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Norwegian fishing industry and its interaction with EU in the time of global economic crisis

1. Introduction

Norway is a Nordic country located in Northern Europe. It has a population of 4,858,200 (2010 est) and the total area of 385,252 square kilometers. Norway is ranked as the wealthiest country in the world on the basis of monetary value with the largest capital reserve per capita of any nation.

Not to mention that Norway is the world's seventh largest oil exporter (with the capacity of 2,383,000 bbl/day (2008 est))¹. The Norwegian economy is an example of a mixed economy, a flourishing capitalist welfare state featuring a combination of free market activity and large state ownership in key sectors. Over recent global financial crisis, Norwegian Krone has been considered as one of the most solid currencies in the world².

Norway is not member of the European Union, but it has cooperation with the EU through agreements such as European Economic Area (EEA)³. In addition, it has been a part of the European Free Trade Association (EFTA)⁴ since 1960. Norway held two referendums about the issue of EU membership in 1972 and 1994, but it was rejected by the narrow majority of people. However, Norway and the EU enjoy good relations. Norway's economic relations with the EU are mainly regulated through the EEA and EFTA. The EEA agreement has been in force since 1994.

Through the EEA agreement Norway is part of an integrated European labor market. Although Norway doesn't have voting rights, through the EEA agreement, it participates in various EU programs and agencies.

¹ See <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2176rank.html>

² Compare http://en.wikipedia.org/wiki/Norway#cite_note-Population-1

³ Compare http://ec.europa.eu/external_relations/eea/ [12.12.2009]

⁴ For Further information about EFTA see: http://en.wikipedia.org/wiki/European_Free_Trade_Association

The Norwegian economy ⁵ is a developed mixed economy with heavy-state ownership in strategic areas of economy. It has shown stable growth since the industrial era. The unemployment rate in Norway is 3.3% (2010 est)⁶. Norway had a trade surplus of US\$ 52.2 billion in 2009, down from US\$ 83.2 billion in 2008 due to the fall in global Petroleum prices in 2008 resulted from global economic crisis. Although Norway is a member of EEA and ETFA, it has very high tariffs on agriculture products (136%). However, it has low tariffs on non-agricultural goods⁷. Norway's economic growth highly depends on natural resources including oil exploration and production, hydroelectric power and fishing industry. The latter is one of the country's major export industries. The main reason for this is that Norway controls some of the world's richest fishing grounds. They include the North Sea, Norway's coastal waters, the Barents Sea and the Norwegian polar front. Norway is one of the top three fish exporting nations. Around of 95% of its production is exported. Norway has a high share in the EU fish imports. Norway has high level of production despite recovering from global crisis. In terms of tonnage, Norway has the highest rank among European fishing countries (2,526,000 tons of fish catch by fishing vessels (2009 est)) ⁸ and it has developed its own efficient fishery policy. Despite not being a part of the EU, it has enjoyed the benefits of a very low tariff on export of salmon (whole salmon) and also many types of fish products through EEA agreement.

Recently, after difficult period of negotiations, Norway and the EU have reached a bilateral fisheries agreement for 2010 and long-term agreement on management of North East Atlantic mackerel⁹. It is important to mention that Norway's past relations with the EU on fishery sometimes has been problematic. Norway has been accused of dumping, causing minimum prices and quotas in periods 1997-2002 and 2005-2009¹⁰. Norway and EU mainly have problem on North-East Arctic cod quota. In addition, there have been preventive interventions against Norway's fishery by EU authorities in the EU territorial waters occasionally. For example,

⁵ See more information on the economy of Norway on:

http://www.theodora.com/wfbcurrent/norway/norway_economy.html [15.01.2010]

⁶ See <http://europa.eu/rapid/pressReleasesAction.do?reference=STAT/10/59&type=HTML> [30.April.2010]

⁷ <http://www.euromonitor.com/>

⁸ http://www.ssb.no/english/subjects/10/05/fiskeri_en/tab-2010-02-12-01-en.html [2010]

⁹ For further information See Norwegian Ministry of Fisheries and Coastal Affairs :

<http://www.regjeringen.no/en/dep/fkd/Press-Centre/Press-releases/2010/Norway-and-the-EU-have-concluded-a-bilateral-fisheries-agreement-for-2010-and-a-long-term-agreement-on-management-of-North-East-Atlantic-mackerel.html?id=592271> [28.01.2010]

¹⁰ See

<http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=/published/emeraldfulltextarticle/pdf/0200260406.pdf> ,p.3, [February.2008]

Norwegian fishermen were banned by the EU coast guards from fishing mackerel in EU territorial waters in November 2009 which caused financial damage to Norway's fishing industry.

Considering aforementioned facts, this essay firstly tries to become familiar with Norwegian fishing industry, and then in the view of Norway and EU economic relation, recent agreement on fishing industry and the dispute between Norway and EU on the quota problem and reciprocal access to both sides' territorial waters, it studies the situation of Norwegian fishing industry in the economically integrated Europe. In the second part, it mainly deals with the cooperation of Norway and EU on fishery, conflicts between Norway and EU on fishery, Norway's fishing trade with EU and labor market for EU workers in the Norwegian fishing industry. In addition to these issues, since there is global economic crisis, this essay studies the situation of fishing industry in the time of crisis briefly.

2. The overview of Norway's Fishing industry

A long coastline with wide sea beds and numerous fjords (A long, narrow, deep inlet of the sea between steep slopes) help Norway make benefit of the sea. The fish industry is the third largest export sector in Norway after oil/gas and metals, and it has 0.4% share of GDP. It also accounts for 4.5 % of the total Norwegian export value¹¹.

2.1. Methods used in the fishing Industry

The fishing industry in Norway includes traditional fishing, fish farming and processing of all kinds of seafood at onshore facilities. The traditional fishing method is still in use, while at the same time new technologies and modern methods have been introduced. Although the new innovations in fishing industry along with international competition have caused an increase in the production of fish and seafood, they also have resulted in the reduction of the number of job vacancies in this sector.

The Norwegian farmed seafood production has comprised of many different branches and it has a great variety in technology, production methods and profitability. As a result, it is not easy to discuss it in one unit. Nowadays, the farmed seafood production experiences a golden time while the traditional fish industry suffer a significant decrease in employment. Norway sold 842

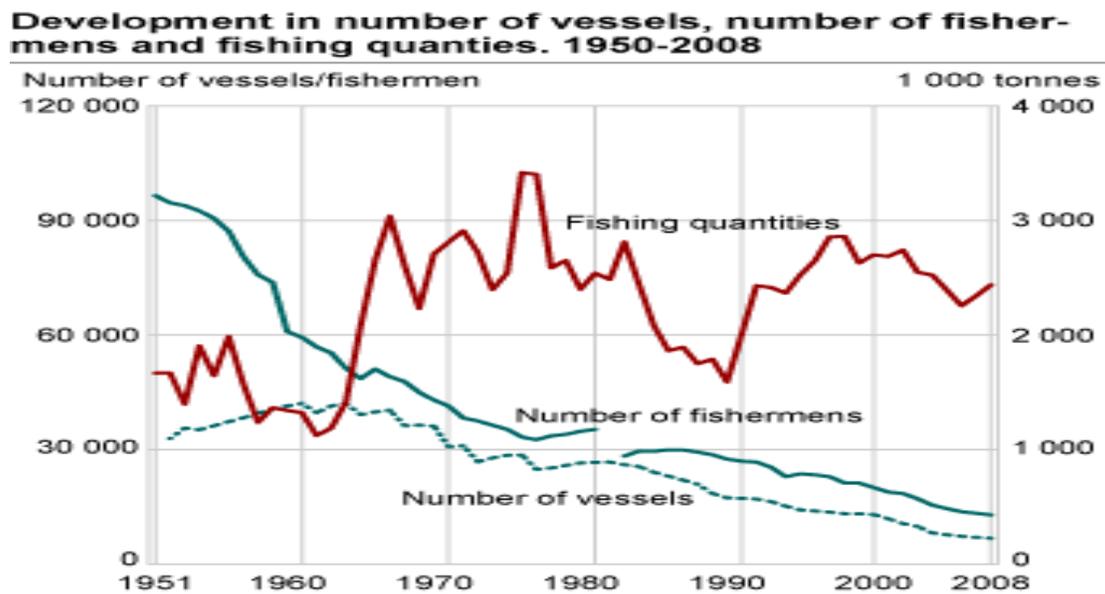
¹¹ See Statistics Norway: http://www.ssb.no/fiskeri_havbruk_en/ [2010]

000 tons of farmed fish in 2008¹². Since the farmed seafood production depends on modern technology, it is not so labor-intensive. As a result of this, the farmed seafood production is not able to compensate for the unemployment reduction in the traditional fishing¹³.

2.2 The Fishing industry Capacity

In the fishing industry, Norway is one of the world's major actors, despite its small size. It has a share of nearly 3% of the total world catch. As mentioned in the last section, although there is a decrease in labor force in this industry because of introduction of new technology and also the decline in the number of fishing vessels in the long-term, fishing capacity has been increased between 1951 and 2008 (Graph 2.1). However, this increase has been fluctuating due to other economic factors.

Graph 2.1



Source: Statistics Norway ¹⁴

¹² See Statistics Norway: http://www.ssb.no/fiskeri_havbruk_en/

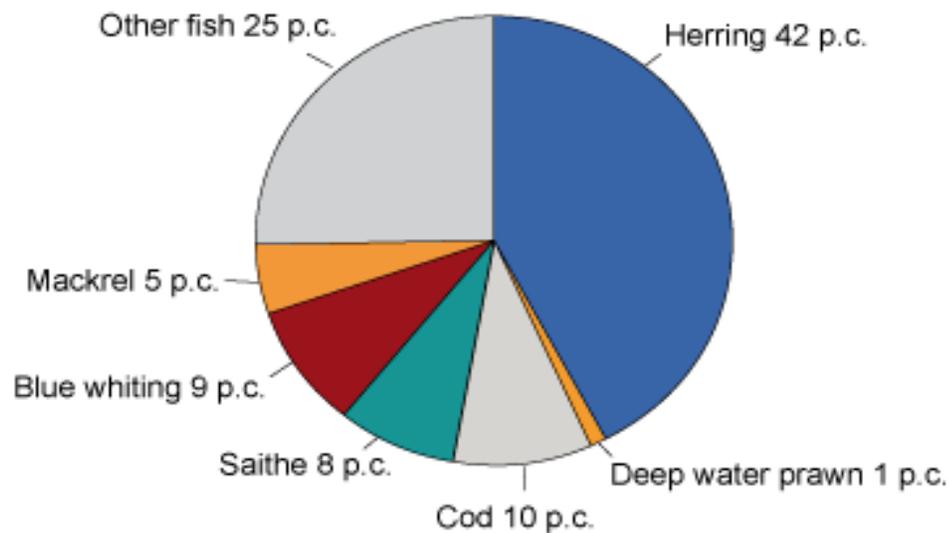
¹³ See Norwegian Ministry of Fisheries and Coastal Affairs website”
<http://www.regjeringen.no/en/dep/fkd.html?id=257>
 and <http://www.nav.no/82986.cms> [updated February 2010]

¹⁴ See Statistics Norway: http://www.ssb.no/fiskeri_havbruk_en/ [2010]

One important reason for the rise in the fishing capacity could be related to the increase in physical capacity as a result of increase in the average size of vessels. In other words, we can conclude that the decrease in the number of workers and vessels has not caused a decline in the capacity of fishing industry over a long term, but on the contrary, due to the development of technology, the efficiency and profitability of the fishing fleet has been improved. One explanation for the increase in the efficiency of fishing is that as the number of vessels decline any given quantity can be caught in less time and vessel can make more frequent trips as a result¹⁵. The quantity of fish caught by the Norwegian fleet was 2,526,000 ton in 2009. We can also point out the catch quantity of most important species. The share of Atlantic Cod and Herring was 242,000 and 1,070,000 ton. Norway's Mackerel catch (including young mackerel) was 121,000 ton¹⁶. In the chart below, catch quantity by fish species is depicted for year 2009.

Chart 2.1

Catch, by fish species. 2009*. Per cent



Source: Statistics Norway¹⁷

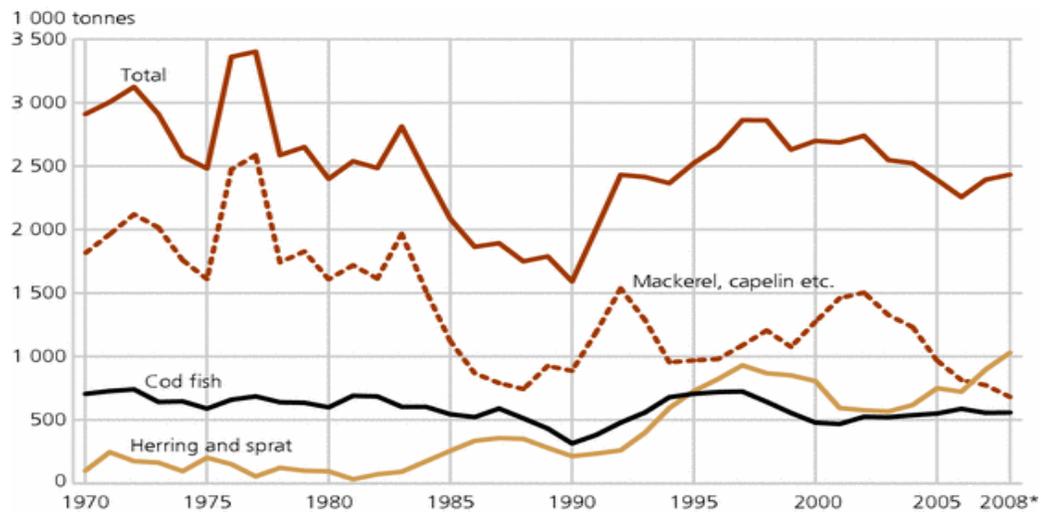
¹⁵ Compare OECD Economic Surveys: Norway 2010 By Organización de Cooperación y Desarrollo Económico, Organización de Cooperación y Desarrollo Económico (París, Francia), p.131-132.

¹⁶ See Norway Statistics: http://www.ssb.no/english/subjects/10/05/fiskeri_en/tab-2010-02-12-01-en.html [2010]

¹⁷ See Statistics Norway: http://www.ssb.no/english/subjects/10/05/fiskeri_en/fig-2010-02-12-02-en.gif [2010]

It is also useful to have a look at quantity of catch, by main group of fish species in last three decades (Graph 2.2)

Graph 2.2



Source: Statistics Norway¹⁸

On the basis of economic terms, the cod catch has the highest value. It is followed by herring, saithe and mackerel¹⁹.

2.3. Setting limit on fishing and resource management

Norway earns huge revenue from two important types of fisheries apart from the economic interest it has in other types of species. North East Arctic (Barents Sea) cod and Norwegian Spring Spawning Herring are these two types of fisheries. One of the key aspects of these types of fisheries is that they are shared with other countries. A lot of countries are involved, but Russia and European Union (EU) are the most important ones.

Since overfishing problem is very likely when the fishery is shared between countries, the international cooperation is required to manage fish resources. At present, there are limits for countries to catch the total amount of fish from each stock in one year. It is called Total Allowable Catch (TAC). Data on recorded and unreported catch shows that there has been always tendency toward overfishing in all territorial waters. For example, in the case of North-East Arctic cod, overfishing has been frequently amount to over 20% of the TAC between 1987 and

¹⁸ See Statistics Norway: <http://www.ssb.no/english/yearbook/fig/fig-371.html> [2009]

¹⁹ See Statistics Norway: http://www.ssb.no/norge_en/primar_en.pdf

2007 (including estimates of unreported catch). (The agreements between Norway and its commercial rivals on allowable catch are discussed in chapter 2).

In addition to catch limit, there are many regulations, for example, on preventing fishing vessels from catching very young fishes and non-targeted species. The enforcement of these regulations depends on the country to which the vessels belong and the country that in its territorial waters the vessels work. In the case of Norway, most of Norway's shared fisheries are in the waters covered by the government. The Norwegian coast guard inspects the territory which is under its control nearly 2000 times every year.

As is the case for most countries, Norwegian law allows Norwegian vessels to fish in areas that are determined by the national regulations and the regional management agreements in which Norway participates²⁰.

2.4. The labor market for the workers in Norwegian fish industry

The labor market in Norwegian fishing industry is supported by Norwegian government. Before the year 2005, there had been an agreement²¹ (1964) between the Norwegian government and the Norwegian Fishermen's Association, but it was repealed in 1 January 2005. In spite of this, the important elements of this agreement such as income support scheme, transportation support, support to a research and support to the sealing industry have been maintained.

In the shadow of the income support scheme, the government allocates funds to fishing industry sector in order to make sure that fishermen will reach the income levels as the average industrial worker. However, recently this support has been weakened and limited, but it is still in force. The minimum wage scheme which is part of income support scheme is still in effect. According to this scheme, the fishermen will be under support when their income is inefficient because some extraordinary conditions such as bad weather, unchallengeable ice conditions and etc²². In general, Norway benefits from good working conditions. The unemployment rate in Norway (3.3%, 2010 est) is lower than the European average with a significant difference (10.0% for Euro Area and 9.6% for EU 27, 2010 est)²³. The working conditions for both domestic and

²⁰ Compare OECD Economic Surveys: Norway 2010 By Organización de Cooperación y Desarrollo Económico, Organización de Cooperación y Desarrollo Económico (París, Francia), p.132-140.

²¹ For further information on this agreement see Review of Fisheries in OECD Countries: Policies and Summary Statistics 2008, P.274.

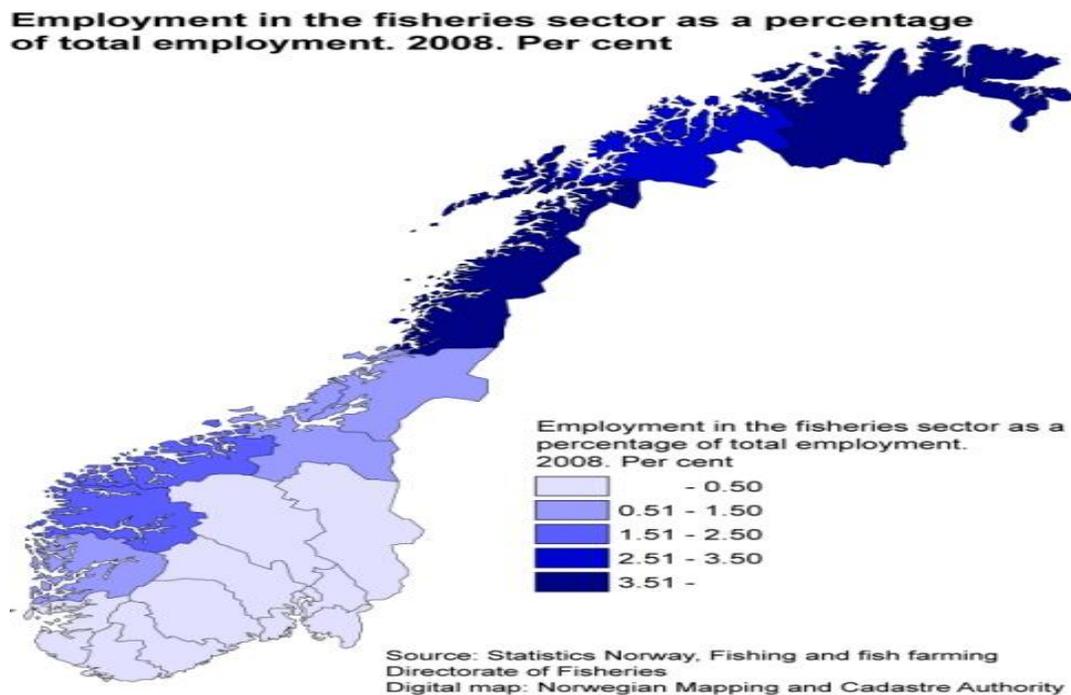
²² For further information on this agreement see Review of Fisheries in OECD Countries: Policies and Summary Statistics 2008, P.274.

²³ See <http://europa.eu/rapid/pressReleasesAction.do?reference=STAT/10/59&type=HTML> [30.April.2010]

foreign workers are almost suitable. The employment of foreign workers in certain key sectors such as tourism, fisheries, services and petroleum industry has increased recently.

In the fishing industry, the production depends somewhat on the weather conditions. As a result, there are seasonal jobs for some group of workers. Although as mentioned in the section 2.1, the unemployment in the traditional fishing has decreased and farmed seafood production is not so labor-intensive because of its relatively high dependency on technology, the employment capacity is still satisfactory in fishing industry.

According to data provided from Statistics Norway in 2008, of 2224100 employed persons in Norway (Employees and self-employed) in all sectors, 13600 persons work in the fishing industry (fishing and fishing farming)²⁴. In the map graph below, the employment in the fisheries sector as a percentage of total employment for different regions is shown. The graph belongs to Statistics Norway in 2008.



Source: Statistics Norway²⁵

²⁴ See Statistics Norway: <http://www.ssb.no/english/yearbook/tab/tab-293.html> [2009]

²⁵ See Statistics Norway: http://www.ssb.no/fiskeri_havbruk_en/ [2010]

3. Norwegian fishing industry and EU

3.1. Fisheries cooperation with EU

Although the Management of sea resources is not included in the EEA agreement, since Norway and EU vessels use the same oceans for hunting the fish, they need an effective cooperation.

In most cases, Norway's fishery cooperation with EU is adapted to its regulation system.

Close fisheries cooperation between Norway and EU has started since 1977 based on the implementation of Exclusive Economic Zones (EEZ)²⁶.

There are general agreements between two sides which is examined or amended every year contingent on the results of their negotiations. In fact, separate negotiation sessions on the further development of cooperation through the EEA are conducted. There are the bilateral, the trilateral and the neighboring agreements (They came into force after 16.June.1981).

The bilateral agreement covers North Sea, the Atlantic and Barents Sea (North-Arctic Sea), the trilateral agreement covers Kattegat and Skagerrak²⁷ and the neighboring agreement covers the Swedish fishery in Norwegian waters of the North Sea.

The bilateral agreements requires that Norway has to be compensated by receiving quota in the EU waters because of a large share of the overall quota for North-East Arctic cod granted to the EU. In addition, on the basis of the bilateral agreement, there is annual quota agreement on fishing operations involving commercial joint stock in the North Sea, Norwegian fishing operations in west of the British Isles and off the coast of Greenland, and EU fishing operations in the Norwegian Economic Zone in the Barents Sea and fisheries zone around Jan Mayen²⁸.

Norway and EU have a close cooperation on the management of resources. Historically, they have had an agreement on North Sea herring since 1998. This agreement required a rational harvesting pattern and stable catch levels. The cooperation on North Sea resources has developed into more comprehensive management plans for herring, saithe, cod and haddock through long

²⁶ For more information about the definition of EEZ and Norway's EEZ see http://en.wikipedia.org/wiki/Exclusive_Economic_Zone

²⁷ The Skagerrak is a strait running between Norway and the southwest coast of Sweden and the Jutland peninsula of Denmark, connecting the North Sea and the Kattegat sea area, which leads to the Baltic Sea. For further information see: <http://en.wikipedia.org/wiki/Skagerrak>

²⁸ Jan Mayen Island is a volcanic island in the Arctic Ocean, 55 km (34 miles) long (southwest-northeast) and 373 km² (144 mi²) in area, partly covered by glaciers (an area of 114.2 km² or 44.1 mi² around the Beerenberg). For further information see: http://en.wikipedia.org/wiki/Jan_Mayen

term agreement and also based on the advice from ICES (The International Council for the exploration of the Sea).

Another important joint cooperation between Norway and EU which is based on annual agreement is concerned with the reduction of discard. The objective is to reduce and finally eradicate discards. The discard ban before 2012 is considered as part of the EU common fishery policy. Today, this policy is enforced in the fishing ground in North Sea and Barents Sea through implementation of RTC (Real Time Closure) system. In RTC system, a sample area of fishing ground is investigated in order to understand if there is high abundance of one species or not.

According to trilateral agreement among Norway, Denmark and Sweden, Norway is authorized to have fishing operations in the Skagerrak and Kattegat waters. In general, the agreement among these countries allows them to have fishery operations up to four nautical miles from the sea boundary in the area. In addition, the annual quota agreements are in accordance with fish stock quota regulations in the EU.

In the case of neighboring agreement, the agreement between Sweden and Norway makes fishing in the Norwegian exclusive economic zone south of 62° N possible for Sweden. In the case of both trilateral and neighboring agreement, since Sweden and Denmark have become members of the EU, the European commission negotiates with Norway on behalf of them on quota agreements which are negotiated annually²⁹.

Apart from its cooperation with EU countries, Norway has a good cooperation with Russia on fishing operations. They share the stocks of cod, haddock and capelin in Barents Sea.

Norway and EU do not give quotas to a third country before consulting on mutual stocks. Quotas to a third country are a subject to the discussion between Norway and the third country based on Norway's quota³⁰.

As mentioned in the introduction, Norway and EU reached new fisheries agreement after a difficult period of negotiations in 2009. This agreement was an important step for improving the relationship between Norway and EU in fishery. According to this agreement, the EU has obtained additional access to cod in North Norway. Quotas for Norway of pelagic species (blue whiting, horse mackerel) in western waters have been reduced. Instead, a new incentive plan to encourage a reduction in discards of cod in Barents Sea has been introduced. In the case of

²⁹ See http://ec.europa.eu/fisheries/cfp/international/agreements/norway/index_en.htm [Last updated:04.05.2010] and http://www.fisheries.no/management_control/Norwegian_fisheries_collaboration/Cooperation_EU/ [Last updated: 08.03.2010]

³⁰ Compare Norway's ministry of fisheries and coastal affairs: <http://www.regjeringen.no/en/dep/fkd.html?id=257>

mackerel, they concluded a long-term agreement on management of North east Atlantic mackerel. In addition to Norway and EU, other coastal states like Faroe Islands and Iceland are also involved in the management of mackerel.

In addition, this agreement fixes the level of TAC (total allowable catch) for the main stock in North Sea including cod and haddock in 2010 (Table 3.1)³¹.

Table 3.1: EU/Norway agreement 2010

Species	TACs 2009	TACs 2010	Norway	European Union
Cod	28, 798	33,552	5,704	27,848
Haddock	42,110	35,794	8,073	27,711
Saithe	125,934	107,044	56,613	50,431
Whiting	15,173	12,897	790	12,107
Plaice	55,500	63,825	4,268	59,557
Mackerel	63,826	60,446	39,054	21,392
Herring	171,000	164,300	47,647	116,653

*: TAC is the weight measured on the basis of Ton.

Source: European Commission Website ³²

In addition to agreement on quotas in territorial waters, Norway and EU cooperate on the control and enforcement of fishing regulations.³³ Until now they have had a good cooperation on the illegal, unreported and unregulated fishing problem (known as IUU problem)³⁴.

For instance, IUU has created serious problems for fishing industry in Barents Sea and coastal communities in that area which are dependent on fishing. The heavy pressure of illegal fishing is on the cod stock. IUU has been being gradually eliminated in the Barents Sea through the active cooperation of Norway and Russia Since 2005.

³¹ See European Commission:
http://ec.europa.eu/fisheries/news_and_events/press_releases/270110/index_en.htm [27.01.2010]

³² European Commission: http://ec.europa.eu/fisheries/news_and_events/press_releases/270110/index_en.htm [27.01.2010]

³³ For Further information about the regulations on fishing see European Commission :
http://ec.europa.eu/fisheries/cfp/control/illegal_fishing/index_en.htm [Last updated: 03.05.2010]

³⁴ Compare Norway and the EU – partners for Europe (Norwegian Ministry of Foreign Affairs), P.23.
<http://www.regjeringen.no/upload/UD/Vedlegg/eu/Norway%20and%20the%20EU.pdf> [02.2009]

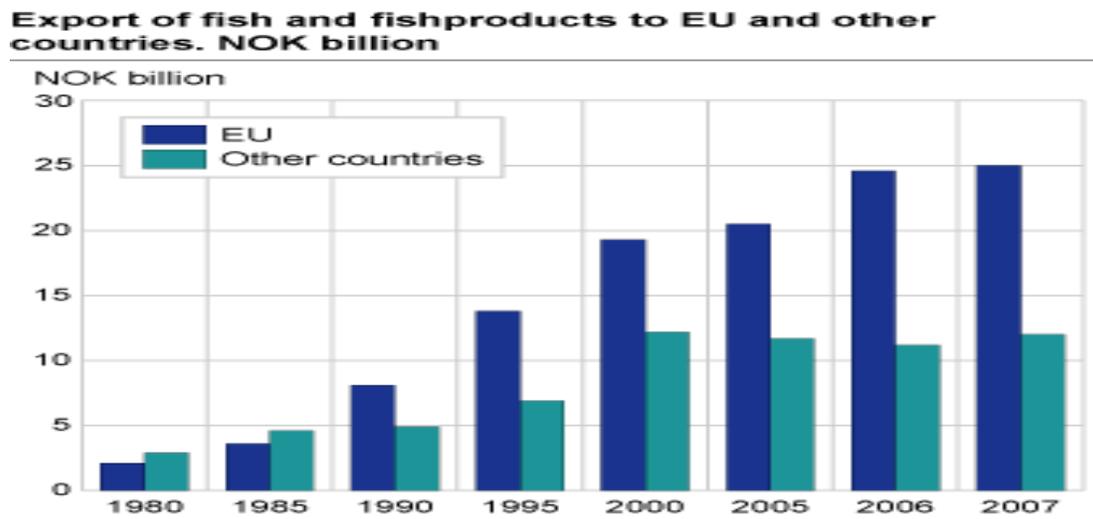
IUU in the Barents Sea is estimated at more than 100,000 ton a year. This cooperation has brought EU support. EU has imposed requirements which make it more difficult to land illegal catches in its territory³⁵.

However, sometimes, this cooperation has been overshadowed by the conflict between EU and Norway on territorial waters and quota fixing (The conflicts between EU and Norway on fishery is more discussed in Section 3.3)

3.2. Norway's Fishing trade with EU

As mentioned previously, fishing products account for 4.5 % of the total Norwegian export value. In 2008 Norway had 17.1% share of total EU fish imports, but the share of Norway fish Imports from EU was 4.4%.³⁶ According to Statistics Norway, between 1980 and 2007 the proportion of export of fish and fish products to EU in relation to other countries has been almost doubled (Chart 3.1). This change necessitates more flexible trade policy for Norway. In our studied case, trade policy about the export of fish from Norway to EU is mainly considered.

Chart 3.1: Export of fish and fish products to EU and other countries. NOK billion



Source: Statistics Norway³⁷

³⁵ See Ministry of Fisheries and Coastal Affairs, press release No: 25/100 on <http://www.regjeringen.no/en/dep/fkd/Press-Centre/Press-releases/2010/Very-good-results-in-combating-illegal-fishing.html?id=601898> [29.04.2010]

³⁶ See http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113429.pdf [22.Sep.2009], P.10.

³⁷ See Statistics Norway: http://www.ssb.no/english/subjects/10/05/fiskeri_havbruk_en/

Norway's trade policy is based on the rules and agreements of the World Trade Organization (WTO). In addition, Norway is a founding member of EFTA and EEA. Through these agreements, Norway secures its access to the international markets and facilitates trade with other countries.

Although through the EEA agreement Norway is part of integrated EU internal market, fishery is not included in the agreement's main body. Norway is considered as a third country³⁸ since it doesn't participate in EU customs union³⁹ for the export of its fishing products. Norway fishing trade with EU is subjected to common WTO regulations and customs tariffs incorporated in the EU trade policy regulations regarding third countries. Norway's status as the third country requires it to accept regulations about anti-dumping⁴⁰ and anti-subsidy⁴¹.

Although the WTO designs a framework for all kinds of trade between countries including trade in fishing product, there are no regulations that exclusively apply to fishing product trade. However, recently, there has been a significant development in international trade so that an increasing share of the world trade is regulated through regional agreements. Tariff reduction or abolishment is the main part of regional agreements.

Norway's fishing trade with EU is mainly regulated through the protocol 9 EEA agreement considering bilateral and trilateral agreements mentioned in the previous section. Protocol 9 is based on WTO regulations. It specifies provisions and arrangements which apply to trade in fish and other seafood products. According to protocol 9, tariffs on some fish products are abolished, on others are reduced and in some cases, remain non-preferential⁴². For sea - products including cod, haddock, saithe and halibut with exception of frozen fillets, there are preferential access⁴³ to the EU market. In addition, there are reduced tariffs for most other products. However, it is useful to mention that there is no tariff duty for a limited number of products such as salmon, herring, mackerel, shrimps, prawns and Norwegian lobster⁴⁴.

³⁸ See http://en.wiktionary.org/wiki/third_party

³⁹ See http://europa.eu/pol/cust/index_en.htm [Last updated: 05.05.2010] and <http://www.ijf.hr/eng/FTP/2010/1/skreb.pdf> [8.February.2010]

⁴⁰ See <http://www.businessdictionary.com/definition/anti-dumping-duty.html>

⁴¹ See <http://ec.europa.eu/trade/tackling-unfair-trade/trade-defence/anti-subsidy/> [Last Updated: 02.Oct.2009]

⁴² For definition of non-preferential tariffs See European Commission website: http://ec.europa.eu/taxation_customs/customs/customs_duties/rules_origin/non-preferential/article_410_en.htm [Last updated 21.04.2010]

⁴³ See http://en.wikipedia.org/wiki/Preferential_trading_area

⁴⁴ Compare European Commission website: <http://ec.europa.eu/trade/creating-opportunities/bilateral-relations/countries/norway/> [Last updated: 01.June.2009]

It is estimated that a complete elimination of tariffs on seafood implies a 1,070 million NOK increase in fish export value which is equal to 3.9 percent of the base year export value.

It is also necessary to take into account that no subsidies are paid to the fish industry which suffers from trade barriers.

Trade barriers vary based on markets (EU, Asia, Japan and etc) and products. They can be divided into two categories. First, there are ordinary tariffs that are usually ranged between 0 percent and 86 percent, depending on products and markets. For example, in the case of salmon, there is 2 percent tariff for whole salmon in the EU market, but it is 13 percent for smoked salmon in the EU market. Tariffs on highly processed fish (prepared meal) are relatively high in most markets with the exception of canned salmon to the EU (5.5 percent). In general, tariff rates in Asia markets are between 20 - 30 percent and in Russia and Japan markets are between 3.5 - 15 percent. Considering shrimps, whole pelagic fish and smoked salmon as exceptions (with tariff rates between 7.6 and 20 percent), due to bilateral trade agreement, tariffs in the EU market are generally low (0 - 3.9).

The second category includes non-tariff barriers which have mainly imposed on the fish farm sector. For instance, in EU, different export restrictions have been imposed on Norwegian salmon over a long period of time due to allegation of dumping. Lately, these restrictions have been removed through WTO dispute settlement. In addition to this example, in Russia - the fastest growing market for Norwegian salmon - import restriction has been imposed several times because alleged health risk from eating Norwegian salmon.

It is also possible to study the tariff rates for different products on the basis of fish species. In the family of whitefish species the tariff is highest for salted and dried cod and saithe (processed) which are two important members of this species (3.9%). For pelagic species (herring and mackerel), the EU tariff is high for whole fish (15-20%). The Smoked farmed salmon, which is exposed to high tariffs in most markets (13 percent in the EU market), expands substantially. The shrimps are also exported as peeled products instead of whole products. The reason for this is that peeled products are subject to lower tariff rates. Although processed fish product meets high level of tariff rate in most markets, it has expanded since it increases the employment in the fish industry by 10%⁴⁵.

⁴⁵ See Agriculture versus fish –Norway in WTO by Ivar Gaasland [14.February.2009], P.2-5.

3.3. Conflicts between EU and Norway on fishery

As mentioned in the introduction and in 3.1, Norway and the EU have reached a bilateral fisheries agreement and long-term agreement on management of North East Atlantic mackerel in January 2010. This agreement is so important for both sides that Norwegian Minister of Fisheries and Coastal Affairs - Lisbeth Berg Hanson - is pleased with the contents of this agreement. After conclusion of this agreement she stated that "We had many rounds of negotiation with the EU last autumn, but the challenges were so difficult that we had to resume negotiations in January. It is of major importance for the fishing industry in Norway and the EU that we now have agreements in place. The industry can now continue their important value creation within a stable framework"⁴⁶.

The challenges she mentioned were mainly about fixing quota shares between two sides, creating long-term agreement on the mackerel fishery, and reciprocal access to each party's exclusive economic zone (EEZ). Although the 2010 agreement was an effective step for improving the relations between Norway and EU on fishery, still there are many problems need to be discussed and reviewed. The main problem of quota fixing before concluding the 2010 agreement was about a larger share of the overall quota for North-East Arctic cod in Norwegian Economic Zone (in Barents Sea) that was being granted to the EU, but there was a problem in compensation of this by the EU. Due to annual agreements, Norway has to be compensated by quota allocations from the EU to Norway. As mentioned in section 3.1, 2010 agreement has moderated this situation by introducing a new incentive plan to encourage a reduction in discards of cod. This incentive is in accordance with mentioned Norway and EU common policy which intends to minimize and through effective regulation eradicate discards⁴⁷. However, the problem of North-East Arctic cod is still unresolved, and it needs to be negotiated in future talks.

Another problem in fixing quota was about fixing TAC for the joint stocks in the North Sea and Skagerrak. Due to recent agreement, the situation of TACs in the North Sea has been improved in an acceptable way (see table 3.1). In the case of North Atlantic mackerel, the problem is that the mackerel stock is at risk at present harvest rate. EU, Norway and Faroe islands set the catch level for mackerel 14 to 18 % of stock in 2000 due to a trilateral agreement, but in 2008, there was a modification since a scientific analysis suggested a precautionary approach

⁴⁶ See Norwegian Ministry of Fisheries and Coastal Affairs : <http://www.regjeringen.no/en/dep/fkd.html?id=257> [26.01.2010]

⁴⁷ See http://www.fisheries.no/management_control/Norwegian_fisheries_collaboration/Cooperation_EU/ [Last updated: 08.03.2010]

toward the mackerel fishing. There are uncertainties in the catch levels which stem from unaccounted mortality due to slippage and discards. Repeated analysis shows that mortality is still 60% higher than those officially reported. Although In 2009 The Faroe Islands, Norway and EU reached an agreement to reduce discard in Pelagic fisheries (mackerel, herring, blue whiting), Norway has been accused of mackerel overfishing. The recent long-term agreement on North Atlantic mackerel has opened new doors for the management of this species⁴⁸.

The controversy on mackerel and problem of quota fixing between EU and Norway have been unrelenting so that it has led to fishing problem in each party's exclusive economic zone (EEZ). Norway through the Zone Act limits fishing activity of foreign boats. However, fishery agreements between Norway, Russia and EU and other neighbor countries make the access to Norwegian territorial waters between 12 and 200 nautical miles from the baseline possible. The EU also has several regulations for protection and management of its resources. Although both parts have brought into force their own regulations and common agreements, still there are conflicts between two parts because of the problem of quota shared between EU and Norway. For instance, as mentioned in the introduction, the EU banned Norwegian fishermen from fishing mackerel in EU territorial waters in December 2009. Norwegian fishing boats were turned away by the EU coast guard. This action could have caused massive financial damage to Norwegian fishing industry. If the banning stayed in place, Norwegian fishing industry would lose \$175 million annually. This issue was serious to the extent that the Norwegian Association of Fishing boat Owners spokesman Inge Halstensen states that "If we cannot trust the EU as an agreement partner, Norway will have to deny EU fishermen access to the Norwegian zone in the North Sea and the Barents Sea."⁴⁹ This reprisal response by a Norwegian official could have exacerbated the tension between two parties. The main reason which caused this action by the EU was criticized Norway's fishing practices in both EU and Norwegian territorial waters.

Norway and EU have battle on Norway's overfishing for mackerel, Atlantic cod, whiting, coalfish, plaice, saithe and other species. The 2010 agreement is a sign of hope for Norway and EU to improve the issue of reciprocal access to EEZ. The reciprocal access problem could be

⁴⁸ See http://www.fisheries.no/Ecosystems-and-stocks/marine_stocks/fish_stocks/mackerel/marine_stocks_mackerel/, <http://www.regjeringen.no/en/dep/fkd/Press-Centre/Press-releases/2010/Norway-and-the-EU-have-concluded-a-bilateral-fisheries-agreement-for-2010-and-a-long-term-agreement-on-management-of-North-East-Atlantic-mackerel.html?id=592271> [28.01.2010] and http://www.fisheries.no/management_control/Norwegian_fisheries_collaboration/Cooperation_EU/ [Last updated: 08.03.2010]

⁴⁹ See <http://www.pamil-visions.net/norway-fishing-for-answers/27521/>, [02.December.2009]

resolved if the fixed quotas in all related waters are modified. The table 3.1 shows some of these improvements of quota for different species in North Sea in the light of 2010 bilateral agreement.

3.4. The situation of EU workers in Norwegian fishing industry

According to Statistics Norway, there was a growth of nearly 28000 employed immigrants out of a total growth of 41000 employed people (15 - 74 years of age) in Norway from the fourth quarter of 2007 to 2008. The employment rate of EU immigrants who are mainly labor immigrants was slightly above the average level of the whole population (71.6 per cent for whole population in 2008 statistics). It was 74.5 % for the Nordic countries, 72.0 % for other Western European countries, 75.9 for EU countries in Eastern Europe⁵⁰.

The fishing industry (especially in Northern Norway) has been dependent on immigrant workers since long time ago. Young Finnish women working on a temporary basis during 60's and 70's, and then Sri Lankan refugees are evidences of this fact. Of total 3247 employed immigrants (aged 15 - 74) in Agriculture, Forestry and Fishing which comprise 4.2 percent of immigrants workers, the share of EU immigrants (the Nordic countries, other Western European countries and EU countries in Eastern Europe) is 2328 (71.7%)⁵¹. This high percentage of participation of EU workers in agriculture, forestry and fishing industry and -as mentioned in 2.4 - increase in the employment of foreign workers in fishing industry in recent years despite of the decrease in job career for fishing industry, and also seasonal nature of employment in this industry indicate that the situation of EU workers in labor market for fishing industry is still satisfactory. The main reason for this good situation is mobility of labor from EU to Norway which is guaranteed by the EEA agreement.

The EEA agreement enables job - seekers from other EEA member states to obtain residence and job in Norway in various sectors. Workers employed in all sectors in Norway are entitled the same labor rights as Norwegian citizens. These rights include social insurance, unemployment benefits, pensions, occupational injury and etc. Of course, the entitlement of all these rights is subjected to specific conditions which are defined by Norwegian law and included in the EEA agreement. For instance, all persons working for an employer are required to pay taxes.

⁵⁰ See Statistics Norway: http://www.ssb.no/innvregsys_en/ [24.June.2009]
and http://www.ssb.no/innvregsys_en/tab-2009-06-24-01-en.html [2009]

⁵¹ See Norway statistics website : http://www.ssb.no/innvregsys_en/tab-2009-06-24-08-en.html [2009]

When they pay taxes, they are automatically members of social insurance scheme⁵².

In sum, considering recent global economic crisis, the situation of immigrants workers (in our studied case EU workers) in Norwegian fishing industry is good enough. Norway's strong economy which is under an obligation to rational policies and also natural resources has caused this suitable situation.

4. The situation of Norwegian fishing industry during recent economic crisis

In the previous sections, issues related to capacity of Norwegian fishing industry, the situation of EU and domestic workers, the cooperation and the conflict between EU and Norway on fishery, and also regulations about trade between two sides were discussed. In this section, we would like to study briefly the influence of recent global economic crisis⁵³ which has started since 2007 on Norwegian fishing industry and its fishery policy.

4.1. Economic crisis in Norway

Norway has improved its economic situation resulted from global financial crisis quickly. Although there has been a considerable increase in unemployment, it is still below 4% and it is forecasted to decline during recovery period. The crisis in Norway began in 2008 when an expansionary fiscal policy was imposed by government. This policy was followed by huge fiscal stimulus in 2009 and also another expansionary budget in 2010. Moreover, the central bank reduced the interest rate between October 2008 and June 2009 in order to mitigate credit problem and increase the supply of liquidity. Although this generous fiscal policy and monetary policy could have led to the long-term economic crisis, the government started withdrawing its expansionary fiscal policy and its monetary policy. It responded to the short – term crisis by effective policy through facilitating bank's access to longer term funding by temporary application of covered bonds instead of treasury bills, establishing a Finance Fund in order to supply core capital to banks to strengthen their lending capacity and a Government Bond Fund to boost supply of credit in the bond market. The central bank also discontinued most of its liquidity measures in summer 2009 when the financial market was being improved.

Credit conditions have been better for households and the corporate sector recently.

⁵² For further information about labor rights entitled EU workers in Norway see: www.nav.no/_binary?download=true&id=805406680 [March.2007]

⁵³ http://en.wikipedia.org/wiki/Financial_crisis_of_2007%E2%80%932010#cite_note-5

4.2. The effect of economic crisis on Norwegian fishing industry

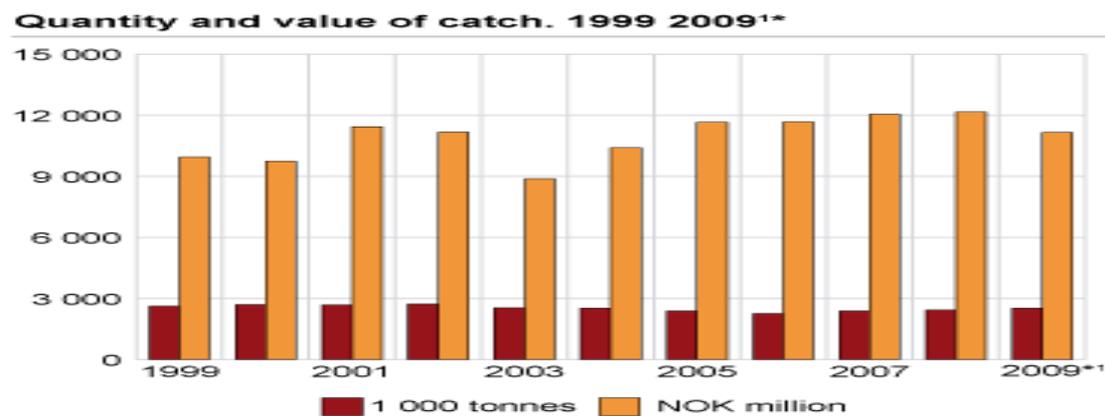
The expansionary fiscal policy which requires a tighter monetary policy (for instance to increase short-term interest rate) and higher exchange rate has negative effects on a country's key industries.

In order to examine the effect of economic crisis on Norwegian fishing industry, we need to compare the total value and quantity of fish production, the situation of domestic and EU workers in Norwegian fishing industry and Norwegian fishery trade with EU during crisis years.

There was 4 % increase in the quantity of caught fish, and 8 % decrease in its value between 2008 and 2009⁵⁴. There is more catch and less value. The supply of fish is greater than its demand as a result of economic disequilibrium. This situation called surplus is resulted from mentioned economic crisis. In particular, it has originated from lack of liquidity.

Chart 3.2 shows output quantity and value between 1999 and 2009. According to chart 3.2, apart from mentioned decrease in value from 2008 to 2009, the data related to output quantity and value for years 2007 - 2009 remained almost stable.

Chart 3.2: Quantity and value of catch. 1999-2009



¹ A small amount of the landed fish has not yet been sold. Therefore, the value of the total catch is expected to increase slightly as these sales are registered..

Source: Statistics Norway ⁵⁵

EU trade balance for Norwegian fishery products was -2.6363 million euro in 2008⁵⁶. This trade deficit for EU in the time of crisis suggests that recent economic crisis has not affect Norway's fishing trade with EU significantly. As mentioned in 3.4 and 2.4, the situation of both

⁵⁴ See Statistics Norway on : http://www.ssb.no/english/subjects/10/05/fiskeri_en/ [12.February.2010]

⁵⁵ See Statistics Norway on : http://www.ssb.no/english/subjects/10/05/fiskeri_en/ [12.February.2010]

⁵⁶ See http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113429.pdf [22.Sep.2009], P.10.

EU and domestic workers is satisfactory in the fishing industry despite being in the recovery period.

Even though Norwegian fishing industry has experienced the more catch - less value situation between 2008 and 2009, and also as mentioned in section 3.2, there is no subsidy for fishing industry which is under trade restrictions such as tariff, average profitability and prices are quite high as industry has ridden out of crisis in line with Norwegian economy . Exemptions on pollution and fuel tax, and also income tax for fishermen have compensated the lack of subsidy for the industry. Consequently, the industry is not affected by global economic crisis harshly.

Although the situation of fishing industry seems hopeful during recovery period and it is helpful for resource management purposes, there are some problems which reduce the economic efficiency of industry and also the efficiency of government's environmental policies.

Profitability of industry stems from the system of vessel-specific quotas, self-regulation and exemption from competition law. This situation limits competition by collecting monopoly and resource rents.

In addition, the policy of exemptions on pollution and fuel tax is at variance with the Norwegian environmental policy regarding the emission reductions⁵⁷.

These problems should be investigated by government authorities regularly and also resolved in an efficient way.

5. Conclusion

Our brief study of fishing industry in Norway indicates that this industry is one of the most important and profitable sectors in the country. The great capacity of fishing despite of decrease in number of workers and vessels suggests that Norwegian fishing industry has a high and sufficient potential of surviving during the recession and crisis. Moreover, it could play an important role in compensation for low productivity in other sectors to help national economy.

Although there was a situation of more catch-less value between 2008 and 2009 because of recent global economic crisis, Norwegian fishing industry survived through the crisis.

The decline in number of vessels has been compensated by the new technology which has increased the size of vessels. Although in comparison with the year 1951 there is a massive decrease in the number of workers in the fishing industry, considering the development of

⁵⁷ See Economic survey of Norway On : <http://www.oecd.org/dataoecd/12/26/44714706.pdf> [March.2010]

technology which leads to decrease in the labor force and today benchmark for employment (the unemployment in Norway is below the EU average with significant difference (3.3% -2010 est.)), the situation of labor market for both Norwegian citizens and immigrants workers is acceptable. 4.2% of Immigrants work in Agriculture, Forestry and fishing sector. Majority of them belongs to EU workers with the share of 71.7%. In addition, there is a growth in immigrant labor force in the market for Norwegian fishing industry every year. Labor mobility act resulted from the EEA agreement and providing EU workers with good conditions of work that Norwegian citizens enjoy is the main reason for the growth and high participation of EU workers in Norwegian fishing industry. The welfare state economy with the help of natural resources maintains and improves the quality of working for both Norwegian citizens and immigrants workers.

The management of fish resources requires setting precise and fair quota system between Norway and its commercial rivals. The bilateral, trilateral and neighboring agreements determine the fishery quota between Norway and EU countries. These agreements are subject to the modification every year and the most recent one was 2010 bilateral agreement. 2010 agreement tries to solve the main fishery conflicts between Norway and EU on North-East Arctic cod, mackerel fishery and reciprocal access to each party's EEZ. However, these problems are somehow interwoven with each other. For example, Norway wants more access to EU waters in exchange with large EU's share of North-East Arctic cod. According to 2010 agreement, a reduction in discards of cod has been introduced as an incentive for Norway and EU has acquired additional access to cod in North of Norway instead. In the case of other species like mackerel and pelagic species, and reciprocal access to EEZ, 2010 has also made a very progressive step and put an end to long period of negotiation between two parts. In spite of this, according to Norwegian fishing minister - Lisbeth Berg Hanson-, "still there is a long way to go".

Norway's trade with EU on fishing products is determined by the WTO and EEA agreement. Although according to WTO regulations, Norway is considered as a third country in its trade with EU and there are custom tariffs for the export of fish from Norway to EU, due to protocol 9 EEA agreement, these tariff rates are low and in some cases for limited number of products such as salmon and mackerel are eliminated. In sum, even though complete elimination of tariff rates is very beneficial to Norwegian economy and it causes 3.9% increase in the export value, Norway already enjoys low tariff rates in export of fish to EU.

In general, this essay showed that there are negative and positive sides in relation between Norway and EU on fishery. Since this relation is mainly based on the agreements between Norway and EU, it is expected to be improved frequently.

Although Norwegian fishing industry works well despite the fact that Norway is outside of EU and the its economy is in the recovery period, in my point of view, many negative sides of the relation between EU and Norway's fishing industry could be removed forever by the integration through the accession of Norway to EU.

Literature and Sources

1 - European Commission:

http://ec.europa.eu/external_relations/eea/ [12.12.2009]

http://ec.europa.eu/fisheries/cfp/international/agreements/norway/index_en.htm [Last updated: 04.05.2010]

http://ec.europa.eu/fisheries/news_and_events/press_releases/270110/index_en.htm [27.01.2010]

http://ec.europa.eu/fisheries/news_and_events/press_releases/270110/index_en.htm [27.01.2010]

http://ec.europa.eu/fisheries/cfp/control/illegal_fishing/index_en.htm [Last updated: 03.05.2010]

http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113429.pdf [22.Sep.2009]

<http://ec.europa.eu/trade/tackling-unfair-trade/trade-defence/anti-subsidy/> [Last Updated: 02.Oct.2009]

http://ec.europa.eu/taxation_customs/customs/customs_duties/rules_origin/non-preferential/article_410_en.htm [Last updated 21.04.2010]

<http://ec.europa.eu/trade/creating-opportunities/bilateral-relations/countries/norway/> [Last updated: 01.June.2009]

2 - Europa:

<http://europa.eu/rapid/pressReleasesAction.do?reference=STAT/10/59&type=HTML> [30.April.2010]

http://europa.eu/pol/cust/index_en.htm [Last updated: 05.05.2010]

3 - Wikipedia:

http://en.wikipedia.org/wiki/European_Free_Trade_Association

http://en.wikipedia.org/wiki/Norway#cite_note-Population-1

http://en.wikipedia.org/wiki/Preferential_trading_area

http://en.wikipedia.org/wiki/Exclusive_Economic_Zone

http://en.wikipedia.org/wiki/Jan_Mayen

http://en.wikipedia.org/wiki/European_Free_Trade_Association

http://en.wiktionary.org/wiki/third_party

http://en.wikipedia.org/wiki/Preferential_trading_area

http://en.wikipedia.org/wiki/Financial_crisis_of_2007%E2%80%932010#cite_note-5

<http://en.wikipedia.org/wiki/Skagerrak>

4 - Norwegian Ministry of Fisheries and Coastal Affairs:

<http://www.regjeringen.no/en/dep/fkd/Press-Centre/Press-releases/2010/Norway-and-the-EU-have-concluded-a-bilateral-fisheries-agreement-for-2010-and-a-long-term-agreement-on-management-of-North-East-Atlantic-mackerel.html?id=592271> [28.01.2010]

<http://www.regjeringen.no/en/dep/fkd.html?id=257> [26.01.2010]

<http://www.regjeringen.no/upload/UD/Vedlegg/eu/Norway%20and%20the%20EU.pdf>
[02.2009]

<http://www.regjeringen.no/en/dep/fkd/Press-Centre/Press-releases/2010/Very-good-results-in-combating-illegal-fishing.html?id=601898> [29.04.2010]

http://www.fisheries.no/management_control/Norwegian_fisheries_collaboration/Cooperation_EU/ [Last updated: 08.03.2010]

http://www.fisheries.no/Ecosystems-and-stocks/marine_stocks/fish_stocks/mackerel/marine_stocks_mackerel/,

<http://www.regjeringen.no/en/dep/fkd/Press-Centre/Press-releases/2010/Norway-and-the-EU-have-concluded-a-bilateral-fisheries-agreement-for-2010-and-a-long-term-agreement-on-management-of-North-East-Atlantic-mackerel.html?id=592271> [28.01.2010]

5 - Statistics Norway:

http://www.ssb.no/fiskeri_havbruk_en/ [2010]

http://www.ssb.no/english/subjects/10/05/fiskeri_en/tab-2010-02-12-01-en.html[2010]

http://www.ssb.no/english/subjects/10/05/fiskeri_en/fig-2010-02-12-02-en.gif [2010]

<http://www.ssb.no/english/yearbook/tab/tab-293.html> [2009]

http://www.ssb.no/innvregsys_en/ [24.June.2009]

http://www.ssb.no/innvregsys_en/tab-2009-06-24-01-en.html [2009]

http://www.ssb.no/innvregsys_en/tab-2009-06-24-08-en.html [2009]

<http://www.ssb.no/english/yearbook/fig/fig-371.html> [2009]

http://www.ssb.no/norge_en/primar_en.pdf

6 - OECD Economic Surveys: Norway 2010 By Organización de Cooperación y Desarrollo Económico, Organización de Cooperación y Desarrollo Económico (París, Francia),

http://books.google.com/books?id=bJoYGdr_Cb4C&pg=PA132&lpg=PA132&dq=norway+fishing+industry+capacity&source=bl&ots=KqRysAlROt&sig=G1Xn-M8tlEMLggAQlPFiEGjsDD8&hl=en&ei=BwuzS-TWOIapsQb6r-2ZAQ&sa=X&oi=book_result&ct=result&resnum=3&ved=0CA4Q6AEwAg#v=onepage&q=norway%20fishing%20industry%20capacity&f=false

7 - Review of Fisheries in OECD Countries: Policies and Summary Statistics 2008,

<http://books.google.com/books?id=lmJMijsRUB0C&pg=PA278&dq=norway+fishery+industry&cd=5#v=onepage&q=norway%20fishery%20industry&f=false>

8 - Agriculture versus fish –Norway in WTO by Ivar Gaasland [14.February.2009],

http://www.sciencedirect.com/science?_ob=MIimg&_imagekey=B6VCB-4VYW6FY-4-1&_cdi=5950&_user=3546788&_pii=S0306919209000268&_orig=search&_coverDate=08%2F31%2F2009&_sk=999659995&view=c&wchp=dGLbVtb-zSkWA&md5=9b3ba2ae28ec53d70d28cf52cbce4cf3&ie=/sdarticle.pdf

9 - Economic survey of Norway

<http://www.oecd.org/dataoecd/12/26/44714706.pdf> [March.2010]

10 - CIA -The World Fact Book: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2176rank.html>

11 - http://www.theodora.com/wfbcurrent/norway/norway_economy.html [15.01.2010]

12 - <http://www.euromonitor.com/>

13

<http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=/published/emeraldfulltextarticle/pdf/0200260406.pdf> ,p.3, [February.2008]

14 - <http://www.nav.no/82986.cms>[updated February 2010]

15 - <http://www.ijf.hr/eng/FTP/2010/1/skreb.pdf> [8.February.2010]

16 - <http://www.pamil-visions.net/norway-fishing-for-answers/27521/> [02.December.2009]

17 - www.nav.no/_binary?download=true&id=805406680 [March.2007]

18 - <http://www.businessdictionary.com/definition/anti-dumping-duty.html>