perhaps still are involved in supposed cases of modern slavery in the British fish industry in more detail. It has shown how unscrupulous recruitment manning agents demand high agency fees that cause the workers to take out loans driving their whole families into major debts. The impossibility to pay back these debts by pursuing work with relatively low wages in their home countries (compared to the UK), renders them

[20] Human trafficking is defined by Anti-Slavery International as follows: "*Human trafficking – invovles transporting, recruiting or harbouring people for the purpose of exploitation, using violence, threats or coercion.*" (Anti-Slavery International, 2019: n.p.).
[21] Debt bondage or bonded labour is defined by Anti-Slavery International as follows: "*Debt bondage or bonded labour – the world's most widespread form of slavery, when people borrow money they cannot repay and are required to work to pay off the debt, then losing control over the conditions of both their employment and the debt."* (Anti-Slavery International, 2019: n.p.).
[22] Forced Labour is defined by Anti-Slavery International as follows: "*Forced Labour – any work or services which people are forced to do against their will under the threat of some form of punishment*" (Anti-Slavery International, 2019: n.p.).

vulnerable to those employers in the UK who are willing to exploit these workers and let them work under terrible conditions. Although the number of the employers that are involved in modern slavery cases seems to be low, a startling number of workers had to suffer extremely low or no pay, unlimited working hours, physical and racial abuse, inadequate living conditions, inadequate working equipment and intimidation.

5.8 Change of working conditions

Many respondents have mentioned that working conditions have changed over time. As such changes could reveal what relevant processes affect working conditions, this chapter will shortly asses the developments of working conditions on British fishing vessels. Almost all interview partners who commented on this issue represented the opinion that the working conditions aboard British fishing vessels have generally improved (IP5: 235; IP6: 85; IP10: 65; IP14: 244; IP20: 60; IP24: 75), or at least "*haven't got worse*" (IP18: 372) over time. This improvement is mostly attributed to the efficiency of new boats, to the implementation of new regulations, to an increased awareness against bad practice, to increased safety and living conditions and new communications possibilities. However, problematic issues such as decreasing revenues and wages due to depleted fish stocks or the introduction of migrant workers into the labour force with related problems such as labour exploitation and inadequate living conditions have not been mentioned.

Many interview partners mentioned that new modern vessels have been integrated into the industry over time (IP3: 63; IP5: 235), which led to more efficient fishing with less manual labour and more automated processes, as skipper IP6 explains: "*The boats are far more economical, far more efficient. […] There's no manual, physical lifting or anything to do*" (IP6: 57). However, when he was young, the vessels did not have the machinery for processing the fish on the deck, meaning it was much more manual labour intensive than it is now: "*We had to basically physically lift everything up. Cut everything, lift everything down, lift everything once it was down. Hugely. Huge huge labour intensity*" (IP6: 57). IP10 confirms that modern vessels have the capacity to catch more fish with less human labour, making it more efficient and profitable (IP10: 71). Modern vessels also need less maintenance as for example their older wooden counterparts who are difficult to clean properly (IP6: 57; IP8: 65). However, as already seen in chapter 5.5 this efficiency does not seem to have affected the working hours of fishers, which are still very long.

Chapter 5 has shown that the modernity of vessels does impact not only the labour intensity but also living conditions and safety aboard fishing vessels. While several interview partners stated that the living conditions aboard newer vessels are massively more comfortable (IP3: 13-25; IP6: 79; IP12: 29-33) as they are bigger and therefore there is more space for everything, IP3 mentioned that demand for local fishers centres dropped massively due to the improved living conditions aboard British fishing

vessels (IP3: 5). Furthermore, new technologies such as mobile phones and internet increased the social welfare of fishers massively, as they can contact their families almost around the clock (IP1: 67), while older communication systems were much less flexible, as IP20 states:

> *"I can remember when I was only a young boy, we had VHF receivers in the house and dad would come on […] at a set time on a private channel. And he could talk to us, but we couldn't talk back to him*" (IP20: 60).

Some interview partners also stated that the current vessels and fishing practices are much safer than they used to be (IP8: 75) as the workers are more protected on newer vessels (IP5: 121) and new rescue and recovery aids are implemented on all vessels (IP6: 43), mostly driven by the requirement to follow newly implemented regulations.

Improved living conditions and safety, therefore, are not only promoted through the implementation of modern vessels but also through the implementation of new regulations that tackle those issues. Many interview partners thereby referred to the ILO188 that requires a certain standard of living conditions and safety measures on every new built or new modified vessel (IP3: 62; IP12: 109; IP18: 372). Although IP18 mentioned that she perceived no impact of ILO188 on working conditions so far, she still thinks that it hopefully will improve living conditions (IP18: 372). IP3 mentions how the implementation of new regulation also led to a change of culture in the fishing industry:

> "*Work in fishing convention is already making a difference because people are starting to look very critically, you know. No freshwater, not going to sea. No toilet, not going to sea. And I think what will happen, is the worst of the operators will be forced out of business because they won't be able to, they won't be able to become compliant with international legislation. […] They won't be allowed to fish*" (IP3: 65).

While the shift to a more safety affine culture was already discussed in chapter 5.4, some interview partners also see a shift to a more caring environment with actors not just minding their own business anymore. IP3, for instance, thinks that the published cases of modern slavery and associated reactions of charities and institutions which are "*raising the profile [and] telling people things they didn't want to hear*" (IP3: 67) led to a change of culture in the British fishing industry. This is confirmed by IP24:

> "*I think they're moving in the right direction. Because I think that the industry – perhaps because of what's happened in company A [the company who is accused of modern slavery], because there has been more scrutiny on the industry – recognizes they need to put its house in order, to use that expression*" (IP24: 75).

This chapter showed how the integration of modern vessels into the fishing fleet and the implementation of new regulations are perceived as the main factors for the improvement of working conditions aboard British fishing vessels. Especially highlighted were the improvements in living conditions and safety and a shift to a more safety-affine and caring culture triggered through new regulations and the publication of cases of modern slavery aboard British fishing vessels. The statement that current fishing practices and vessels are safer than they used to be is only partly confirmed by official statistics. While deaths and injuries to fishing vessel crews decreased from 2009 to 2013, they stagnated since (MAIB, 2019a: 89). Also the percentage of annually lost fishing vessels to registered fishing vessels in the UK seems to decrease since 2009 (ibid: 82), which generally indicates an improvement of safety aboard British fishing vessels. However, even when many aspects in the British fishing industry have changed for good, fishing is still the most dangerous occupation in the UK and several problems with living conditions, safety and health, working hours and remuneration were stated in chapter 5, indicating that there is still a lot to improve. Even though many interview partners stated that the modern vessels are far more efficient and less labour-intensive, working hours are still extremely long, indicating that maybe profitability but not working conditions have changed for the better. Furthermore, none of the interview partners mentioned the problems that evolved through the integration of international fishers into the labour force. While most of the interview partners perceived improvement of working conditions, none of them mentioned that the integration of international fishers enhanced new problems such as human trafficking, debt bondage or modern slavery, which thoroughly could be considered as worsening of working conditions in general.

6 Reasons for precarious work in the British fishing industry

Chapter 6 analyses the working conditions aboard British fishing vessels by embedding the thesis into the research field labour geography, with a particular focus on precarious work. In the field of labour geography, forms of undeclared work and employment relationships with temporary, part-time or sub-contracts, weak levels of union coverage, poor health and pension benefits and low wages are identified as precarious work (McDowell and Christopherson, 2009: 337). As chapter 5 has shown, most of the characteristics of precarious work apply to many workers in the British fishing industry. Simms (2011: 3), who uses the term precarious work for all workers that do not have open-ended, full-time contracts, elaborates five major categories of precarious work, wherefrom three seem to be paradigmatic in the British fishing industry: temporary contracts, temporary agency workers and self-employed workers. The findings in chapter 5 have shown that many workers are self-employed or in temporary employment relationships and experience the above-mentioned characteristics of precarious work in their everyday working life. Therefore, I argue that precarious employment relationships are paradigmatic in the British fishing industry. The following chapter aims at analysing the reasons for these precarious employment relationships.

Many fishers with various backgrounds experience precarious forms of work in the UK, including EEA and non-EEA nationals, as well as British fishers. Still, in this thesis I mainly focus on migrant workers, as precarious work is most urgent and most clearly visible with international fishers. In the debate about precarious work, special attention is given to the role of regulatory frameworks and labour market intermediaries in pushing migrant workers into precarity, and new forms of organization of the labour force to cope with the increased fragmentation of employees (Coe, 2012: 271). These aspects also seem to be crucial in the British fishing industry, as chapter 5 has shown. Therefore, the following sections will focus on the role of state regulations, labour market intermediaries and the organization of the labour force in creating precarious work.

6.1 The role of regulatory frameworks

Several authors have highlighted the role of the state in actively creating or passively allowing precarious work. Coe (2012), for instance, sees the labour market deregulation as a crucial driver for precarious work. But also May et al. (2007) highlight the British state's role in promoting precarious work in London, whereby the main drivers are seen in "*policies of labour market deregulation, welfare 'reform' and 'managed migration'*" (May et al., 2007: 152). Instead of protecting workers "*from the worst excesses of low-paid work*" (May et al., 2007: 152), they conclude that the absence, as well as the presence of particular regulatory frameworks, actively pushes workers into precarity. This conclusion from the Greater London Economy also applies to the example of the British fishing industry, as the following sections will show. I argue, that the transit visa framework is an active driver

of precarious work in the international labour force. Furthermore, the absence of adequate regulations for fishers in the UK, inappropriate enforcement of existing regulation, as well as the NRM for supposed victims of modern slavery, enable the occurrence of precarious work amongst the domestic and international labour force. While the implementation of ILO188 constitutes rays of hope to many involved actors, this analysis displays its limits, especially when it comes to working hours and remuneration. Within the next sections, the impacts of regulatory frameworks on precarious employment relationships in the UK will be analysed in more detail with particular focus on the transit visa, absence of regulations, ILO188 and enforcement regimes such as the NRM.

6.1.1 Transit visa

Chapter 5 has shown that many aspects of the transit visa regulation actively push migrant workers into indecent and precarious working conditions. Especially the fact that the transit visa obliges non-EEA workers to live on the vessel, enhances many problems. First, this ruling exposes some of the affected workers to extremely uncomfortable living conditions with constant noise, smell, sway (Shebbeare, 2015) and sometimes even a lack of basic minimum facilities such as toilets, showers and cooking facilities (IP3: 13-25; IP6: 79; IP12: 29-33). This renders many fishers dependent on infrastructure ashore, which is often not offered by the state or the fishing industry, but by charitable organizations (IP6: 79; IP8: 9; IP12: 118). While these fisher centres are positive in many ways, as they constitute a meeting point and a point of contact for fishers in need (e.g. IP7: 40; IP12: 111; IP19: 378), the dependence on onshore infrastructure gets extremely problematic for those workers whose vessel is situated in a port without a fishers centre or other onshore infrastructure (IP12: 22-24). Second, the fact that affected workers have to live on the vessel renders them invisible to the authorities and charitable organizations (IP24: 17). This problem is further increased by some skippers and vessel owners who tell their international employees that they are not allowed to leave the vessel at all (IP19: 272), so they are completely isolated from the life ashore. This situation "*makes them more vulnerable to abuse and exploitation*" (IP24: 17), as a workers' representative states. Third, living on the vessel constitutes additional safety risks for transit visa holders. Twenty-four fishers died while boarding or leaving a fishing vessel over the past two decades, as national statistics show (MAIB, 2019b: 36). As the workers live on the boat, they have to board and leave the vessel much more often than the domestic workers, leaving them at risk every single time, especially at night and while intoxicated (IP8: 94). Another safety risk constitutes the fact that many transit visa holders live on old vessels, meaning they are exposed to old and/or malfunctioning infrastructure that could trigger fires or carbon monoxide poisoning, as past accidents have shown (IP3: 33; IP13: 15). Fourth, some vessels operate with rotating crew, whereby for every fishing trip some crewmembers stay at home to get some rest in order to be well recovered for the next fishing trips (IP5: 20; IP6: 15). Workers on a transit visa, however, are not able to get these special resting times, as they are not allowed to stay ashore.

Therefore, they have to attend every fishing trip, resulting in extreme working hours and extremely little resting times (IP12: 59; IP13: 13).

Although almost all interview partners were sure that transit visa holders are not allowed to stay ashore, some irritation around this regulation occurs within the industry. Interview partners 3 (139) and 13 (15) mentioned that this ruling does not exist as such and is only promoted by industry representatives and skippers as they want their international fishers to stay on the vessel to guard it and keep it protected (IP3: 139). Statements from the industry body Seafish (Green, 2017), from a well-known immigration lawyer in the UK (Stevenson, 2018) and a research briefing for the British parliament (McGuinness and Pepin, 2018), also suggest that fishers on a transit visa generally are allowed to reside in the UK between fishing trips. However, there seems to be great uncertainty within the fishing industry, whether or not the transit visa regulation implies a prohibition to live ashore. The fact that this uncertainty, which has various negative implications for transit visa holders and actively marginalizes them, has not been clarified for years, shows a lack of labour organization to stand up for the fishers' rights – a topic that will be discussed later.

Besides the ruling of transit visa holders not being able to stay ashore, their obligation to have a fixed wage in their contract is a further aspect of the transit visa regulation in triggering precarious work. Chapter 5 has shown that contracted workers have significantly lower levels of remuneration than share fishers (Jones et al., 2019: 7). As transit visa holders are not allowed to work as share fishers (IP3: 148; IP13: 150), most non-EEA migrant fishers are exposed to low pay and earn significantly less than their domestic counterparts – although they do the same work on the same vessel (Jones et al., 2019: 1). The combination of low remuneration and long working hours leads to some international workers earning only a fraction of the National Minimum Wage (Moulds, 2017; Lawrence and Mcsweeney, 2018). I therefore argue that the transit visa is an active driver of precarious work, by pushing international fishers to live in inadequate conditions and render them invisible to authorities, by exposing them to higher safety risks, by forcing them to work longer hours due to the inability to reside ashore and by forcing them into a lower-paid remunerating scheme.

6.1.2 Absence of regulations

As some interview partners (e.g. IP13: 63) and a report from the fishing industry body Seafish (Green, 2017) confirmed, until recently, no other regulations than health and safety requirements and international legislation existed for the employment of fishers. The vast majority within the British fishing industry either works as self-employed share fishers or as contracted workers on a transit visa (Jones et al., 2019: 5). Both of these groups of workers are not entitled to certain labour rights protections such as National Minimum Wage, the protection from extreme working hours, or social benefits such as sick days and pension benefits (see also Simms, 2011: 20).

When it comes to share fishers, the theory of "false self-employment" seems to be of great relevance. False self-employment describes all self-employed persons who only have one client and often work under similar conditions as employees (Thörnquist, 2015: 411). This seems to be the case in the British fishing industry as share fishers usually are normal employees who work for one specific vessel. However, these forms of dependent or false self-employment do not enhance the rights and protections that employees usually are entitled to under labour law or collective agreements (ibid). Certain labour protection rights in the UK explicitly exclude self-employed fishers, such as the entitlement to the National Minimum Wage (GOV.UK, 2019d). Furthermore, on fishing vessels, the employer shifts the risk of economic failure to the self-employed workers by tying the wages to the revenues of the catch (IP5: 60). As already mentioned in chapter 5, this can result in great financial uncertainties and poverty among British fishers, particularly on the West Coast. Thus, the large number of share fishers is a strong indicator for the paradigmatic occurrence of precarious forms of work in the British fishing industry, also amongst domestic workers.

However, not only share fishers but also all other forms of employment in fishing are disadvantaged by legislation, as fishers are explicitly excluded from the regulation that determines the maximum weekly working hours at 48 hours (GOV.UK, 2019b). Furthermore, transit visa holders do not have a permit to work in the UK, as their visa only allows them to transit to their vessel, in order to work in international waters outside of the twelve miles zone (Green, 2017). Thus, transit visa holders are not entitled to UK labour market regulations, which means they do not have a limit of working hours or a minimum wage (IP3: 95). This means that the absence of labour regulations for fishers – or their explicit exclusion from existing regulatory frameworks – enables employers to legally make their employees work excessive working hours while sometimes paying them only a fraction of the National Minimum Wage. Therefore, I argue that not only existing regulations such as the transit visa promote precarious work in the British fishing industry, but the absence of legislation and the fishers' explicit exclusion from existing regulations enable precarious forms of work as well.

6.1.3 ILO188

ILO188 could be a way to tackle the problem of lacking regulations for international fishers, as many interview partners state, who hope for significant improvement in working conditions because of ILO188 (e.g. IP4: 39; IP5: 155; IP12: 37; IP18:372; IP24: 27). However, chapter 5 already showed that ILO188 does not implement minimum wages for fishers, meaning they still are not entitled to National Minimum Wage regulations (ILO, 2007: Annex II (i)). Furthermore, the discussion about working hours showed that the new regulations are seen as unrealistic within the fishing industry, which will lead to employers searching for evasive options (IP6: 37). Last but not least, the interviews have shown that controlling whether or not employers are following the rules, is extremely difficult in the context of

fisheries, due to the isolation of fishing vessels at sea (IP3: 3; IP24: 47). Some interview partners therefore mentioned that the regulations are only as good as their enforcement (e.g. IP1: 101; IP4: 39), a topic that will be discussed in the next section. ILO188 could be a helpful approach to improve workers' conditions aboard British fishing vessels if it is successfully enforced. However, I argue that ILO188 will not avoid or even decrease forms of precarious work, due to its inability to tackle the most important problems such as extreme working hours and low wage.

6.1.4 Enforcement and the National Referral Mechanism (NRM)

Many interview partners (e.g. IP1: 101; IP18: 301) mentioned the importance of enforcement of existing regulations in the UK fishing industry, which is mostly executed by the Maritime and Coastguard Agency (MCA) and the Border force (IP10: 27; IP18: 297). In this context, several interview partners mentioned understaffed enforcement authorities, which result in few controls and therefore even fewer actions against misconduct (IP5: 196; IP14: 364; IP18: 301). The current cases of modern slavery within the British fishing industry raise further questions regarding the enforcement of existing legislation. First, it seems quite surprising that the cases have not come to court yet, although the police have been involved already in the year 2012 (IP24: 57). Therefore, the perpetrator – company A – is still allowed to operate and, according to several interview partners and the ever-recurring cases of supposed modern slavery on its vessels, still allegedly treats his employees as modern slaves (IP18: 43, 168; IP21: 357). Second, chapter 5 showed how the NRM, which is a process to identify, refer, assess and support potential victims of Modern Slavery (Green, 2017), enhances several problems. Potential victims are meant to stay in the NRM for 45 days in a safe environment with minimal benefits for living costs, which usually is £65 per week (Lawrence and Mcsweeney, 2018). However, some had to stay in the NRM for up to 9 months (IP18: 45), which is very problematic for the workers, as those who were employed as modern slaves probably paid exorbitant agency fees. Therefore, many potential victims' families have gone into huge debts and rely on the fishers' remittances (IP18: 47). According to IP18 (47; 65-68), this long duration without getting paid is reason enough for many potential victims to not go into NRM, meaning their case will not be investigated. Instead of encouraging the potential victims to testify, the current NRM therefore incentivizes many potential victims to leave the country, with the result that their cases are not being investigated and the alleged perpetrators do not fear any consequences. I conclude that some of the current enforcement strategies – particularly the NRM –fail in penalizing the perpetrators, allowing them to continue creating precarious work for workers on British fishing vessels.

6.2 Subcontracted employment

As mentioned above, labour geography engages in analysing the role of subcontracted employment in promoting precarious work. Thereby, it has been highlighted how an international cadre of global

staffing agencies emerged and how they – amongst others – seek to expand their market spaces through lobbyism activities (Coe, 2012: 276). Wills (2009) mentions how subcontracted employment is becoming paradigmatic and identifies it as the central mechanism for precarious work with serious implications for wages, working conditions and power relations. Within the model of subcontracted employment, she especially sees challenges in identifying the real employer at the top of the contract chain (Wills, 2009: 456). The case of the British fishing industry shows how international recruitment agencies can be active drivers of precarious work on fishing vessels in the UK. In chapter 5.7 I analysed how workers, who have paid exorbitant agency fees, are in huge debts and therefore highly financially dependent on the job aboard the fishing vessels. Thereby they tend to accept even the worst of working conditions, making them particularly vulnerable for precarious work. Chapter 5.7 also shows how some employers only are willing to negotiate with the agent and how some workers therefore struggle to get in contact with their real employers to stand up for their rights. Furthermore, the analysis about pay gaps in the industry shows how recruitment agencies demand a level of remuneration which employees are willing to work for, instead of setting the remuneration on the level which the industry would be willing to pay for. Due to these reasons, I conclude that subcontracted employment and the involved actors – international labour market intermediaries and British employers – are active drivers for precarious work in the British fishing industry.

6.2.1 Labour market intermediaries

The interviews showed that many international fishers struggle to find an income opportunity in their home country (e.g. IP19: 55; P21: 9). Therefore, some of them are willing to collaborate with recruitment agencies in order to find employment on a fishing vessel abroad (e.g. IP21: 13). Usually, the fishers do not have to remunerate the agencies, as the British vessel owners pay these recruitment agencies for their mediation (IP5: 97; IP7: 23; IP9: 115). The British vessel owners, or their vessel agents (e.g. IP11), thereby can check online if the international recruitment agency has a license, which is issued by the domestic government (IP11: 40). If the recruitment agencies do have such a license, UK vessel owners and their agents usually trust on their reliability and are willing to collaborate with them (IP11: 40). However, there are also illegal recruitment agencies that do not have such licenses but still provide their services online (IP3: 27). According to IP3, it can occur that British vessel owners who have never been engaged with employing migrant workers or who do not care, encounter such illegal agencies online and start collaborating with them, as they are forced to compensate low British labour supply with international fishers (IP3: 49). Fishers that are supplied illegally sometimes do not have the right visa and medical certification (IP3: 51) or are trained engineers and were promised different jobs, such as working on a merchant vessel instead of ending "*up on a stinking old fishing boat*" (IP12: 84-90).

However, the main problem with illegal recruitment agencies seems to be fishers paying exorbitant agency fees to their recruitment agents (e.g. IP21: 15, 17; Shebbeare, 2015) and ending up with huge debts (IP13: 59). This form of employment is called bonded labour, or debt bondage and is the world's most widespread form of modern slavery, according to Anti-Slavery International (2019). Debt bondage occurs when a person is forced to work to pay off a debt, whereby he or she loses the control over the conditions of both, the employment and the debt (Anti-Slavery International, 2019). IP21, for instance, was so desperate to find a job (IP21: 23), that he accepted to pay about £2'000 for the agency fee and a flight ticket upfront (IP21: 218), without even knowing the conditions of the contract (IP21: 25). As shown in chapter 5, many other international fishers on British fishing vessels paid exorbitant agency fees, forcing them to earn a lot of money in order to pay back their debts (IP12: 75; IP18: 86; IP19: 408; Shebbeare, 2015; Moulds, 2017). Sometimes, the financial problems of international fishers are even increased when the wages are not transferred to their bank accounts at all (IP21: 201), or only after a significant deduction (IP3: 27; IP16:39). Some recruitment agencies also defraud the fishers by presenting second contracts with worse conditions than agreed upon, after the fishers have already paid their agency fees (IP18: 90; IP24: 33). However, recent examples show that also some licensed recruitment agencies defrauded their employees and deducted significant amounts of their remuneration. A recruitment agency from the Philippines, who amongst others supplied the supposed victims of modern slavery to company A, lost its license due to illegal practices such as deducting wages (IP5: 172; IP6: 21; IP7: 15; IP11: 34). All of these methods result in fishers tending to accept even the worst of working conditions in order to be able to pay back their debts, as the cases of IP21 (99, 101) and IP19 (408) show. They stated how they desperately wanted to leave the vessel and return back home but basically were forced to keep on working in order to pay back their loans and provide for their families (IP19: 408; IP21: 99, 101). I therefore argue, that fishers who are employed through recruitment agents – whether licensed or not – are exposed to significantly higher risks of labour exploitation than those who are employed directly.

6.2.2 Employers in the UK

While the recruitment agencies without a doubt play an important role in creating precarious work for international fishers in the UK, the role of British employers should not be underestimated. According to IP3, many British employers who collaborate with illegal recruitment agencies turn a blind eye on their practices while paying the international fishers as little as possible (IP3: 49, 55). While IP12 can understand that some skippers do not know that their international crew was employed under illegal practices such as paying high agency fees, he finds it *"more difficult to think that the [UK vessel] agent doesn't know something about what's going on*" (IP12: 87). He therefore suggests that at least the contracting party of the recruitment agent knows when the labour force is supplied under illegal practices.

The case of IP21 underlines the role of UK employers in creating precarious work through subcontracted employment even more. IP21's employer actively engaged in Human Trafficking by making IP21 work ashore or on other vessels than his transit visa intended (IP21: 69, 77). Many other interview partners confirmed such practices by UK operators (IP3:51; IP12: 75; IP13: 59; IP14: 200; IP18: 94) and mentioned how the employers render the fishers invisible to the authorities and charitable organizations by telling them they are not allowed to leave the vessel when in harbour (IP18: 94). This seems to be a big problem for international fishers, as they often are unaware of their legal status and completely rely on the information of their skippers (e.g. IP21: 131). Therefore, many respondents suggested educating migrant workers as well as vessel owners and skippers, in order to improve their knowledge not only about visa status but about all relevant factors of decent working conditions (IP1: 25; IP13: 15; IP22: 27, 28; IP24: 51). Furthermore, IP21 was only paid a fraction of his contracted wage and when he tried to address this matter to his employer, he had severe difficulties getting in touch with him (IP21: 93, 107, 201). IP21 was only able to contact his employer via his skipper, who was also an employee of company A and was only able to speak to him when he stated that he wants to quit the job and return to Ghana (IP21: 93, 161). When the employer was addressed to the missing wages, he mentioned that he always paid the wages to the agent in Ghana, although this payment method was not part of IP21's contract (IP21: 93, 103). The employer basically "hid" behind his contract with the recruitment agency and left IP21 on his own with his financial problems (IP21: 93). This kind of "hiding" behind the contract between the UK vessel agent and the recruitment agent was confirmed by IP16 who is a vessel agent on the West Coast. He mentioned that he heard rumours about a Romanian recruiter who deducted money from the fishers' wages, but he turned a blind eye on these practices:

> "*[..] I don't know if that's true, that sometimes agent was taking money off them and they got home and he was deducting money off their wage […]. So we didn't know that. We would just pay the money over and whatever happened after that was between the crewmen and the agent*" (IP16: 39).

Last, the cases of supposed modern slavery within the fishing industry show, that some employers are prone to exploit vulnerable and desperate subcontracted international fishers and actively force them into precarity.

This analysis highlighted how not only foreign recruitment agents but also some UK vessel agents and employers contribute to the emergence of precarious work through subcontracted employment. Some of them take advantage of the vulnerability and desperation of the subcontracted workers and exploit them, resulting in deducted wages, Human Trafficking or alleged modern slavery. However, UK

employers do not only promote precarious work through illegal practices, as, for instance, the discussions above about low wages and false self-employment displayed.

6.3 Labour organization

As mentioned in chapter 2, labour geography sees the making of economic geography through the eyes of labour and thereby emphasizes on the workers' agency in shaping geographies of capitalism. Thereby, Katz' (2004) classification of agency into strategies of resilience, reworking and resistance is widely accepted. While strategies or resistance are scarce in global economies, authors (e.g. Coe and Jordhus-Lier, 2010) promote for more strategies of reworking, rather than for coping strategies of resilience. To better cope with emerging forms of precarious work, some authors suggest new forms of labour organization, for instance, multiscale approaches such as community unionism that involve trade unions as well as civil society actors (e.g. Wills, 2009; Coe, 2012; Lier 2009). Thereby, community unionism is able to address the needs of workers that usually are excluded from traditional union activity, such as migrant workers (Coe, 2012: 278) or self-employed. Chapter 5 has shown that fishers in the UK indeed are excluded from traditional union activity, amongst others because of the share fishers' status as self-employed. Furthermore, the case of the British fishing industry has shown how most actions have been coping strategies of resilience, instead of transforming strategies of reworking. Therefore, I argue that existing forms of labour organization fail in addressing the workers' rights and suggest a multiscale approach of community unionism, as suggested by different labour geographers.

Current forms of labour organization within the British fishing industry seem to fail in giving the fishers a strong voice and fight for their rights, as the following section shows. Several interview partners mentioned that labour unions for a long time have hesitated to engage in British fisheries (IP24: 107), probably because the majority of the labour force was self-employed, a concept which is seen as problematic by trade unions (IP3: 109). Charitable organizations and NGOs in fishers' favour, however, have been active in supporting fishers in the UK for a long time. They mainly support fishers with strategies of resilience, that aim at supporting fishers to cope with their existing situations, for instance by providing infrastructure and points of contact in local fishers centres (IP3: 5; IP8: 5; IP12: 12, 14; IP14: 7: IP18: 9; IP24: 7-13). Such strategies, however, only help the fishers to adapt to existing conditions and power relations, instead of trying to change them. Therefore, charities and NGOs also engage in reworking strategies that try to lobby the government and negotiate with industry representatives. However, as already explained, they seem to do so only through industry bodies such as the "Fishing industry Safety Group" or the "Fishermen's Welfare Alliance", whose members most certainly have different, more profit-oriented interests (IP3: 87; IP24: 101). Furthermore, my analysis in chapter 5.2 showed how some representatives of charitable organizations hesitate in publicly addressing problems concerning fishers' working conditions, as they want to protect the big majority

of operators that treat their employees well (IP12: 150). The proximity between charitable organizations and the fish industry was further highlighted in chapter 5, by displaying a certain financial dependency of at least one charitable organization on British fishing companies.

Therefore, and through the almost entire absence of labour unions, the fishers seem to lack a voice that speaks for them and fights for their rights independently, as several interview partners confirmed (IP1: 145; IP23: 49; IP24: 107). This shows in the example of IP24, an NGO representative, who mentions that they have not been able to persuade the government of the need to revise the transit visa system (IP24: 21). According to IP24 (21), this demonstrates the low priority of fishers within the government, while I would argue that this rather shows the incapability of the organized labour force to influence the political agenda. The advisor IP23 (49) mentioned that the absence of labour unions aggravates tripartite implementation of new regulations and conventions, as it is unclear what organization is able to represent the interests of the labour force. Furthermore, the fact that organized forms of labour, until now, have not been able to clarify whether or not workers on a transit visa are allowed to reside in the UK, although this would improve their working conditions significantly, shows that those forms of labour organization are not adequately capable of pushing workers' rights. Thus, I conclude that new forms of multiscale labour organization such as community unionism could strongly improve the fishers' position and their working conditions. In this context, the active participation of labour unions within British fisheries to influence the political agenda and to negotiate with industry representatives seems to be the key factor. In collaboration with the long-standing expertise of charitable organizations and NGOs in resilience strategies, the workers would then have not only support in their everyday life but also a strong voice that addresses their problems and rights in a broader context.

7 Conclusion

This thesis assessed and analysed the working conditions on British fishing vessels. In this context, chapter 1 introduced into the topic and determined a significant research gap when it comes to working conditions on British fishing vessels and the application of the theoretical concept precarious work on fisheries-based research. Chapter 2 then displayed how the research field labour geography and its theoretical concept precarious work are a suitable tool to analyse the empirical data on working conditions aboard British fishing vessels. The next chapter then presented the applied methods of this study and offered a critical review of my research approach in this thesis. Then, chapter 4 provided an introduction into the context of global and British fisheries with particular focus on the economic, social, environmental and political dimensions. These four chapters built the basis for the further course of this thesis, particularly for answering the research questions. Chapters 5 and 6 then presented the results of this study and analysed the working conditions on British fishing vessels through the lens of the research field labour geography and its theoretical concept precarious work.

The assessment was based on 24 interviews with workers, workers' representatives, industry representatives and experts of the British fishing industry. Most of these interviews were conducted in two ports on the East Coast and two ports on the West Coast of Scotland. Thus, a particular focus in this thesis was laid on Scottish fisheries. The analysis was supported by extern sources such as news articles, government reports and academic literature. While this approach is far from holistic due to the small sample of interview partners, this thesis still gives an insight into the working conditions of fishers in the UK. The next sections will present the findings of this thesis and thus answer the research questions.

7.1 Findings: Working conditions aboard British fishing vessels

The main goal of this study was to assess the working conditions aboard British fishing vessels. The following main research question guided this thesis:

> *How are the working conditions aboard British fishing vessels?*

The next sections will summarize how I answered this research question and highlight the most relevant findings of chapter 5.

Chapter 5.1 served as an introduction into the way how British fishing vessels work and elaborated that most vessels are operated by four to eight fishers and that most fishing trips last from one day to four weeks. Chapter 5.2 displayed that the majority of interview partners sees a great variety in working conditions aboard British fishing vessels, according to the age, size and type of fishing vessel. My respondents generally assessed the working conditions positively, particularly compared to other

countries such as Thailand. Industry representatives mainly highlighted the positive aspects and developments of fishing, such as improving safety standards, new regulations and high levels of remuneration in certain fisheries. While workers' representatives and experts generally assessed the working conditions as good, they highlighted many issues when asked in detail, including long working hours, low safety standards, low pay and inadequate living conditions. Most of the sampled workers, particularly the migrant workers, were content with their wages but mentioned issues when it comes to working hours and social welfare, such as contact to their families. Generally, this chapter has displayed that areas of concern have been played down by many respondents, particularly by industry representatives, but also by experts and workers' representatives. Many issues were labelled as normal in the fishing industry and were justified based on the history and the nature of fishing, which takes place in a challenging environment. However, despite these fairly positive assessments of working conditions, many vessel owners struggle to find local crewmembers, indicating the unattractiveness of the job as a fisher. The further course of chapter 5 has shown that many issues exist with working conditions on British fishing vessels. This concerns living conditions, safety and health, remuneration and human rights abuses, among other things.

Chapter 5.3 displayed that some workers live on their fishing vessel for up to one year, depending on their nationality, visa status and location of the vessel. When it comes to living conditions, the respondents emphasized the great variety amongst the vessels. Large and new vessels were labelled as luxurious and unproblematic as they are equipped with all the necessary infrastructure and provide adequate space to live, work and sleep on the vessel. Those vessels are mainly to be found on the financially better performing Scottish East Coast with its vicinity to the relatively shallow North-Sea, while the West Coast generally consist of more older and smaller vessels. Thereby, lots of problems exist with this more challenging population of older and smaller vessels that sometimes lack bare minimum facilities such as toilets, showers, adequate sleeping arrangements, cooking facilities, electricity, enough fresh water and adequate food. This lack of basic facilities aboard fishing vessels renders those fishers who are living on their vessel dependent on onshore facilities such as local fishers centres, that are often provided by charities. Thereby, migrant fishers are particularly vulnerable to inadequate living conditions, as many of them are forced to live on the vessel due to their transit visa obligation. This practice was not questioned until recently when word spread that the law does not prohibit transit visa holders to reside in the UK between fishing trips. Further characteristics related to living conditions were inadequate nutrition and improved connectivity aboard the vessel and the social isolation of international fishers.

When it comes to safety and health aboard British fishing vessels, many interview partners stated that it has improved in recent years, especially due to an increased culture around safety in the industry.

These positive developments showed in the implementation of obligatory safety courses, newer and safer technologies and stricter regulations. Almost all interview partners emphasized the importance of the topic safety and health, whereby particularly industry representatives highlighted their participation in improving safety aboard fishing vessels. However, chapter 5.4 showed that the process of improving safety and health aboard fishing vessels is still ongoing and takes much time in an industry that was quite loose on safety-related issues for a long time. Particularly lifejacket wear and small fishing vessel stability are still areas of concerns, where improvements could significantly increase safety. Chapter 5.4 displayed that fishing is still the most dangerous job in the UK, particularly due to the exposure to heavy weather conditions and the involvement of high-powered gear with lots of ropes on an open deck in which body parts can get caught. Here, non-EEA migrant workers are exposed to increased safety risks, as their transit visa regulation dictates them to live on the vessel. This chapter has shown how living on the vessel enhances many safety issues, such as the increased risk of having an accident while boarding and leaving the vessel, particularly when alcohol is involved. Living on the vessel enhances further problems, such as the exposure to old and malfunctioning infrastructure on the vessel that can result in fires or carbon monoxide poisoning. A further safety and health issue that has been identified in this chapter is long working hours combined with few hours of rest, which can result in tiredness and fatigue and therefore in an increased risk of misconduct.

Long working hours seem to be paradigmatic on British fishing vessels and have been described as problematic by most interview partners, as chapter 5.5 showed. Thereby, the working hours tend to depend on age, size and type of vessel and especially on the duration of a single fishing trip, as several examples and statements have shown. Workers on day-boats in a port on the West Coast usually work five days a week for eight to twelve hours per day and spend the nights and the weekends at home in their apartments. On the other side of the scale are workers on the larger vessels, whose trips last several days. Thereby, industry representatives such as vessel owners, as well as workers, their representatives and experts mentioned extremely long working hours on some vessels with only minimal hours of rest. It has been displayed that many interview partners justified these long working hours by stating that it lies in the nature of fishing and that it is not possible to work normal working hours as in other jobs. However, money seems to be the main reason for this excessive way of working as every additional day at sea is costing a lot of money due to high fuel prices. Therefore, on many vessels the net is hauled every four hours, meaning that the crew's resting hours are dependent on the amount of fish they have to process. The chapter showed that many vessels do not stay in port for long after landing the fish and therefore operate with rotating crews. Thus, the workers now and then stay at home for one fishing trip to regenerate, while others take their place on the vessel. This has been determined to be particularly problematic for the non-EEA fishers who are not allowed to stay ashore and have to participate on every fishing trip, meaning they have extremely few resting days.

These problems are being tackled by the implementation of the new ILO188 regulation, which stipulates at least 77 hours of rest in any seven-day period. However, chapter 5.5 showed that the practicability of this regulatory framework seems questionable, as the willingness of industry representatives tends to be low to tackle the issues of long working hours. Particularly industry representatives labelled the proposed resting times as unrealistic and did not show any intention of changing the way of how British fishing vessels operate. Also many workers' representatives and experts questioned to what extent ILO188 will improve working hours, particularly as monitoring working hours seems practically impossible due to the isolation of fishing vessels on the open sea.

Chapter 5.6 displayed that workers on British fishing vessels are usually employed as share fishers or as contract fishers. As share fishing is a long-standing tradition within the British fishing industry, the vast majority of British fishers is employed in this system. While international EEA workers are mostly employed as share fishers as well, non-EEA migrant workers are obliged to have a contract and thus the vast majority of non-EEA nationals is employed as contract workers. This chapter has demonstrated that the separation into British and European (EEA) share fishers on one side and into international contract workers on the other, is of great importance as contract workers earn significantly less than share fishers. Although, share fishers on average have higher levels of remuneration, decreasing catches and difficult weather conditions in the winter season posed increasing problems for families on the West Coast that are pushed into poverty due to the share fishers' dependence on the catch. When it comes to contract workers, small differences in remuneration, based on the origin country of said workers and the negotiating power of the particular country's labour unions, were determined in this chapter. Thereby, it was displayed that the National Minimum Wage does whether apply for international fishers working outside UK territorial waters, nor for the self-employed share fishers, which has been criticized by workers' representatives and experts. Industry representatives, on the other hand, complained about difficulties in recruiting domestic labour force and emphasized the dependence of British fisheries on international fishers. The assessment of wages has shown that particularly the contract workers are paid only a fraction of the National Minimum Wage, while some share fishers on the same vessel earn a multiple for the same work. In chapter 5.6, I also analysed the justifications for the remuneration differentials between domestic and international fishers. Based on the research of Jones et al. (2019), I concluded that international fishers are paid below the level of National Minimum Wage and therefore significantly less than domestic workers because employers are able to do so. Reasons for this ability have been discovered in the low labour demand and low levels of remuneration in the home countries of migrant workers and therefore increased vulnerability and willingness to work for low pay. Further reasons were elaborated in labour market intermediaries demanding levels of remuneration from employers that workers are willing to work for instead of levels of remuneration that employers are willing to pay for. Finally, instead of protecting migrant

workers from low pay, national legislation actively excludes transit visa holders from National Minimum Wage and therefore contributes to significant remuneration differentials between domestic and international fishers.

When it comes to human rights abuses, chapter 5.7 demonstrated that the regularity of modern slavery and human trafficking in the industry is controversial. While news coverage of modern slavery and labour exploitation on British fishing vessels was strong, particularly industry representatives denied such cases. Experts and workers' representatives, on the other hand, confirmed the occurrence of such cases but highlighted their exceptionality and the inflated media coverage. Chapter 5.7 has furthermore presented the experience of Ghanaian fishers that were involved in an alleged case of modern slavery and of a workers' representative that was and still is involved in helping those victims. Thereby, it has been highlighted how the affected workers were victims of debt bondage, human trafficking, extremely low or no pay, excessive working hours, inadequate living conditions, malnutrition, sleep deprivation and physical and mental abuse. Particularly the bondage to the major debts that have resulted from paying exorbitant agency fees were of great concern to the workers and rendered them vulnerable to labour exploitation and indecent working conditions. All interviewed actors mentioned that these cases of modern slavery occur almost exclusively on vessels of one particular company, which is suspected by many interview partners to treat their workers as modern slaves still, although the police investigation is ongoing already since 2012. The vast majority of victims have been determined to be international fishers, mostly coming from the Philippines and Ghana. Cases beyond the vessels of this company were only scarcely mentioned, highlighting again that such cases seem to be the rare exception.

The assessment showed how various differences exist when it comes to working conditions aboard British fishing vessels. The main differences have been determined between migrant and domestic workers, between share and contract fishers and between vessels from the East Coast and vessels from the West Coast. Thereby, areas of most concern throughout the industry are extreme working hours and low resting times in combination with low levels of pay, safety and health issues and the marginalization of migrant workers. Particularly international fishers from outside the European Economic Area (EEA), who are allowed to work on British fishing vessels on the basis of a transit visa, experience exploitative conditions with levels of remuneration significantly below the National Minimum Wage and working hours significantly above standard labour regulation.

7.2 Findings: Migrant workers' increased risk of indecent working conditions

The first subquestion falls back to several reports and articles that have suggested modern slavery amongst migrant workers on British fishing vessels. The following research question was posed to pursue these allegations:

To what extent and why do migrant workers experience different working conditions on British fishing vessels than domestic fishers?

The first part of this question has been answered mainly in chapter 5, which assessed the working conditions on British fishing vessels in general. As the big majority of fishers involved in alleged cases of modern slavery are non-EEA internationals, although their share of the labour force is only about 20%, I conclude that international fishers – especially those coming from outside the EEA – tend to be more prone to labour exploitation than domestic workers. This argument is strengthened by the results of chapter 5, which showed that many migrant workers have significantly lower wages, worse living conditions, extremely long working hours and are exposed to higher safety risks than their domestic counterparts. This is confirmed by several interview partners who acknowledged a higher risk of indecent working conditions for international fishers especially due to their immigration status (IP5: 131; IP13: 21; IP23: 163; IP24: 78) and the lack of knowledge about their rights and about possible access points to seek for support (IP14: 341, 343). Coming back to the research question, I therefore conclude that international fishers indeed are exposed to a significantly higher risk of indecent working conditions than domestic workers and therefore tend to experience worse working conditions on British fishing vessels than domestic fishers. The second part of this research question will be answered together with the second subquestion in the next sections, as the migrant workers' worse working conditions are highly related to the occurrence of precarious work in British fisheries.

7.3 Findings: Reasons for precarious work on British fishing vessels

This second subquestion goes back on voices that pledged for more intense application of the theoretical framework precarious work on global fisheries. Therefore, the second subquestion was the following:

To what extent and how is precarious work on British fishing vessels enabled and promoted?

Empirical data of this study has shown a great variability of working conditions aboard British fishing vessels. Thereby, particularly size and age of the vessel, nationality and legal status of the worker and the employment relationship determine the working conditions of individual fishers. Although many actors mentioned that working conditions aboard British fishing vessels are basic but indeed good, this thesis finds that precarious forms of work are paradigmatic aboard British fishing vessels. Self-employed share fishers, the most common form of employment in the British fishing industry, are often employed without a written contract. Furthermore, international contract fishers are often employed through a labour market intermediary and on a temporary basis. All these forms of employment are typical characteristics of precarious work. Issues related to low pay, long working

hours, high safety risks and inadequate living conditions reflect the precarious forms of employment in British fisheries. Thus, I conclude that precarious work is widespread amongst fishers on British fishing vessels. The next sections will elaborate how precarious work is enabled and promoted and why migrant workers experience worse working conditions aboard British fishing vessels than domestic fishers.

This thesis elaborated several factors that are responsible for the occurrence of precarious work within the British fishing industry. While some are active drivers of precarious employment relationships, others more or less passively enable the occurrence of such. In this study, I argue that inappropriate legislation and enforcement, subcontracted employment and its involved actors – namely British employers and international labour market intermediaries – and improper labour organization play an active role in enabling and promoting precarious work within the British fishing industry.

First, this thesis highlighted the active role that the British state takes in promoting precarious work in British fisheries. Instead of protecting the most vulnerable workers from the worst excesses of indecent working conditions, I conclude that the transit visa scheme does not only exclude non-EEA migrant workers from existing labour market regulations but also actively drives them into precarious forms of work. Furthermore, the National Referral Mechanism, which is designed to identify victims of modern slavery, incentivizes potential victims to leave the UK for their home country, instead of incentivizing them to stay in the UK to accuse the perpetrators. However, not only international fishers are at risk of precarious work, but also the domestic share fishers lack the entitlement to crucial labour rights protections such as National Minimum Wage or weekly maximum working hours. These missing labour rights protections are exploited by British employers who operate with false self-employed fishers, which are excluded from crucial labour rights protections, instead of hiring normal employees. This results in many self-employed fishers living in poverty, particularly on the West Coast.

Second, subcontracted employment, and particularly its involved actors which are labour market intermediaries and British employers, has proven to be a crucial driver of precarious work. Most of the migrant workers have been supplied by labour market intermediaries in their home countries, whereby some have paid exorbitant agency fees to be mediated. Therefore, some international fishers are forced to work in order to pay back their major debts, which renders those fishers vulnerable and prone to accept even the worst of working conditions. The fishers' situation is sometimes exploited by British employers who pay their workers as little as possible, make them work extremely long hours under indecent conditions and render them invisible to authorities and charities by forbidding them to leave the vessel. Furthermore, subcontracted employment relationships allow the British employer to hide behind his or her contract with the international recruitment agency, which makes it difficult for workers and their representatives to address the real employer and stand up for their rights.

Third, many charitable organizations and NGOs actively engage successfully in resilience strategies for workers to cope with their conditions. However, due to the almost entire absence of traditional trade unions within the fishing industry, fishers in the UK seem to lack a voice that unites them and addresses their problems and rights on the political agenda and the negotiating tables with industry representatives. Increasing engagement of labour unions in combination with the already existing charities and NGOs would build a promising multiscale approach of labour organization, that not only supports fishers in their everyday challenges but also gives them a stronger voice in addressing their rights.

This thesis concludes that precarious work is paradigmatic in the British fishing industry, and is enabled and actively created by state regulations, subcontracted employment and inadequate forms of labour organization. Thereby, particularly migrant workers are exposed to higher risks of indecent work, mainly due to the transit visa scheme, unscrupulous recruitment agents and British employers and a lack of knowledge about their status and rights. Although the research questions have been answered in this thesis, many further questions remain unanswered. In the next subchapter I will address to several topics that need further research in order to fill the existing research gap.

7.4 Outlook

Diverse relevant topics have not or only scarcely been discussed in this thesis. First, it is important to set the topic of working conditions aboard British fishing vessels in a wider context and compare them to global processes. While the role of vessel owners and employers has been discussed in detail, the role of multinational corporations and particularly retailers in driving precarious work has not been discussed. Thereby, the Global Value Chain approach could help to analyse drivers of precarious work within the fish value chain.

Second, many respondents tended to justify indecent working conditions as normal and tried to display them in a better light than they seem to be. Thereby, several respondents first stated that working conditions were good on British fishing vessels. When asked in more detail, particularly experts and workers' representatives mentioned various issues with working conditions. Industry representatives justified low pay and extreme working hours by stating that they were normal and the fishers used to it. The fact that British fisheries have serious issues with recruiting local labour force may be an indicator for the indecency of working conditions. Therefore, I suggest further research in justification strategies for indecent working conditions aboard British fishing vessels.

Third, taking up on the previous point, I observed that many respondents, particularly industry representatives, lamented serious issues with recruiting local labour force and the dependence of British fisheries on migrant workers. Many respondents stated that international fishers entered the

labour force only because of a lack of domestic workers. However, the fact that the British fishing industry profits from the cheap international labour force has not been thematized. Therefore, I suggest to further research to what extent the British fishing industry promotes the introduction of migrant labour force and to what extent the industry profits from international fishers.

Fourth, I suggest further research on the role of charitable organizations in supporting fishers in the UK. During my stay, I observed that charities take on many tasks that actually would adhere to the industry or the state. While the industry fails to provide some of their workers with a living wage and adequate accommodation, various charitable organizations accept responsibility and provide emergency aid, while the state misses protecting its citizens and migrant workers with social benefits and adequate regulation.

Last, I strongly advise to take up on my initial research questions that were skipped due to the limited scope of this thesis. Therefore, I suggest further research on the interests and positions of the involved actors, particularly regarding the necessity and motivation of improving working conditions aboard British fishing vessels and what opportunities and problems they identify in improving working conditions. Such analyses will help to find common viewpoints and encourage further collaboration between the different actors.

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Appendix

Appendix 1 – Interview guides

Appendix 1 displays the three different interview guides.

1. Interview Guide - Holistic

Beginning of the interview	
▪ Hello and thanks for the interview ▪ Presentation of: Me, research topic and aim of the interview ▪ Clarifying the duration of the interview ▪ Can I record the interview? ▪ Data/information will be anonymised and treated confidentially. Persons and companies will not be mentioned by name.	
Introductory question	
All except retail: Could you tell me about ***Organization***? *What does your Organization do? Aim?* ▪ What is your position and duration in ***Organization***? **Retail**: ***Organization*** obtains fish from the UK. Could you explain this process? ▪ How does the fish get from the sea to the consumer? ▪ Which actors are involved? *Workers, Boat owners, processors, suppliers?* ○ From what kind of actor(s) does ***Organization*** buy British fish? ▪ How has this process changed in recent years? *Why? (Structure, Organization, Prices, etc.)* ▪ What is your role/time in the Organization? Time?	
Topic A: Working conditions on British fishing vessels	
1. **All:** What does "working" on a British fishing vessel mean nowadays? ▪ What kind of tasks have to be done? By whom? 2. **All**: What does Organization know about the working conditions on British fishing vessels? ▪ How would you assess the current working conditions on British fishing vessels? ▪ What problems does Organization perceive as the most urgent ones regarding working conditions on British fishing vessels? ▪ What kind of problems have you perceived regarding… ○ … contracts and wages? ○ … working hours and safety & health? ○ … living conditions? ○ … abuse of workers? ○ … Forced Labour and Human trafficking? Others? ▪ To what extent and why did working conditions change in recent years?	

3. **All**: Let's get more into the topic of migrant workers (EEA/Non-EEA). To what extent are migrant workers exposed to a higher risk of indecent working conditions?
    - If there is a higher risk:
        - What kind of indecent working conditions are we talking about?
        - What kind of migrant workers are we talking about? *(EEA/Non-EEA/long-term/short-term)*
            - How are they recruited?
        - Why is there a higher risk for migrant workers?
        - How is this unequal treatment promoted/prevented?
        - What role does the transit visa regulation play in this issue?
    - To what extent are (other) groups of workers treated unequally? *(female/younger/elder workers)*
        - If there are unequal treatments: Same questions as above

4. **Experts, enforcement**: How are decent working conditions on British fishing vessels enforced by authorities?
    - How do you assess current enforcement?
    - Who and how often are vessels being controlled?
    - What kind of problems are detected on these controls?
    - What happens if problems are detected?

Topic B: Organization's interests and positions

5. **All**: To what extent and why does ***Organization*** think it is necessary to improve working conditions on British fishing vessels?
    - What aspects of working conditions should be improved?
    - How does Organization actively take action in achieving decent working conditions on British fishing vessels?
        - What effects did/do these actions have on the workers?
        - What does ***Organization*** understand as "decent" working conditions?
    - What is your motivation to improve working conditions? Why is it necessary?

6. **All**: What would be the best way(s) to improve working conditions aboard British fishing vessels?
    - To what extent does Organization think that…
        - … social standards/labels can improve working conditions?
        - … unions/workers?
        - … appropriate legal frameworks? *New ones? Or better implementation of existing?*
        - … audit systems?

7. **All**: Where do you perceive the biggest problems/hurdles in improving working conditions?
    - To what extent is the structure of the British fishing industry a problem? *Why?*
    - Willingness of the involved actors? *Why?*
    - Legal frameworks? *Why not change?*
    - Absence and/or current implementation of appropriate labels and audits?
    - Others?

8. **All**: Where do you perceive the biggest opportunities in improving working conditions?
    - Ask same points as above.

9. **Retail**: What kind of requirements does ***Organization*** place on the producers/suppliers regarding working conditions on British fishing vessels? *(standards, labels, conventions, laws, etc.)*
    - What specific criteria do you require?
    - How do you know that the requirements are met? *Audits? Who does the audits? How often?*
        - What are the consequences if some requirements are not met?
    - What difficulties does ***Organization*** encounter when placing requirements for working conditions?
        - What are the challenges for companies?

Topic C: British fishing industry	
10. **All**: What developments have made working conditions on British fishing vessels, what they are today? *Economy (Competition, Price, Scale), Politics (Quotas, Brexit, Conventions, etc.)* ▪ How has the British fish industry changed in recent years? ▪ How have these developments affected working conditions and the workers' position? *11.* **All**: By which actors is the British fishing industry influenced/defined most? *(Vessel owner's/processors/suppliers/retailers/state/civil society (standards, NGO's))* ▪ What is the workers' role in the industry? ▪ How are they organized? Includes all workers? ▪ In your opinion, whose responsibility is it to ensure decent working conditions? (unions, owners, suppliers, retail, consumer) 12. **Industry**: Let's talk about the production network. Could you explain how the fish gets from the sea to the consumer? ▪ Which actors are involved? ▪ How has this process changed in recent years?	
Final question	
13. What kind of impacts on the British fishing industry do you expect from the Brexit? ▪ Thank you very much for the interview! Would you like to say something additional that we haven't discussed yet? Do you have any supplements?	
Ending of the interview	
▪ Do you know any other persons/organizations from the fishing industry that I could interview? ▪ Could I come back to you in case of open/further questions? Mail/phone? ▪ Are you interested in the results? Thank you!	

2. Interview Guide - Workers

Beginning of the interview	
▪ Hello and thanks for the interview ▪ Presentation of: Me, research topic and aim of the interview ▪ Clarifying the duration of the interview ▪ Can I record the interview? ▪ Data/information will be anonymised and treated confidentially. Persons and companies will not be mentioned by name. ▪ Age category, ethnic origin of interviewee	
Introductory question	
Could you tell me about your job on the fishing vessel? - What kind of vessel? Where do you fish? - What kind of fish? - What is your job on the fishing vessel? - For how long have you been doing that? - How do you like it?	
Topic A: Working conditions on British fishing vessels	
1. What does "working" on a British fishing vessel mean nowadays? o What kind of tasks have to be done? By whom? 2. How would you describe the working conditions on your fishing vessel? o How would you describe the working conditions on British fishing vessels in general? o What are the most urgent problems? o To what extent do certain groups of workers experience unequal working conditions? 3. Is your employment on the fishing vessel voluntary? o Did you have to lodge a 'deposit' or identity papers with employer? o Are you free to leave the job? o Does this apply to all of the workers? 4. What kind of contract do you have? o Do you have written information about the working conditions? What is the content? o Are the written conditions respected in reality? o By whom are you employed? o Do all the workers have contracts (that are respected)? 5. How much do you earn for your job on the fishing vessel? (in relation to other nationalities?) o Are you content with the amount and are your expectations met? (living wage?) Parity? o Who pays you? o How and when is it paid? (Bank, Cash, …) Is this convenient? o What kind of payment system do you have? (share system, fixed wages, etc.) 6. Working conditions: o How many hours do you work per day? What is in the contract? (overtime, breaks) o What kind of training did you have? (HSE - Health and safety training?) o Are you provided with Personal Protective Equipment?	

7. How are the living conditions on board?
    - How are the cooking facilities/food on board?
    - How is the hygiene on board? (sanitation, shower, toilet, fresh water, etc.)
    - Can you leave the boat whenever you want (in harbour)?
    - Parity?
8. What is your role on board compared to the other crew members?
    - Any preferential treatment? Based on what?
    - What kind of disciplinary measures do you experience? Parity?

9. Are there any pay deductions? Parity?

10. Are you member in a trade union? What is the employer's attitude to this?

11. Welfare:
    - Are you in regular contact with your family?
    - Are you paid in case of sickness?
    - Do you feel supported by the local community?
    - Do you know who to contact if you need of help?
    - Parity?

12. Are you aware of cases of forced labour and / or human trafficking?

13. Personal statement: Anything further to add?

If migrant worker:

14. Recruitment: How have you been recruited
    - When, why and by whom?
    - Have your expectations been met?
    - What kind of contracts / agreements have you signed?
    - Other comments?

15. Journey: How did you get to the UK?
    - When, why and with whom?
    - Did you have any upfront costs/fees & if so, how much?

If domestic worker:

16. Let's get more into the topic of migrant workers (EEA/Non-EEA). To what extent are migrant workers exposed to a higher risk of indecent working conditions?
    - If there is a higher risk:
        - What kind of indecent working conditions are we talking about?
        - What kind of migrant workers are we talking about? *(EEA/Non-EEA/long-term/short-term)*
            - How are they recruited?
        - Why is there a higher risk for migrant workers?
        - How is this unequal treatment promoted/prevented?
        - What role does the transit visa regulation play in this issue?
    - To what extent are particular groups of workers treated unequally? *(female/younger/elder workers).* If there are unequal treatments: Same questions as above

Ending of the interview

- Do you know any other persons/organizations from the fishing industry that I could interview?
- Could I come back to you in case of open/further questions? Mail/phone?
- Are you interested in the results?

Thank you!

3. Interview Guide – Vessel owners

Beginning of the interview	
▪ Hello and thanks for the interview ▪ Presentation of: Me, research topic and aim of the interview ▪ Clarifying the duration of the interview ▪ Can I record the interview? ▪ Data/information will be anonymised and treated confidentially. Persons and companies will not be mentioned by name.	
Introductory question	
Could you tell me about your vessel? ▪ How long / old; what kind of fish; in-/offshore; how many days?	
Topic A: Working conditions on British fishing vessels	
1. Who works on your vessel? o How many? o Where are they from? o How are they recruited? o How long have they worked for you? 2. What does "working" on your vessel mean? o What kind of tasks have to be done? By whom? o How does your vessel operate? *How many days at sea, rotation, etc.?* 3. How would you assess the working conditions on your vessels? o Can you tell me about… ▪ … contracts of your crew? ▪ … wages? ▪ … working hours? ▪ … living conditions? ▪ … safety & health? o What problems do you perceive for you and your crew regarding working conditions on your boat? o To what extent and why did working conditions change in recent years? 4. Let's get more into the topic of migrant workers (EEA/Non-EEA). Do the migrants workers experience the same conditions as the domestic workers on your vessel? o To what extent do you think is modern slavery / forced labour / human trafficking a problem in British fishery? o What influence does the transit visa regulation have on the working conditions of migrant workers? 5. What challenges do you as a vessel owner perceive regarding working conditions on fishing vessels? o Any problems with finding fishermen/recruiting? o Any problems with meeting the requirements of ILO 188? o Do you feel supported in achieving decent working conditions? By whom? o What should be done to improve working conditions for fishermen in general? 6. What happens to the fish when you arrive in the harbour? o Who buys the fish? o How does it get to the consumer? o What is your role / say in this whole process?	

7. How has the British fish industry changed in recent years? o How have these changes affected working conditions and the workers' position?	
Final question	
8. What kind of impacts on the British fishing industry do you expect from the Brexit? o Thank you very much for the interview! Would you like to say something additional that we haven't discussed yet? Do you have any supplements?	
Ending of the interview	
▪ Do you know any other persons/organizations from the fishing industry that I could interview? ▪ Could I come back to you in case of open/further questions? Mail/phone? ▪ Are you interested in the results? Thank you!	

Appendix 2 – List of interview partners

Appendix 2 displays an overview of the respondents and the correspondent interviews.

Shortcut	Background	Where	Date	Start	Duration (min)	Remarks
IP1	Advisor for British fisheries	Geneva	25.03.19	11:00	92	Pre-Test
IP2	Representative of a retailer	Zurich	08.04.19	10:00	66	Interview in Swiss German
IP3	National representative of a charitable organization	London	23.04.19	13:30	60	
IP4	Representative of a certification scheme	London	26.04.19	14:00	43	
IP5	2 representatives of a producers organization	East Coast	29.04.19	14:00	92	
IP6	Skipper (vessel owner)	East Coast	30.04.19	17:00	53	
IP7	Filipino worker	East Coast	30.04.19	18:00	5	Skipper (IP6) was present at the interview
IP8	Representative of a local fishers' centre	East Coast	03.05.19	09:00	71	Interview was interrupted several times
IP9	6 Filipino workers	East Coast	03.05.19	11:00	33	
IP10	Representative of a port authority	East Coast	06.05.19	11:30	40	
IP11	Representative of a vessel agency	East Coast	07.05.19	12:00	28	
IP12	Representative of a local fishers' centre	East Coast	08.05.19	10:00	66	
IP13	Researcher of British fisheries	Edinburgh	10.05.19	16:00	73	
IP14	2 representatives of a local fishers' centre	West Coast	15.05.19	13:45	91	
IP15	Employed skipper (not vessel owner)	West Coast	16.05.19	10:00	5	Notes were written down after the conversation
IP16	Representative of a vessel agency	West Coast	16.05.19	10:30	13	
IP17	2 domestic workers	West Coast	16.05.19	11:00	5	Notes were written down after the conversation
IP18	2 representatives of a local fishers' centre	West Coast	17.05.19	10:00	100	
IP19	Ghanaian worker	West Coast	17.05.19	12:00	39	Another Ghanaian worker helped occasionally with communication problems due to language difficulties
IP20	Skipper (vessel owner)	West Coast	17.05.19	14:00	40	
IP21	Ghanaian worker	West Coast	17.05.19	15:00	50	
IP22	2 representatives of an industry body	Skype	20.05.19	10:00	63	No recording due to manual application error. Notes were written down after the interview
IP23	Advisor for British fisheries	London	22.05.19	14:00	103	
IP24	National representative of a charitable organization	Skype	14.06.19	13:00	62	

Appendix 3 – Interview transcripts

For reasons of data protection, the interview transcripts cannot be published and have been submitted to the supervisors separately.

Appendix 4 – Coding of the interviews

The following list shows the category system and the number of codings per category.

List of codes	Number
Actors	10
Decent working conditions	6
Aspects to improve	14
Best ways to improve	16
General Statements	1
Most urgent problems	16
Motivation	6
Necessity of improving	8
Opportunities	15
Participation	37
Problems	18
Purpose of Organization	67
Responsibility	10
Taking action	10
British Fish Industry	15
Developments	52
Education	16
Effects on working conditions	9
Hegemony	6
Investment / Finance	65
Perception	28
The workers' role	13
Politics	2
Brexit	22
Enforcement	57
Quota	15
Regulations	87
Migrant Workers	3
Abuse, Forced, Human trafficking	39
Dependence	10
Origin / Culture / Reason	70
Recruitment / Agencies	37
Status	64
Unequal Treatment	21
Willingness to talk / fear	12
Working Conditions	44
Change of working conditions	20
Contracts	30
Culture aboard	6
Living Conditions	80
Safety & Health	52
Skipper/company	83
Type of fishing / boat / community	69
Unequal Treatment of other groups	6
Wages	69
Working Hours	35
Working on a vessel	12

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Personal Declaration

I hereby declare that the submitted thesis is the result of my own, independent work. All external sources are explicitly acknowledged in the thesis.

Zurich, 30.01.2020

Dominic Rietmann