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**External Crises as a Catalyst for Further
Business Development and Innovations:**

Evidence from the Oil and Gas, Fishery and Tourism
Industries in Norway and Russia

Master's thesis in Innovation, Entrepreneurship and Society

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Abstract

The period of 2014-2015 has been highlighted by a multitude of diverse external crises that drastically disrupted both national economies and private business. The most demolishing externally initiated shocks for the Norwegian and Russian enterprises were the smart multilateral sanctions against Russia, the Russian food embargo, the national currency slump, and the tremendous crude oil price tumble. Notwithstanding, the destructive power of external shocks can be creative as well. Crises compel business to think “differently” and discover new opportunities to survive in the deteriorated market environment and win the rivalry with other firms. Thus, the current study intends to elicit the creative power of destructive external crises.

This master’s project elucidates the devastating and creative effects of the mentioned above economic shocks on the oil and gas, fishery, and tourism industries in Norway and the Russian Federation. These countries appeared as a “sender” and a “target” nations in the sanctions “war”, and both the Norwegian krone and the Russian rouble devalued as a sequence of the oil price slump, that destructed the oil-reliant national economies. Thence, the companies impinged the urgency to cope with the external crises. The current study expounds a direct connection between the extent of the external shocks’ damaging effect and the range of consecutive undertaken responses. Importantly, the most disrupted firms employed the most radical business- and production-related alterations and innovations to ensure their survival. Moreover, the cross-industrial and cross-national analysis elucidates diverse manners to cope with the external disruptive events. Specifically, the role of the state engagement, in the form of import substitution policies, was crucial in Russia, while the Norwegian businesses were more independent from the state. Moreover, the large business demonstrated a better ability to survive in the economic turmoil due to their extensive networks and financial resources, while SMEs struggled significantly during the recession.

The basal data for the study was conducted from various companies and experts, and is presented in the empirical analysis chapter. Whereas, the core theoretical framework draws on the innovation-, crisis-, and crisis management-related studies. Therefore, the meticulous empirical analysis on the base of the profound conceptual framework contributed to the disclosure of pivotal crisis management strategies and determinant particularities of business scope, industry and country, which foreordained the peculiar extent of the destructions caused by the crises, and success or failure of the undertaken measures.

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List of Abbreviations

APEC	The Asian-Pacific Economic Cooperation
BB	The fishing company “Baltiyskiy Bereg”
BRICKS	Brazil, Russia, India, China and South Africa
ERP	Effective Rates of Protection
EU	The European Union
EUR	Euro
FDI	Foreign direct investment
HEI	Higher education institution
IMF	The International Monetary Fund
INTSOK	Norwegian Oil and Gas Partners
NRCC	The Norwegian-Russian Chamber of Commerce
NSI	National innovation system
NSL	The Norwegian Seafood Association (Norske Sjømatbedrifters Landsforening)
OECD	The Organisation for Economic Co-operation and Development
ØSG	Øglænd System Group
R&D	Research and Development
RA	The fishing company “Russian Aquaculture”
RHBZ	The Military Academy of the Radiation, Chemical and Biological Defence
RUB	Russian rouble
SME	Small and medium-sized enterprise
UN	The United Nations
US/USA	The United States of America
USD	United State dollar
VNIIGAZ	The Scientific & Research Institute of Natural Gases and Gas Technologies
VNIIST	The Russian National Scientific Research Institute for the Construction and Operation of Fuel and Power Sector Pipelines and Facilities
VrTZ	The Volgorechensk Tubular Production Plant
YarNPZ	The Yaroslavl Oil Refinery

1 Introduction

The pattern of the global economic development resembles roller coasters with continual booms and falls. From the beginning of the 21 century, the world economy has been severely disrupted by a variety of external shocks, including financial crises, currency collapses, civil wars, political conflicts, crude oil price slump and so on.

Companies react differently to the external crises. According to the survey of the Austrian firms' responses to the financial crisis in 2008, the chief reactions encompassed cost-cutting strategies, including reducing of work hours (33% of companies), cutting of base wages (10%) and flexible wage components (13%), and laying off temporary and permanent personnel (10%) (Kwapil, 2010). Despite the apparent devastating impact of external shocks on business, these challenges test the firms' entrepreneurial mind, the ability to survive and stay in the market, and the ability to innovate and transmit to the next stage of business development. Jawaharlal Nehru, Indian nationalist and statesman, said, "Crises and deadlocks when they occur have at least this advantage, that they force us to think" (Ahmad, 2015, 1).

Hence, the aim of the thesis is to elucidate pivotal crisis management strategies and aspects fostering companies' innovations and further development in the difficulties caused by outer shocks. The ability of enterprises to survive and create new products, services and processes is essential in the fast changing technological world, when everything is inconsistent and improving incessantly. Furthermore, the ability to cope successfully with the external crises depends on the managers' entrepreneurial competencies, company size, country's specifics, the extent of government support, regional infrastructure, managerial capacities and skills, cultural, entrepreneurial and risk-taking willingness, and other factors. Thus, the master's thesis aspires to examine the connections between the mentioned business particularities and the company's innovativeness and development during the economic turmoil.

1.1 Background Problem

Companies' adaptation to the external shocks varies significantly between companies of different scales and industries. Firms' responses can be presented by the bankruptcy, production and project halt, production relocation, market's diversification, the plea for the state financial support, innovation, modernisation, etc. The enquired crises disrupted several industries and forced them either to innovate and stay in the market or to bankrupt and close the production. Hence, this diversity of crisis management strategies will be scrutinised in the master's thesis.

The external shocks affected business in Norway and Russia to a varied extent. The Russian rouble slumped from 47,473 RUB/EUR in February 2014 to 86,3711 RUB/EUR in February 2015, that disrupted the majority of the Russian businesses (European Central Bank, 2016). Analogously, the Norwegian krone decline significantly affected the Norwegian economy in 2014-2015. The Russian and Norwegian currency tumble in 2014-2015 is a direct consequence of the largest, in the past 30 years, crude oil price slump (Baffes et al., 2015).

The anti-Russian sanctions implemented in March 2014 and the Russian countermeasures adopted in August 2014, affected to a greater extent the European Union (EU) than the United States (US). In 2013, the EU trade with Russia accounted 326 billion euros, including 119 billion euros of exports, that ten times exceeded the value of the US-Russia trade (38 billion dollars) (de Galbert, 2015). For instance, the fishing industry in both Norway and Russia was negatively affected by the import ban, because Russia was the largest market for Norwegian fish and seafood in 2013, and Russian fishing enterprises heavily relied on the Norwegian fish and technology suppliers. Thus, analysis of the European, particularly Norwegian, business reactions to the sanctions and countermeasures is crucial for the research.

Besides, the oil price collapse in 2015 severely undermined the Russian and Norwegian national economies that were over-reliant on natural resources. The oversupply-problem triggered the tremendous oil prices downfall by 42 percent in 2015 alone: from 92,87 dollars a barrel in January 2015 to 43 dollars a barrel in January 2016 (International Energy Agency, 2016). Thus, the contemporary Russian and Norwegian economies cannot any longer be based merely on the steadily increasing oil price. Both Norwegian and Russian companies have faced a critical challenge to make national business stronger, more sustainable, and less dependent on oil. This future development is possible merely by the utilisation of skills, knowledge, and innovation (OECD, 2014). Therefore, the master's thesis aspires to analyse the O&G companies' prudent reactions to the oil price collapse, and consequent innovation and development policies that were undertaken to combat the crisis.

Furthermore, the country's peculiarities play an important role concerning the mode of crisis management and innovation activities. Norway and the Russian Federation represent two different ways of business mind and system, state regulations, openness to innovation and willingness of risk-taking (Hofstede, 1980). Thus, the crisis management strategies are elaborated and executed differently in these countries. This aspect will be elucidated in the current study.

Ultimately, key participants in the study are Russian and Norwegian companies in the oil and gas, fishery and tourism industries, which were directly or indirectly affected by the mentioned above externally caused shocks during the period between 2014 and 2015.

1.2 Problem Discussion

The firm's ability or inability to survive during the crises is a core issue of the master's thesis. Hence, the diversity of crisis management strategies was examined during the inquiry. The research will elucidate both cost-cutting and pro-active, and internally- and externally-directed strategies. Furthermore, the companies' adaptation to the external crises are influenced by a row of aspects. During the research, I scrutinised which particularities hampered or spurred innovation activities and development during the crisis turmoil. In particular, the role of the state is crucial during the economic turmoil; and sometimes companies can survive in the tangled circumstances merely by the state financial and protective assistance. Thereby, the master's thesis elucidates the interconnectedness of external crises, companies' crisis management strategies, and specific factors related to the firm's size, industry, country, and so on. Consequently, the parsing of external shocks as a catalyst for further companies' development and innovation is verified by a scrutiny of the firm's reactions to the diverse external shocks in two different countries and three variegated industries.

1.3 Purpose and Research Questions

The purpose of the study is to contribute to novel insights into a variety of companies' responses to the crises and to elucidate aspects that foreordain a particular crisis management strategy.

Consequently, the basal research questions of the master's thesis are:

at first, how did diverse external crises affect the Norwegian and Russian businesses in different industries during the period 2014 to 2015?

at second, how did companies in the O&G, fishery and tourism spheres in Norway and the Russian Federation respond to diverse external shocks?

at third, which organisational, industrial and national institutional aspects fostered or hindered the firm's ability to survive, develop and innovate during the economic turmoil?

1.4 Road Map of the Thesis

The master's thesis encompasses six chapters. The first chapter aspires to elucidate the background research problem and its significance in the contemporary world, and to introduce the primary purpose of the study and the core research questions. The second chapter embraces

the theoretical concepts related to the research questions. In particular, the first part of the literature overview encompasses theoretical concepts concerning the innovation phenomenon, including the essential Schumpeterian theory of innovation and creative destruction, the main features of innovative organisation, and the impact of the company's scale, country and cultural aspects on the companies' innovation activities. Whereas, the second sub-section comprises the crisis-related theories, including currency oscillation and sanctions, and distinguishes diverse firms' behaviour during the economic turmoil. Finally, the third sub-section elucidates the crisis management theory, including the crisis management team, various crisis management strategies, and the role of the state during the recession time, including the utilisation of import substitution industrialisation.

The third chapter of the research provides a review of the employed methodologies and strategies, including the rationale behind the chosen research topic, methodologies and study sample. Furthermore, this chapter incorporates a detailed description of the study sample and the research process, highlights the research limitations and essential ethical aspects, and discusses the trustworthiness of the study.

The fourth chapter elucidates the fundamental findings of the qualitative data that was gathered through interviews with Russian and Norwegian companies and experts. Moreover, this chapter comprises the analysis and discussion of the primary research findings based on the theoretical framework introduced in the second chapter. Eventually, the fifth concluding chapter provides the answers to the enunciated research questions, deliberates the theoretical and empirical implications of the study, and proposes the potential areas for further research.

2 Theoretical Framework

The objective of this chapter is to provide an overview of the theoretical concepts related to the enunciated research questions. The first part of this chapter comprises the literature concerning innovations, innovative organisation, and the role of company's size, culture, and government regulations for the firm's innovation activities. Whereas, the second section of this chapter elucidates the crisis phenomenon, including economic sanctions and currency instability, and its impact on organisational activities, such as innovative performance and development strategies. Eventually, the third section encompasses a multiplicity of crisis management strategies that ensures the business survival and further development.

2.1 Innovations as a Major Driver of Progress

2.1.1 Innovation and the Schumpeterian Theory of Creative Destruction

Innovation is a driver of progress, competitiveness and economic development. Dicken (2011) distinguishes four main types of technological changes. Firstly, *incremental innovations* are small-scale, progressive modifications of existing products, services, and processes, that are created through "learning by doing" and "learning by using". Secondly, *radical innovations* drastically alter the existing production processes, and have a wide-spread economic effect. Thirdly, *changes of technology system* are based on radical, incremental, and organisational innovations, and influence several existing economic sectors or create entirely new sectors, such as biotechnology, nanotechnology, and so on. Fourthly, *changes in the techno-economic paradigm* present large-scale revolutionary alterations embodied in the new technology system.

Joseph Schumpeter (1883-1950) focused on the role of innovation in social and technological alterations, and outlined the fundamental concept in his masterpiece "Capitalism, Socialism and Democracy" (1942). According to Schumpeter, *innovation* and qualitative changes are the primary engines of economic development that are based on organisational learning and creativity. Entrepreneurs discover new opportunities through the creation of something new or a new combination of existing resources (Fagerberg, 2003). Moreover, Schumpeter defines *five core types of innovations*. First, the introduction of new product, good, or new quality of goods with which customers are not familiar yet. Secondly, the introduction of new scientifically based production methods that had not been applied yet in the manufacturing, or it can appear in a new way of commercially handling a commodity. Thirdly, the opening of new markets that have not yet been discovered or entered by the particular branch of manufacturing in the country. Fourthly, the utilisation of new supply sources of raw materials

or half-manufactured goods that have not been applied earlier in the particular industry in the country. Fifthly, the application of the new ways of organisation of industry (Mitra, 2012).

While the Schumpeterian Mark I emphasises macroevolution and the importance of charismatic entrepreneurs, Mark II highlights microevolution and the significance of large firms with strong R&D and knowledge capabilities. Furthermore, the Schumpeterian Mark I model is based on the evolutionary and cyclical concept (Figure 2.1).

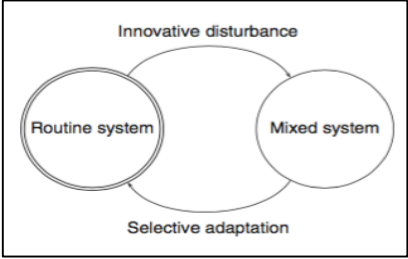


Figure 2.1 Schumpeter’s cyclical Mark I scheme of economic macroevolution (Sloth Andersen, 2013, 19)

According to Mark I, economic macroevolution begins from an initial halt of evolution, where routine behaviour reigns in the circular flow of economic life. Hereafter, a horde of charismatic entrepreneurs innovatively disturbs the evolution process that will be continued by the selective adaptation and the creative destruction of old routines. Eventually, this selective process brings the evolutionary process to a new halt and redounds to the adaptation of new routines. After that, the evolutionary process will be disturbed again and restarted by another horde of entrepreneurs. Thus, the routine system evolves through cycles, repeated innovative destructions, and precarious situations that bring the system to an economic equilibrium (Sloth Andersen, 2013).

Schumpeter describes innovation as an evolutionary process by which charismatic entrepreneurs creatively destruct the existing social order and create radical alterations (Nightingale, 2014). Therefore, he underscores the importance of two basal processes: creative destruction and creative accumulation. In line with the Mark II, *creative accumulation* is distinguished by high technological cumulativeness and low opportunities that form a sustained environment, where the bulk of incremental innovations is routinised in large established firms with internal R&D laboratories, in the markets with substantial entry barriers and oligopolistic competition (Archibugi et al., 2013b). On the contrary, *creative destruction* comprises industrial modifications that revolutionise the economic structure, devastate the old structure, and create a new one (Schumpeter, 1942). Schumpeter defines a *gale of creative destruction* as a cyclical process, when economic booms with amplified competition, supply and prices, trigger the economic recession that, in turn, compels production reorganisation, cost reduction, and squeezing out insufficient businesses, products, services, and methods of production by new and efficient ones (Mitra, 2012).

Two hypotheses outline the cyclical relations between innovation and business. The first hypothesis highlights the cyclical nature of innovation and affirms that firms during economic

recessions tend to diminish their innovation efforts. Conversely, the second hypothesis conjectures the innovation counter-cyclical nature and alleges that economic downturns spur innovation activity (Filippetti & Archibugi, 2011).

Causal loop diagram displays the organisational innovation process subsystem that consists of three positive feedback loops (Figure 2.2). The first loop L1 demonstrates that enhanced product innovations contribute to an increase in process innovation and vice versa. The second loop L2 illustrates that enlarged R&D capacity redounds to an augmentation in product and process innovation performance, which, in turn, stimulates product attractiveness, increases the market share, sales, and profits. Whereas, the third loop L3 reveals the positive correlation between process innovation on R&D capacity (Samara et al., 2012).

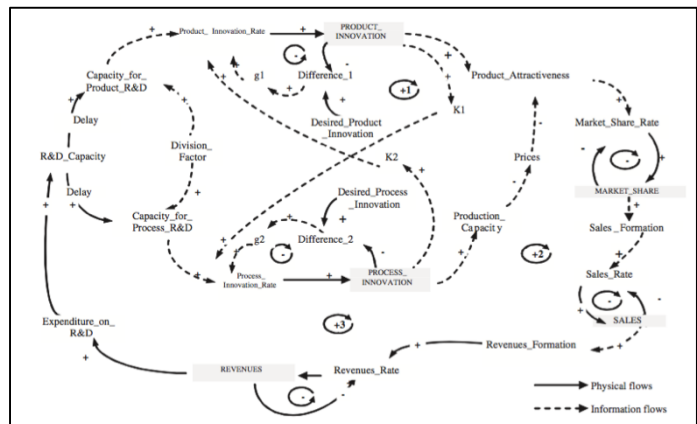


Figure 2.2 Causal loop diagram of the innovation process subsystem (Samara et al., 2012, 629)

In general, innovations foster an overall economic growth through job creation and enhancement of personal income, which, in turn, facilitate an increase in domestic demand for products, amendment of the health system and security, raise of taxes, and so on. Therefore, innovations lead to economic and social stability (Hausman & Johnston, 2014). Thence, innovation activities are vital for business in all countries. However, some companies possess greater innovation capacities than other firms. The essence and particularities of the innovative organisations will be elucidated in the next section.

2.1.2 Innovative Organisations: Main Features

Innovations occur in small, medium and large companies that deploy their unique knowledge and skills (Ferreira et al., 2014). Tidd & Bessant (2009) designate seven personal and impersonal components of innovative organisations: shared vision, leadership and the will to innovate; appropriate organisational structure; key individuals; effective team working; involvement in innovation process; creative climate; and external focus and customer orientation (Appendix A).

According to (Mitra, 2012), companies with strictly defined hierarchical structure, job classification, routines, and accountability, restrain immensely their ability to innovate.

Conversely, the flexible management and organisational structures and purposes, and the employment of divergent skills spur company's innovative activity. For instance, high-tech, biotechnological, and electronics companies are highly flexible and, consequently, more innovative and adaptive.

Besides, the firm's innovative ability relies on external actors, including the basal "Triple Helix" that comprises interrelation between higher education institutions (HEIs), industry and government. For instance, research-intensive HEIs generate and transmit new knowledge, ensure the industry and community needs, and play a fundamental role in business development through research, knowledge transfer, and consultancy. Hence, the academia-industry links foreordain the economic development through the creation of new companies, innovations, industrial development, and the development of human capital (Fagerberg, 2003).

The Marshallian idea of knowledge spillovers plays a substantial role in innovations' promotion on federal, regional and urban levels. For instance, a region may benefit from spillovers through supply chain relationships, horizontally related firms, transfer of labour and skills, and shared knowledge, markets, research, and so on. Moreover, regional clusters appear as incubators of innovations due to geographic proximity, and they accumulate public and private finance, attract R&D activities, chamber of commerce and trade associations, and draw on regional government spending on industry-specific infrastructure (Mitra, 2012).

Therefore, there is a multiplicity of peculiarities that influence the business innovation capacities. The next section will scrutinise the impact of the firm's scope on its innovativeness.

2.1.3 Impact of Company Size on Its Innovation Activity

Importantly, business size and age, experience, substantially influence the innovative activities' pattern. The OECD classification divides firms into four core groups by the size concerning the overall amount of employed personnel: micro-enterprises with 1 to 9 employees, small – 10-49, medium – 50-249, and large – 250 and more (OECD, 2015a).

The impact of company's size on innovation activity is ambiguous. Rober Gibrat (1931) formulated the Gibrat Law's that postulates that the firm's absolute size and its rate of growth and ability to innovate are unrelated. Whereas, the industry life cycle alleges that the firms innovate ability depends on the business scale and industry specifics (Lotti et al., 2006).

Moreover, in Mark II, Schumpeter postulated that routine-based large firms are the primary source of innovation activities due to their monopolistic advantage. Likewise,

Galbraith (1967) highlighted the importance of large corporations creating the bulk of incremental and original innovations and developing technology.

According to Figure 2.3, compared to SMEs, large businesses introduce the bulk of new-to-market innovations in OECD countries due to their competitive advantages, economies of scale, cheaper credit, and invariable access to global value chains (OECD, 2015a).

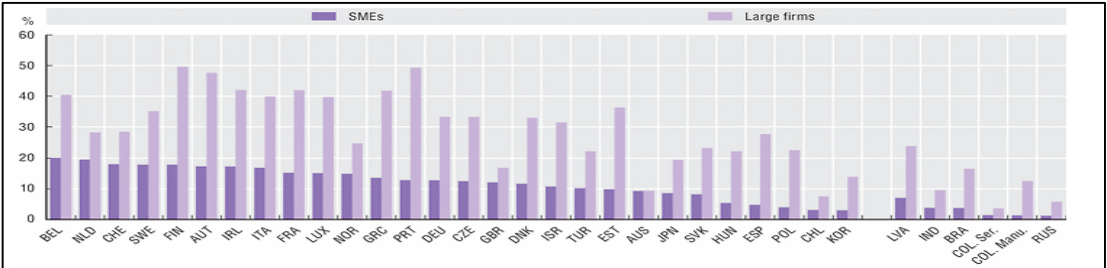


Figure 2.3 New-to-market innovation, by firm size, 2010-2012 (OECD, 2015b)

However, the importance of small and medium-sized enterprises (SMEs) has significantly enhanced in the contemporary knowledge economy, where SMEs are primary drivers of economic and employment growth in the developed countries. Furthermore, SMEs benefit from their efficient non-bureaucratic management structure with few decision-makers (Macãs Nunes et al., 2012). In addition, smaller firms utilise and commercialise more spillovers from universities, and spread innovation in the wider economy (Mitra, 2012). However, compared to large firms, SMEs often struggle with managing R&D projects due to a lack of funding, qualified human resources, and information (Macãs Nunes et al., 2012).

Moreover, firms of varied scale exhibit different levels of innovation activity in diverse industries. For instance, small companies innovate mainly within computer and process control instruments, while large firms are foremost innovators in the pharmaceutical and aircraft industries (Mitra, 2012). However, small enterprises demonstrate low innovation activity in product, process, non-technological and new-to-market product innovation (OECD, 2010).

Besides, compared with small enterprises, the medium-sized firms possess several size-related benefits, including long-term development strategies, larger market scale, bigger innovation capacities, management functionality, and easier access to technology. Furthermore, the growth of mid-size companies leans on their innovation activities, including the discovery of new markets, marketing innovations, internationalisation, and diversification (Appendix B). Simon (2009) alleges that mid-scale firms, particularly in German-language and Scandinavian countries, are the world leaders for export, and they are number one or two in the global market leadership with the approach towards global excellence.

2.1.4 Country and Culture Aspects in Innovation Activities

In line with the significance of the business scope, the national and cultural aspects play a crucial role in the firms' innovation activities. Dicken (2011) defines *culture* as a learned, shared, compelling, and interrelated set of symbols stipulating orientations for society members. Furthermore, according to (Fink & Mayrhofer, 2001), organisational culture combines the nationality and ethnic aspects influencing innovation activities.

Every society is unique and varies from the others, and, analogously, innovation culture, including shared values, beliefs, and ideas, differs within cultures and societies. For instance, many Western nations focus on large established companies, while others aspire to create new small enterprises (Mitra, 2012). Moreover, Schwartz (2009) identifies seven distinctive cultural dimensions: conservatism, intellectual autonomy, adequate autonomy, hierarchy, egalitarian commitment, the degree of legitimisation, and harmony. For instance, the Asian entrepreneurial culture is characterised by collective responsibility, hard work, immense state's role, etc.

Additionally, Hofstede (1980) distinguishes four distinct cultural dimensions: individualism versus collectivism, large or small power distance, high or weak uncertainty avoidance, and masculinity versus femininity (Appendix C). Evidently, societies that appreciate the individual autonomy, collective interests, risk-taking, and creativeness, possess a greater innovative capacity. However, the Hofstede's theory does not shed light on the causes of cultural changes (Mitra, 2012). Thus, the cultural categorisation appears stereotypical for distinct nations.

For instance, in Russia, the entrepreneurial spirit and innovative activities are one of the lowest in the BRICKS and Eastern-Europe countries. Approximately 90% of Russians do not see opportunities to start up a business, and fear of failure impedes 42% of non-entrepreneurs from establishing a business (Graduate School of Management SPbSU, 2014). In comparison, the Norwegian level of the entrepreneurship and innovative activity is higher, but cramped by a lack of entrepreneurial skills and fear of failure. However, a magnification among young entrepreneurs (25-34 years of age) is indicating the strengthening entrepreneurial culture in Norway (Bodø Graduate School of Business, 2013).

The traditional economic growth theory postulates that the bulk of new innovations originates in the developed industrial countries that possess a tremendous capacity and potential of knowledge, skills, production, and high-income markets (Mitra, 2012).

Importantly, the National Innovation System (NSI) incorporates scientific and technological institutions, education, training and financial systems, labour market's structure, and industrial specialisation, etc. According to this perspective, the innovation process is a consequence of an intricate relationship among different actors which are producing, distributing and applying tangible and intangible knowledge. Therefore, the NSI approach predetermines variegated innovation performance in diverse nations (Samara et al., 2012).

Furthermore, the state regulates innovation activities and influences innovation dynamic. While some regulation tools such as taxes, price restrictions and product market rules, diminish the level of investment in R&D, other regulation instruments create a stimulus for investments in R&D. Furthermore, the government regulation comprises a compound of intellectual property rights, patents, consumer protection, etc. (Mitra, 2012). Moreover, the state may employ industry policies that contain investment incentives, labour market policies and regulation, state procurement policies, taxation, competition policies, industrial restructuring, investment promotion, etc. Thereby, favourable government policy redounds to the creation of economic and social value in the form of new products, processes and services. For instance, the decision of the Chinese government to open the national market for foreign direct investments and mass manufacturing drastically altered the national market system and made China a factory of the world with both state-owned and private enterprises (Dicken, 2011).

Importantly, the pattern of national innovation settings is the most prominent during the crisis time, when robust nations provide financial and regulative support, and invest in innovations (Filippetti & Archibugi, 2011).

2.2 Crisis: Theory, Stakeholders and Classifications

In the twenty-first century, firms operate in the erratic business environment with multitude crises. After the “golden age” and economic growth period from the early 1950s to the early 1970s, the world economy's pattern was uneven, with plenty periods of growth (1950-1960, 1994-1995, and 2000s) and recessions (1990s, 1998-1999) (Mitra, 2012). The terrific statistics of crises after the WWII comprises 139 financial crises occurred in the period between 1973 and 1997, while just 38 crises transpired during the period from 1945 and 1971 (Dicken, 2011).

The term “crisis” can be applied in sundry contexts: individual, economic, financial, business or system crises. Until the first worldwide economic crisis, the definition of crisis was mainly connected to the process of economic recession. However, from the 1970s, the crisis phenomenon was associated primarily with a business crisis (Bain, 1968).

According to (Pearson & Clair, 1998), organisational crisis can be defined as a low-likelihood, high-impact occurrence that threatens the viability of the firm; and it is characterised by the ambiguity of causes, effects and types of solutions, and necessity of swift decisions. Sönmez et al. (1994) specify the crisis for the tourism sector as any occasion which impedes the proper operation of tourism-related businesses.

Hauschildt (2000) distinguishes internal and external causes of crises. The external causes embrace market imbalance, competitive pressure, currency collapse, high interest levels, deregulation of key industries, insufficient government policy strategies, and so forth. On the contrary, internal causes are induced from within the company, and can be engendered by managerial mistakes and incompetence, overestimation of possessed skills and control over particular events. Furthermore, Pearce & Robbins (1994) claim that companies' crises can be caused by a combination of internal and external factors.

Lowth et al. (2010) assert that recessions can engender the forfeits of substantial sums of money, the sudden reduction in customers orders, and so on. Moreover, Pearce & Michael (2006) affirm that economic downturns trigger enhanced unemployment, credit shortage, price-sensitive customers, price-based rivalry, drop in exports, and a higher level of business failures. Furthermore, during the crisis, a high risk constrains the lending and venture finance. However, crisis can stimulate a creation of great ventures, lead to a notable decline in the prices of labour, materials, services and rent. For instance, several world leading companies were established during the recession times, including Microsoft, Genentech, Gap, Polaroid, Atari, Apple and Revlon. Thus, crises may foster disruptive technologies and facilitate value creation and innovation. Moreover, during the crisis, firms tend to create better value for existing customers rather than looking for new clients, that in turn, contributes to a significant improvement of goods and services, and cost-cutting (Mitra, 2012).

Besides economic crises, business impinges a multiplicity of other external shocks. Henderson (2007) and Parakevas & Altinay (2013) cognises that the tourism industry is highly sensitive to political changes and terrorism, including hijacking, suicide missions, bombing and shootings, that leads to fall of tourist flow and less attractiveness of the tourist places.

As mentioned above, currency oscillation and sanctions can immensely disrupt the businesses in diverse industries. Therefore, the following two sub-sections will elucidate the impact of these external shocks for companies.

2.2.1 Impact of Currency Fluctuation on Business

Currency crisis presumes a situation, when a country's national currency value is jeopardised, and that, in turn, causes severe financial and macroeconomic problems. The possible triggers of currency collapses may comprise "currency mismatch", weak banking sector, inferior, and misrule monetary or financial sanctions (Eyler, 2007).

There are both advantages and disadvantages of weak and strong currencies. On the one hand, strong currency leads to a notable decline in prices for imported goods and a decrease in travelling costs, that in turn, is favourable for consumers in the home country. On the other hand, strong currency leads to a significant increase in prices of exported goods, that, in turn, diminishes demand and sales for exporting companies. The converse is valid for a weak currency. Hence, weak currency is beneficial for exporting companies, while strong currency is auspicious for importing firms (Peter & Downes, 2009).

The majority of empirical studies, such as Abuaf & Jorion (1990), He & Ng (1998), and Glaum et al. (2000), indicate an insignificant impact of the currency oscillation for companies in the developed countries, such as USA, Germany, Japan, and so forth (Dash & Madhava, 2008). However, Starks & Wei (2003) affirm that exchange rate fluctuation negatively affects company's short-term cash flows that trigger a firm's financial distress.

Henderson (2007) cognises that the currency oscillation influences immensely the tourist trends, investment, demand, and activities of operators and agents. Weakening national currency may refrain investors and make tour operators and agents cautious about selling destinations. Whereas, strong currency detains domestic tourism and spur outbound travel.

Dash & Madhava (2008) avouch that the exchange rate fluctuation led to the decline of the Indian IT companies' revenues by approximately 6 percent. Thereby, the IT companies coped with the currency instability by employing diverse regulation tools, including a shift of the primary export markets from the US towards Asia and Europe, and short-term financial instruments, such as forwards and options, expecting fast stabilisation of currency flow.

2.2.2 Sanctions: Theory and Classification

Economic sanctions perform as one of the most exploited instruments of political ascendant in the recent decades. Sanctions destabilise the political, economic and social systems, and constrain the business activities. Eyler (2007) defines economic sanction as a sender country's discriminatory cumber of trade or credit flows with a target country to manipulate or transform

the current target's behaviour. Whereas, the contemporary sanctions incorporate chiefly the limitations on commerce with a target to provoke the target economy's suffering.

Key entities involved in the sanction process are a target country, a sender state and third parties. Target is the sanctioned nation that political policies considered as abnormal by a sender country. Whereas, sender is a state that initiates economic restrictions against the target without application of military power. Usually, the sender states are large nations actively engaged in foreign policy, and therefore, they possess an immense power to affect the events on the global scale (Hufbauer et al., 2007). Additionally, third parties' engagement in the sanction policies is contingent on their perception, reaction to the sender's policies, and the potential profits from helping to sender or target (Askari et al., 2003).

There are several classifications of sanctions. Regarding the number of involved entities, sanctions can be divided into four key groups: unilateral, multilateral, collateral, and total-lateral. *Unilateral* sanctions assume that only one country implement economic sanctions, while *multilateral* sanctions presume imposition of sanctions by several entities. Haass (1998) alleges that unilateral sanctions are an ineffective policy tool, because a target is almost always able to find an another source of goods, services, capital, and technology. *Collateral* sanctions possess a substantial efficacy due to their implementation by international and regional organisations with global membership, such as the UN, IMF, EU, APEC, etc. Ultimately, *total-lateral* sanctions presume engagement of all applicable entities (Askari et al., 2003).

Besides, Hufbauer et al. (2007) define three main types of sanctions: import sanctions, export sanctions, and financial restrictions. Through implication of *import sanctions*, the sender nation aspires to limit the import flow from the target country to engender the considerable obstacles for the sender's economy. Whereas, *export sanctions* affect the target's import supply, including arms and military embargoes, enhance the world price, and diminish the target's supply. Hence, the aim of export sanctions is to constrain net investment in the target's macro-economy, retard savings rates, reduce GDP, abate consumption, and consequently decrease the target's ability to export goods (Eyler, 2007). Likewise, *financial sanctions* damage the target's market by an anticipated decrease in interest payments and target investors income, or by "freezing" the target's assets holding in the sender economy. Consequently, banks in third countries perceive the target to be more unpredictable and risky.

Importantly, *smart sanctions* target specific individuals, such as the ruling elite, terrorist, or military, and combine a variety of different measures, such as arms embargoes,

financial sanctions, freezing of assets, travel sanctions, etc., in order to minimize collateral damage to the target innocent commoners, their assets, income, and regular life (Eyler, 2007).

Evidently, sanctions affect several economic variables, including profits and revenues of state-owned and private companies, sales, employment, growth, development, government taxes, standard of living, quality of life, wages, and other variables (Eyler, 2007).

2.2.2.1 Analysis of Sanctions Effectiveness and Success

Buklemishev (2015) cognises that despite the minuscule predictability of the sanctions' success, its nature is more adequate and bloodless compared to the military engagement. The effects and efficacy of a particular sanction in a specific country at a distinct time are based on a case-by-case basis. Pape (1997) affirms that mere 5 out of 40 sanctions employed during the period from 1914 to 1990, were successful. Thence, sanctions are usually not able to achieve the intended foreign policy goals.

The relative GDP of the two countries, bilateral trade between sender and target, economic size of countries, economic health and political stability, type of sanctions, trade routes and partners, international access to credit, and other factors predetermine the scale of the sanctions' impact. Furthermore, the sender's prevailing size and more extensive leverage over the target predetermine the sanctions' success. And conversely, the target's dominance in size and leverage signal unsuccessful sanctions' implementation (Askari et al., 2003).

Moreover, sanctions may contribute to the unification of the target's population in support of its government and search for commercial alternatives, as it happened during the League of Nations' sanctions against Italy in 1935–1936. Benito Mussolini responded to the sanction: “To sanctions of an economic character we will reply with our discipline, with our sobriety, and with our spirit of sacrifice” (Hufbauer et al., 2007, 8).

Hufbauer et al. (2007) estimated the impact of the US economic sanctions on the US national economy approximately 15-19 billion dollars annually in the post-2000 period. Additionally, third-party countries can benefit from the re-export or substitution of prohibited sender country's goods and services to the target nation (Eyler, 2007).

Eventually, crises heavily destruct businesses and force them to alter radically the business concept. However, the recessions can spur innovation activities. Thence, the next section will elucidate various firms' innovation behaviour in the economic turmoil.

2.2.3 Firms Innovation Behaviour During the Crisis Time: Practical Evidence

There is no consensus in the literature on the impact of the economic downturn on company's innovation activities. While Filippetti & Archibugi (2011) predicate that crises foster the utilisation of innovation opportunities, other researchers affirm that the firms tend to decrease its innovation expenditure during recessions. During crises, businesses may demonstrate three different types of innovative behaviour: cyclical, neutral, and counter-cyclical. During the crises in 2008, 50 percent of businesses demonstrated the *cyclical* behaviour and decreased their innovation activities, 45 percent of the firms exhibited the *neutral* behaviour and maintained their innovation performance, and merely 6 percent of the companies exposed the *counter-cyclical* behaviour and increased innovation expenditures (Filippetti & Archibugi, 2011).

As mentioned above, the Schumpeterian creative destruction presumes that an economic crisis may stagger established industries and technological fields, that, in turn, contributes to the emergence of new innovative firms in new sectors. This defies the incumbent firms to focus on innovations and exploitation of new opportunities (Schumpeter, 1942).

According to the Schumpeterian Models Mark I and Mark II, the most dynamic firms and new innovators are major innovators. The most dynamic companies are represented by knowledge-intensive enterprises that innovate continuously despite the business cycle stages, and alter their products and services to survive. Whereas, the new innovators are diminutive or entirely new businesses that advance from the economic turmoil through entry into new markets or rival for the market shares with the existing firms through the employment of innovations.

The Neo-Schumpeterian stream, Nelson & Winter (1982) and Dosi (1982), alleges that greater innovators in the past are apparently greater innovators of today. In consonance with Mark II, the greater innovators of tomorrow are large firms that devote a substantial budget to R&D and product innovations. Additionally, during the crisis, the presence of in-house R&D departments, screening for new markets, and new products development divine the probability of enlargement of innovation expenditures (Archibugi et al., 2013b).

Besides, new fast-growing firms incline to elevate their innovation expenditure during the crisis. Archibugi (2013b) analysed the innovation investment of 2485 British firms' before and after the financial crisis in 2008, and detected that the share of the greater innovators magnified from 21 percent before the crisis to 37 percent during the crisis.

There to, Alvarez et al. (2010) revealed a positive correlation between the manufacturing firms' size and innovative activity. Importantly, Latham (2009) cognizes that size and age

evaluate firm’s response to crises. Thence, smaller and younger firms incline to seek new investment opportunities, while large established firms habitually utilise cost-cutting strategies. Conversely, Kanerva & Hollanders (2009) did not detect any correlation between the firm’s scale and the innovation spending during the crises in Europe in 2008.

Moreover, in the post-crisis period, firms tend to search more for the innovation opportunities in new markets. Thus, at regular times, the model of creative accumulation prevails, while during the recessions, the creative destruction affirms itself (OECD, 2009).

2.2.3.1 Divergent Firms Innovation Activities Across Countries During Crises

Companies in various states react differently to economic crises. While some countries encounter financial deficit and overall decline, other nations demonstrate a splendid ability to recover swiftly from the recessions. For instance, the US employed a dialectical-historical approach in its responses to three financial crises. In particular, in the crises occurred in 1998 and 2000-2002, the US crisis management strategies encompassed minimal government engagement and loose coordination with G7, G20, and Basle Committee. On the contrary, the US crisis management approach to the economic recession in 2007-2010 comprised an active government involvement with a variety of immediate and post-crisis financial regulatory reforms and cooperation at the multilateral level (Doyran, 2011).

Filippetti & Archibugi (2011) divide the EU nations into four fundamental categories regarding innovation expenditure dynamics during the financial crisis in 2008: frontrunners, catching-up, declining, and lagging-behind countries (Figure 2.4). The *catching-up countries*, the EU new member states, despite the

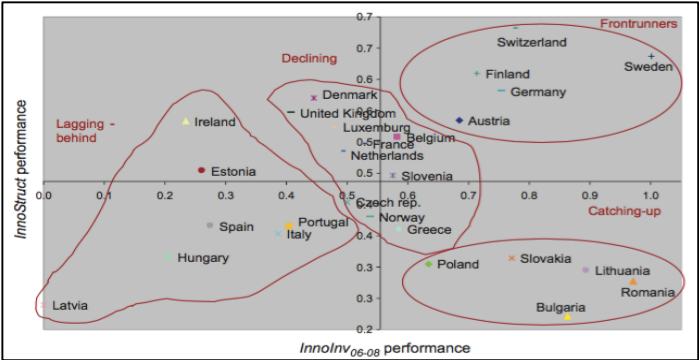


Figure 2.4 Innovation performance and national innovation system strength (Filippetti & Archibugi, 2011, 184)

fragility of their NIS, enhanced the innovative efforts during the downturn in concern with the acquired knowledge, skills, competencies, and human resources. The *frontrunners-countries* displayed the consolidated structural leadership of their innovation performance and proceeded the enhancement of their innovation expenditure. The *declining countries*, despite their strong NISs, diminished their innovation spending in the period 2006–2008. And the *lagging-behind-countries* demonstrated a low level of national innovation performance and formidably abridged the innovation investment due to their innovation delay compared to their main

competitors. Thus, the crisis affected severe the countries with weaker NISs, particularly the EU New Member States.

Besides, Campello et al. (2010) allege that primary financial barriers for the R&D investments during the crises are the investment, credit, and capital constraints. Importantly, firms receiving state financial support discontinue their innovation, while private funding is a less useful source of finance. Moreover, leading innovators occurred in the machinery, manufactory, chemical and metal industries compared to food and beverage (Paunov, 2012).

Importantly, the oil crisis initiated by the OPEC embargo in October of 1973 provoked the largest drop in the stock market and energy prices. However, the oil crisis spurred innovations in energy-saving technologies during and after the 1970s. The energy-related R&D expenditures magnified twofold, while the overall R&D spending stagnated. Moreover, the number of successful patent applications of energy-saving technologies enhanced staggeringly during and after the oil crisis (Alpanda & Peralta-Alva, 2010).

Next section will scrutinise the diverse crisis management strategies and aspects that foreordain the business survival in the economic turmoil.

2.3 Crisis Management: Strategies to Succeed from the Crisis

According to (Pearson & Clair, 1998), *crisis management* can be defined as a systematic effort by company members and external stakeholders to prevent crises or to efficiently manage the already occurred shock. Furthermore, effective crisis management should be grounded on four “C”: causes, consequences, caution, and coping. Causes encompass preceding conditions that triggered the crisis; consequences comprise a direct and long-term impact; cautions reveal a variety of undertaken means aspiring to avert or minimise the crisis adverse consequences; and coping embodies a range of measures in response to the occurred crisis.

The conservative crisis management approach is built upon the power, security, tradition, conformity, and achievement. This approach has revealed its inefficiency during the crisis turmoil in virtue of its sluggish speed of decision-making, void response to the customers’ needs, and a lack of motivation to innovate, diversify or increase export performance. On the contrary, the pro-active managerial approach derives from excitement, novelty, independence, openness to alterations, and collective vision. This approach fosters the firm’s export activities and contributes to the firm’s development (Navarro-García & Coca-Pérez, 2014).

Besides, the environmental-scanning and the stress theories affirm that managers heed more externally caused crises compared with internally initiated shocks due to the significance,

urgency, and ambiguity of the former crises. Therefore, the adaptive firms consider external shocks as a priority, secure long-term solutions, employ a vigilant scanning of the external environment, including output-related success factors, such as customer needs, demand growth, buyer power, and sales. This ensures management skills to mediate between the external and internal environments to tailor successfully a set of strategies (D'Aveni & MacMillan, 1990).

Furthermore, the competing theory of turnaround accentuates that companies are more vulnerable to progressive economic decline, when they often miscarry to undertake indispensable actions. Tichy & Devanna (1986) called this phenomenon a “boiled frog phenomenon” by comparing it to the psychological experiment, when a frog dropped into mild warm and gradually heated water fails to react and die. Analogously, the managers that are not able to recognise a subtle deteriorating situation tend to fail. For instance, Doyran (2011) analysed 12,000 public trading firms during the period 1984-1987, and remarked that firms experiencing a steep crisis had more successful turnaround and generated quicker external financial support compared to firms going through a more gradual decline. Consequently, to cope with an external crisis, managers of firms need to employ sensitive internal and external scanning, and establish constant consulting and advisory relationship.

The business scope plays an essential role in the elaboration of crisis management strategies. Haveman (1993) alleges that companies of different scope have varied abilities to manage the crisis, while Ghobadian et al. (2008) do not find any correlation between the company's size and its adaptive abilities during the crisis. Yasai-Ardekani & Nystrom (1996) affirm that large firms possess advantageous information about the external environment and wider network compared to smaller firms. This ensures the more extensive environmental scanning process by larger enterprises. Furthermore, while small businesses frequently encounter a lack of resources for urgent expansion and diversification, large corporations are constrained by their bureaucratic system, longer communication lines, and hierarchies that retard the speed of responses. Therefore, mid-sized companies are leaders of the most effective and flexible adaptation to external shocks. Moreover, Ebben & Johnson (2005) highlight that the advantage of SMEs' adaptation to crisis is grounded on its flexibility, proximity to the market, and absence of necessity to follow formal rules and strategies. On the contrary, Anderson & McAdam (2006) cognise that due to greater resources and experiences, large firms adapt better to external shocks compared with SMEs with less financial and human capacities. Furthermore, Haveman (1993) affirms that during the crises, large companies reap benefit from its slack human resources that can be utilised for strategic options.

The industry significance for the elaboration of crisis management strategies is indeterminate. Lowth et al. (2010) avouch that external shocks destruct firms in different industries to a varied extent. Thereby, companies in the service sector operate in the turbulent environment with constant challenges and oscillations of demand, and, consequently, they combat the crises quicker than firms operating in the stable environment. For instance, the tourism industry is highly sensitive to economic forces that can entail both opportunities and challenges for business in this sector. Hence, the domestic tourism can be spurred by crisis in case when many tourists choose cheaper domestic tours and remain home (Henderson, 2007).

The contemporary economy is knowledge-intensive and requires constant innovations. Thus, the success of crisis management in all industries should be grounded on durable innovations, and development of core competencies and organisational knowledge (García-Zambrano et al., 2014). Also, new wealth can be obtained by discovering of new markets, serving new customers, and generating new revenue stream (Hamel & Prahalad, 1994).

Personnel play a crucial role in crisis management though elaboration and utilisation of specific measures to adapt to the economic turmoil. The essence and importance of crisis management team will be provided in the next sub-section.

2.3.1 Crisis Management Team: Substantial Personal Characteristics

Corporate strategies and organisational knowledge are essential for the successful crisis management (Faghfouri, 2012). Managerial personnel interpret occurring external and internal shocks and influence the undertaken actions and decisions. The managers' ability to identify and exploit market and growth opportunities contributes to a successful coping with economic downfall. Moreover, the experience in export, education, and language skills contribute to the development of international business and export/import relations, refine overseas mobility, and encourage linkages with clients and suppliers (Pearce & Robbins, 1994).

Furthermore, the numbers of decision-makers in crisis management team is crucial. Small firms succeed from a less bureaucratic management structure and a few decision makers. However, an established crisis management team of senior-levels experts ensure a felicitous crisis management, because the team decision-making process hastens the flow of resources and information during the economic downturn. Also, team of diverse individuals embodies a variety of useful perspectives, skills, knowledge, and experiences (Pearson & Clair, 1998).

The upper echelon theory presumes that executives and their personalities, experiences, and values, determine the company strategic choices, including crisis management strategies.

Hambrick (2007) accentuates that the biases and dispositions of top executives determine the firm's strategies and performance. On the contrary, the population ecology and the new institutional theory assess the executives' role in a company as insignificant, because organisations are solely inertial and constrained by a set of conventions and formal norms.

Moreover, decisions undertaken during the crisis are affected by the environment and the culture where firms and managers operate. Barr & Glynn (2004) avouch that culture differences influence the strategic decision-making process. For instance, the uncertainty-avoidance, managerial resistance to alterations and risk-taking, constrain the speed of adaptation to the crisis environment. Different cultures possess a varied degree of uncertainty-avoidance and willingness of risk-taking that, in turn, foreordain diverse modes of entrepreneurial mind and crisis management strategies.

2.3.2 Fundamental Crisis Management Strategies

Economic crises compel companies to alter the business strategy, to restructure and to reduce employment, costs, and assets, to assure their survival (Tansey et al., 2013). Hence, firms are forced to think differently and undertake unusual responses to defend their assets and operations in the turbulent environment (Kitching et al., 2009).

Crisis management strategies should be carefully tailored to a particular externally caused crisis. This will predetermine success or failure of the employed measures. In particular, managers should scrutinise and manage the following aspects: signal detection, incident containment, business resumption, effects on learning and reputation, resource availability, and decision making (Pearson & Clair, 1998).

In general, the crisis management strategies can be divided into two fundamental types: deliberate and emergent strategies (Lowth et al., 2010). The clear and explicit *deliberate* strategies presume an intentional elaboration of planning before acting and an execution by the firm itself. Whereas, the formation of *emergent* strategies occurs from the company's interaction with the external environment. Therefore, these strategies are an ongoing process of invariable learning, experimentation, and risk-taking.

The fundamental Porter (1980) generic concept comprises three competitive strategies: cost leadership, differentiation, and focus. *Cost leadership* focuses on efficiency and aspires to reduce costs. Whereas, *differentiation strategies* require substantial investment and presume a differentiation of the firm's products and services, and a creation of unique goods and services. And *focus strategy* assumes a concentration on a particular market, geographical location or

customers. Importantly, the conjunction of these generic models redounds to the achievement of competitive advantages in the deteriorated environments (Tansey et al., 2014).

Furthermore, Whittington (1991) divides the responses to the crises into three core categories: rationalisation versus protection, diversification versus focus on the core business, and internally-directed versus externally-directed actions. While the *rationalising* strategies comprise cutting costs of R&D, technology, quality, HR, production, marketing, sales, customer service, administration, the *protection measures* aspire to maintain the expenditures in the mentioned spheres. Whereas, the *diversification* strategy endeavours to eliminate the business dependence upon one single market's demand through discovering new opportunities, resources, capabilities, and markets, that possibly will reduce costs and redound to learning of new marketing techniques. Conversely, *focusing on the core business* strengthens the companies' basal competitive advantages in the core market (Sternad, 2011). Ultimately, Chattopadhyay et al. (2001) and Whittington (1991), identify *internally-directed responses* as a combination of fortifications of control system, amelioration of business processes, and organisational alterations. Whereas, *externally-related* measures are directed towards the market and encompass changes in the marketing strategies, price strategies, and company's international orientation.

In general, crisis management comprises two fundamental stages: retrenchment and recovery (Appendix D). The *retrenchment phase* ensures a firm's short-term stabilisation and survival by employing the life-sustaining measures, cost monitoring, and diminution of direct and overhead expenses. Whereas, the *recovery stage* assures a long-term competitive position of the firm through applying the strategic reorientation and alterations in the value chain, that guarantees firm's long-term survival. Moreover, the recovery actions can be divided in two essential types: efficiency and entrepreneurial actions. While *entrepreneurial* recovery actions foster relocation of remaining resources for the most promising products and the market combinations, *efficiency* actions contribute to the attainment of supreme efficiency of a product or market combination. Thus, the entrepreneurial strategies are more beneficial for business during the economic recession (Faghfour, 2012).

Furthermore, the recovery phase encompasses a *downsizing strategy* that can be dissected into three types: *strategic* downsizing that comprises a conscious refocusing of certain business areas at the expense of others; *mergence and acquisition* downsizing when several organisational functions are merged; and *conventional cost-saving* downsizing. However, the downsizing strategies may trigger an erosion of the company core competencies and

competitive position in the post-crisis period (Radcliffe et al., 2001). Therefore, managers should be cautious with employing the downsizing measures.

Whittington (1991) defines pro-active strategies and retrenchment strategies. Analogously, Sternad (2012) distinguishes three main types of company's adaptation to economic crisis: retrenchment, investment, and ambidextrous strategies. First, *retrenchment strategy* comprises cost-cutting measures and divestment of non-core assets. The basal measures of this strategy encompass divestment of business, closure of production, reduction in employment, and cut off R&D, marketing and training expenditures. However, the external crises can compel business to execute radical business alterations through the employment of *investment strategies* that presume spending on innovation and market diversification. Notwithstanding, the investment measures are parlous and resource-demanding. Therefore, due to the lack of human and financial resources, and low willingness of risk-taking, the bulk of firms employs merely the short-term retrenchment measures. Ultimately, *ambidextrous strategies* combine two mentioned strategies, when the sagacious cost-cutting and R&D expenditures are prudently conjoined. Kitching et al. (2009) cognise that ambidextrous measures are more successful both during and after recession time.

Sternad (2012) combines the mentioned above classification into the complex crisis management responses (Table 2.1). Sternad (2012) states that an economic downturn can be a brilliant possibility for businesses to grow and expand due to low costs, cheap equipment and labour, and simultaneous presence of constructed plants. Importantly, Latham & Braun (2009) emphasise the customer retention as one of the most important crisis management strategies.

	External	Internal
Pro-active	<i>External pro-active strategies</i>	<i>Internal pro-active strategies</i>
	Investment into new markets	Investment into technology
	Diversification of the business	Investment into quality
	Investment into sales	Investment into HR
	Investment into marketing	Investment into R&D
	Customer acquisition	Investment into production
Retrenchment	Customer retention	Investment into logistics
	<i>External retrenchment strategies</i>	<i>Internal retrenchment strategies</i>
	Withdrawing from markets	Rationalization in administration
	Divestment of products/product lines	Rationalization in technology
	Rationalization in sales	Rationalization in HR
	Rationalization in marketing	Rationalization in R&D
Selling parts of the business	Rationalization in production	
Focus on the core business	Rationalization in logistics	

Table 2.1 Classification of Strategies in Response to Economic Crises (Sternad, 2012, 264)

Lowth et al. (2010) affirm that the company's size and industry specifics do not influence business performance during the crisis. However, many other authors presume the industry and size peculiarities as decisive for elaboration of crisis management responses. Therefore, crisis management strategies should be carefully tailored to a particular company and a specific industry. Parakevas & Altinay (2013) underscore that recovery strategies for the tourism industry should comprise the sufficient crisis communication, marketing initiatives, and specific business recovery measures aspiring to re-establish the sector confidence. Moreover, Parakevas & Altinay (2013) underline the significance of understanding the crises

causes and consequences in order to obviate the future crises and establish effective crisis management. Moreover, the business adaptation to recessions depends on external entities, such as the state and academia, that can provide advisory, financial, and protective support. Thus, the complex of varied aspects foreordains success or failure of the elaborated crisis management strategies (Appendix E).

Importantly, the mentioned above strategies can be combined and complement each other in order to focus on different business angles and aspects. Nevertheless, no one particular business strategy can guarantee the company's survival in the economic turmoil.

Eventually, the elucidated above crisis management strategies will be the base for interpreting the enquired firms' responses to external crises in the current study. Among the mentioned above classifications of crisis management strategies, the core conceptual framework for the master's project will be Sternad (2012) classification of retrenchment, investment and ambidextrous strategies. Importantly, the downsizing (Radcliffe et al., 2001) strategies will be scrutinised in the empirical analysis to show their efficiency in the short-term perspective during the crises. Moreover, due to the significant changes of the market's and suppliers' pattern for the studied firms, the Whittington (1991) diversification measures will be highlighted in the analysis chapter in order to display the various ways of re-shaping the suppliers/customers pattern. Besides, the study will elucidate both externally- and internally-directed strategies (Chattopadhyay et al. (2001); Whittington,1991) due to the necessity of illustrating both organisational and market-related changes during the recession. Thus, the scrutiny of the companies' responses to the external shocks will incorporate a variety of different strategic measures, which effectiveness will be verified in the empirical analysis.

2.3.3 The Government Role in Crisis Management

The decision-making process and responses to external crises depend on a complex of entities and factors, including strategic group, country, industry, organisational culture, and other industries' influence (Kitching et al., 2009). The state plays a crucial role in the resolution of economic crises through alterations of public and private structures and processes. Generally, in response to the economic downturn, the bulk of governments exposes the vast public expenditure programmes to sustain the current innovation capabilities, provide opportunities, stimulate job creation, support R&D, and place the national economies on the knowledge-intensive path of growth. As a rule, the government policies ease onerous and costly regulations, provide tax relief, and encourage economic development (Peter & Downes, 2009).

For instance, to combat the financial crisis in 2008, the Russian government implemented a proactive supportive plan for the financial sector and firms within the export-dependent industries. These support incentives accounted 113 billion dollars or about 6,7 percent of GDP (Bogetic, 2010). In particular, the Russian macro-stimulus measures comprised an enhancement of social welfare spending, cut-off corporate tax profits by four percent, increase of import tariffs, cut off the reserve requirement on liabilities, and expanding the Russian oil and gas assets in Europe and Asia for future development and recovery. Ultimately, aligning by increased oil prices, the Russian economy emerged from the recession in the third quarter of 2009 after two quarters of negative growth (Yeh-Yun Lin et al., 2013).

Furthermore, crises can incite the development of domestic industries, including the introduction of the import substitution policy, that presumes the profound state engagement.

2.3.4 Import Substitution as a Crisis Management Strategy

The variety of ongoing crises of the market capitalism after the Great Depression and the Second World War fostered a search for novel strategies of economic growth, such as import substitution. The model of import substitution appeared as a bundle of industrial and social policies carried out by the political regimes, that aspired to comprise the interests of the middle and lower classes. Over time, import substitution evolved into a new set of coherent policy responses and became a flourishing model grounded on economic theory (Silva, 2007).

Import-substitution industrialisation can be defined as a long-term process that aims to manufacture all goods, that otherwise would be imported, within the national borders and protect the national production against import. Hence, the fundamental goal of the import-substitution policy is to safeguard, develop, and diversify domestic industries and diminish dependence on foreign goods, services, technologies, knowledge, and capital (Dicken, 2011).

From the 1950s, practically all developing countries have been employed a broad range of diverse protective instruments, such as nominal tariff levels, effective rates of protection (ERPs), import licences, and exchange rates. ERPs estimate the escalation of the nominal rates from lower to higher levels of fabrication in manufacturing activities, and it influences import flows and investments' allotment. Whereas, import licences assure the availability of new productive investments and products essential for consumption (Bruton, 1998).

The role of the state in the import substitution model comprises fostering the creation of basic domestic industries, centralising state authority, improving infrastructure, and stimulating local manufacturing. Moreover, the state provides the protective trade barriers,

subsidies, and restrictions on capital mobility to protect domestic producers from import. However, the success of implementation of this strategy is contingent on the country's specifics, political system, social formation, particular time settings, and other peculiarities (Silva, 2007).

The first attempt of employment the import substitution industrialisation was undertaken in Chile during the period 1930s-1940s, after the Great Depression. The Chile's import substitution strategy grounded on the total governmental control, counter-cyclical fiscal policies, mild industrial policies, public works projects, and tariff protection for the domestic industries and landowners (Morley & Smith, 1970). Analogously, in 1949-1964, Brazil applied the import substitution in the manufacturing industries. Thence, in 1949, the earlier import-dependent Brazilian metal-using industries, such as transportation, electric equipment, and machinery, were entirely supplied by the domestically produced metal (Morley & Smith, 1970).

2.4 Summary

Thus, the contemporary theoretical framework encompasses a variety of different approaches to the innovation phenomenon. The core ideas of the master's thesis are based on the Schumpeterian theory of innovations and creative destruction, that are particularly essential in order to explain the firm's counter-cyclical behaviour during the economic downturns; when businesses foster the innovation activities, while the old and inefficient markets, goods, and services are superseded from the market. Furthermore, companies' innovation capabilities and its ability to survive during recessions highly depend on diverse factors, including the business size, experience, knowledge, country's and industry specifics, organisational structure, geographical proximity, government involvement, and so on.

Moreover, the nature of crisis phenomenon is ambiguous; it can be both destructive and creative. Also, there can be distinguished many types of externally initiated crises, including sanctions, currency fluctuation, oil prices' collapse, etc. Despite the devastating economic effect of crises, economic recessions can foster firm's innovation activities. Thereby, in order to efficiently manage and succeed from an economic crisis, companies have to apply a set of varied retrenchment and investment strategies, including environmental scanning, conventional cost-cutting strategies, long-term decision-making, strategic downsizing, customer retention, marketing, innovations, markets diversification, import substitution, and so on. Importantly, a set of internally and externally-directed crisis management strategies should be meticulously tailored to a specific crisis, time settings, country, and industry. Hence, pro-active crisis management, employing innovation and development measures, ensures the business survival in the economic turmoil and its transferral to the next stage of business development.

3 Methodology and Research Process

The objective of this chapter is to describe and discuss the research methodology deployed in the master's thesis. Videlicet, the chapter outlines the research design and strategy, applied methods, selection of the study sample, research process, research limitations and challenges, ethical considerations, reliability, and trustworthiness of the study. The methodology choice and research design are significant stages of the research which ensure the validity and trustworthiness of the data, research findings, and recommendations.

3.1 Justification for Choice of Qualitative Methodology and Methods

The master's project aims to elucidate the effect of external crises, such as economic sanctions, currency fluctuation, and oil price slump, on the firm's ability to survive, innovate, and develop further. The research was conducted in two countries: Norway and Russia, in three different economic spheres, and among the companies of small, medium, and large scale. To gratify the research questions, qualitative and quantitative methodologies were applied.

A *methodology* is an overall approach to the research process embodying an array of methods. Research methodologies comprise qualitative and quantitative methods. According to (Clifford et al., 2013), *quantitative methodologies* are based on the mathematical and statistical approaches, and reasoning, while *qualitative methodologies* explore personal subjective meanings, values, and emotions. Moreover, quantitative methodologies are usually applied for big samples and lean on numbers and statistics; qualitative approaches achieve usually the upper trustworthiness for relatively small study samples. According to the enunciated research topic and the research questions, the methodology choice for the current study required employment of both qualitative and quantitative methods. However, the core of the research relies on qualitative approaches due to the intersection of cultural, economic, social, and political aspects in Russia and Norway in the period between 2014 and 2015.

Qualitative methodologies ensure an utter description and scrutiny of the research subject, without restraining the research scope and the depth of enquiry. The essence of qualitative research is appropriate for small samples, while its results are not measurable and calculable. However, the small scope of qualitative research is perilous for the research results due to the statistical generalisation of the opinions for a wider population (Collins & Hussey, 2014). Qualitative methods allowed me to look at the world as changing and dynamic, through the prism of different external crises that were steady smiting the global economy during the period of 2014-2015.

The core of the research is grounded on qualitative data, such as opinions, experiences, visions, realities, that were gathered from various companies and experts. Qualitative approaches ensured an in-depth understanding of the demolishing impact of the external crises on different companies, the business ability to survive and innovate, and significance of the industry and culture factors in the crisis management process. According to (Smith, 2001), qualitative approaches challenge the prevailing picture and understanding of the world, including the importance and role of the external crisis for the companies' further development.

Quantitative data comprised the companies' annual and quarter reports, development programmes and presentations, the federal and regional statistics catalogues, and the state statistics. Thus, the gathered quantitative data were a base for statistical analysis of the impact of external shocks on Russian and Norwegian business, particularly the main economic and financial tendencies during the researched period, including the trade changes, market structure, profits and loss dynamics, and so on. Quantitative methodologies were applied through analysis of a row of different reports, tables and graphs that served in interpreting the extent of the outer shocks' impact on various firms and the scope of the basal business alterations during the researched period. Thus, quantitative approaches were used to explore the secondary sources and to present the final results. The process of collecting and analysing quantitative data was very time-consuming but essential for interpretation of the main research results (Field, 2010).

Thus, the best vision of the research problem was obtained by the joint application of quantitative and qualitative methodologies, that ensured comprehensive understanding of the firm' ability to innovate and develop in the deteriorated environment (Limb & Dwyer, 2001).

3.2 Research Design and Strategy

According to (Valentine, 2001), *research design* is based on the complex of knowledge, academic literature, research questions, conceptual framework, and advantages and disadvantages of applied techniques. Thence, meticulous planning of the research design is an essential stage of the qualitative research. Taking into account the cross-cultural aspect of the research, need to travel, diversity of the researched industries, it was critical on the early stage of the research to establish a preliminary research net, initiate access to appropriate people and companies, plan the travelling costs, and elucidate the role of language, power, and ethics.

According to (Cook & Crang, 2007b), to avoid the collision of data and theory, the research design of the master's thesis was based on the "read-then-do-then-write" model. The employment of this model ensures the scrutiny of the theoretical aspects related to the research

topic, elucidates the intricate angles of the research questions, and procures a preparation for the interviews, including enhancement of professional vocabulary. Despite the preliminary theoretical preparation, the inquiry was open for new angles from the informants, that could be beyond the literature braces. This ensured new insight into the research topic, contemporary tendencies and changing dynamics of the studied industries.

According to (Brun, 2011, 134), “the *field* is a social terrain in which researchers can strengthen, through direct experience and encounters, the academic foundation of knowledge, thereby forging bonds between the academy and the world at large”. The field of my research was the Russian and Norwegian companies in the oil and gas, fishery and tourism spheres, which were affected directly or indirectly by the external crises in the period 2014-2015. The fieldwork took place in ten cities: Moscow, Kostroma, Volgorechensk, Yaroslavl, Saint Petersburg, and Murmansk (Russia), and Trondheim, Orkanger, Oslo, and Stavanger (Norway).

The cultural aspect meaningful for the research. The cultural differences between Russia and Norway are tremendous when it comes to the hierarchy, social relationships, dress codes, political views, and so on. Nevertheless, this cultural diversity ensured an in-depth look and the wider scope of different modes of companies’ reactions to the external crises (Smith, 2010).

The comparative study of merely two countries ensured the richness of details about each country and industry compared to studies of big samples (more than 50 countries) Furthermore, comparative analysis of small samples contributes to a splendid understanding of how various factors have influenced the researched phenomena (Lor, 2010). Thus, the comparative research between Norway and Russia and three various industries assured the scrutiny of a multiplicity of crisis management strategies concerning the cultural, industry, and business size particularities.

I chose the oil and gas sector in Russia and Norway for my research, because it was severely disrupted by the anti-Russian sanctions, and the decline of the Norwegian krone and the Russian rouble caused by the oil prices tumble, that, in turn, undermined the “oil-dependent” national economies. Whereas, the fishing industry in Russia and Norway was disrupted mainly by the national currency oscillation and the Russian food embargo. Russia was the biggest export market for the Norwegian salmon and seafood in 2013, but the food embargo in 2014 prohibited the fish import to Russia. Hence, the import ban disrupted both Norwegian and Russian exporting and importing fishing businesses. Eventually, the Russian tourism industry was chosen for the master’s thesis, because it was exposed to the range of varied crises in 2014-2015, including the Russian rouble slump, the new regulation for the Schengen-visa

applications, the bankruptcy of the travel operators and charter airlines, and the travel prohibition to Egypt and Turkey. This triggered a 50%-decline of the Russian outbound tourism in 2014 compared to the previous year (Federal Agency for Tourism, 2016). The tourism sphere in Norway was affected to a less extent. However, the Russian tourists' flow to Norway decreased by 40 percent in 2014 compared to 2015 (Innovation Norway, 2014). Thereby, I researched how Visit Norway in Moscow responded to the Russian tourists' slump during the period 2014-2015. Consequently, the ability of the firms to cope with the external shocks foreordained the future of the mentioned industries in both Norway and Russia.

The key informants for the research were employees at the high-management level, including financial and commercial managers, engineers, and heads of departments in governmental and non-governmental organisations. I focused on the high management level due to their awareness about the company's tendencies and dynamics, including economic, financial, technical, and production aspects; and their personal and professional networks might be beneficial for establishing further relevant contacts. Whereas, the specialists in the technical departments were more familiar with technological innovations, production nuances, and manufacturing difficulties, that was essential for analysis of the innovations applied in response to the crisis in 2014-2015. The experts were presented by the members of governmental and non-governmental organizations, such as Norwegian Oil and Gas Partners (INTSOK), the Norwegian-Russian Chamber of Commerce (NRCC), Innovation Norway, the Norwegian Seafood Association (NSL), and Deputy Head of Administration in Volgorechensk, Russia.

The nitty-gritty practicalities such as informants' recruiting, time and financial limitations, tape recording, transcribing, and translating, are the crucial stage of the research design. Time-management charts and work schedule helped me to organise the work more efficiently during the research trip in Russia. However, there were several alterations in the research schedule due to new established contacts or other relevant meetings.

Importantly, conducting interviews was the most interesting part of the research, although initiating and establishing contacts were the most involuted part of the inquiry. In total, I have sent over fifty emails to relevant companies, approximately a half of them were not answered at all or been rejected to initial enquiries; calling for the secretary was not fruitful since they were not willing to put me in touch with the managers. The main pitfall was the complicated political situation between Russia and Europe. Besides, the key-informants for my research was the management personnel, and their busy schedule complicated the thorny process of the research. For example, the appointment for the interviews with the fishing firms

in Norway could be possible just in December, while the Norwegian oil and gas (O&G) companies were almost unreachable due to their busy schedule and due to the crises itself. The solution for the O&G sphere was achieved by the participation at the conference in Stavanger organised by NRCC, where I got in touch with the essential O&G companies and experts.

According to (Cook & Crang, 2007b), the majority of researchers develop the research project of already existing membership of social groups, and access the already familiar cities and places. My personal network in Russia was essential for the research since I interviewed the research participants from the O&G sphere who I knew from before. Besides, the tourism sector was open for the research, and the informants provided me with further, “snowballing”, contacts. Hence, the research sampling was mainly purposive and partly “snowballing”. Thus, casting net in the early stages of the ethnography was vital for my research.

3.3 Study Sample

The sampling methods comprise two basal types: probability and non-probability methods. In order to satisfy the research questions, I applied non-probability methods that incorporate the researcher’s personal judgements. The application of non-probability methods is suitable for the inquiries that aspire to make the generalisation of a particular or extreme studied case, not the whole population. Thus, by applying the purposive non-probability technique, I chose the research participants who were relevant to the research topic due to my opinion. The purposive sample included the managerial personnel of companies and organisations, who possessed essential information concerning the research questions (Hall, 2008).

There is no particular guideline for designating the sample size for qualitative research. However, detailed and comprehensive data gathered from a small sampled is more valuable for qualitative methodologies than perfunctory data collected from the large specimens. On the initial stage of the research, the desired number of participants was approximately three companies from each industry in each country. However, concerning the time limitations, the unwillingness of some firms to participate in the research, and the insignificant effect of external crises on the Norwegian tourist sphere, the number of informants was reduced. In the Russian research field, interviews were conducted with two key informants and one expert in the O&G industry, two companies and one expert in the fishing industry, and three businesses in the tourism sector (Appendix F). Whereas, the study sample in Norway comprised two key informants and two experts in the O&G industry, two key informants and one expert in the fishing industry, and one key informant and one expert in the tourism sector (Appendix G). Moreover, I employed data gathered from the seminar in Stavanger in October 2015, where the

Norwegian O&G businesses and experts provided valuable information about the companies' adaptation after the imposed sanction and the oil price slump (Appendix H).

3.4 Research Process and Specification of Applied Methods

The research questions and the data needs determine the methods of data collection. According to (Hall, 2008), my research required original data that had never been collected before. Besides, the secondary data were gathered from the Russian and Norwegian libraries and firms.

The field trip to Russia took place from the 12th of September to the 23d of October 2015. Whereas the research in Norway was more longitudinal. The first interview in Norway was conducted in September 2015, and the last one was held in December 2015. The conference in Stavanger took place on the 13th of October 2015.

The base of the master's thesis constituted the conventional research techniques, namely interviewing. In particular, the primary applied qualitative method was semi-structured in-depth interviews with several key questions but broader parameters for discussion. I employed both face-to-face, phone, and email interviews. Face-to-face interviews contributed to gathering of sensitive and complex information, and were beneficial due to a wider range of follow-up questions during personal communication compared to the phone and email interviews. In-depth interviews congregated the informants' visions of the world, economic situations, and management strategies; and the meanings they ascribed to it (Limb & Dwyer, 2001). Besides the face-to-face interviews, some informants due to the busy schedule answered on my research questions via mail (INTSOK and Cermaq) or phone (Visit Norway). Despite the disadvantage of not face-to-face conversation, the email interviews were more detailed since the interviewees had a good time to meticulously read, analyse, and answer to the research questions that, in turn, enriched the overall data (Crang & Cook, 2007a).

Preliminary preparation for the interviews embraced reading financial press, statistics, market surveys, trade press, national and local media, and internet sources. Therefore, the preliminary preparation eased the flow of the interviews because the informants felt that I was knowledgeable and familiar with the basal market situation and the terminology.

For every company, I designed a distinct questionnaire because every company was unique, with peculiar production (McLafferty, 2010). Appendix I provides example of questionnaire for fishing companies. Nevertheless, every questionnaire elucidated the similar topics regarding companies' recent development and its reactions to the external crises in order to enable the comprehensive comparative study results. Furthermore, during every interview I

asked follow-up questions regarding to the occurred participants' viewpoints on the research topic. In general, follow-up questions contributed a lot to a discovery of new angles of the study, because there were plenty of nuances that I did not heed. *Videlicet*, during the interview with the Russian O&G companies, the follow-up questions elucidated the modernisation strategies and the cluster's creation programme that I was not familiar before the interviews.

All interviews were conducted at the companies' offices and the conference hall in Stavanger. The flow of the interviews went very smoothly both in Russia and Norway. All researched participants were talkative and interested in the research topic. A big benefit of interviewing the acquaintances in Russia was that the interview flow was eased by the friendly atmosphere, and the interviewees were willing to talk more than one hour. Moreover, all informants provided a lot of additional information, such as annual reports, diagrams, catalogues, statistics, etc. However, the atmosphere of the interview with NSL was quite tension, because the informant was frustrated of the multiple Russian sanctions on the Norwegian fish, and he accentuated that I was Russian during the interview that made me feel a little bit uncomfortable. Therefore, I explained that I aspired to compare two countries from a neutral point of view.

The duration of the interviews varied from 30 to 60 minutes; mainly, the informants were willing to talk more. According to (Crang & Cook, 2007a), a one-hour interview is sufficient for a single interview, this is usually long enough for some rapport to be established, enables discussion of a range of issues, and short enough to be "user-friendly".

The issue of language was essential for the research. I interviewed research participants in three languages: Russian, English, and Norwegian. All interviews required considerable preparation due to the specifics of terminology in each spheres. Hence, I had read the related websites and articles in order to be familiar with the terminology, specifically for the fishing industry. All conducted interviews were transcribed, translated and discursively analysed. The recording of the interviews was made by a mobile phone; the interviews conducted via mobile phone was written down due to an inability to take a voice record. The recording with a phone was more advanced and saved all essential information, intonation, and silence, and made it possible to return to the interview later and carefully listen to it.

I transcribed and translated all interviews after conducting them. Transcribing was a time-consuming task, but it was worth to do it right after the interviews, because it was easier to transcribe the conversation that remained fresh in the my mind (Longhurst, 2010). The most time-consuming issue was the transcribing of the conference in Stavanger, since I had to

transcribe and translate ten presentations that took in total over one week. All interviews were translated into English, a primary language of the master's thesis. According to (Cook & Crang, 2007b), the researcher needs to pay attention to transcribing the interviews because he/she brings own feelings, assumptions and values for the translation of the fieldwork. Hence, I focused on clarity and accuracy of the translation.

The data analysis process was eased by gathering all research data in one document and creating of bookmarks and tags regarding the core relevant topics and issues. This technique saved a considerable amount of time and ensured an effective analysis process.

3.5 Limitations of Qualitative Methodology

Despite the variety of qualitative approaches' advantages, I encountered several limitations of the research that had to be highlighted in order to assure the trustworthiness of the inquiry. At first, the research sample was quite modest that question the reliability of the research for other industries. Secondly, the political, economic, and financial confidentiality constrained the openness of the interviews; thereby, some research participants did not desire to spotlight on the negative facets of their organisation's activity and was candid about their political views. Thirdly, the time and financial limitations constrained significantly the duration of the research process in different cities. On the one hand, I as a Russian citizen did not have to apply for a visa for overseas fieldwork and could stay as long as possible in both Norway and Russia. On the other hand, time limits and cost of accommodation constrained notably the duration of my research in each city, especially in Norway, where the price of a hotel room exceeded the Russian prices approximately in 5 times. Fourthly, the external crises are not ceased yet; thus, the further measures can be probably undertaken by the companies in the hereafter but they were not analysed in the master's thesis. Fifthly, the language limitations, need to develop questionnaires and conduct the interviews in three different languages, were reasonably essential and tricky. Furthermore, the necessity to translate all interviews into English made the data preparation and transcribing process a very time-consuming matter. In addition, the data analysis process was very laborious. Sixthly, the research findings of qualitative study could be affected by my personal views, biases, and idiosyncrasies (Valentine, 2001).

3.6 Ethical Aspects

Qualitative methodology is often influenced by the social norms, expectations of individuals, and power relations. Hence, the scrutiny of ethical aspects is crucial for qualitative research (Dowling, 2010). Research ethics include the researchers' responsibilities and the obligations

of the research participants. My research was primarily concerned with my responsibility to the research subjects concerning the issues of privacy, confidentiality, and harm. Initially, I clarified to the interviewees the research purposes, ensured confidentiality and anonymity of interviews, that made them more confident and open to talk. Importantly, many Russian informants required my identification card as a researcher, but I did not have it. Therefore, they were cautious of providing sensitive information. All informants were provided with the informed consent form and were asked the permission to take a record of the conversation. The consent form embraced the detailed information about the research topic, questions, purpose, voluntary participation, and possibility to withdraw from the study. Importantly, research participants from the Russian fish companies were willing to retain the anonymity of their names and occupations. Thereby, I ensured their confidentiality with the use of just their company name in the master's thesis (Cook & Crang, 2007b).

Taking into account the peculiarity of my thesis, the principal research issues were quite sensitive, including commercial aspects, statistics, business strategies, personal perspective on the external crises, etc. Therefore, I ensured the informants that my original field notes, recorders and transcripts will be stored in a secure place with restricted access (Dowling, 2010).

Moreover, any physical and psychological harm to the research participants and the researcher was eliminated. The potentially upsetting or psychosocially harming questions were absent. However, I informed the interviewees that in the case of inappropriate questions, they could reject to answer. To minimise the risk of physical harm to the researcher and research participants, all interviews were conducted at daytime in companies' offices.

Researcher's and informants' positionality and personality were interrelated and important for my cross-cultural study. The personality of the researcher and the research participants determined the flow of the interviews. Personality played an important role in my research (Moser, 2008). Both in Russia and in Norway, I interviewed people who possessed a higher social status and were more powerful. Moreover, this status difference was more notable in Russia than in Norway due to the more prominent hierarchical structure of the society. According to (Dowling, 2010), the power relationships in my subject area between the researcher and the research participants can be classified as "asymmetrical relationships", where the informants had greater power to influence compared to the researcher. However, the impact of power misbalanced was insignificant for the inquiry because the majority of the informant were friendly, open to dialogues, and easy-going persons.

Moreover, during the research, I was both “insider” and “outsider” in the studied societies. On the one hand, in Russia, I was an “insider” since I was a Russian citizen, native speaker, and had a work experience in the public and financial sphere. On the other hand, in Norway, I was an “outsider” since I was a foreign student, non-native speaker, and did not have relevant work experience in the country. From my point of view, there are both advantages and disadvantages of being an insider or an outsider. In Russia, I shared the culture, mind-set of the world, and vision of economic aspects, thus, the information flow was easier and better functioning. However, in Norway, since I was not aware of all legal, financial, and cultural aspects, the interviewees described their visions and other aspects more detailed and clearly. This was beneficial and ensured the comprehensive data understanding.

3.7 Trustworthiness of the Study

Trustworthiness of both qualitative and quantitative methodologies depends on the research process, study design, and research outcomes. Trustworthiness of quantitative methodologies is evident because it is based on statistics, facts, and numbers, while trustworthiness of qualitative research is often in doubt due to the positivist paradigm.

Guba (1981) suggests four principal criteria of trustworthiness in the quality research: credibility, transferability, dependability, and confirmability. Credibility measures congruence of the research findings to the reality. The prolonged and varied field experiences in Norway and Russia, in different cities, the research reflexivity, and the richness of the interviews ensured the interconnectedness between my research results regarding the firm’ adaptation to the crises and the reality where it occurred. Furthermore, the experts assessed and provided feedback to my preliminary study findings during the research process (Shenton, 2004).

According to (Shenton, 2004), the transferability and conventional generalisability of the qualitative study are almost never possible due to the nature of qualitative methods applied to a specific context. However, the outcomes of the current research can be assimilated within the complex context of the O&G, fishing and tourism industries in Norway and Russia.

Dependability ensures that research results are reproducible and can be repeated in the same circumstances later, namely the stability of research design over time (Anney, 2014). The detailed description of the research methods, companies’ peculiarities, specification of the crisis impacts, and the firms’ reactions to the crises allow to repeat the inquiry and achieve similar results in the future for the similar sectors (Credibility of Research Results, 2011). Eventually, the study confirmability was grounded on the reliance of the findings and testimonials on the

information collected during the research process in Norway and Russia. Thus, the informants' experiences, ideas, visions, and evaluations constituted the essence of the research findings.

3.8 Summary

The comparative research was undertaken in Norway and Russia within three diverse industries: oil and gas, fishery, and tourism. This ensured the quality and trustworthiness of the study conducted with the small sample of research participants. Importantly, the study combined both qualitative and quantitative methodologies, however, the qualitative methods constituted the core of the study. The cross-cultural research process was carefully designed and prepared by purposive and partly snowballing study sampling. The cross-cultural and cross-industrial enquiry required circumstantial design of the questionnaires for every interview. The main bulk of interviews was conducted through face-to-face meetings, while phone and email interviews ensured the accessibility of the occupied participants. Furthermore, the conference in Stavanger assured access to the Norwegian O&G companies that possessed vital information regarding the research topics. Also, the research process comprised transcribing and translating of the interviews that was the most time-consuming, but the most essential task during the study.

Furthermore, the inquiry limitations incorporated a modest research sample, political tension constraining interviewees' openness, constrained duration of the study, not ceased external crises, language limitations, and personal researcher's influencing of the study. Moreover, the ethical aspects, including confidentiality, anonymity and avoidance of the physical or psychological harm, were carefully insured regarding both the researcher and the research participants. Ultimately, the trustworthiness of the study was ensured by the prolonged and varied field experience, the richness of the interviews, detailed description of the research process, and reliance of the research results on the gathered data.

4 Empirical Analysis

The purpose of this chapter is to provide explicit analysis of the qualitative and quantitative data gathered during the inquiry. The analysis is based on the theoretical framework introduced in the second chapter. Furthermore, the chapter is parcelled into several sections to ensure a comprehensive understanding of the varied impact of the diverse external crises on the businesses in the oil and gas, fishery and tourism spheres in Norway and Russia. Importantly, the chapter scrutinises the companies' responses to the external shocks concerning the industry specifics, company's scale, international cooperation extent, geographical location, cultural impact, and so on.

The study dissects the impact of the externally initiated crises that disrupted the Norwegian and Russian businesses in various industries in the period between 2014 and 2015. The most demolishing impact on the companies inflicted the following externally caused crises: the multilateral smart economic sanctions implemented against the Russian Federation in 2014, the food embargo imposed by Russia, the oil prices' tremendous downfall in 2015, and the subsidence of the Russian rouble and the Norwegian krone. Therefore, the first section of this chapter provides a short background of the enquired crises that will instate circumstantial understanding of the external shocks' impact on the businesses in Norway and Russia. Whereas, the rest of the chapter comprises several sections in regard to industries and each respective country. Furthermore, to the meticulous comprehension of the research questions, each section comprises sub-sections which dissect the cumulated empirical data pertaining two core aspects: the affection of the external staple crises on the businesses and the companies' responses to these outward shocks.

4.1 Background of the External Crises Occurred in 2014-2015

In response to the annexation of Crimea in March 2014, the EU and the US imposed the diplomatic and economic sector-specific sanctions against Russia in March 2014. Furthermore, the sanctions were strengthened several times in April, May, July, and September 2014, and January and June 2015. According to the Eyler (2007), as the large nations with the biggest world economy, the US and the EU-countries employed their power to obstruct trade and credit flows between the target (Russia) and the sender nations to alter the current Russian behaviour. Despite the cease-fires and agreements negotiated in Minsk, the sanctions' abolition did not occur (Veebel & Markus, 2015). The Western trade and financial sanctions targeted primarily the Russian energy and defence sectors. The Economist (2014) alleges that the focus of the restrictions on the finance sector can be explained by the pre-eminence of the dollar, and the

US's role in clearing of the cross-border bank and credit-card transactions. Thence, Russia is more vulnerable in the financial aspect compared with the USA that, in turn, explains Putin's aspiration to eliminate reliance on the US dollar in the international trade and banking system.

The sanctions reverberated on the EU-Russian bilateral trade, because Russia was the EU's fourth biggest partner with 8,4 percent of total trade (103 billion euros) in 2014. The foremost part of the EU export commodities to Russia in 2014 embraced machinery, transport equipment, chemicals, medicines, electrical and electronic goods, and agricultural products. Whereas, the Russian exports to the EU in the respective period accounted 182 billion euros and were chiefly represented by mineral fuels (74.9%) (European Parliament, 2015).

It is important to note that the European countries have been affected unevenly: Germany, the Baltic countries, Finland and Eastern Europe suffered to the largest extent due to their substantial trade volumes to Russia in the pre-crisis phase (Bond et al., 2015). Ultimately, the Russian economy incurred 40 billion dollars in 2014, while the losses from the combination of the sanctions and the oil price slump in the period 2014-2017 are estimated at 600 billion dollars, including 170 billion dollars' loss from the financial sanctions, and 400 billion forfeits of the O&G sector (Nadykto, 2016; Forbes, 2014). Whereas, the Austrian Institute of Economic Research estimated the deprivation of the Western nations from the sanctions approximately at 100 billion euros and additionally a loss of 2,2 million jobs in the long run (Buklemishev, 2015).

However, despite the immense economic impact the sanctions were not sufficient to alter the government policy. Contrariwise, the restrictions provoked overwhelming patriotism in Russia. The support rate for Vladimir Putin attained the highest ever level of 81,2 percent in 2015 compared to 63,5 percent in 2013 (Levada-Center, 2015).

In response to the Western restrictions in August 2014, Russia implemented the embargo on food import from the US, the EU, Norway, Canada, and Australia. Additionally, on the 13th of August 2016, Russia banned food import from Albania, Iceland, Liechtenstein, Montenegro, and Ukraine. Importantly, the food embargo mainly affected the EU import that accounted for 73 percent of banned import goods. The European Commission estimated the overall effect of sanctions and food embargo at 0,3 percent of the EU's GDP in 2014 and 0,4 percent in 2015, (40 and 50 billion euros respectively) (European Parliament, 2015).

In response to the external crises, the Russian authorities actively promoted the import substitution policy that aspires to protect and develop domestic industries and reduce the over-reliance on import. *Jarle Forbord, NRCC*, stated that the Russian Ministry of Trade allocated

2,5 billion euros to this programme, and intended until 2020 to lessen import in the following sectors: O&G equipment by 16.1%, food industry equipment – 53.1%, agriculture and forestry equipment by 55.9%, light industry - 33.5% and metalworking machines and tools – 28.9%.

The Impact of the Sanctions and the Embargo on the Norwegian-Russian Collaboration

Øyvind Nordsletten, the former Norwegian ambassador in Russia, admitted that the Western economic sanctions and the Russian countermeasures had an adamant effect on both the Russian and Norwegian businesses. Analogously, *Forbord, NRCC*, alleged that as a result of the food embargo and the sanctions, Norway’s export to Russia engendered a 79%-decline in the first half of

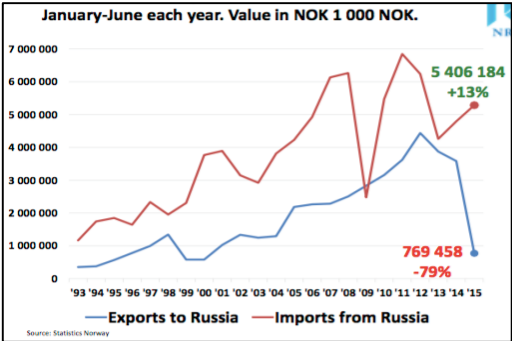


Figure 4.1 Trade Norway-Russia 1993-2015 (Mugaas, 2015b, 6)

2015. Whereas, the Russian import to Norway increased by 13 percent in the respective period (Figure 4.1). NRCC estimated the overall loss for Norwegian exporters to Russia around 10 billion NOK in 2015. “*Despite the prevailing opinion that losses were not so significant for the Norwegian economy, my issue that we could export four billion more*” (J. Forbord, personal communication 13.10.2015).

Consequently, in 2015, the prevailed Norwegian fish and seafood export to Russia was replaced by manufactured goods (294 million NOK), and machinery and transport export (217 million NOK) (Figure 4.2). On the contrary, the Russian export to Norway was represented by mineral fuels, lubricants, manufactured goods, and chemicals.

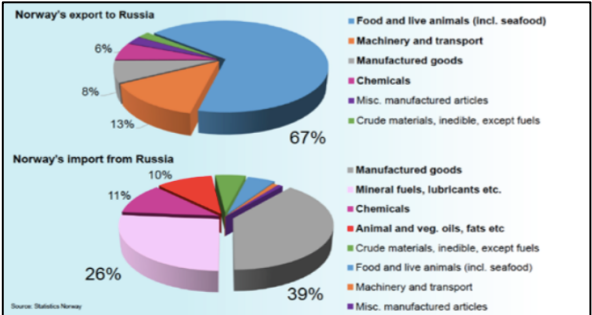


Figure 4.2 Norway's export to Russia/ Norway's import from Russia (Norwegian-Russian Chamber of Commerce, 2015, 3)

According to (Askari et al., 2003), the anti-Russian sanctions are multilateral due to the multiplicity of the sender nations and collateral due to the engagement of the EU. Hence, the sanction’s demolishing effect on Russia should be immense (Haass, 1998). Whereas the food embargo introduced merely by Russia, appears as unilateral sanctions; thus the damaging effect of this measure should be minuscule, regarding the ability of the target to relocate the market swiftly (Askari et al., 2003). This assumption of the efficiency of the multilateral and inefficiency unilateral restrictions will be elucidated later in the current chapter.

Moreover, the sanctions' primary goal to transshape the political regime in Russia, has not been achieved. Conversely, the enhanced popularity of Vladimir Putin triggered an opposed result when the nation unified and the state politics obtained more national support. Thus, the (Hufbauer et al., 2007) assertion that sanctions may contribute to the unification of the target's population in support of its government, was valid for the anti-Russian sanctions case.

Therefore, in line with Pape (1997) the economic sanctions were not able to achieve the intended foreign policy goals. However, the sanctions regime is not over yet in 2016. The future will reveal the utter effectiveness or failure of the "sanctions war" between Russia and West.

Oil Price Slump and Currency Exchange Rate' Fluctuations

The total damaging effect of the sanctions on Russian and Norwegian economies is arduous to assess in virtue of the oil price slump that severely affected the oil-dependent Russian and Norwegian economies. The Russian economy has experienced a dramatic twofold downfall of the Russian rouble (RUB) from 46 RUB/EUR in March 2014 to 75 RUB/EUR in March 2016, with an overall decline of 60 percent of its value (The Central Bank of the Russian Federation, 2016). This tremendous decline was triggered by the Ukrainian conflict, the sanctions in 2014, and primarily, by the steep decline in oil prices from the 97,57 USD/Barrel in August 2014 to 33,87 USD/Barrel in February 2016 (Macrotrends, 2016). Whereas the Norwegian krone decreased from 8,3 NOK/EUR in June 2015 to 9,5 NOK/EUR in February 2016 (European Central Bank, 2016).

Therefore, the crude oil price tumble, and the Norwegian and Russian currency decline are inter-related (Figure 4.3). Hence, the national currency exchange rate is highly sensitive to oil prices fluctuations. This has had a knock-on effect in all industries, both in Norway and Russia.

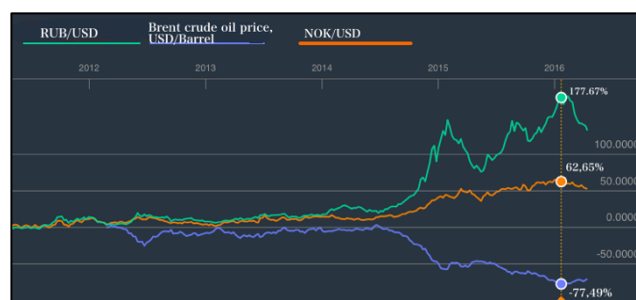


Figure 4.3 Fluctuation of the RUB and NOK exchange rates and oil prices, 2015-2016 (Bloomberg, 2016)

Thus, a set of externally caused shocks, during the period of 2014-2015, put Norwegian and Russian companies' sustainability and profitability at stake. The following sections will examine the effects of the enquired external shocks on the Russian and Norwegian business in the O&G, fishery and tourism spheres, and will elucidate the core crisis management strategies.

4.2 The Fishery Industry: Crises Impact and Responses

This section will scrutinise the impact of the mentioned above external shocks on the fishing sectors in Norway and Russia, and will dedicate the chief responses to the crises, its effectiveness, and factors affecting the success or failure of adaptation strategies.

4.2.1 Norwegian Fishing Companies

4.2.1.1 Impact of the External Crises on the Norwegian Fishing Businesses

Impact of the Food Embargo

According to (Askari et al., 2003), the bilateral target-sender trade, international collaboration, and international access to credit, predetermine the scale of the sanctions' impact on both target and sender nations. As mentioned above, the level of the Russian-Norwegian bilateral trade was considerable during the pre-crisis period. *Nordsletten, Forbord, and Svein A. Rappe, The Norwegian Seafood Association (NSL)*, emphasised that Norwegian pelagic and non-pelagic fish companies were intensely stricken by the restrictions, due to Russia being the largest export market for the Norwegian fishery and seafood in 2013, with a total trade volume of 295 thousand tonnes and the total value of 6,5 billion NOK. After the introduction of the embargo, the Norwegian fish export to Russian dramatically declined by 55 percent in 2014 (from USD 6,2 billion to USD 3,4 billion), and by 98 percent in 2015 (Figure 4.4., Figure 4.5). Therefore, the Norwegian fishing industry encountered an abrupt loss of the biggest trade partner and had to swiftly make decisions regarding market relocation.

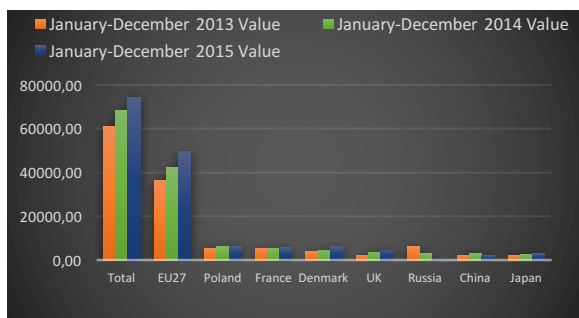


Figure 4.4 Norwegian Total Value of fish Export per Country, 2013-2015, MNOK (Norges sjømatråd, 2015; 2016)

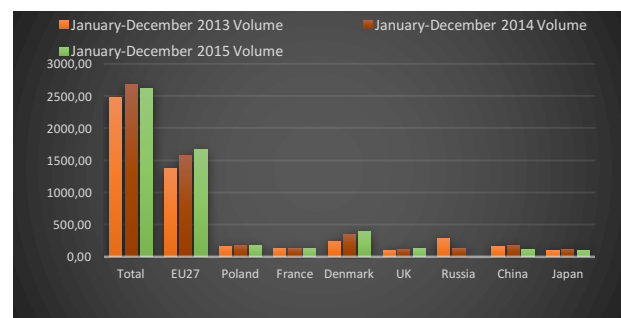


Figure 4.5 Norwegian Total Fish Export Volume per Country, 2013-2015, 1000 tonnes (Norges sjømatråd, 2015; 2016)

Importantly, *Rappe* highlighted that the Russian import ban was not unique for the Norwegian companies, and the last boycott was in 2005-2006. Simultaneously, *Ola Loe, Norwegian Royal Salmon (NRS)*, highlighted that bans for the Norwegian fish companies occur “too often”, including the recent Chinese boycott after the Nobel peace prize incident, and the American protectionist-boycott to support local producers. Therefore, Norwegian fish

companies were used to operate in urgent circumstances. The crisis management strategies were elaborated and strengthened by previous experiences, and consequently the crisis adoption of the Norwegian fish business went swiftly with minuscule losses for the industry. That goes in line with (Lowth et al., 2010), who allege that companies operating in the environment with constant shocks, challenges and varying demand, cope with crises quicker and more efficiently.

Importantly, the company’s pre-crisis trade volume with the target/sender nations foreordains the degree of demolishing impact of the sanctions (Eyler, 2007). *Loe, NRS*, discerned that before the restrictions, the Russian market was significant for NRS export, and accounted 16-18 percent of total export, together with Ukraine up to 20 percent.

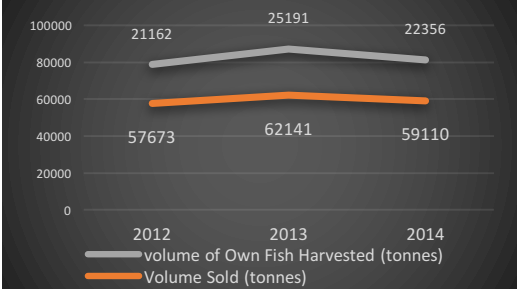


Figure 4.6 Key Figures NRS, 2012-2014 (NRS, 2014)

Consequently, as a result of the import ban, the increased salmon prices, and additional biological challenges, the NRS’s total volume of sold and harvested fish dropped by 4,98% in 2014 compared to 2013, including a 11%-decline in NRS-farming, and 0,8% decline in external volumes (Figure 4.6). However, due to the increased salmon prices, the company’s revenue increased in 2014. In addition, *Loe* underscored that the bankruptcy of NRS’s Russia business partners, such as Atlant Pacific and Technolab, was challenging for the business due to a loss of reliable trade partners. Analogously, *Lise Bergan, Cermaq*, acknowledged that the firm struggled with the loss in the Russian market. Consequently, the firm’s operating revenue from the Russian market descent from 611,490 MNOK in 2013 to 450,6 MNOK in 2014 (-26%), but the total operating revenue of Cermaq Norway increased by 5,3 percent in 2014. Importantly, the share of the Russian market in the firm’s total export volume foreordained the greater adverse impact of the food embargo on NRS compared to Cermaq. That correlates with the mention assumption of Eyler (2007).

Impact of the Currency Fluctuation

Besides the import ban, the Norwegian fishing businesses impinged the fluctuation of the national currency exchange rates. *Bergan and Loe* alluded that the companies’ sales were in foreign currencies, mainly in dollars and euros, while primary expenditures were in Norwegian krone. Therefore, the exchange rate fluctuation influenced the firms’ cash flow and profitability.

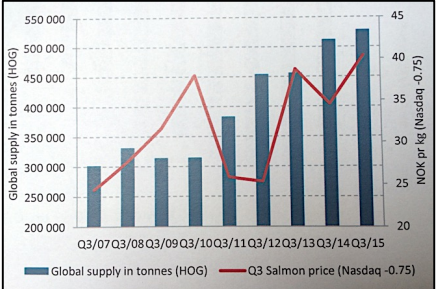


Figure 4.7 Price and Volume Q3 2007 - Q3 2015 (Norwegian Royal Salmon, 2015)

Importantly, *Loe* accentuated that the fish prices vacillated remarkably during 2014: prices for salmon decreased significantly in the third quarter, due to the Russian ban, and achieved the highest spot price in the last 20 years (45,14 NOK) in the fourth quarter. Therefore, this abrupt price-leap contributed to a formidable enhancement in production volumes that, in turn, led to an oversupply of salmon and a consequent decrease of prices later in the year (Figure 4.7).

According to (Peter & Downes, 2009), a weak currency is beneficial for exporting companies, while strong currency is auspicious for importing firms and vice versa. In line with this postulate, both interviewees in the Norwegian fishing businesses acknowledged that a weaker Norwegian krone combined with the strong price growth and increasing global fish supply, contributed to market development for Norwegian salmon and increased revenues of the companies despite the decline in sales volume. *Bergan* emphasised that in 2014, Cermaq Norway performed the strongest operating profit ever (537.8 million MNOK) due to a weakened krone and increased prices for salmon (Cermaq, 2014).

Nevertheless, the foreign currency fluctuations in the major export markets had an adverse impact on the Norwegian fish exporters, due to a significant reduction in consumption and demand from foreign markets with weak currency. Both informants at NRS and Cermaq underlined that considerable currency oscillations engendered vagueness in some export markets. *Loe* alleged that the Russian rouble tumble in 2014, and lessened purchasing power and demand on fish in Russia provoked the 15%-overall drop of fish import to Russia. Therefore, *Loe* emphasised that despite the import restrictions, the Russian market for Norwegian salmon would decline twofold, due to the increased prices for fish in Russia, less availability of fish for middle-class customers, and the sequent decline of fish consumption. Thus, the tumble of the foreign currency in the main export markets is nugatory for Norwegian fishing exporters due to the lessened sold volumes and lost potential profits.

Therefore, the currency fluctuation affected remarkably the activities of the Norwegian fishing firms. Hence, evidence of Norwegian fishing businesses contradicts with the studies of Jorion (1990), He & Ng (1998), and Glaum et al. (1998) that indicated an insignificant impact of the currency fluctuation for firms in the developed countries.

Impact of Other Crises

All researched fishing firms did not notice any direct correlation between the crude oil price decline and the fishing business activities, although they remarked the general deterioration of the economic situation in Norway and other markets. This crisis also triggered

a decrease in the purchasing power and demand on fish both in domestic and foreign markets, especially in oil-dependent economies, such as Russia and Norway.

However, all interviewees remarked the importance of biological challenges for the industry. “The high mortality of fish in Finnmark in 2014 profoundly affected NRS farming, total trades, and profitability. Consequently, good biologists ensure our profitability, economic, and environmental sustainability” (O. Loe, personal communication 21.12.2015). Therefore, due to the peculiarities of the fishery industry, the business profitability and sustainability can be guaranteed by focus on the biological challenges that cause both financial and production obstacles for the sector.

Discussion

Eventually, among the variety of the crises occurred during the period of 2014-2015, the Norwegian fishing companies were mainly disrupted by the Russian food embargo and the currency fluctuation. However, while the import ban’s effect was primarily adverse and destabilising, the currency fluctuation had a positive impact on the businesses, due to the increased revenues despite decreased sold volumes.

NRS was affected by the embargo to a greater extent than Cermaq, due to a larger share of the Russian export market in the company’s total export volumes. Hence, trade sanctions affect primarily firms with substantial trade and collaboration with target or sender in the pre-crisis period. Moreover, Cermaq is a large international corporation, exporting fish to Russia from both Norway and Chile, which made the company less prone to the import restrictions on one affiliate. Thus, NRS, as a mid-sized firm with fish farming only in Norway, encountered more perilous consequences of the import ban compared to the large corporation, Cermaq. The evidence shows that large companies are less vulnerable to external crises compared to the mid-sized businesses due to their market opportunities, greater market-flexibility and vast networks.

Importantly, the negative impact of the food embargo had a short-term character due to the companies’ preceding experiences within boycotts. Therefore, businesses operating in the constant turbulent market, have a greater ability to cope swiftly with external shocks.

Whereas, the currency fluctuation had a dual effect on the enquired fishing enterprises in Norway. On the one hand, a decrease of the national currency facilitated the amplification of the fish exporters’ revenues and profitability, due to the main export activities in euros and dollars. On the other hand, the weakening foreign currency combined with the increasing prices for fish, had a total adverse impact on the researched companies. This was due to the slump of

the fish consumption in the foreign markets, particularly in Russia and Ukraine that in turn, caused the decline in fish sales to these markets and consecutive profit losses. Therefore, the tumble of the national currency exchange rate is favourable for exporting companies trading in foreign strong currency, while the downfall of the foreign currency is negative for businesses exporting to this market.

In addition to disrupting external economic crises, the Norwegian fishery industry was sensitive to the occurring biological challenges, that caused the grave obstacles for fish farming, that, in turn, undermined the business profitability and sustainability.

4.2.1.2 Responses to the External Crises

The elucidated above external crises were sudden and unpredictable for the Norwegian fishing industry. According to the Doyran competing theory of turnaround (2011), firms undergoing a steep crisis should cope better with the crisis and even be more adaptable to generate external finance, compared to businesses experiencing a more gradual decline.

Sternad (2012) defines three essential types of company's adaptation strategies: retrenchment, investment and ambidextrous strategies. On the base of this classification every section of the empirical analysis is subdivided into subsections, describing retrenchment and investment measures that were undertaken by the researched companies.

Retrenchment Strategies

In line with (Faghfour, 2012), the short-term responses to the external crises comprehend retrenchment strategies that incorporate cost-monitoring and cost-cutting measures, diminution of direct and overhead expenses, and closure of plants.

Analogously, (Lowth et al., 2010) claims that external shocks can severely erode the business and lead to the merely feasible solution a closure of production and businesses. Moreover, Haveman (1993) postulates that small businesses during the crisis often encounter a lack of resources for expansion and diversification of production. *Rappe and Forbord* mentioned that the small fishing enterprises in Norway impinged significant problems due to the lack of market flexibility and limited collaboration with external actors, while the Norwegian mid-sized and large fishing companies swiftly surmounted the outer challenges. *Johan Bøe Bjørkevoll, Innovation Norway*, denoted that the small enterprise "Kirkenes Trading AS", based in Murmansk, with 150 MNOK in turnover, was extensively beaten by the restrictions. The company was not able to survive and was forced to close business, due to inability to compete with Russian fishing companies on the local market with Russian fish.

Thus, the retrenchment strategy of business closure was a single solution for the small firm, with limited financial and production capacities and constrained networks. Hence, the small companies operating abroad impinge virulent challenges during the economic downturn due to their restrained capabilities of production and market diversification, financial limitations and the hampered rivalry with local businesses. Furthermore, the concentration just on one single market can be fatal for business during recession. Therefore, to avoid closure and bankruptcy during external crises, enterprises should amplify their business networks and diversify markets and production in the pre-crisis period. In addition, Norwegian fishing companies are entirely independent of the states' financial support. Thus, the business survival leans primarily on the entrepreneurial skills of the management.

The researched firms, *Cermaq* and *NRS*, effectively managed the outer shocks without a risk of business or production closure. However, they employed another type of retrenchment strategy – *cost-cutting downsizing*, that assured business short-term survival and adaptation (Radcliffe et al., 2001). *Loe at NRS*, stated that after the embargo and the Norwegian krone decline, *NRS* employed short-term reduction of production costs that guaranteed firm's adaptation to the astatic market situation. Likewise, *Bergan* alleged, “*External shocks forced Cermaq to think in new ways due to customise the company to big external alterations. The company focused more on short-term cost reduction, appropriate risk estimation and insurance of export credits*” (L. Bergan, personal communication 25.11.2015). Both studied Norwegian fishing companies employed cost-cutting strategies, concerning the production costs, while the personnel reduction did not occur. The cost-cutting measures are effective in the short-term perspective, when the economic turmoil has not reached the peak and more prominent threats are not clear. Importantly, risk estimating and export credit insurance are crucial for exporting companies concerning the high risk of financial insolvency of particular customers.

Investment Strategies

While the retrenchment measures assured the short-term survival of the firms, the investment strategies contributed to the long-term adaptation and development of undertakings. Nevertheless, Sternad (2012) asserts that investment strategies are parlous due to its high uncertainty compared to the retrenchment strategies that are more secure and profound.

According to (Pearce & Robbins, 1994), personnel play a determinative role in crisis management. Both *NRS* and *Cermaq* in response to the external shocks established *crisis-management teams*. Moreover, in line with the Hambrick upper echelon theory (2007), both *NRS* and *Cermaq* crisis management teams were represented by the high-level management.

However, the Cermaq crisis management team embodied both internal and external experts, while the NRS management team was entirely internally-based. Hereby, *Loe* mentioned that the NRS crisis-management department required further development and attraction of new knowledge and skills from the external sources. To conclude, the strategic crisis management teams have vindicated the efficiency of deliberated strategies, due to a beneficial combination of varied skills, knowledge and experiences in one expert group.

Rappe at NSL, admitted that the Norwegian fish enterprises in the current crises were more innovative in market-related aspects compared to production-related innovations. “*Market-flexibility is highly important for the Norwegian fishery due to constant occurring external or internal crises*” (S.A. Rappe, personal communication 26.11.2015).

According to (Lowth et al., 2010), another essential investment strategy is *market diversification*, which is perilous and resource-demanding. Thus, the large and medium companies have a greater advantage in employing these measures compared to small firms. The studied firms are large and medium-sized businesses, and both of them had to reallocate exported fish volumes from Russia to other markets, both existing and new ones.

Rappe emphasised that the restrictions caused significant short-term problems, but not long-term, because the Norwegian firms swiftly redistributed the market’s pattern. *Rappe* noticed that the primary export market for Norway after the market relocation, was the EU, par excellence Poland, France, Denmark and the UK (Figure 4.8).

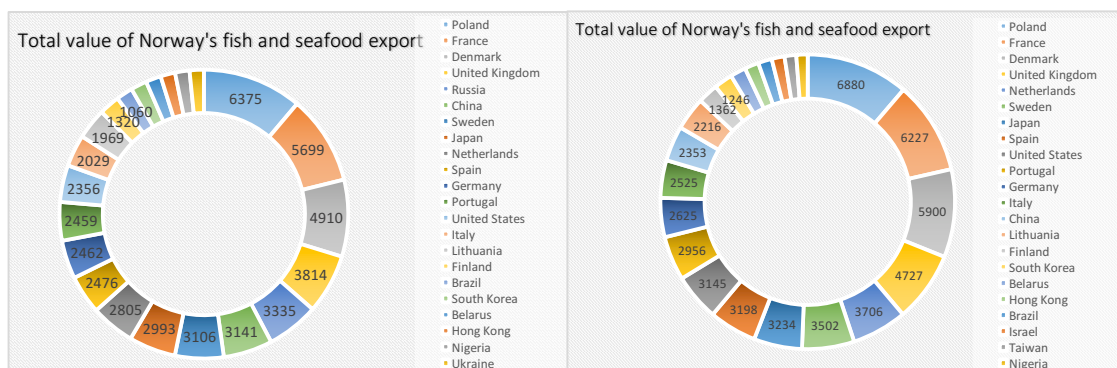


Figure 4.8 Value of Norway’s fish and seafood export per country, 2014, MNOK (Statistics Norway, 2016)

“*NRS was very flexible in the face of significant trade barriers after the loss of the Russia’s largest customer. Our salespeople managed to divert the flow of fish to new markets speedily, despite the high salmon prices in 2014-2015*” (O. Loe, personal communication 21.12.2015). Analogously, *Bergan* noticed that Cermaq promptly compensated the lost Russian market through the development of cooperation with other countries, and enlargement of its export volumes in the existing and newly developed markets. Hence, the geographic proximity

to the EU contributed to the redistribution of lost export volumes within the main European market. Both studied businesses redistributed ex-Russian fish volumes chiefly within the EU, in particular, the UK, Spain, and Portugal. As a result of the loss of the Eastern European market, the NRS total export volume to Western Europe attained 72 percent in 2015, and domestic sold volume amounted 12 percent. Importantly, after the embargo, Cermaq significantly increased export from Chile to Russia. However, it did not compensate the total losses of the Cermaq production in Norway. Hence, while NRS owns fish farming just in Norway, Cermaq fish farms locate in Norway, Chile and Canada. Thence, Cermaq bore a superior possibility of market's reshaping and achievement of new markets compared to NRS.

Concerning the newly occurred markets and future perspectives for Cermaq, the informant added that the US and China present good growth. *Loe at NRS* accentuated the significance and development of the Asian market for the company despite rivalry from Chile. *“NRS is working on extending its Chinese market. Hong Kong was the third largest export country for NRS in 2015”* (O. Loe, personal communication 21.12.2015).

Importantly, *Rappe* stressed that the primary obstruction for the fish companies was a prompt relocation of trout and herring export volumes, while trout sales maintained to be a problem for Norway in 2015, because Russia was the main customer for this type of fish in the pre-crisis period. Analogously, Cermaq struggled with the relocation of herring and mackerel export volumes due to the deprivation of the East European primary market for these fish types.

Besides, both researched companies utilised *a third, intermediate, market* in Belarus with further re-export to Russia. *Rappe, NSL*, stated that Belarus opened six fish processing factories after the introduction of the import ban on Norwegian fish. Belarusian firms processed, re-labelled Norwegian fish and sold it further to Russia with significantly enhanced prices. Nevertheless, *Loe* alleged, *“The credit researching organisation estimated the credit risks for Belarus as very high. Thus, the export volumes to Belarus declined significantly, and all Belarusian companies have to pay cash to increase their export volumes”* (O. Loe, personal communication 21.12.2015). Hence, the exertion of a third market is an effective but simultaneously parlous strategy to compensate the lost market shares.

Concerning the innovation activities, both Cermaq and NRS underlined that the main bulk of innovations focussed on biological aspects, including: production, catching, fish health, pisciculture, and fish slaughter. *“We are working continuously on improving our production and especially during the economic downturn; we try to make production to lower production costs. And of course, biological challenges for NRS are the main catalyst for further innovations*

and development” (O. Loe, personal communication 21.12.2015) *Bergan* provided the example that an outbreak of the fish disease ILA in Chile in 2008, provoked significant alterations for Cermaq, including modernisation and development of new technologies that cardinally readjusted the fish culture, fish slaughter, and fish health control. In 2014, the total Cermaq’s R&D investment accounted 25 million NOK. Furthermore, the company invested in a new smolt facility in Nordland, which will ensure self-sufficient supply of smolt in Norway, which in turn will contribute to increased profitability and cost-reduction of fish farming.

To conclude, the Norwegian fishing industry continued their innovation activities during the period 2014-2015. Nevertheless, the bulk of the innovation was fish health-related. Therefore, the assumption of Filippetti & Archibugi (2011), that economic crises foster the utilisation of innovation opportunities, was proved by the evidence in Norwegian fishing firms during the period 2014-2015. The researched companies were “great innovators” with substantial investment in R&D and product innovations in the pre-crisis period, and they maintained their innovation activities during the economic downturn, that goes in line with the Schumpeterian Model Mark II. Thus, both researched companies demonstrated counter-cyclical behaviour during the recession by sustaining their R&D spending during the crisis that confirms Filippetti & Archibugi (2011) postulate.

Discussion

The Norwegian fish companies employed both internally- and externally-related strategies (Chattopadhyay et al., 2001), which assured efficient firm’s adaptation to the external crises through changes in both organisation- and market-related issues. Importantly, the bulk of alterations caused by the external events was market-related rather production-related. Moreover, the enquired businesses employed ambidextrous strategies, combining both retrenchment and investment strategies, including cost-cutting measures, diversification and relocation of markets, increased focus on the new markets, the exertion of the Belarusian intermediate market, and the increase in innovation expenditures. Therefore, Kitching et al. (2009) theory that ambidextrous strategies are more favourable and successful during the recessions, was evident in the Norwegian fishery industries during the period 2014-2015.

The researched firms are mid-sized and large businesses; therefore, their possession of required financial, organisational, human and network resources was beneficial in the adaptation to the economic downturn. On the contrary, Norwegian small fishing firms were destructed to the greater extent and had to employ the retrenchment closure measures due to its constrained financial resources, and inability to compete with other actors in the market.

Besides, the large firms' slack organisational resources ensured the creation of the crisis management experts' teams that carefully tailored the elaborated strategies and assured businesses' survival and further development. Therefore, the expert teams, and multiplicity of skills and experiences of decision makers was beneficial for the companies' management during the crisis. Moreover, the combination of external and internal experts in a team is more beneficial due to the attraction of unique experience and knowledge from varied spheres. Therefore, the large and medium-sized fishing companies presented better survival ability during the crisis compared to small enterprises, while large corporations displayed even better capabilities to resolve swiftly the occurred external challenges. However, the research did not focus on the personalities of research participants, such as language skills, experiences, willingness of risk-taking, and so on. Thence, the significance of the personal qualities and cultural differences of the crisis managers is unrevealed for the current study.

Importantly, the preceding experience from the boycotts on the Norwegian fish industry contributed to the businesses' promptly and efficient market-related strategies, in particular, market redistribution and diversification. In response to the Russian restrictions, the primary markets absorbing Norwegian fish volumes were within the EU. Hence, Europe was still the main consumer of Norwegian fish. The exertion of a "third" market has a dual effect: it ensured customer retention and eliminated the lost market shares, although this strategy was parlous. Moreover, the Norwegian fishing industry increased its focus upon the Asian market that can be one of the main future markets for the industry in coming years. Thus, the market diversification caused by the external crises opened new opportunities for fish enterprises.

In addition, the studied firms maintained their innovation activities during the crisis period and admitted that the external shocks forced them to think differently and find new opportunities in the market. Importantly, the bulk of production-related innovations in the fishery industry was mainly biologically-focused.

4.2.2 Russian Fishing Companies

4.2.2.1 Impact of the External Shocks on the Russian Fishing Firms

This section aspires to scrutinise the extent of negative or positive impact of the external crises that destructed Russian fishing business during the period of 2014-2015.

Impact of the Sanctions

Analogously with Norwegian fishing business, Russian fishing enterprises were affected primarily by the food embargo and the currency exchange rate fluctuation. *Nikitin, the Union*

of *Fishermen of the North-Trade Association (SRPS)*, commented that the sanctions and the rouble's crash startled the fishing industry in Russia on a short-term perspective. According to (Askari et al., 2003), the bilateral trade between target and sender, and the entities' economic health and stability foredoom the extent of the sanctions' demolishing effect. The cooperation between Norwegian and Russian fishing companies has been developing since the collapse of the former Soviet Union, and many Russian and Norwegian fish businesses were interdependent. Videlicet, Norwegian supplier assured the bulk of the fish supply for Russian fish processing factories. Thence, the unexpected import ban engendered a significant shortage in fish feedstock and smolt for both processing companies and fish farms. The interviewee at *Baltiyskiy Bereg (BB)*, alleged that the company exploited mainly Norwegian fish for their fish-factory in the pre-crisis period. In similar fashion, the informant at *Russian Aquaculture (RA)* acknowledged that the import ban led to a loss of 80 percent of RA's imported fish, while the share of Norwegian salmon for the company's distribution amounted 100 percent. Therefore, in 2014, the total volume of fish sold by RA decreased by 5,1 percent compared to 2013 (Russian Aquaculture, 2014). Moreover, RA informant stated that in the next ten years, the Russian fishery industry will not be capable of substituting the loss of imported fish volume from the Norwegian partners that accounted around 100 thousand tonnes in 2013.

Moreover, both participants affirmed that the biggest challenge was a lack of smolt for fish farming that could be imported merely from Norway. Notwithstanding, the Russian authorities abolished the embargo on smolt that made possible a development of the companies' fish farming. Besides, the enquired businesses engendered a comminatory technology deficiency. RA established a fish farm in Murmansk in 2012; the factory was entirely based on the Norwegian technology and equipment from AKVA group ASA and Norwegian smolt. Thus, due to the embargo and deterioration of the Norwegian-Russian relationship, both RA and BB heavily suffered from the deprivation of technologies and knowledge for their fish farms. RA participant asserted, "*We have to acknowledge that the Russian fishery and fish farming are still lacking technologies, knowledge, and specialists. And the primary focus of the industry should be to eliminate this gap*" (Russian Aquaculture informant, personal communication 07.10.2015). Therefore, the company's over-reliance on import and foreign technology can be subversive during the crises.

According to (Eyler, 2007), the main purpose of trade sanctions is to constrain investment flow in the target's macro-economy. The anti-Russian sanctions and food embargo profoundly impaired the investment climate in Russia, that affected all industries. *Nikitin at*

SRPS remarked that since the collapse of the Soviet Union, the Russian fish industry has been working in unpredictable circumstances with continuously emerging outer and inner shocks that entailed high risks for the industry and the lessened investment flow. Both Russian Aquaculture and Baltiyskiy Bereg admitted that the Russian fishery factories are investment-unattractive, that implicates financial resources lack and consequent perilous challenges for further factories' modernisation. However, in line with (Lowth et al., 2010), the constant market turbulence entails a more efficient business adaptation to the external crises regarding the utilisation of previous experiences of crisis management.

In general, the demolishing effect of the import ban was more prominent on the evidence of Russian fishing companies that encountered a parlous fish feedstock and smolt paucity. Moreover, the anti-Russian sanctions and general deterioration of the Norwegian-Russian collaboration triggered the deficiency of the Western and particularly Norwegian technologies and investment in fish farming. Thence, the Russian companies have to develop own technologies, knowledge, and skills to become less dependent on import, and be less affected by external crises in the future.

Impact of the Currency Fluctuation

The Russian rouble decline significantly disrupted the Russian fishery industry. On the contrary with Norwegian fish exporting companies that succeeded from the national currency decline, Russian fishing enterprises suffered from this type of external crises. The research participant at Baltiyskiy Bereg and Russian Aquaculture (RA) affirmed that the firms depended to a large extent on the European import. Therefore, the slump of the Russian rouble entailed a dramatic growth in the raw material component in production, and a consecutive increment in domestic fish prices. This eventually provoked a tremendous decline in fish consumption and demand in the Russian market, particularly among middle-class customers.

RA interviewee underlined that the company distributed the bulk of fish products within Russia, and partly to Azerbaijan, Armenia, Kazakhstan, and Serbia. Therefore, RA's profitability depended on the domestic market prices' fluctuation and demand alterations. "*The Russian rouble instability undermined the positive dynamic of accrescant fish import, and significantly declined domestic fish consumption due to twofold increased prices for fish*" (RA informant, personal communication 07.10.2015). Thus, in line with (Peter & Downes, 2009), the weak Russian rouble entailed a considerable decrease of imported fish, smolt and technologies, that in turn was negative for both consumers and private businesses in the home country.

Thus, the Russian rouble fluctuation had a profoundly devastating effect on Russian fishing industry. That can be interpreted by the import-dependency of the enquired firms. While the Norwegian businesses were export-orientated and traded in dollars and euros, the Russian companies were import-dependent and distribute fish primarily within Russia in roubles that negatively influenced the enterprises' short-term cash flow and revenue. This evidence proves Starks & Wei (2003) and Dash & Madhava (2008) assertion about the currency fluctuation's demolishing impact on the businesses.

Impact of Other Crises

The Russian companies and expert in question did not remark a direct effect of the crude oil decline on the industry, but noted the deterioration of the national economy and financial climate within the country. Alongside with Norwegian fish companies, the Russian research participants cognised that significance of biological challenges. *RA informant* underlined the significance of such biological problems as fish lice and Myxobacteriales, that caused fish mortality and led to the business loss of 344 million roubles in 2015. These biological challenges for the Russian industry were caused by the absence of technology and knowledge about fish health. However, the share of the own farmed fish in the total sales volume of the Russian enquired firms is imperceivable compared to the Norwegian enterprises. Therefore, the impact of biological issues on the Russian fishery is lower compared to Norwegian firms. Nevertheless, both Russian informants asserted that the sustainable development of the fishery in Russia depended on the biological aspects that foreordained the profitability of fish farming.

Discussion

Eventually, among the abundance of the external crises during the period 2014-2015, the most devastating impact on the Russian fishing firms had the currency fluctuation and import ban. Importantly, the extent of adverse effect of these external shocks was greater in Russia compared to Norway due to the high import-reliance of the Russian fishery industry and the notable abrupt lack of feedstock, smolt, technology, vessels, and knowledge. This, in turn, hampered the further development and modernisation of the fish factories and farms. However, the negative effect of the ban was short-term due to the companies' preceding experiences in reshaping the suppliers' pattern regarding during the boycotts. Thus, both Norwegian and Russian businesses, operating in the unstable market environment with constantly emerging external disruptions, were highly adaptable to the external shocks.

Furthermore, the sanctions triggered a sufficient deterioration of bilateral collaboration between Russia and West, and destroyed the Russian fishery industry investment climate that made this sector more investment-unattractive. This, in turn, hampered modernisation and development of fishing business in Russia. Therefore, according to (Askari et al., 2003), the food embargo affected not just political elite, but as well undermined the Russian private businesses, the Norwegian businesses operating in Russia, and the citizens due to the diminished purchasing power and declined fish consumption by middle-class customers. Therefore, the sanctions affected primarily commoners and private companies, while the political system has not changed. This evidence questions the efficiency of sanctions as a political tool alongside with Pape (1997) theory of sanctions ineffectiveness.

Both studied Russian fishing firms are large businesses that distribute imported and partly own farmed fish mainly within Russia. The Russian Aquaculture was destructed by the embargo to a greater extent, compared to Baltiyskiy Bereg, due to the greater import-dependency of the company and less production volume of own fish farming, that caused a shortage of fish for processing factories and sequent significant profit loss.

The Russian rouble downswing and the consecutive enhanced prices on the final fish products undermined the domestic fish consumption and demand, which in turn, triggered the substantial business forfeits in profits and sales volumes. Both Russian enquired companies bought the import in dollars and euros while distributed fish within the country in roubles that made them vastly sensitive to the currency fluctuations. Therefore, the demolishing impact of the national currency downswing was more prominent on the evidence of Russian business compared to Norwegian companies which mainly succeeded from this type of external shocks. Besides, the biological challenges are crucial for the fishery industry, both in Norway and Russia. Furthermore, the study did not peruse the Russian small and mid-sized fishing enterprises. Therefore, the correlation between the firm's size and the impact of external crises in the Russian fishing industry is not evident.

4.2.2.2 Responses to the External Crises

Due to the greater damaging impact of the external shocks on the Russian fishery businesses, the companies' undertaken adaptation measures had to be multifarious. *Nikitin, the Union of Fishermen of the North-trade Association*, emphasised that the bulk of Russian enterprises coped with the crises swiftly, and all caught fish volumes were distributed to the varied markets without a notable deprivation for business.

Retrenchment Strategies

According to (Sternad, 2012), retrenchment strategies, as secure and profound, ensure the company's survival in the short-term period during the crisis. Alongside with Norwegian fishing companies, several Russian firms employed the retrenchment *closure strategies* due to inability to survive in the deteriorated market environment (Lowth et al., 2010). *Nikitin at SRPS* alleged that in the circumstances of significant market turbulence, national currency fluctuation and political changes, the company's full dependence on the import feedstock was parlous. For instance, the total import-relation of the Murmansk fish factory on Norwegian living fish and vessels was virulent. The factory was entirely modernised in 2013 and tailored to merely Norwegian living fish, RSW-vessels and technology, that assured a considerable amplification in production volumes and decumulation of production costs in 4 times. Thence, due to the abrupt import ban and deterioration of the Norwegian-Russian collaboration, the company had to close the production and bankrupted due to inability to substitute the forfeit of the basal living fish suppliers (FederalPress, 2014). This case displayed a precarious lack of the Russian domestic living fish, technology, knowledge, and vessels. Hence, over-reliance on import technology and feedstock is virulent during economic downturn. Thus, the company's production processes had to diversify feedstock' and services' suppliers. Moreover, large firms with a rigid production system can encounter more pestilent challenges caused by the external crises compared with more flexible small firms.

According to (Whittington, 1991) rationalising strategies comprise costs-cutting of technology, quality, human resources, and *withdrawing from R&D projects*. The informant at *Baltiyskiy Bereg* remarked that due to the devalued national currency, the company had to halt the project of construction of a complex of full cycle catfish production and fish feed fabrication, with possible production of 2500-4000 tonnes of catfish a year. The overall investments in this project in the Krasnodar region accounted one billion Russian roubles. Notwithstanding, the considerably increased interest rate after the rouble slump made bank credits precarious. Thus, the project was halted at the end of 2015 due to high credit risks and the lack of the required Western technologies. This evidence confirms Mitra (2012) assertion that during the crisis, a high risk constrains the lending, venture finance and investment in new ventures. Hence, the lack of domestic technology and the contemporaneous deterioration of the financial climate within the country hampered the modernisation process of fish companies. This rationalising strategy of halting the project in Krasnodar was, on the one hand, negative due to the delayed modernisation process, but on the other hand, it ensured firm's survival on

the short-term perspective and assured focus on the core business activities. According to *BB informant*, the project will be resumed later with normalisation of the financial climate in Russia. Thus, companies during the early stage of the crisis should meticulously ponder the effectiveness of ongoing projects with prioritising of the most important and profitable ones.

Baltiyskiy Bereg employed the short-term cost-saving downsizing strategy (Radcliffe et al., 2001) that comprised the employment of energy-saving technologies, reduction of production costs, exertion of long-term contracts with suppliers and customers, and strengthen the customers’ credit control. The mentioned retrenchment strategies ensured the enquired firms’ survival and its operational sustainability on the early stage of the crisis.

Investment Strategies

According to (Robert 2003), counter-cyclical strategies encompass the enhancement and diversification of the companies’ activities, and contribute to the superior performance during the recovery stage. In a like manner with NRS, both RA and BB established *crisis management internally-based teams*. This secured the efficiency and meticulous elaboration of the crisis management strategies. According to (Pearce & Robbins, 1994), managerial personnel play a crucial role in the interpretation and responses to recessions. RA participant emphasised that managers did precise analysis and continual forecasting of the business and fish market’s development in Russia during the economic downturn. Thence, the multiple experts’ decision-makers were favourable for crisis management efficiency due to the wide range of embodied skills, experiences, and knowledge within one team. That goes in line with Pearson & Clair (1998) theory and the upper echelon theory (Hambrick, 2007).

Moreover, one of the primary tasks for the Russian fishing industry was relocation of the basal suppliers’ pattern. Whittington (1991) claims that *diversification strategy* can discover new opportunities, resources, and knowledge in other markets, that can ensure cost-reduction. Analogously, Hamel & Prahalad (1994) allege that during recession, new wealth can be obtained by the creation of new markets, serving new customers, and generating the entirely new revenue stream. *Nikitin, SRPS*, underlined that the lost import volumes from Norway and the EU were superseded swiftly by Chile, Faroe Islands, and China. In the first half of 2015, import share from Chile to Russia increased twofold and accounted 19 thousand frozen

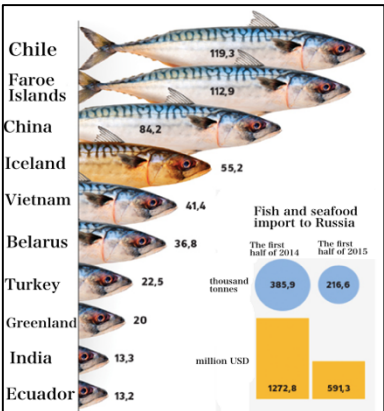


Figure 4.9 Import of fish to Russia in the first half of 2015, million USD (Federal Customs Service, 2016)

fish (119,3 million dollars), and fish import from Faroe Islands enhanced in 10 times – 1,8 thousand frozen fish and 8,2 thousand living fish (112,9 million dollars) (Figure 4.9). Moreover, Russia enhanced import from new markets, such as China, Vietnam, Belarus, Turkey, India, and Ecuador. However, the total value of imported fish to Russian declined by 169,3 thousand tonnes (681,6 million USD) in 2015 compared to 2014.

“The food embargo on fish forced us to rethink the approach to the production sources, because approximately 30% of total fish feedstock was imported from the sanctioned countries” (BB informant, personal communication 05.10.2015). Baltiyskiy Bereg diversified the suppliers, markets, trade agents and shops, and increased import from Faroe Islands, Iceland, and the Russian Far East. In similar fashion, *RA informant* remarked that therewithal the introduction of restrictions, the company promptly superseded Norwegian and Danish markets by Iceland, Faroe, and Chile. Furthermore, distribution of domestic fish by RA enlarged from 29 thousand tonnes in 2014 to 34 thousand tonnes in 2015, including a 60,6%-increase of herring volume and a ninefold-rise of cod sales. *“Substitution of fish suppliers went promptly because it was not the first time during our 15-years experience”* (BB informant, personal communication 05.10.2015). In 2014, *Baltiyskiy Bereg* revenue augmented by 26% compared to 2013 (9 billion roubles), and the overall sales grew by 40% (51 thousand tonnes of fish) (Baltiyskiy Bereg, 2015). Thus, the suppliers’ substitution went smoothly at the enquired firms due to their previous experience of market’s relocation. This correlates with Latham (2009) postulates that size and age (experience) foreordain firm’s strategic responses to crises.

According to (Hufbauer et al., 2007), a third party can attain potential profits from helping to sender or target nations during the sanctions “war”. As mentioned above, Belarus was *a third market* that re-exported Norwegian fish, primary salmon, to Russia. Both BB and RA acknowledged that they significantly amplified import from Belarus after the import ban, event though Belarus imported Norwegian fish with significantly increased prices, approximately 40 extra roubles per kilo. However, the law of the 6th of August 2015 ordained the annihilation of prohibited agriculture goods to Russia. Therefore, thousands of tonnes of goods, including fish from Belarus, which originated in the sanctioned countries, were destructed on the Russian borders. Thus, *BB interview* underlined that the opportunity to exploit the Belarusian fish suppliers was obviated due to high financial risks. Thus, the externally-related strategy of exploiting a third country, on the one hand, promptly substituted the lost market share, while on the other hand, engendered higher-cost of import to the final nation and additional high risks.

Furthermore, due to the rouble slump and market relocation that entailed higher fish prices regarding the increased transportation costs, both RA and BB *increased prices* on fish products by 35-40 and 20-30 percent respectively. This, in turn, engendered a decline in domestic fish consumption. Therefore, *RA informant* noted that in 2015, due to stabilisation of fish distribution, the company *reduced prices* by 5-19 percent for the most popular fish products, such as herring, salmon, sea cabbage and crab stick. This prices' policy was essential for the fishing businesses due to the notable overall decline in fish consumption by the middle-class customers in Russian. Thus, the firms were compelled to employ the customer retention measures. This goes in line with (Mitra, 2012) who states that during crises, firms tend to create better value for existing customers rather than looking for new clients.

Moreover, the researched companies *diversified the production* in response to the crises (Sternad, 2012). After the market relocation, Baltiyskiy Bereg produced novel products from new fish types, such as anchovy. Moreover, *BB informant* added that the company's food engineers were working on developing new products based on fish and seafood from the enlarged South-West Asian market. Furthermore, the research participant remarked that after the embargo, BB was working on *the marketing strategies*, including its renewed brand, business strategy, and values. According to (Sternad, 2012), investment into marketing presents a pro-active external crisis management strategy which assures the firm's sustainability and development during the recovery stage. Hence, due to the relocation of the basal fish supplier, the studied companies were forced to develop novel fish products regarding the new suppliers' pattern. Thence, the deprivation of the whilom suppliers redounded to the development of new markets, strategies, and products.

Import Substitution Strategy

The state played an important role in Russian firms' adaptation to the harsh market environment in 2014-2015. The Russian government utilised the imposed sanctions and the food embargo as an opportunity to promote the development of the domestic industries through the *import substitution strategy*. Dicken (2011) states that import-substitution aspires to manufacture all goods, that otherwise be imported, within the country's borders and to protect national producers against importers. Amenably to this assertion, *Nikitin at SRPS* accentuated that the primary aims of the import substitution strategy in the fishery industry were the development of aquaculture, substitution of imported fish, and amendment of the transportation system from the Russian catching regions, especially the Russian Far East. "*The food embargo can be an excellent waymark for the domestic fishery because the programme provides unique*

opportunities for fish producers to induce their productivity while Western products are banned” (V.F. Nikitin, personal communication 22.09.2015). Nevertheless, the interviewee added that there was a risk of an inability of domestic producers to substitute all lost imported fish volumes, and a risk of potential enhancement of import from the not-sanctioned countries.

BB and RA informants avouched that they amplified focus on the domestic fish farming and domestically processed fish. Moreover, RA participant accentuated that the company entirely modernised its fish processing factory in Noginsk, the Moscow region, in 2014-2015 regarding the government strategy of import substitution. This factory utilised merely Russian fish and seafood. Amenably to Silva (2007) assertion of significance of the state in import substitution industrialisation, the Russian government elaborated the programme “Development of aquaculture complex” that aspired to redouble Russian aquaculture volume from 160 thousand tonnes in 2014 to 315,5 thousand tonnes in 2020. Regarding this programme, both RA and BB received financial stimulus from the government, including zero rate of income tax, and subsidising interest expenses on loans, in order to support and develop domestic fish farming. Pursuant to (Peter & Downes, 2009), the government policies eased onerous and costly regulations, provided tax relief, and encouraged economic development. In 2014, nine RA fish farms produced 4,3 thousand tonnes fish, and the company planned to amplify its fish farming and production to 8 thousand tonnes in 2015, 6 thousand tonnes in 2016, and 25 thousand tonnes in 2017. Besides, in the long-term, RA aspired to build a smolt factory. In 2015, RA invested approximately 4 billion roubles in fish farming.

BB informant affirmed that the modernised 6-fish farms-complex “Russkiy Losos” in Murmansk exploited merely new technologies assuring to process fish

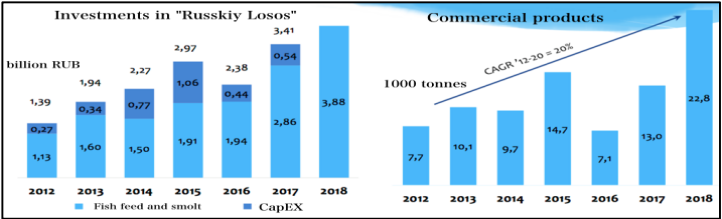


Figure 4.10 Investment Program "Russkiy Losos"

of all sizes and kind. In 2014, the complex farmed 18 thousand tonnes of salmon. Furthermore, the research participant remarked that the complex 3-stage investment programme was in the government focus after the embargo introduction (Figure 4.10).

The first stage of the programme achieved the imposed goals of production increase to 10 thousand tonnes and construction a modern fish farm. The second stage, 2014-2018, envisages an expansion of production volumes up to 20 thousand tonnes, and employment of own fish feed transportation. The third phase, 2018-2022, aspires to enhance the production volumes up to 25 thousand tonnes, and to construct a fish feed and smolt production factories.

BB informant, personal communication 05.10.2015

Thus, the outer shocks forced the Russian fishing industry and government to rethink the over-reliance on Western fish, smolt, and technologies. The import substitution programme encompassed substantial financial stimulus that will contribute to self-sufficiency and independence of the Russian fishery industry through modernisation and development of the domestic factories and fishing farms.

Moreover, *RA informant* emphasised that the company's management underscored the concernment about R&D and innovations in order to achieve the imposed goal to substitute the imported salmon in the Russian market. In 2015, the corporation invested 718,9 million roubles in R&D projects concerning equipment for new farms, construction of processing factories, fish transport vessels, and so on (Russian Aquaculture, 2014). Therefore, the Schumpeterian theory of creative destruction was proved for the Russian fishing industry that was forced by the external crises to innovate, modernise the factories, develop own fish farming and production, and diversify markets, suppliers and production. Also the study verified the Schumpeterian Mark II idea about the superior innovativeness of large firms with substantial investment in R&D. Moreover, the study goes in line with Alvarez et al. (2010) assertion about a direct correlation between the firm's scope and innovation activities during the crisis. Thus, large companies have revealed to be great innovators and enhanced their R&D spending despite the recession. Furthermore, the import substitution and the enhancement of R&D expenditures proved the efficiency of the recovery strategies that aspired to attain a supreme efficiency of a product or market combination, firms' long-term survival and development (Faghfour, 2012).

Discussion

During the crisis period from 2014 and 2015, both studied Russian fish companies employed ambidextrous strategies that comprised the downsizing measures at the beginning of the outer shocks and the investment strategies that assured firm's sustainability during the recover stage. The fishing companies ensured their survival in the short-term period by the classic cost-saving downsizing measures and focusing on the core projects.

Importantly, the role of crisis management team with a vast spectre of experience, skills and knowledge foredoomed the successful management of the occurred challenges. Therefore, a profound combination of varying inner and outer experts within a crisis management team redounded to the efficient external crises adaptation.

The diversification strategies, employed by the enquired firms in response to the import forfeits, plaid a crucial role in the business survival. However, on the contrary with Whittington

(1991) assumption of cost-reducing effect of the market diversification strategy, this strategy impinged a significant increase in the prices for final products in the Russian market due to the high transportation costs from Chile. Furthermore, the Chilean fish could be imported to Russia just frozen; that means a lower fish quality for processing purposes. Thus, the diversification strategies elaborated by the Russian businesses had significant drawbacks. Thence, the market relocation and diversification strategies should be meticulously elaborated and tailored to a specific company considering the price and quality aspects. Importantly, the companies' price policies, decrease the prices on the most popular production, were beneficial for the Russian fish factors and managed the lessened fish consumption by the middle-class customers.

Moreover, the businesses' precedent experience in suppliers' relocation was favourable for both Norwegian and Russian fishing businesses, that ensured their swift adaptation to the business alterations. Thence, the companies operating in the constant disrupting business environment, possess a great capability to adapt promptly to the external crises with lower costs.

Concerning the correlation of company's scope and its adaptation to the external shocks, we can notice that while Norwegian small fish enterprises encountered severe adverse consequences of the external crises and employed the business closure measures, Russian large fish business struggled more with the crises due to the over-dependency on Western fish and technology in the pre-crisis period. Hence, the company's over-reliance on import or focus on one single market or supplier, constrained business ability to cope efficiently with the external crisis due to its limited flexibility. Thus, companies had to diversify the production, suppliers, markets, and cooperation partners, in order to cope successfully with the external shocks.

Importantly, the import-substitution strategy denoted its efficiency for domestic firms' modernisation and development. First of all, the import ban facilitated the promotion of Russian aquacultures, fish farming and fish processing while imported goods were prohibited and the basal competitors of the local producers were out of the market. Thus, the import ban and the Russian rouble slump appeared as a catalyst for development of the Russian fishery industry that could survive during the economic downturn only through developing own technology, knowledge, equipment, and personnel. Furthermore, the state financial support, including tax discounts and subsidies, were immense in Russia and facilitated the development and modernisation of firms and plants. Moreover, the studied companies were one of the biggest fish producers in Russia, and therefore were the main competitors in the market. Hence, their involvement in the import substitution strategy, and development of own fish farming and fish processing foredoomed their competitive advantages and survival.

Eventually, during the researched period 2014-2015, Norwegian and Russian fishing sectors were affected unevenly by the external crises. Compared with Norwegian fish firms, Russian enterprises suffered to a greater extent due to its sufficient lack of feedstock and technology. Consequently, the responses to the crises varied notably between the countries. While the Norwegian firms' alterations were chiefly market-related concerning the import ban and decreased demand after the salmon price leap, the Russian fish companies innovated both in the market-related and production-related sphere. Therefore, a greater eroding impact of the external crises engendered a greater scope of innovations and alterations within the business and industries. Thus, the Schumpeterian theory of creative destruction was proved on the evidence of the Russian and Norwegian fishing firms.

4.3 Oil and Gas Industry: Crises Impact and Responses

This section will provide analysis of empirical data concerning the impact of multifarious external crises on the O&G industry with a peculiar focus on aspects triggering a particular impact of the crises and the scope of undertaken responses.

4.3.1 Norwegian O&G Companies

4.3.2.1 Impact of the External Crises on the Norwegian O&G Firms

The Norwegian O&G industry was substantially disrupted by a variety of external crises during the researched period. The impact of the sanctions, the national currency slump, and the oil price downswing will be rummaged in this section.

Impact of the Sanctions

The role of the O&G industry in the Norwegian economy is immense, and the disruption of this sector engendered severe obstacles for other industries within the country. Importantly, *Forbord at NRCC* underlined that Norwegian petroleum companies suffered heavily from the imposed restrictive measures in 2014-2015 compared to the Norwegian fishery that was capable of relocating markets promptly and eliminating the adverse effect of the import ban.

Moreover, the trade and financial sanctions undermined the Russian-Norwegian collaboration. The Norwegian and Russian O&G partnership had a positive dynamic in the pre-crisis period when the number of joint exploration and processing projects was steadily amplifying in terms of high oil prices. However, the sanctions disrupted the Norwegian O&G businesses assisting Russian O&G projects. *Ola Smeby, Innovation Norway*, underlined that due to the restrictions, Innovation Norway was cautious with doing the "ProRus" programme, with a budget 15 MNOK a year during the five years' period. This project aspired to establish

strong business cooperation, and to facilitate the exchange of experiences and knowledge between Norway and Russia. Furthermore, the focus of the another Innovation Norway's programme, "Arctic 2030", shifted from the Russian Arctic towards the Scandinavian Arctic due to the restriction. Thus, the sanctions undermined the Norwegian O&G business' operation and investment in new O&G projects in Russia, that led to sequent forfeit of potential profits.

Eyler (2007) alleges that export sanctions diminish the target's import supply. *Siv Kaspersen, Section for Export Control*, accentuated that sanctions affected primarily the Norwegian oil exploration and production companies because export of petroleum-related goods and services was one of the basal Norwegian exports. As a result of the restrictions, the Norwegian O&G companies had to discontinue direct or indirect provision of services for exploration and production in waters deeper than 150 metres, offshore north of the Arctic Circle, or shale oil, except contracts concluded before 16 August 2014. *Smeby, Innovation Norway*, emphasised that the current situation for Norwegian managers operating in Russia was not so bad as it portrayed by the media; although, the sanctions disrupted Norwegian business operating in Russia, especially Arctic oil drilling firms.

Moreover, *Dahl Olsen at Statoil* remarked that the Russian offshore projects were heavily deteriorated due to the technology transfer ban and the long-term loans' prohibition.

The highly evaluated project of the Prirazlomnaya platform was a success story for the Norwegian technology providers. However, due to the technology transfer ban, they had to stop the supply to this project. Thus, Gazprom Neft Shelf questioned the plan Marine Management Organisation of the Prirazlomnaya platform due to the technical problems and production stops caused by the lack of the essential Western technologies.

H. Skretting, personal communication 13.10.2015

According to (Askari et al., 2003), sanctions affect firms in the target and sender countries that were actively collaborating before the introduction of restrictions. *Olga Lien, Technip Norge*, asserted that the sanctions did not hit the Orkanger Technip affiliate, because the spool base was not involved in direct collaboration with Russia before the restrictions. Whereas, *Øglænd System Group (ØSG)* was affected by the sanctions due to its direct engagement in collaboration with Russia in the pre-crisis period. *Geir Austigard, ØSG*, noticed that the sanctions challenged the central ØSG's project in Yamal with duration from 2015 to 2019 which had brought around 500 million NOK to the company, and future recurring business was estimated to 5 million NOK a year. Thence, the company was forced to rethink their technology supply's pattern to Russia in order to complete one of the most profitable projects.

Impact of the Oil Price Tumble

The crude oil price downfall was the most damaging external shock for the Norwegian O&G industry that encountered severe problems in the efficiency and profitability of the ongoing and future oil exploration and processing projects. All participants at the conference in Stavanger remarked that many Norwegian O&G companies were compelled to postpone or halt the ongoing oil exploration projects due to its low profitability in terms of low oil prices.

Both *Austigard at ØSG* and *Lien at Technip* asserted that the oil price slump hampered the business development. The studied O&G technology suppliers encountered a decreased demand for their products and services from both domestic and international companies. “*The oil price crash has affected Technip to a large extent. We lost all Norwegian domestic contracts, and we do not receive any new contracts on pipelines production*” (O. Lien, personal communication 20.12.2015). In the pre-crisis period, Technip continuously received 1-2 contracts yearly from the Norwegian O&G companies, such as Statoil, Norsk Hydro, and so on. However, after the oil price crash, there was almost an entirely cease of all projects in Norway. *Lien* alleged that there were only 1-2 projects in the whole country, and the rivalry for them was abnormal, both domestically and internationally. Primary competitors for Technip were Subsea 7 and Emos. Besides, *Lien* remarked that the production specifics of the spool base in Orkanger was not so unique compared to the competitors, that significantly constrained the company’s competitive advantages. “*The survival of Norwegian firms in the pipe construction industry directly depends on these few contracts. If a company does not win the project, it should make crucial decisions regarding halting, bankrupting or radical changes in the production system*” (O. Lien, personal communication 20.12.2015). Also, *Lien at Technip* added that some Norwegian companies, such as “Dolphin”, announced bankruptcy due to the inability to survive in this harsh market environment.

Therefore, the oil price slump drastically disrupted Norwegian O&G oil exploration firms’ activities that, in turn, undermined the operation of the O&G technology providers. Importantly, the company production and services’ unicity and utility, competitive advantage and networks were determinative factors in the rivalry during the economic turmoil.

Impact of Currency Fluctuation

In similar fashion with the Norwegian fish industry, export-orientated O&G firms benefited from the Norwegian krone descent. *Nordsletten, the former Norwegian ambassador in Russia*, emphasised that in 2014, the Norwegian O&G companies’ 13%-increase in turnover

in dollars was equivalent to 21%-growth in Norwegian krone. *Austigard at ØSG* underlined that the weakening Norwegian krone was a positive for the business, because its main turnover was in dollars, while the bulk of expenditures was in Norwegian krone. Furthermore, the main feck of ØSG and Technip contracts were in dollars. Thence, in line with (Peter & Downes, 2009), the weak national currency was beneficial for the Norwegian O&G exporting businesses.

Besides, *Lien* alleged that the currency descent engendered a substantial advantage for the company due to declined labour costs. The interests to Technip's projects increased significantly compared to the companies in countries with strong currencies. Hence, due to lessened production costs, Technip received new offers on exceptional projects for oil pipelines supply. This evidence goes in line with (Mitra, 2012), who states that crisis trigger a creation of a great venture and a notable decline in the prices of labour, materials, services, and rent.

Notwithstanding, *Lien* remarked that the Norwegian krone oscillation had an ambiguous effect. Amenably to (Peter & Downes, 2009), weak currency entails a parlous increase in prices for imported goods. Technip imported metal and pipelines from Japan, China, Germany, Italy, and other countries. Thence, the krone tumble caused enhanced prices for imported feedstock, goods, and technology, that adversely affected the importing companies, Technip. Therefore, the currency decline had a dual effect on the enquired Norwegian O&G technology providers.

Discussion

The external crises in the period 2014-2015 significantly affected the Norwegian O&G industry. The most eroding effect on the studied firms had the oil price slump that caused a significantly decrease in amount of O&G exploration and processing projects. Furthermore, the curtailment of ongoing projects triggered an immense competition among O&G suppliers, which survival leaned on these few projects. Therefore, the direct correlation between O&G industry and crude oil price oscillation made the researched corporations utterly vulnerable to the deteriorated market environment.

The impact of the anti-Russian sanctions was less demolishing compared to the oil prices tumble. However, while ØSG and Statoil were notably affected by the restrictions and consequent forfeit of the joint projects, Technip Norge was not undermined by the sanctions due to the absence of collaboration with Russia. Hence, the technology transfer ban disrupted the activities of Norwegian O&G technology providers operating in Russia. Thus, the adverse impact of sanctions on companies directly depends on the level of bilateral trade and cooperation.

Eventually, the Norwegian currency decline in the period 2014-2015, had a primarily positive impact on the studied O&G suppliers, which exported in dollars, while the bulk of expenditures was in Norwegian krone. This engendered an increased cash flow and profitability. Moreover, weak national currency ensured the companies' competitive advantage due to the decline of labour and production costs. This entailed an increased interest to the O&G technology suppliers from both Norwegian and international exploration companies. However, the O&G technology providers suffered from the currency decline due to the increased prices for imported goods and feedstock.

Both enquired firms were large-scale international businesses with extensive networks and diversified markets. Whereas, Norwegian O&G SMEs were not scrutinised in the study. Thus, the connection between firm size and extent of the shocks' devastating effect is indefinite for the current research.

Ultimately, meticulously elaborated crisis management strategies foreordained the companies' adaptation to the altered market. The complex of the crisis management strategies employed by O&G business, will be elucidated in the next subsection.

4.3.2.2 Responses to the External Shocks

The environmental scanning and the stress theories affirm that firms heed primarily externally caused crises due to its significance, urgency, and ambiguity (D'Aveni & MacMillan, 1990). The bulk of shocks engendered by the Norwegian O&G companies was externally initiated. Thence, the businesses had to elaborate deep-laid crisis management strategies.

Retrenchment Strategies

In similar fashion with the studied fishery firms, the Norwegian O&G companies deployed retrenchment strategies (Faghfour, 2012) to guarantee business survival in the short-term period. In line with Whittington (1991) rationalising strategy of cutting human resources, *Lien, Technip Norge*, stated that as a direct impact of the oil crisis, Technip had to actuate cost-saving downsizing of personnel, ships, production assets, and offices. “*Due to the crisis, in spring 2015, Technip had to reduce personnel by 5 percent globally, 60 employees in Norway, and the Orkanger affiliate reduced 2 out of 14 employees. In addition, all consultant staff in engineering companies was fired*” (O. Lien, personal communication 20.12.2015). However, the cost-saving downsizing, especially of human resources, can entail a substantial eroding effect in the future due to the loss of the competent and knowledgeable human resources. However, these measures were indispensable for Technip Norge in Orkanger due to the cease

of ongoing contracts. Whereas, ØSG did not accentuate any downsizing measures in response to the external shocks in the studied period.

Investment strategies

Both enquired O&G businesses employed the internally-directed crisis management strategies that aspired to improve business processes, and change the organisational structure and systems (Chattopadhyay et al., 2001). According to (Haveman, 1993), large corporations possess slack human resources that can be utilised for strategic management. Both firms actuated deliberated crises responses (Lowth et al., 2010), that were designed and executed by *the crisis-management teams*. The researched O&G large firms benefited established efficient strategic management groups encompassing internal experts in the various spheres.

Lien at Technip Norge noticed that the company’s crisis management strategies were designed and elaborated by the crisis management department on the high management level in Paris and Aubergine. This proves (Hambrick, 2007) upper echelon theory and the importance of high-level management. Importantly, Technip spool base in Orkanger dealing with the subsea supply production. Thuswise, the crisis-management department in France devised the general development plan for subsea development in terms of low oil price, which comprised four basal directions: joint sustain R&D efforts with clients, integrated solutions, Technip/FMC technologies alliance, and supply chain’s improvement (Figure 4.11). According to this plan, Technip aspired to be self-sufficient and to develop the spectre of unique products and services for subsea projects, that will assure the company’s competitive advantage in the rivalry for the crucial subsea projects. Besides, *Lien* emphasised that several crisis management projects were designed in Norway due to the specifics of the subsea production of the affiliates.

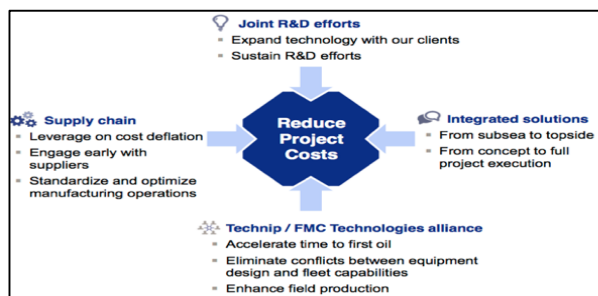


Figure 4.11 Making Subsea Development in Low Price Environment (Technip, 2016, 21)

Furthermore, *Austigard, ØSG, and Dahl Olsen, Statoil*, underscored the importance of the *local management and engineering companies* for their Russian projects and affiliates. Local personnel understand better the market’s dynamic and structure due to proximity and familiarity with the market. “*This is always a combination of efforts, we could never win it without work locally in Russia with engineering companies*” (G. Austigard, personal communication 13.10.2015). The business operation in the Russian market estimably varies from the Norwegian market; Russian business is highly hierarchical, and the manner of the

conducting business and success factors are locally-specific compared to the Western business model. Therefore, the employment of the local managing directors, familiar with the basal rules and particularities, contributed to the establishment of ØSG wider networks and swifter development of business. Moreover, ØSG strategy presumed the employment of local directors who owned a part of the company. This, according to *Austigard*, ensures a retentive focus on the company and minimised the chance of the employee' withdrawal from business. Furthermore, *Dahl Olsen* and *Austigard* underlined the relevance of strategic patience, and long-term vision and decision-making during crises, when the speed of business slows down.

In the O&G industry, the forfeit of basal partners can be fatal for businesses due to the protracted character of oil exploration projects. Therefore, Statoil and ØSG utilised the external pro-active strategy of *customer retention* (Sternad, 2011). Both companies maintained their presence in the Russian market and continued cooperation with Russian O&G business. *Dahl Olsen* alleged that despite the sanctions, Statoil maintained the cooperation with Rosneft, including the onshore heavy oil pilot project in Western Siberia, the project in the North Komsomolskoe oil field, etc. The close collaboration between Statoil and Rosneft on these projects during the economic turmoil, helped to ensure trust between businesses and to design constructive solutions regarding the joint projects. Moreover, *Dahl Olsen* emphasised that the sanctions affected mainly the offshore projects; therefore, Statoil increased its focus on *onshore projects* that were more likely to be developed during the oil price collapse. Thence, despite the restrictions, the O&G firms were able to discover new opportunities in the Russian market.

Importantly, while Filippetti & Archibugi (2011) claim that economic crises foster the utilisation of innovation opportunities, other researchers affirm that economic downturns obstruct innovation activities and investment in R&D. In line with the former assertion, Technip Norge due to the impoverished production volumes during the crisis time, signed new pioneer projects, unique for the spool base. Therefore, Technip was forced to innovate, improve and tailor its technological system to new projects. “*For instance, the primary transportation method for our affiliate is via ship by the sea, but now we have signed contracts for shorter pipelines, which require another technological concept and different transportation method that we need to develop*” (O. Lien, personal communication 20.12.2015).

Furthermore, companies that encounter a scarcity of ongoing projects and order, are forced to take quaint contracts that require the substantial modernisation of production. *Lien at Technip* noticed that the external crises, particularly the Norwegian krone slump, spurred an increased interest from *the domestic and international* (Militag Oil Libya and Arabic countries)

O&G companies due to the lessened labour force costs. Thence, Technip received several novel project-suggestions that presumed utilisation of new unique production methods. This evidence proved the Schumpeterian theory of creative destruction, when crisis compels firms to modernise and innovate to assure its survival in the market.

Moreover, during recession, companies are forced to *widen their networks* with other partners in different markets. *Lien* emphasised an increased cooperation with the Russian O&G corporations after the sanctions implementation and the oil prices tumble. “*Spool base in Orkanger has hosted a joint seminar for the Russian Transneft company. We discussed our projects in pipeline-manufacturing, change experiences, and established new contacts*” (O. Lien, personal communication 20.12.2015). The purpose of the increased interest from the Russian companies towards the Norwegian O&G partners was to solve the problems with quality and control, and to develop Russian R&D projects on the base of the high-level Norwegian technologies, knowledge, and experience. Moreover, *Lien* underlined a possibility of strengthening the Norwegian-Russian collaboration in pipeline production due to the low production costs in Russia after the Russian rouble slump. Hence, the external crises forced the companies to evolve their international cooperation in order to assure access to essential experiences and low-cost production.

Additionally, due to forfeits of the previous customers/suppliers during the economic downturn, companies screened for new markets (Archibugi et al., 2013b). *Forbord* alleged that the import substitution strategy in Russia could be an opportunity for Norwegian business, because this strategy required the Western technologies and knowledge. *Austigard* asserted that due to the technology transfer ban, ØSG *relocated the main production* for the Yamal project, first to China and lately to Russia, where the government promoted the import substitution strategy. “*During two years with sanctions, it was clearly stated by the Russian government that all companies should try to work with locally made products, try to face out internationally made products, and this was a real opportunity for all businesses*” (G. Austigard, personal communication 13.10.2015). Therefore, ØSG established production in Russia in addition to 3 factories in Norway, Malaysia and China.

Furthermore, the foremost suppliers for the Yamal project were primarily Russian, and partly French (Technip) and American. Importantly, *Austigard at ØSG* remarked that the Yamal project opened new opportunities for the company in other projects. Thence, the maintenance in the market and the relocation of the production was a key success-factor for ØSG in terms

of the restrictions. Hence, the external shocks forced the firms to rethink the production location and suppliers' pattern, that ensured business self-sufficiency and independence.

According to Schumpeterian models Mark I and Mark II (Schumpeter, 1942), the knowledge-intensive most dynamic firms innovating continuously despite the business cycle stages, and new innovators are major innovators. Both ØSG and Technip, as most dynamic firms, remarked their continuous R&D activities both before the crises and during it. *Lien* mentioned that Technip consistently increased its investments in R&D that doubled since 2007 and amounted €86 million in 2015 (Figure 4.12).

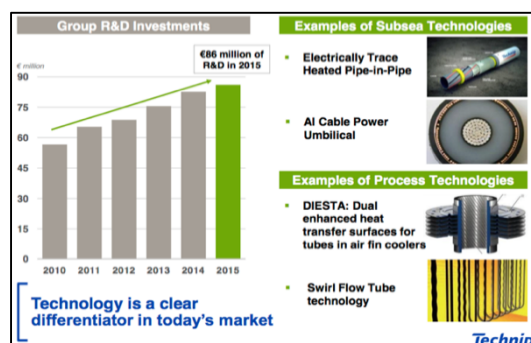


Figure 4.12 Technip's Technology Investment (Technip, 2016, 46)

“During the economic downturn, the company shifted the focus to engineering personnel, new solutions, and innovations, that can ensure a competitive advantage for our corporation” (O. Lien, personal communication 20.12.2015). *Lien* noticed that in 2014, the engineers had developed several innovation projects that secured a sizable reduction of production and transportation costs, enhancement of production volumes, and increase in the company's profitability and competitiveness. The bulk of Technip innovations in subsea occurred in the Technip Innovation and Technology Centre, that was established in 2013 near Paris. Furthermore, *Lien* added that Technip innovated through in-house R&D centres, the acquisition of specialised companies, and research partnerships in the field.

Thus, all enquired Norwegian firms maintained their innovation activities during the period 2014-2015. This contradicted with the categorisation of Filippetti & Archibugi (2011), where Norway was allocated to the declining countries, that despite their strong NISs, diminished their innovation spending during the crises. However, the current study has not researched all Norwegian O&G businesses; therefore, the overall pattern of the Norwegian O&G companies' R&D spending is unclear.

Discussion

The enquired Norwegian O&G firms were affected by the different external crises to various extent, that foredoomed the companies' crisis management strategies. While ØSG was undermined to a great extent by the sanctions and the oil price tumble, Technip Norge was undermined merely by the oil price slump. Thence, the basal challenge for ØSG was a

relocation of suppliers and production for the Yamal project. Whereas, Technip Norge encountered severe obstacles related to the halt of ongoing subsea projects, that put on a stake the company's activities, and caused fundamental alterations both in organisational and production-related aspects. In general, subsea companies, including Technip, and offshore projects were severely disrupted by the external shocks in the researched period, while onshore projects and technology suppliers for these projects maintained their activities.

Technip applied ambidextrous strategies, combining retrenchment and investment measures. Retrenchment measures of human resources and assets downsizing ensured the firm's survival in the short term due to the penury of ongoing contracts. Moreover, both ØSG and Technip applied a variety of internally- and externally-directed pro-active strategies. These deliberated strategies (Kitching et al., 2009) were favourable and successful during the recessions and ensured firms' adaptation to the changing environment.

The employed crisis management responses of Technip Norge and ØSG were meticulously tailored by the internally based crisis management teams, that proved the ponderosity of the high-level management personnel and the effectiveness of multiply decision-makers. The crisis management teams ensured better tailoring of the crisis management strategies due to a wide complex of experience, knowledge and skills. Importantly, both research participants accentuated the importance of local crisis managers due to a comprehensive understanding and familiarity with the market rules. Therefore, the personnel play a crucial role in the firm's adaptation during economic turmoil.

Importantly, in line with the Schumpeterian theory of creative destruction, the Norwegian O&G companies were forced by the external crisis to innovate and re-think their business strategies. Technip developed new production and transportation methods and technologies after the allocation of new domestic and international contracts, unique for the spool base. Whereas, ØSG in order to ensure stable technology supply for the Yamal project, relocated the production partly to China, established production in Russia and amplified the employment of the local Russian suppliers due to the government's requirement of import substitution.

Moreover, the crisis compelled the enquired companies to search for opportunities in new markets and develop cooperation with new entities, such as Russian Transneft. Besides, both researched businesses maintained the innovation activities during the crisis time due to the specifics of the industry, because the O&G companies and technology suppliers can survive, guarantee their leadership and win the rivalry merely by incessant improvement, innovation,

and diversification. Thus, the studied external crises fostered the innovation activities, including creation of new products, services, production methods, and exploitation of new markets.

Both research O&G firms are large-scale international corporations with internal R&D departments and wide collaboration with other entities. Therefore, in line with Alvarez et al. (2010), there was a positive correlation between the manufacturing firms' size and innovative activity during the economic crises; the large companies maintained innovative activities despite the economic turmoil. However, the study did not elucidate the crisis management strategies of Norwegian SMEs in the O&G industry. Therefore, the correlation of the firm's size and its innovative activities in the crisis environment is obscure for the current study.

However, we can conclude that the extent of the adverse impact of a specific external crisis foredoomed the O&G businesses' set of crisis management strategic measures. A greater demolishing impact of the outer shocks triggered a greater and more profound complex of crisis management measures.

4.4.2 Russian O&G Companies

4.3.2.1 Impact of the External Shocks on the Russian O&G Businesses

Impact of the Sanctions

In line with (Askari et al., 2003), the anti-Russian trade and financial sanctions had a destructive effect on Russian O&G business due to the vast financial and trade cooperation with Western during the pre-crisis period. The Russian O&G industry was highly dependent on Western technologies and venture capital. Thereby, the devastating effect on the Russian oil industry was engendered by the prohibited access to the essential technologies for deep-sea drilling and shale oil extraction, and restricted access to finance. This, in turn, led to a delay in the modernisation of O&G companies. In consonance with (The Economist, 2014), *Skretting at INTSOK* avouched, “*The sanctions undermined the investment climate in the Russian petroleum industry. Such huge companies as Gazprom, Lukoil, Transneft, Gazprom Neft, Surgutneftegaz, Novatek, Rosneft, are suffering from the prohibited access to long-term, more than 30 days, loans*” (H. Skretting, personal communication 13.10.2015). Furthermore, *Skretting* added that attempts of Russian O&G businesses to find finance sources within the country were ineffective due to the straitened financial capacities of the Russian financial sector for prodigious, investment-intensive O&G projects.

According to (Hufbauer et al., 2007), trade sanctions engender costs on a target nation through losses of export markets, denial of essential import, and higher prices for substituted

imported goods and services. The Russian O&G industry confronted an immense lack of indispensable technologies. *Lubov Gradusova, Gazpromtrubinvest (VrTZ)*, affirmed that the adverse technology transfer ban and the cease of international cooperation engendered a precipitate halt of the tubular products' indents. "*The plant is quite new, the production was established in 2000. The bulk of equipment, such as ThyssenKrupp, Voest-Alpine, Kocks, etc., was imported from Germany and Italy. Thus, VrTZ depends heavily on Western specialists, services and technologies*" (L.A. Gradusova, personal communication 02.10.2015).

Chuvilayev, Volgorechensk Municipality, remarked that the sanctions and the national currency decline smote the newly-opened oil derricks producing company "NOV Kostroma" in Volgorechensk. The plant suffered from the lack of technology supply and the significantly amplified prices for the basal technologies, such as the American plasma cutting machine, that were imported through third countries. Moreover, the primary pitfall for "NOV Kostroma" and VrTZ was importing activities, because the international companies were prohibited from buying production of these plants. Also, *Chuvilayev* affirmed that both sanctions and Russian rouble tumble eroded the economy of the city of Volgorechensk that was entirely based on Gazpromtrubinvest, "NOV Kostroma" and Powerplant. This conforms Eyster (2007) assertion, that the contemporary economic sanctions undermine both private businesses and economies of particular regions.

Analogously, the informant at the *Yaroslavl Oil Refinery Plant (YarNPZ)* highlighted the parlous lack of domestic funding, technology and knowledge. The participant stated that the restrictions jeopardised the YarNPZ modernisation plan, that was worked out in collaboration with Western and Russian companies, such as UOP Honeywell, United Engineering Group and Severo-Zapadnaya Production Company. The plan aspired to amplify the production volumes to three million tonnes with 95-97 percent deepness of oil refining, and to shift towards light oil products, such as gasoline, diesel fuel, and kerosene in 2019. However, the technology transfer prohibition hampered the plant's access to Western technologies, that procreated a sharp decline in its profitability. Moreover, analogously with the Volgorechensk municipality, the municipality of Tutaev, where the plant locates, suffered significantly due to a lack of taxes from the city-forming oil refinery. Thus, the external crises undermined primarily businesses relying on Western technology and capital. Therefore, the significance of the diversification of suppliers, markets and investors, and the development own technology and knowledge base, was confirmed for the Russian O&G industry. This will make O&G business less vulnerable to the future outer shocks.

Impact of the Oil Price Steep Decline

Analogously with Norwegian O&G business, the researched O&G companies in Russia were severely destructed by the oil price downswing. *YarNPZ participant* noticed that the sharp decrease of crude oil price significantly declined interest to the O&G companies' modernisation projects. Consequently, 15 Russian oil refineries, including the Yaroslavl Refinery "SlavNeft", Kirishskiy Refinery "Surgut Neftegaz", Gazprom NefteKhim Salavata, and all Rosneft refineries, postponed their modernisation plans by one to four years.

Likewise, *Gradusova, VrTZ*, affirmed that the decline in oil price affected the whole O&G industry and engendered the curtailment of ongoing projects for the technology providers. Consequently, VrTZ received fewer contracts on pipeline production during the period 2014-2015, videlicet, the greatest decline was on the medium-diameter pipelines.

Hence, the oil price tumble eroded both O&G exploration and technology suppliers companies due to the direct correlation between the crude oil price fluctuation and the O&G companies' profitability and success.

Impact of the Currency Fluctuation

Dahl Olsen underscored the interconnection between the Russian currency exchange rate and prices of crude oil: Russian rouble slumped the same much as oil prices declined. In consonance with (Peter & Downes, 2009), the weak national currency was favourable for Russian O&G exporting companies trading in dollars, while it was negative for firms importing technology and services from the countries with strong currencies. *Dahl Olsen* asserted that the Russian rouble tumble was negligible for the Russian O&G sector because they trade principally in dollars.

Nevertheless, the enquired Russian O&G technology suppliers distributed their production mainly within Russia. Thus, the impairment of national currency entailed a significant increase in output costs for both YarNPZ and VrTZ, and enlarged final prices for customers. *Gradusova* remarked that VrTZ had the bulk of international contracts for steel and strips import from China and the US in dollars. Therefore, the rouble downfall provoked a significant increase in prices for imported metal. Besides, *Gradusova* mentioned that the domestic prices for steel and strips became even higher than worldwide, that could result from the price collusion of the domestic steel makers. In similar fashion, informant at *YarNPZ* affirmed that the plant ended 2015 with a 5 billion roubles in debt due to the instability of the exchanging rate, and sequent amplified prices for imported goods and services.

Therefore, the studied firms' import-overreliance and the large share of sales within the country in roubles, combined with the halt of international contracts for the plants, provoked a substantial negative consequences of the national currency decline.

Discussion

The externally caused shocks during the period 2014-2015 severely eroded Russian O&G business. Conforming to (Lowth et al., 2010), the crises inhibited the companies' development potential due to the lack of demand, funding, technologies, and skilled labour. The trade and financial sanctions engendered the substantial lack of finance and technologies, and the notable increase in production costs due to alterations in the suppliers' pattern and technology import through third countries. The main pitfall for YarNPZ was the constrained collaboration with Western technology suppliers for the refinery's modernisation plan, while VrTZ suffered both from the lack of technologies and restricted export to the EU. Moreover, the sanctions undermined the regional economies, where the O&G plants located. Thus, the over-reliance on Western suppliers and contractors was highly damaging both for business, and local and regional economies during the recession. Thereby, the adverse impact of the external shocks was more prominent for the Russian O&G firms compared to the Norwegian ones.

Likewise, the O&G businesses was disrupted by the oil price tumble that triggered an abrupt curtailment of ongoing projects and investments in the industry. Moreover, the crude oil slump was disrupted YarNPZ to a larger extent, because the plant processed petroleum and was directly related to the crude oil price fluctuations. Whereas, VrTZ, as a pipelines' supplier; suffered primarily from the shortage of projects from O&G exploration companies. Therefore, the specifics of the firm's production foreordained the extent of the adverse crises' impact.

Ultimately, the national currency downfall was more damaging for the Russian O&G companies, distributing production within Russia, compared to the Norwegian export-orientated and technology-sufficient firms. The studied Russian companies distributed their production mainly domestically in roubles, while the feedstock contracts were in dollars or euros. This entailed a notable amplification of production costs and a consecutive decrement of the plants' profitability. Therefore, Vladimir Putin attempt to put the Russian industry out of the dollar- and euro-zones, can make the Russian industries less vulnerable to the currency oscillation. Furthermore, the necessity of the domestic O&G technologies and knowledge base development became evident for the sector during the researched period. Eventually, the devastating external crises forced the Russian O&G firms to search for new opportunities in the market in order to maintain their activities and ensure their competitive advantages.

4.3.2.2 Responses to the External Shocks

Pursuant to the competing theory of turnaround (Doyran, 2011), the sanctions, oil prices slump and rouble downswing, as unsuspected external shocks, fostered the efficacious adaptation of O&G companies and discovery of new opportunities in the market. In response to the external crises in the period 2014-2015, both studied companies employed the retrenchment and proactive strategies, both internally- and externally-directed (Faghfour, 2012).

Retrenchment Strategies

Lowth et al. (2010) claim that recessions entail a deprivation of substantial sums of money and abrupt reduction in customers' orders. Compared to VrTZ, YarNPZ struggled to a larger extent from the external crises due to the perilous lack of technology and funding. YarNPZ applied to the Arbitration Court with a lawsuit of *bankruptcy* that however was rejected. Therefore, the management of the plant was compelled to search for new opportunities, change markets, and develop further on the base of Russian human, financial, and technology resources.

Campello et al. (2010) allege that financial credit and capital constraints often trigger *halt of innovation projects* during the recession. Pursuant to this assertion, *Skretting at INTSOK* avouched that due to the mentioned above external shocks, many joint projects in Russia were suspended. For instance, Exxon intermitted all ten joint projects in Russia, except Sakhalin 1. Consequently, Rosneft had to postpone the exploration drilling project in the Kara Sea by 2018, because Exxon owned the vast offshore licence areas together with Rosneft. Analogously, Gazprom Neft Sakhalin delayed the drilling project in the Pechora Sea on Dolginskoe.

Besides, both researched plants employed the retrenchment *cost-cutting downsizing strategies* (Radcliffe et al., 2001). Tansey et al. (2013) assert that during recessions, firms are compelled to cut employment and costs to ensure their survival. In line with this postulate, straight after the sanctions implementation, VrTZ halted several projects, suspended production, dismissed two heads of departments, and reduced the cost of equipment, reparation, and feedstock. Importantly, while VrTZ did not downsize the working force in response to the crises, YarNPZ was forced to cut off the production staff due to the production halt and the enormous credit debts after the rouble tumble. However, Radcliffe et al. (2001) allege that downsizing strategies may trigger an erosion of the company's core competencies and competitive position. Therefore, there was an immense risk of a future lack of human resources for YarNPZ plant.

Moreover, *Gradusova* avouched that at the beginning of the crisis period, VrTZ employed cost-saving downsizing in the pipelines' transportation and logistic system. The logistics department changed the convenient continuous plan purchasing of metal towards the purchase of huge volumes of metal and strips at the bottom market price. Furthermore, the plant employed a junction of several pipelines' orders in one train during the railway transportation; this alteration notably reduced the transportation costs. Therefore, the retrenchment measures proved to be efficient for the short-term recession period. However, businesses have to tailor carefully the retrenchment strategies to avoid conceivable pitfalls in the future.

Investment Strategies

While the retrenchment measure assured the enquired firms' short-term survival, future development and efficient adaptation to the market could be achieved merely by employment of investment strategies (Lowth et al., 2010). Among pro-active responses to the crises, the Russian O&G businesses utilised *retention* of domestic and international *customers*, that according to (Latham, 2009), is one of the most important crisis management strategies. *Skretting* and *Nordsletten* underlined that Norwegian and Russian collaboration was still going on in several essential projects. Rosneft and Statoil maintained cooperation in the exploration drilling project in the Okhotsk Sea, the pilot onshore drilling project in the Western Siberia, and the construction a Far East Centre of Shipbuilding "Zvezda".

According to (Yasai-Ardekani & Nystrom, 1996), more effective large companies' adaptation to the disrupted market is ensured by greater information about the environment and wider network, compared to smaller firms. In agreement with this assertion, *Gradusova* acknowledged that during the recession, the huge advantage of VrTZ was that the plant was a subsidiary of Gazprom that was the main shareholder (94,5 percent of shares) and the primary consumer of the plant. After the prohibited collaboration with West, the bulk of VrTZ production was tailored to the Gazprom internal O&G projects. "*Gazprom is a big corporation that can protect own interests and react swiftly to the market changes. Hence, VrTZ can survive in external crises as long as it is in the Gazprom's production chain*" (A. Chuvilayev, personal communication 28.10.2015). Similarly, YarNPZ was a subsidiary of the corporation Mendeleev Group; however, it is considerably smaller compared to Gazprom. Thence, the large corporations possess better survival capabilities compared to SMEs, due to their vast networks, interconnections, and financial capacities.

Another important pro-active firms' response to the external shocks is *diversification* of market, suppliers and business (Sternad, 2012). *Skretting*, *INTSOK*, remarked that due to a lack

of foreign technologies, the Russian O&G companies re-oriented their technological supply to the Russian-based companies, such as Volgograd-NIPI-Morneft (Lukoil), Corall in Sevastopol (Lukoil), VNIIGAZ (Gazprom), and so on. *Gradusova* asserted that VrTZ shifted from the primary Western suppliers towards Russian providers. Additionally, VrTZ increased metal supply from China; although due to a low quality of metal, the plant had to enhance the precise quality control. *Gradusova* avouched, “*The top priority of our company now is supply just from Russian companies, because, at first, we trust the businesses and the quality of the resources, and, at second, we support the government programme of import-substitution*” (L.A. Gradusova, personal communication 02.10.2015).

Furthermore, concerning the technological gap and lack of knowledge, *Gradusova* remarked that the management personnel were working on the creation of a locally-based labour pool, that will be capable of working on the Western equipment. It goes in line with *Garcia-Zambrano et al. (2014)* postulate that the success of crisis management in all industries should be grounded on durable innovation activities, development of core competencies, and organisational knowledge. Therefore, the companies encountered the perilous lack of technology and feedstock, and were compelled to develop collaboration within the country, diversify suppliers’ pattern, and develop own knowledgeable labour force to assure the plants’ self-sufficiency and less vulnerability in the case of future external shocks. *YarNPZ participant* accentuated that the development of the oil refinery leaned on cardinal alterations of the production processes. The oil refinery was compelled to enlarge its production volumes and elaborate novel production processes.

Lee et al. (2009) state that externally-related crisis management strategies enrich *the company’s international orientation*. In line with this assertion, *YarNPZ* informant accentuated that the plant due to prohibited collaboration with West, amplify its focus towards China. In July 2015 *Mendelev Group* (parent company) opened an office *Mendelev China Ltd.* in Beijing, China, that aspires to promote oil production in China and Asia, and develop new engineering solutions and innovations. Furthermore, the company signed a collaboration agreement with Chinese companies in Shanghai that presumes the joint constructing of a modern oil refining plant on the base of *YarNPZ* in *Tutaev*, in the period 2016-2020. Thus, the Western restriction forced the Russian O&G firms to shift the focus towards Asia, particularly China, that possessed immense technology, human and knowledge capacities. This goes in line with *Hufbauer et al. (2007)* postulate that the target nation usually retain access to Western technology and oilfield technology from the non-sanctioned countries.

Import Substitution

Doyran (2011) and Campello et al. (2010) accentuate the importance of the state regulatory and financial support for companies during recessions. One of the most efficient types of governmental involvement in crisis resolution is import substitution strategy. Dicken (2011) emphasises that the basal goal of this policy is to safeguard, develop and diversify domestic industries, and diminish dependence on foreign goods, services, technologies, knowledge, and capital. Ergo, *Forbord* alleged that the weak rouble and the import prohibition benefited the Russian import substitution policy for the manufacturing and service sector.

In line with the import substitution purposes, VrTZ designed the Research Development Strategy that comprised three basal goals: import substitution for Gazprom, satisfaction of other O&G extracting companies' needs, and conversion from the regular pipelines production towards pipelines with increased consumer properties. Importantly, this programme presumed utilisation of new sort of steel and pipe threads for tubes, and establishment of a coating department. *Gradusova, VrTZ*, accentuated that the plant was elaborated in close cooperation with the state departments and R&D institutes (VNIIGAZ, VNIIST, etc.). Moreover, due to the import substitution strategy, VrTZ launched a second production line of unique medium-diameter pipelines on the 27th of August 2015. *“The overall investment amounted 10 billion roubles. This plant will ensure a threefold amplification of the production volumes, additional 70%-increase in taxes for the regional budget, creation of 500 jobs, and amelioration of the regional investment attractiveness”* (L.A. Gradusova, personal communication 02.10.2015). Moreover, the factory planned to start the third production line of unique big-diameter-pipelines, that will substitute imported tubular products. Importantly, the regional policy towards the company was beneficial; VrTZ received significant tax discounts, subsidiaries and support both from the municipal, region and federal level.

The abundance of changes occurred in 2014-2015, contributed to a creation of a metallurgy cluster in Volgorechensk, that will assure the tubular production supply for all Russian O&G companies in the Central region and the Eastern Russia.

The location of the cluster in Volgorechensk was beneficial due to the proximity to the central federal motorway A113 and the federal railroad that has connection to all destinations within the country, to the major cities such as Kostroma, Ivanovo, and Yaroslavl, proximity to the Volga river and the non-freezing pond, transit gas pipelines from Urengoi, presences of the Hydropower Plant, and stable financial situation of the city (subsidies' free).

A. Chuvilayev, personal communication 28.10.2015

Therefore, the unicity of geographic and resource proximity of Volgorechensk, concentration of the oil derricks plant, the O&G pipelines plant (VrTZ) and the Power Plant engendered the cluster-creation, that will betoken a new epoch for VrTZ and the region. However, this sublime strategy relied entirely on the beneficial state regulatory and financial support, at both federal and regional level.

Importantly, Campello et al. (2010) accentuate that companies receiving state financial assistance tend to discontinue their innovation activity while private funding is less useful during the economic turmoil. YarNPZ restarted the refinery modernisation plan due to the import substitution strategy that presumed the profound financial and technical state, regional, and municipal support. Furthermore, YarNPZ informant affirmed that in 2015-2019, the plant was planning a construction of a complex processing the oil of new generation, with total production volume of 3 million tonnes a year and the implication of the innovation oil-free technologies that will ensure 95-97%-conversion of crude oil. Moreover, the new production complex will include a power block that will assure the plant's energy independence and energy efficiency. The overall cost of the project accounted 2 billion dollars, however, according to the management plan, the employed innovations will ensure the plant's profitability in one year after its launch. Therefore, the government import substitution strategy has brought essential stimulus for the Russian O&G industry. By the development and protection of the domestic O&G technologies and suppliers, Russia will be capable of becoming self-sufficient in technology sphere and be less affected by the future external crises.

Discussion

Both Russian and Norwegian O&G business were affected to a great extent by the externally caused shocks during the period 2014-2015. These challenges forced the companies to change significantly their business approach. Alongside with Norwegian O&G firms, the Russian studied corporations employed ambidextrous crisis management strategies, combining both retrenchment and investment measures. This ensured the companies' short-term survival, and long-term adaptation and sustainability. Pursuant to Latham (2009), the studied large established firms utilised cost-cutting strategies due to the temporary halt of production and the forfeits of contracts. The adaptation of VrTZ went quicker compared to YarNPZ, because VrTZ, as a subsidiary of Gazprom, reoriented the production for the Gazprom internal needs, while YarNPZ, processing gasoline products, were not able to cope promptly with the oil price slump. However, both studied companies survived in the economic turmoil through utilisation of the internally- and externally-orientated investment strategies.

Furthermore, in line with (Alpanda & Peralta-Alva, 2010), the oil crisis spurred innovation in oil-related technologies in the researched companies. VrTZ established a unique for Russia production of middle and large diameter-pipelines, which substituted Western analogues. Whereas, YarNPZ restarted the modernisation plan that aspired to produce oil-free ecologic high-quality petroleum products. This conforms the Schumpeterian Mark II Model and the creative destruction theory for Russian O&G business in the crises period 2014-2015. Furthermore, the restricted access to Western technologies and investment significantly spurred collaboration with China, both technologically and financially. Thence, Russian O&G business was able to substitute the restricted products, services and finance from new sources.

Moreover, the importance of crisis management department appeared to be crucial for the studied large firms. While YarNPZ managed the crises by internal human resources, VrTZ closely collaborated with the research institutes and state department in the elaboration of the development strategy and the meticulous tailoring of new production for customer needs. Thus, the “Triple Helix”-linkages were essential in the crisis resolution. The current study did not focus on the Russian O&G SMEs experiencing the external shocks in the period 2014-2015; therefore, the clear correlation between business scope and effectiveness of the undertaken responses is indistinct for the research. However, in consonance with (Anderson & McAdam, 2006), the large firms’ access to diverse resources, experiences, finance, networks. and technology ensured a notable advantage of the large firms during the recession.

Additionally, the adaptation of the Russian O&G corporations was eased by the intensive focus of the government import substitution strategy on the O&G industry, as one of priorities. The role of the state in promoting and protecting domestic industries was crucial in the economic turmoil. Importantly, the effectiveness of the import substitution industrialisation in the O&G industry was palpable at the moment of writing the thesis, because many O&G companies, including the enquired businesses, reoriented suppliers’ pattern towards domestic manufactory and engineering firms, and companies became less dependent on Western suppliers. However, the fact that the sanctions will be ceased one day and all Western suppliers will get back the access to the Russian market, questions the future of the Russian O&G import substitution strategy in the rivalry with Western analogues.

Regarding the cultural impact, the study did not reveal any significant differences between Norwegian and Russian O&G businesses in coping with the external crises. I would agree with the opinion of *Skretting, INTSOK*, who stated that there were no distinct differences between Norwegian and Russian O&G companies in crisis management; all companies took

risks and did their best to resolve the business problems. However, I would underline a greater reliance on the state support and greater state engagement in Russia. Russian businesspeople in all industries expected the financial, advisory, and technical state support, while Norwegian business was more independent from the state and survived by its own in the deteriorated market environment.

4.4 Tourism Industry: Crises Impact and Responses

This section will scrutinise the impact of external crises on the Russian tourism industry and Visit Norway, responsible for promoting the tourism from Russia to Norway. In contrast with analysed above large and medium-sized firms, the enquired tourist agencies are small enterprises. Therefore, the impact of external shocks on small businesses and their adaptation's peculiarities is essential for this master's thesis to compare reactions of firms of different size.

4.4.1 Russian Tourism Industry

4.4.1.1 Impact of the External Shocks on the Russian Tourist Agencies

This section will shed light on the extent of the negative or positive effect of the externally caused shocks on the Russian tourist agencies located in Kostroma and Yaroslavl.

Impact of the Sanctions

Henderson (2007) alleges that the tourism industry and tourist movements are correlated with the government structure, and national and international processes. Therefore, such external shocks as sanctions and deterioration of international relations, disrupted the operation of several Russian tourist agencies and operators. However, the devastating or creative impact of the Western sanctions on the Russian tourism industry was diminutive compared to the studied fishery and O&G spheres. Eyler (2007) states that the smart sanctions target specific individuals, such as the ruling elite, terrorist, or military, and combine a variety of different measures, such as arms embargoes, financial sanctions, freezing of assets, travel bans, etc. In consonance with this definition, the smart sanction against Russia comprised travel restrictions on the particular group of people, such politicians and militaries, who were prohibited to travelling to the EU, the US, and other aligned countries. The bulk of banned individuals resided in large cities such as Moscow, St. Petersburg, and Sevastopol (Crimea). Therefore, the impact on the activities of the tourism firms locating in Kostroma and Yaroslavl was insignificant. *Sergey Hodchetkov at Tourservice* and *Svetlana Tretyakova at Svetlana Tour* did not detect any correlation between the travel restrictions and their tourist agencies' operations, due to their low activities with tourists of the prohibited by the sanctions professions. Notwithstanding,

Alexandra Shipanova, Globus, cognised that the restrictions were more favourable than disrupting for the firm. Globus located in the city of Kostroma where the military academy (RHBZ) and troops located. The mentioned professions and police officers were prohibited from travelling after the sanctions; thus, Globus received a government contract for tourist service for militaries and policemen to Russian resorts. Therefore, the anti-Russian sanctions did not disrupt the studied Russian tourism enterprises. Moreover, the enhanced patriotism among Russians engendered an amplified interest to the domestic resorts instead of Western destinations. This was favourable for the agencies focusing on the domestic tourism.

Impact of the Currency Oscillation

In line with (Henderson, 2007), tourist trends and activities of the tourist agencies were highly vulnerable to the national currency oscillation, that undermined demand on both international and domestic tours, due to the abruptly amplified prices. Moreover, weak currency made tour operators and agents cautious about selling tours. All three Russian enquired tour agencies asserted that the rouble slump was the primary external shock for them, because it negatively affected both the outbound and domestic tourism. Moreover, all researched companies in the pre-crisis period were focused chiefly on the outbound tourism; thus, their activities were disrupted significantly. The researched tourist firms sold their international tours in roubles, while booked the overseas hotels and tour programmes in foreign currencies, mainly in dollars and euros. Therefore, the rouble tumble automatically engendered an increase in the final price for international tours, that in turn, triggered a notable decline in demand for overseas trips among middle-class customers.

Concerning international tourism, *Shipanova and Hodchetkov* remarked that among the most popular international budget destinations among Russian tourists, the Baltic countries, Sweden and Finland were affected to the greatest extent, because the price for these tours amplified from 4-7 thousand roubles per person in 2013 to 15-20 thousand roubles in 2015. Furthermore, all informants noticed a tiny tourist flow to Norway both before and during the economic downturn. “*Norway has never been a popular destination from Kostroma region or our neighbour regions due to the high costs of living and food there. We have not had any tourists to Norway for a half year*” (S. Hodchetkov, personal communication 09.10.2015). Concerning the domestic tourism, *Shipanova* alleged that, as a result of the steep rouble drop, the statistics of tours to the Black Sea resorts declined by approximately 30% in 2014.

Importantly, *Tretyakova, Svetlana Tour*, emphasised that due to the instability of exchange rates, the main tour operators reduced the commission for tourist agencies from 10

percent to 5 percent per each sold tour. Thence, the tourist firms could not provide any discount to their regular clients. This entailed the customers' dissatisfaction with the company, that was adverse for service business that leaned on the clientele.

Pursuant to Starks & Wei (2003) theory, all researched tourist businesses encountered a decline in the companies' short-term cash flows and profitability after the national currency decline. Thus, the tourism agencies and operators in countries with weak currencies are highly vulnerable to the exchange rate fluctuation, because the middle-class tourists' flow diminishes proportionally with the national currency downswing.

Impact of Other Crises

Besides the mentioned above external economic shocks, the specific of the tourism industry foredoomed its sensitivity to alterations in the international state of affairs, visa regulations, personal security level, and so on. According to (Hall, 1994), the enforcement of law and regulations affects the tourism sector, that, in turn, disrupts the state institutions dependent on the tourism industry. All three interviewed agencies cognized that they were hardly disrupted by the new regulation of the Schengen visa application from the 14th of September 2015. The law prescribed personal attendance in embassies to scan the applicant's fingertips. Before this law, the basal advantage of tourism agencies for Russian tourists was that the firms prepared the whole documents' package and sent it directly to Moscow without a liability of tourist's personal presence. *Shipanova* and *Tretyakova* noticed that due to new regulation for visa application and the devalued Russian currency, the prices for tours to the most popular European countries, such as Italy, Spain, and Greece, increased at least twofold. *“Therefore, many tourists stopped to use travel agencies, and plan and book all trips by themselves on the Internet nowadays”* (S. Tretyakova, personal communication 08.10.2015).

Moreover, the period of 2014-2015 was highlighted by the significant deterioration of security in the world. Henderson (2007) postulates that terrorism, including hijacking, suicide missions, bombing and shootings, is a perilous threat to the tourism industry, and diminishes the tourist flow and the attractiveness of tourist destinations. All informants underlined an immense challenge regarding the Ministry of Foreign Affairs restrictions on travel to Egypt after the terror attack on the Russian plane A321 flying from Sharm el-Sheikh, that killed 224 people; and travel ban to



Figure 4.13 The main destinations for tourists travelling through tourist firms, 2014, thousand people (Federal Agency for Tourism, 2016a)

Turkey after the shot down Russian jet SU-24 by Turkey. *Hodchetkov, Tourservice*, cognized that during the first half of 2015, Egypt and Turkey were the most popular destinations among tourists in Kostroma, and Russia in general, due to low tours prices and the considerable high service level in hotels (Figure 4.13). Therefore, the abrupt travel bans to Egypt and Turkey significantly affected the Russian tour operators and agencies that were compelled to swiftly reconsider their main activities to ensure the business survival.

Furthermore, all research participants underlined the challenges occurred after the bankruptcy of the largest Russian tour operators, such as Neva, Roza Vetrov, etc., and the bankruptcy of the largest low-cost plane company Transaero that was the primary charter airlines for the bulk of Russian tour operators.

The bankruptcy of Transaero was very stressful, because we had to stop sales for a while. Furthermore, prices for charter flights increased by 30-50%. Many tour operators were 70-90%-dependent on Transaero. Thus, they were not capable of coping swiftly with this crisis, and bankrupted. Such external shocks ruined reputation of the tourist agencies as well.

S. Tretyakova, personal communication 08.10.2015

Discussion

The researched tourist firms were destructed by the wide range of abrupt external crises during the period 2014-2015. This entailed an enormous leap in prices on both outbound and domestic tours, and put at stake the operation of many Russian tourist agencies and operators. The most devastating effect on the researched tourist firms had the Russian rouble tumble, that triggered the steep decline in demand for domestic and overseas tours. Furthermore, the travel bans to the most popular tourist destinations for the middle-class tourist in Russia (Turkey and Egypt), the alterations in the visa regulation, and the bankruptcy of the large tour operators and charter flight company “Transaero”, undermined the tourism business sustainability. Hence, tourism business was highly sensitive to the political and economic changes, both domestically and internationally. Moreover, it is impossible to predict such external crises. Thus, the tourism firms were continuously disrupted by the multiplicity of external shocks that had to be resolved promptly and efficiently.

Among researched companies, just Svetlana Tour in Yaroslavl was a part of a tourist agencies network, while Globus and Tourservice were single private enterprises. The damaging impact on the network of tourist agencies was lower compared to solely operating firms due to the ability of the united firms to relocate tourists’ directions, wider information about the market situation, and greater financial capacities. Thus, the firms’ networks had better environment

scanning and less vulnerable to external challenges. This goes in line with the environmental-scanning theory (D'Aveni & MacMillan, 1990).

Moreover, the firm's location foreordained the extent of external shocks. While Globus and Tourservice located in Kostroma, with 277 thousand inhabitants and lower average salary, Svetlana Tour resided in Yaroslavl, with 604 thousand inhabitants with higher average income level, and momentous proximity to Moscow, the airports, and the embassies. Therefore, the tourist flow from Yaroslavl declined to a less extent compared to agencies in Kostroma due to the Yaroslavl advantageous geographical location, better financial situation of the inhabitants, and wider clients' networks. Therefore, companies locating in bigger cities with higher average income level, were less vulnerable to the external shocks.

In general, the studied tourist businesses operated in the economic turmoil during the whole two years' period, 2014-2015, when one external crisis occurred after another. This instability significantly disrupted the companies' operation, sustainability and profitability. According to (Lowth et al., 2010), companies in service sector experience constant shocks and challenges from the external environment and variations in business demand, and consequently, cope with the crises quicker than companies operating in stable markets. The efficiency and speed of the undertaken responses to the crises will be rummaged in the next sub-section.

4.4.1.2 Responses to the External Shocks

Retrenchment Strategies

Anderson & McAdam (2006) and Haveman (1993) affirm that small businesses often encounter a lack of financial and human resources for urgent expansion and diversification. Whereas, Ebben & Johnson (2005) declare the advantage of the smaller companies' adaptation due to its flexibility, proximity to the market, and the absence of duty to follow the formal rules. In agreement with the former assertion, *Tretyakova, Svetlana Tour*, acknowledged that due to the hectic situation in the sector, many tourist agencies maintained their activities just in the peak summer season and were closed during the winter, while many of other tourist agencies in Yaroslavl closed or bankrupted. *Tretyakova* cognised that merely large united tourist companies with extensive clients' flow survived the multitude of external crises in 2014-2015. Thus, the retrenchment measures of business closure and partial activities during the high season were common for the tourism agencies in Yaroslavl and Kostroma. Furthermore, the deterioration of the tourism industry was complexified by the immense rivalry in the sphere. The statistics for Kostroma comprised 68 tourist firms with 186 employees in 2014, and Yaroslavl – 100 tourist

agencies with 426 employees in the respective year (Federal Agency for Tourism, 2016b; Federal State Statistics Service, 2016). Therefore, the survival of the tourist agencies in the severely aggravated market environment and immense competition, required the employment of the retrenchment crisis management strategies. However, the long-term survival was assured by the investment measures contributing to the firms' competitive advantage and sustainability.

Investment Strategies

The adaptation of the enquired tourism agencies was assured by utilisation of the externally-directed pro-active strategies, which prescribed the employment of opportunities for radical changes, including increased innovation expenditures and market diversification (Lowth et al., 2010). Importantly, compared to the researched fish and O&G businesses that established the crisis-management teams, the studied tourism agencies' decision-making process was elaborated solely by the business owners. As stated by Pearson & Clair (1998), small firms succeed from their less bureaucratic management structure and a few decision makers. Small tourist enterprises descried new opportunities and developed novel products and services, which contributed to the enhanced tourist flow and adaptation to the mutable business environment. Thus, the efficiency of the individual decision-making process has been confirmed by this study. However, it is hard to collate the effectiveness of the sole and team crisis management for the current study due to highly diverse industries, its financial and technological capacities, and different eroding impact of the external crises in 2014-2015.

Importantly, the enquired tourism agencies were compelled to diversify their activities due to the forfeit of preceding tourism destinations after the rouble slump and the travel bans. In line with (Whittington, 1991), the diversification strategy aspires to discover novel opportunities, markets, resources and capabilities, ensures cost-reduction, and provides new marketing techniques. *Shipanova at Globus* remarked that in response to the new visa regulations, *Globus* furnished a new service for collecting and preparing the documents package for visa application, so a tourist did not need to fill in any documentation. *“It is very time-consuming to write in all blankets for a visa application. Moreover, it should be done in English, but many Russians do not speak English. Thus, our new service is popular among clients”* (A. Shipanova, personal communication 05.10.2015). Therefore, the tourist agency was forced to find new ways to ease the visa application process for the outbound tourists that preferred to travel via agencies.

Moreover, the travel agencies utilised the externally-related diversification measures (Lee et al., 2009). Svetlana Tour due to the larger tourist flow in Yaroslavl, maintained their

international tourism activities, but notably changed the main *overseas tourist destinations*. *Tretyakova* accentuated the importance of *the customers' retention* strategy for the company during the crises, because the regular clients ensured the bulk of the agency's profit. Therefore, the firm had to satisfy their wish to travel abroad. It goes in line with the Mitra (2012) postulate that during the crisis, firms tend to create better value for existing customers rather than looking for new clients. Therefore, the agency was forced to maintain and develop international tourism destinations to retain its clientele.

For summer, our agency has shifted the primary focus towards Tunis, Morocco, and Bulgaria, where a tour price is around 60 thousand roubles for two people, and it is equivalent to the tours to Turkey or Egypt. Moreover, the tourist flow to the United Arab Emirates has amplified notably during the whole year.

S. Tretyakova, personal communication 08.10.2015

Importantly, these overseas destinations were not popular among Russian tourists before 2015, and increased in demand just after the imposition of the travel bans to Egypt and Turkey.

The tourism industry's principal response to the disrupting external events in 2014-2015 was the enlargement of *focus on Russian domestic tourism*. All researched participants underlined the amplified tourists flow to the Russian South resorts, such as Sochi, Anapa, and Crimea. *Shipanova* affirmed that *Globus* was forced to shift the firm's basal focus from the outbound tourism towards the domestic tourist destinations. As mentioned above, *Globus* received a regional government contract on providing tourist services to militaries' and police officers' families in Kostroma region, who were prohibited from travelling abroad. *Shipanova at Globus* noticed that the main destinations for these groups of tourists were the Russian south, particular Sochi, or Abkhazia. Therefore, the summer season in 2014 and 2015 was highly profitable for *Globus* due to enhanced militaries and police officers' tourists flow. *Shipanova* underlined that due to the state financial subsidies for these professions, the cost of tours was above the average, because these clients preferred high-quality hotels and central location. For instance, Sochi was a quite expensive resort both for the Russian and foreign tourists: in 2015, the eight days-tour in Sochi in a 4-stars hotel cost 100-140 thousand roubles per person. Despite such high prices, Sochi was the most saleable for the banned professions because the military personnel got full compensation of travel expenses for the whole family.

Likewise, *Tretyakova and Hodchetkov* avouched that their agencies enlarged focus on the Russian South due to the increased interest towards the domestic less expensive tourism, after the national currency decline and the new visa application regulation. *Tretyakova* accentuated that the most saleable destinations for New Years Eve in 2015 were Krasnodarskiy

Krai, St. Petersburg, Moscow, Mineralnyie Vody, and Velikiy Ustug (Father Frost home city). Importantly, the favourite family-vacation trips to Velikiy Ustug were sold out 3-4 weeks before the New Years Eve, despite the 15%-price increase. Furthermore, for winter *Svetlana Tour* notable amplified promotion of tours to Krasnaya Polyana instead of the Western Europe ski-resorts, and family-tours to Sortavala, in Karelia, that was the “Russian New Year Capital of 2015” where the Fathers Frost competition took place. Therefore, the Russian tourist agencies were capable of substituting the expensive or banned outbound trips by the novel domestic tourism destination. This contributed to the development of the Russian tourism industry and enhanced the tourist attractiveness of the regions.

However, all research participants highlighted that Russian hotels and resorts need to invest in infrastructure and quality of leisure to attract more tourists. In 2014, the bulk of federal investments went to the tourism industry in Krasnodarskiy Krai, while investments allocated to other regions were negligible to create a tourists-attractive infrastructure (Figure 4.14).

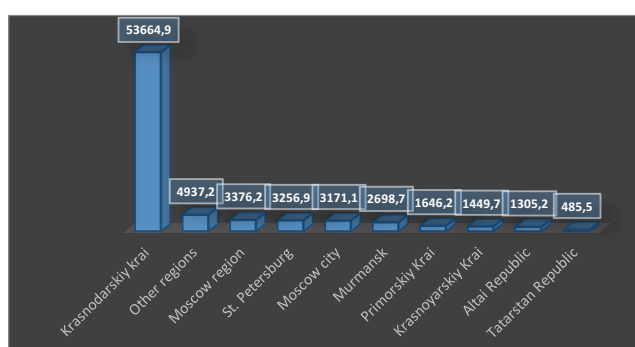


Figure 4.14 Investment in tourism in Russia 2014, million RUB (Federal Russian Tourism Agency, 2015)

Besides, the external crises spurred development of regional and local tourism. *Hodchetkov at Tourservice* underscored that the agency actively promoted the weekend-tours to neighbour cities, such as Myshkin, Ivanovo, Nizhniy Novgorod, Suzdal, and so on. Importantly, the tour agency enlarged the cooperation with universities.

We elaborate new tours together with the Kostroma State University, Faculty of Tourism Service. Students get a possibility to present their projects for our agency, together with a business plan, precise trip and route plan, and guide description. Eventually, we select the most interesting and economic-efficient projects and try them with our clients.

S. Hodchetkov, personal communication 09.10.2015

For instance, Tourservice in October 2015, launched a new tour “Cinematographic Kostroma” that was developed by a student from KGTU, as a master’s project. The tour comprised a guide presentation of different cities and places in the Kostroma region, where many famous Soviet and Russian movies were filmed. *Hodchetkov* cognised that the tour was very popular among tourists, and the agency had sold out all tours for the nearest months. However, the price for the weekend-tours was around 1500-3000 roubles per person with 20-

30 tourists in each group, that was considerably less profitable compared to the international tours. Additionally, the weekend-tourism was more time- and resources-consuming because the agency solely elaborated and launched tours. Nevertheless, the informant alleged that the local tourism guaranteed a stable profit for the company, especially during the winter period. Therefore, the company was compelled to discover unseized opportunities within the domestic tourist industry due to the deterioration of outbound tourism. Thus, the Schumpeterian Mark I and the creative destruction theory was confirmed for the Russian tourism industry, when external shocks forced the firms to innovate, reveal novel services, and develop further.

Fagerberg (2003) alleges that the academia-industry links foreordain the economic development through innovations. In consonance with this assertion, *Hodchetkov, Tourservice*, remarked that the agency was a part of the state tourism development programme, that aspired to spur the Russian regional tourism development, attract investments in regional tourism, develop tourist clusters and zones, establish international and interregional experience exchange and collaboration, and so on. This programme allocated the task to the universities and research centres to elaborate regional-specific education programmes aiming to prepare the high-class specialists pursuant to the international standards, and establish cooperation between universities, research institutes, and tourism agencies and operators (Ibragimova, 2014). The collaboration between KGTU and Tourservice was a part of this programme. Therefore, the significance of the Triple-Helix linkages for the crisis adaptation was evident for the Russian tourism industry, because each entity of this collaboration embodied diverse capabilities, experiences, and knowledge that assured the development of local and regional tourism. Eventually, this was favourable for the regional and federal budgets and development. “*Tour agencies have to develop continuously its marketing strategy, new directions, invest in new tours, make special offers, maintain advertisement in social media and local newspapers. But the main competitive advantage in our industry is the high-quality service*” (S. Tretyakova, personal communication 08.10.2015).

Discussion

The demolishing effect of the external shocks was vastly prominent due to the direct correlation of the enterprises’ activities and fluctuations in the tourists’ demand. Thence, many small tourist agencies were forced to employ the business closure measures or were opened just in the summer time. Moreover, the small firms’ proximity to the market and customers were beneficial, because the agencies detected quickly changes in demand trends and tailored meticulously the agencies’ activities to the customers’ preferences.

Importantly, Svetlana Tour performed an advantageous aspect of being a part of the large tourist agencies' network that can be crucial for firm's survival during recessions. Thus, small solely operating tourist agencies encountered more significant challenges during the external crises compared to the networks of tourist firms possessing greater financial, knowledge, and network capacities.

Russian tourism agencies employed ambidextrous crisis management strategies encompassing both retrenchment and investment strategies. However, the researched agencies utilised chiefly the investment externally-orientated crisis management strategies aspiring to diversify customers and tourism destinations. Importantly, the specifics of the tourism industry, the severe rivalry in the sphere, and the crucial role of service and clientele spurred the employment the customers' retention strategy, because attraction of new clients was problematical during the crisis. Moreover, the service sector was more reliant on the clientele's demand oscillations compared to the fishery and O&G sectors. Eventually, all abrupt externally initiated crises spurred the tourist agencies' swift refocus from the outbound tourism towards the domestic tourism, in particular, the South part of Russia.

According to (Faghfour, 2012), company's specifics are crucial in designing an effective crisis management strategies. Thence, Svetlana Tour in Yaroslavl retained the focus on international tourism to a greater extent compared to the enquired firms in Kostroma, due to the larger scope of business, and more advantageous location and financial situation of Yaroslavl. Therefore, the location of tourist agencies predetermined the scale of responses.

In service industries, such as the tourism sector, creativity, constant innovativeness and development of new products predetermine the company's competitive advantage and survival in the market. In consonance with Filippetti & Archibugi (2011) assumption that economic crises foster the utilisation of innovation opportunities, the researched businesses developed new services, such as visa application service, and elaborated new local tourist programmes.

Furthermore, the evidence of Tourservice highlighted the importance of collaboration of tourist agencies with the high-level education institutes, which can spur new opportunities, ideas, tourist destinations, and so on. Furthermore, despite the absence of the direct federal financial support to small tourist firms in Russian, the essential role for tourism business played the regional and municipal tourism development programmes, that embodied the financial support and ensured linkages between business, academia, and state structures.

Importantly, on the one hand, Tourservice was disrupted by the external crises to the greatest extent compared to Svetlana Tour, which maintained outbound tourism activities, and Globus that received a regional order on the tourist services for militaries and police officers. On the other hand, Tourservice altered the core activities more radically by refocusing on domestic, primarily local, tourism. Hence, the damaging effect of the externally caused shocks to business foreordains the degree of organisational and business changes, and its innovativeness. Therefore, the Schumpeterian theory of creative destruction has been proved for all researched tourist agencies in Russia.

4.4.2 Tourism from Russia to Norway

This section will elucidate the impact of the decline of Russian tourists' flow to Norway in the period 2014-2015, and consecutive responses of Visit Norway to the adverse external shocks.

4.4.2.1 Impact of the External Crises on Tourism Firms

Impact of the Sanctions

According to (Henderson, 2007), the tourism industry is sensitive towards the economic and political changes, which can either hamper or foster the outbound and inbound tourism. The political changes and sequent deterioration of the Norwegian-Russian collaboration influenced the tourism flow from Russian to Norway. In consonance with Eyler (2007), the impact of the travel restrictions on the Norwegian tourism industry was not demolishing due to the insignificance of the Russian tourists' flow to Norway in the pre-crisis period. Russians spent three percent (161814 hotel nights) of total commercial foreign guest's nights in Norway in 2013 (Innovasjon Norge, 2013). In agreement with Eyler (2007), *Shavrov, Innovation Norway*, alleged that the restrictions did not destruct the Norwegian tourism sector because they targeted a limited group of Russians. Moreover, in 2014, the total amount of commercial guest nights in Norway amplified by three percent, including a 6%-increase in foreign guest nights (Innovation Norway, 2014). Therefore, the travel ban did not have a direct adverse impact on the Norwegian tourism sector. However, *Philipenko at Visit Norway* asserted that the sanctions, the rouble tumble, and the political instability in 2014-2015, vastly undermined the Visit Norway in Moscow activities. *"The total decrease of the tourist flow from Russia to Norway is very significant. Hence, a continued work of promoting Norway as a brand in Russia was disrupted"* (O. Philipenko, personal communication 14.09.2015). The major negative impact on tourism from Russia to Norway was engendered by the restrictions for particular people, such as political leaders, diplomats or militaries. Moreover, the forfeit of Russian tourists was adverse

due to the high average daily spending of Russian tourists in Norway in the pre-crisis period. Thence, the overall effect of the travel ban was minuscule for the total visitors' flow to Norway; however, the sanctions disrupted the continuous work of Visit Norway and entailed a loss of potential profit for the Norwegian tourist sector.

Impact of the Currency Slump

The rouble tumble engendered the major devastating consequences on the outbound tourism from Russia. Pursuant to Henderson (2007), the weak Russian currency undermined the demand on international tourism by the middle-class tourists. *Shavrov* accentuated that Norway, in general, was a highly expensive tourist destination for Russian tourists, and due to the national currency collapse, tours became even more costly for the middle-class travellers. *Shavrov, Innovation Norway*, asserted that the descent of Russian tourists to Norway in 2014 accounted 40%, while the total decline of outbound tourist flow from Russia amounted 50% in the respective period. Thus, the Norwegian destination was less affected compared to the overall trend. The tourists' flow from Russia to Norway was more significant in the North-West part of Russia that borders with Norway; therefore, the tourists with easier access to visa to Norway continued to travel to the country due to lower transportation expenses.

Importantly, *Philipenko at Visit Norway* alleged that the Norwegian krone 34%-downswing engendered a decline in Norwegian tours prices, and consequently attracted tourists from the other countries with stable national currencies. Furthermore, the interviewee remarked that tourism was a vastly price-sensitive industry (Figure 4.15). A 16%-decline in foreign guest nights in 2014 compared to 1998 resulted from a 3%-increase in the trade-weighted exchange rate index that indicated that tourists got less for their money in July 2014 compared with July 1998.



Figure 4.15 Foreign guest and trade-weighted exchange rate index, 1998-2014 (Innovation Norway, 2014)

Notwithstanding, *Philipenko* underlined that the weakening Norwegian krone did not attract Russian tourists because the rouble devaluation accounted 118 percent. Moreover, the informant asserted that Russian tourists preferred to travel to countries with weak national currencies. Thence, the Norwegian tourism industry has lost potential tourists and profits. Besides the mentioned above external crises, the participants did not notice any direct impact of other external crises on Norwegian tourism business during the researched period.

Discussion

The external shocks disrupted the Norwegian tourist industry to a less extent compared to the Russian tourist enterprises. The interviewees' opinions contradicted to each other. While *Philipenko* underscored the significance of the forfeit of the Russian tourists to Norway, *Shavrov* assessed the decline as inconsiderable for the Norwegian tourism industry. However, we should take into account the specialisation of the informants. *Philipenko* was responsible for the promotion of the Russian tourists' flow to Norway; therefore, she cognised the adverse impact of the Russian tourists' decline that destructed the continued work of Visit Norway activities in Russia. While *Shavrov*, a director of Innovation Norway in St. Petersburg, assessed the tourism fall in comparison to common tendencies in the Norwegian-Russian collaboration.

Besides, both research participants agreed upon that the Russian rouble downfall triggered a slump of outbound tourism from Russia, while the declined Norwegian krone attracted more tourists from countries with strong currencies due to the decreased tours prices. Notably, the total decline in the Russian tourists was engendered to a greater extent by the devaluation of the Russian rouble than the travel bans. Therefore, Visit Norway in Moscow was compelled to alter the ongoing tendency of the declining flow of the Russian tourists to Norway.

4.4.2.2 Responses to the External Shocks

The focus of Visit Norway just on the promotion of tourism from Russia to Norway, made it utterly arduous to cope with the declining tendencies regarding the devaluation of the Russian currency. *Philipenko* avouched that Visit Norway was not capable of altering the declining number of the Russian tourists to Norway in 2014-2015.

According to (Sternad, 2011), the parlous proactive strategy of investment in marketing and customer retention contribute to the firm's survival and competitive advantage in the long-term period. In consonance with this assertion, Visit Norway maintained their activities in promoting Norway as a tourist destination and disseminated information about Norway in Russia in order to keep Norway in minds of the Russian tourists.

Visit Norway in Moscow is still promoting Norway as a tourist destination for Russians in social media and organised events in Moscow, designing catalogues, collaborating with tourist operators, tourist agencies, and journalists. Visit Norway elaborates all destinations and programmes solely in Moscow and approved them at Innovation Norway in Oslo.

O. Philipenko, personal communication 14.09.2015

Also, after the decline of the Russian rouble, Visit Norway developed novel budget tours for Russian tourists. These tours suggested budget places to stay and focused more on nature tourism, including the most attractive destinations for Russians, such as fishing, fjords, and skiing. Furthermore, *Philipenko* noticed that Visit Norway and the Russian Tourism Agency arranged several working groups' meetings concerning the enhancement of bilateral tourism between Norway and Russia. Thus, increased collaboration with other agencies, operators and state departments in the tourism industry, contributed to the promotion of tourism, experience and knowledge exchange, and the development of novel programmes targeted new tourism destinations. Therefore, the adaptation of Visit Norway grounded primarily on the employment of the internally-directed investment strategies (Whittington, 1991). Hence, in line with the Schumpeterian theory of creative destruction, the external shocks forced Visit Norway to rethink its core activities, develop new collaboration, elaborate new tours, employ marketing strategies, and expand the collaboration networks.

Discussion

Regarding the high extent of the Russian rouble devaluation and sequent decline of Russia tourists' flow to Norway, Visit Norway in Moscow was highly constrained in changing and diversifying its activities of promoting Norway as a tourist destination, because Norway was one of the most expensive tourist destinations and the Russian currency downswing made the tours to Norway highly costly for the middle-class Russian travellers. In addition, the visa requirement for Norway was the strictest in the Scandinavian countries that explained the higher popularity of Sweden and Finland among Russian tourists.

In general, the pro-active investment in marketing and customer retention strategies were the best solutions in resolving the occurred challenge for Visit Norway. Thus, the pro-active crisis management strategies of Visit Norway encompassed the maintenance of information assimilation, marketing strategies, and amplification of collaboration with tourist agencies, operators, and the state department.

All programmes for Visit Norway were elaborated in Moscow by the local specialists, familiar with the specifics of the Russian culture, tourists' preferences and alterations in demand. This was exceedingly beneficial during the crisis time, and contributed to the elaboration of new budget tours regarding the declined Russian rouble. Therefore, the proximity to customers ensured elaboration of the well-tailored tourism programmes for the local people, and it contributed to the efficient and meticulous crisis management strategies.

Thus, the extent of the crisis's impact and specifics of business foreordain the adaptation strategies during the economic downturn. Importantly, the narrow specialisation and focus just on one activity are parlous for business during the recession time. Therefore, the companies have to diversify their markets, customers, products, and services. Furthermore, the external and extensive networks and collaboration with diverse entities contribute to better adaptation to the deteriorated environment.

Summary and Cross-Industrial Discussion

The results of the empirical analysis are illustrated in Figure 4.16 that displays the general correlation between the external crises, industries, nations, and undertaken responses. Whereas, Appendices J and K meticulously elucidate the impact of external crises on the Russian and Norwegian researched businesses, and Appendices L, M and N depict the particular responses by each studied company in every enquired industry in two countries.

According to (Lotti et al., 2006) and (Paunov, 2012), the innovativeness of diverse industries varies significantly and the leading innovators usually occur in machinery and manufactory industries, while Sternad (2011) affirms that the correlation between industries, and crisis management strategies and innovativeness is unrevealed.

The current master's thesis has scrutinised the impact of external shocks on three diverse industries: fishery, O&G, and tourism. Importantly, the degree of demolishing effect on business foredoomed the scale of undertaken measures in response to the crises. The firms impinged the most damageable consequences of the crisis, employed the most radical measures.

The studied Russian tourism firms and Visit Norway utilised mainly the service- and market-related crisis management strategies, including the elaboration of new services, development of new programmes, marketing strategies, and development of cooperation with other businesses, academia, and state departments. Moreover, Globus and Tourservice almost entirely reoriented their core activities towards domestic tourism. Importantly, for the tourism agencies the customer retention was a basal strategy due to the importance of the clientele for business sustainability in terms of the immense rivalry among tourist agencies.

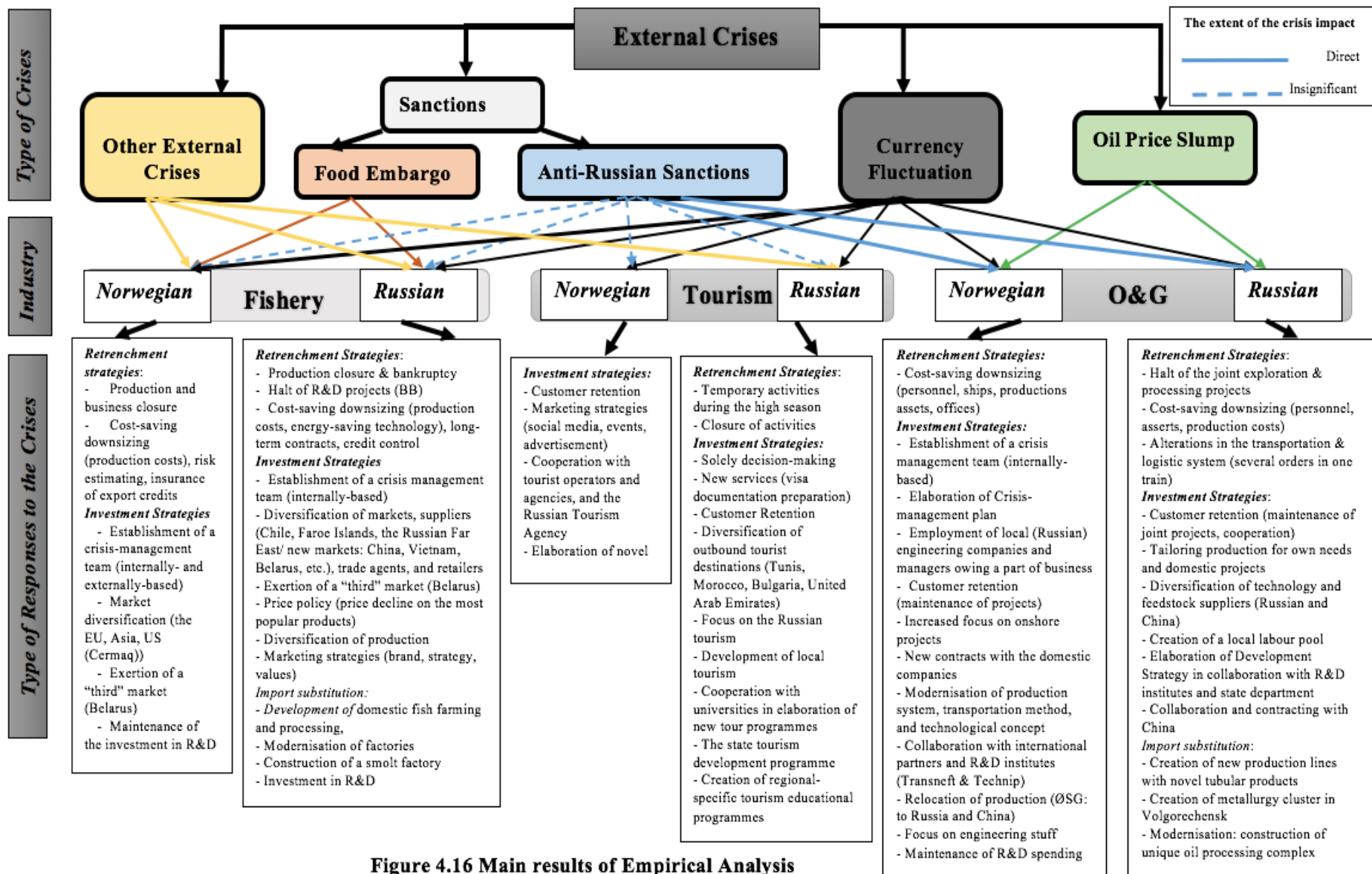
Whereas, the Norwegian and Russian fishery firms employed mainly the market-related changes, including import/export market diversification and exploitation of an intermediate market. These measures ensured swiftly reshaping or substitution of the lost export or import markets. Finally, the responses of the O&G companies were primarily production-related,

including the relocation of production to other countries, modernisation of production and transportation system, and the creation of new products and services.

Due to the extensive organisational and financial capacities, both Norwegian and Russian fish and O&G companies established crisis management teams comprising diverse internal and external experts from the high-management level. Whereas, the adaptation of the small tourism firms was entirely reliant on a single decision maker, business owner. The crisis management team proved its great efficiency during the crisis regarding the unique combination of varied knowledge, skills, and experiences.

According to (Filippetti & Archibugi, 2011), the pattern of national innovation settings is the most prominent during the crisis time, when robust nations support domestic industries by the financial stimulus. Importantly, the adaptation of the Russian fishery and O&G industries was spurred by the import substitution strategy, that allocated immense financial resources in order to substitute the imported goods and services by the domestic producers. Thence, the collaboration of the researched fish and O&G companies with the state was essential for prompt and efficient modernisation of the production processes. Furthermore, despite the absence of direct state financial support for the Russian tourism agencies, the firms were engaged in the regional tourism development programmes that established linkages between the business, state and universities. These programmes were immensely important for the elaboration of new tourism programmes and efficient coping with the decline of tourist flow during the crises. Therefore, the reliance of business on the state in Russian was tremendous, while all enquired Norwegian firms were entirely independent of the government.

Hence, the industry's peculiarities foreordained the extent of external shocks, and the scope of the undertaken responses. However, it is problematical to collate the innovativeness of the fishery, O&G and tourism industries due to too diverse business scope. It is evident that the large established O&G business possessed the greatest R&D capabilities due to immense financial potential, presence of internal R&D departments, cooperation with R&D centres, and government support. It confirms Galbraith (1967) assertion that large corporations create the bulk of incremental and original innovations and developing technology. Whereas, the innovative capacity of the fishery industry was actively growing in the recent decade. *Loe at NRS* mentioned that the oil price slump could be a catalyst to the paradigm shift from O&G to fishery; however, this shift depends entirely on the state engagement and support. Whilst, the financial capacities of small tourism firms were notably constrained. However, all studied firms in all industries maintained their innovation activities despite the recession time.



5 Conclusion

The aim of this section is to summarise the main findings and provide answers to the imposed research questions. The structure of this section comprises three subsections regarding the research questions, implication of the study, and areas for further research.

How did diverse external crises affect the Norwegian and Russian businesses in different industries during the period from 2014 and 2015?

The external shocks influenced the studied companies in different industries to a various extent. While the fishery industry was chiefly disrupted by the food embargo and the currency oscillation, the O&G industry suffered the most from the crude oil price slump, and the tourism sector encountered the greatest challenge regarding the national currency tumble.

In line with (Askari et al., 2003), the Western multilateral sanctions had a more demolishing effect compared to the Russian unilateral food embargo. In response to the loss of the Russian market, the Norwegian fishery and O&G companies reshaped swiftly their market's pattern with less forfeits for business compared to the Russian firms, that were struggling due to the loss of umpteen significant markets, suppliers, and partners in the US and Europe. The trade and financial restrictions imposed by the large world economies, especially in collaboration with regional and international organisations, cause the severe damages of the target's economy compared to the sanctions implemented by small-scale nations. However, the size of the target's economy as well predetermines the scale of economic destructions. The large nations, such as Russia, with substantial domestic production and economic resources, suffer to a less extent compared to smaller states that are highly reliant on import/export activities.

Importantly, the Norwegian and Russian fishing and O&G industries were in a common value chain, they supplemented each other. Norway was the main technology (fishery and O&G) and feedstock (fish) supplier for the Russian fish and O&G companies, which constituted the huge export market for Norway during the pre-crisis period. Therefore, the loss of one player in a value chain triggers substantial adverse consequences for other entities. Therefore, the firms complementing each other and interrelated through a common value chain, are highly sensitive to the alterations of the market conditions and external shocks.

Moreover, the effect of sanctions relies on the target-sender bilateral trade and their cooperation in the pre-crisis period. The Norwegian fishery industry suffered from the food embargo due to the forfeit of the largest export market in 2013-2014, and particularly struggled with the relocation of herring, mackerel, and trout, that were primarily consumed by the Russian

market before the import ban. Importantly, in addition to restricted feedstock, goods and services, the Russian O&G and fishing business were severely affected by the immense lack of unique Western technology, knowledge, and funding, that could not be substituted promptly within the country. Thence, the over-reliance on imported supply and collaboration, and the supplementary technology and knowledge gap engender a greater destructive effect on business during recessions. Moreover, the business focus on one single export/import market, especially technology and feedstock suppliers, is perilous during the crises and can trigger a production halt or closure. Therefore, the companies have to diversify their markets, suppliers, and business partners, and develop own knowledge and technology to eliminate the adverse effects of the future import/export restrictions.

Conversely, the travel restrictions had an insignificant impact on the activities of the Russian tourist agencies and Visit Norway due to minor tourists' flow from Russia to Norway before 2014. Furthermore, the tourist agency Globus benefited from the travel bans due to the magnified tourist flow of the prohibited professions to the Russian South resorts.

Importantly, business operating in the environment with consistent disruptions, possesses a greater ability to navigate and adapt to the external shocks with minuscule forfeits. The fishing enterprises in both countries operated in the environment with a multitude of diverse external shocks, including import/export boycotts. Therefore, the previous experiences in crisis management, specifically market's diversification and relocation, were advantageous for the fishing firms during the economic turmoil. Analogously, the tourist agencies operated in circumstances of the continuous political and economic shocks that forced them to elaborate efficient crisis management strategies on the base of the preceding experiences.

On the contrary, the O&G businesses operated in the more stable environment with high and stable crude oil prices. Notwithstanding, the epoch of the stable oil was disrupted suddenly in 2015, that, in turn, extensively undermined both O&G processing companies and technology suppliers, in both Norway and Russia. While the O&G technology suppliers (Technip, ØSG and VrTZ) suffered primarily from the abrupt forfeit of the ongoing projects and consequent temporary production halt, the oil processing plant (YarNPZ) encountered the more complex challenges due to the general less efficiency of oil exploration and processing projects in terms of the low crude oil price. In general, the adaptation to the economic turmoil of the O&G companies is more time-consuming, requires immense financial and human resources due to the large industry scope. Importantly, the study did not scrutinise the sanctions and the oil slump effect on the oil exploration firms that were affected to the great degree.

The destroying or creating effect of the currency fluctuation directly depends on the industry specifics and the predominance of export or import operations. While the studied Norwegian fishery and O&G companies primarily benefited from the national currency downswing, due to their prevailing export-orientation, all enquired Russian industries and Visit Norway gravely destructed by the Russian rouble tumble regarding their major activities in the “rouble-zone”, dependency on import, increased prices for import technology, products, and services (O&G and fish), and the decline of the Russian outbound tourism (tourist agencies). Moreover, the beneficial effect of the weak national currency for the Norwegian fishing firms was accompanied by the highest spot fish price in the recent 20 years, that in total, contributed to the enhancement of total profits and cash flow. Importantly, the Russian O&G businesses could not succeed from their export activities due to the restricted by the sanctions cooperation with Western partners. Therefore, the exporting companies benefit from the national currency downswing due to the increasing cash flow and profitability, while importing businesses suffer from this external shock due to the enhanced prices for goods and services. Moreover, the weak national currency can attract new customers from both the home country and the states with strong currencies. This can spur production and facilitate business development.

In addition to disrupting economic crises, fishery business is vastly vulnerable to biological challenges that cause grave obstacles for fish farming and lessen business profitability and sustainability. Also, the researched Russian tourism enterprises were immensely disrupted by the travel ban to Turkey and Egypt, the alterations of the visa application procedure, and the bankruptcy of the major tour operators and airlines. Therefore, the tourism industry, as a service sector, is more sensitive to the political changes and the international state of affair compared to other enquired industries. Furthermore, the tourism industry depends directly on the tourists’ demand that predetermines the business sustainability.

How did companies in the O&G, fishery and tourism spheres in Norway and the Russian Federation respond to diverse external shocks?

The extent of damaging impact of the sanctions predetermines the range of responses to the crises. Hence, business affected to the greatest degree usually utilise more radical changes and vast set of crisis management strategies compared to less disrupted firms.

The bulk of studied companies both in Norway and Russia employed ambidextrous strategies (Sternad, 2012), that combine both retrenchment and investment measures. Moreover, the researched businesses utilised both externally- and internally-directed responses (Chattopadhyay et al., 2001; Whittington, 1991) concerning both organisational and market-

related aspects. Therefore, the efficient adaptation of business to external crises should be grounded on the combination of several strategic measures, including both internal organisational changes in the management structure and production process, and externally-related market alterations, including diversification, customer retention, production relocation, innovation, and so on. These diverse strategies complement each other and ensure the firm's survival, substitution of the lost suppliers or customers, further development, and the greater robustness during the future crises.

The short-term business survival in all industries has been assured by cost-saving downsizing measures (Radcliffe et al., 2001), that assured the adaptation to steep crises and focus on the core firm's activities by the cut-offs of other expenditures. The Russian tourism agencies, Visit Norway, and the Russian and Norwegian fish companies employed primarily the production cost-saving downsizing, and temporary halt of activities, production, and R&D projects, while the O&G businesses both in Norway and Russia, except ØSG, utilised the human resources downsizing in addition to the production cut-offs due to the great economic forfeits and financial risks. Thus, business with more sufficient economic losses during the recessions, tends to employ personnel cost-cutting measures, while firms with less economic forfeit employ merely production cost-saving measures. The personnel downsizing is a perilous strategy that can engender a lack of substantial knowledge and skills in the post-crisis period. Thus, companies should be cautious with employing these measures. Moreover, the credit insurance and risk assessment are essential during the economic downturn; they secure the business operations in the unstable economic environment.

Importantly, the role of personnel is crucial in the elaboration of the crisis management strategies. In line with the upper echelon theory (Hambrick, 2007), the crisis management teams comprising executives and high-level management experts elaborate unique and carefully tailored crisis management strategies due to a unique beneficial combination of varied skills, experiences, and knowledge. Importantly, the engagement of experts from the external R&D institutes contributes to the richness of the elaborated strategies with close focus on technical and knowledge aspects. This is particularly important for the knowledge-intensive O&G and fishing corporations. However, mainly just large and medium-sized companies establish crisis management teams during the recession, while small enterprises tend to elaborate strategies by individual decision-maker. The Russian tourist agencies' owners were able to adapt the business to the economic turmoil, and develop new services and products. Moreover, ØSG underscored the importance of the local management in adaptation to the deteriorated foreign

market environment due to better familiarity with the demand, market and culture, and higher sensitivity to demand changes. Thus, the local managers of international corporations, owning a part of the company, assure the better adaptation and the elaboration of more efficient crisis management strategies.

Among investment strategies (Sternad, 2012) employed by the fishing and O&G companies, the diversification of markets, customers and suppliers was the most essential in the short-term crises period. The fishing businesses both in Norway and Russia swiftly relocated their export/import markets due to their previous experiences from the boycotts. In addition to the increased focus on the EU, the Russian import ban forced Norwegian fishing companies towards new markets, particularly Asia, China, and the USA. Whereas, Russian fishing enterprises, significantly enhanced their import from Chile, and Faroe Islands. Moreover, the Russian fishing business enlarged the consumption of domestic fish from the Russian Far East. Moreover, the Russian fishery industry encountered an urgent necessity to develop and modernise own fish farms and fish processing factories to ensure the self-sufficient fish production and import substitution within the country.

Moreover, the studied companies exploited a third, intermediate, market in Belarus for re-export of Norwegian fish to Russia. Analogously, the Russian O&G technology suppliers imported the American O&G equipment through third countries. The utilisation of a third market has a dual effect. On the one hand, it ensures customer retention, and provides needed imported goods and services. On the other hand, it is a perilous strategy due to high financial risks of prohibition of the re-imported goods and services. Furthermore, the final price on goods, re-imported through third nations, exceed significantly the initial price, that in turn, lessen the consumption and demand on the final market.

The studied tourism firms were forced to diversify their services and products, and tailor them to the altered demand. The external shocks forced the tourism agencies to diversify the outbound tourism destinations instead of prohibited ones. Moreover, the basal response of the tourist agencies to the crises was an increased focus on Russian tourism, including both summer and winter destinations. Thus, the external crises contributed to the development of the domestic tourism. Importantly, for tourism firms, as Visit Norway, focusing on one single activity or market, the customer retention and marketing strategies are literally the merely possible measures during the crises. Thus, in line with Mitra (2012), service firms during the crisis tend to retain the clients instead of attracting new ones. However, the Russian rouble

slump and consecutive increased prices for tours to Norway spurred the investment strategy of developing new budget tours by Visit Norway for Russian middle-class tourist.

Moreover, the collaboration with universities and state departments are important for all industries during the crises, because the “Triple-Helix” linkages contribute to the discovering of new opportunities and ideas, development of new products, services, and programmes, reaching new clients, and better execution of the crisis management strategies due to a unique set of financial and human resources, knowledge, skills, and experiences.

Importantly, in line with the Schumpeterian creative destruction theory, the external crises compelled all studied companies to innovate and develop new products, services, and production methods. The forfeit of previous customers and consecutive novel unique contracts forced Technip Norge to modernise its transportation system, technological concept, and production processes. Moreover, the relocation of production is an efficient innovation strategy that opens new opportunities for business in new markets. ØSG relocated the production to China and Russia, and extended utilisation of local Russian suppliers due to the prohibited technology transfer from Norway to Russia. However, the relocation of production is possibly merely for large companies with great financial capacities and networks. Furthermore, O&G business is more efficient in their production relocation to the foreign markets compared to fishing industry, because the relocation of the Norwegian fish companies was economically insufficient due to the immense rivalry on the Russian market with locally produced fish. Moreover, due to the forfeit of Western partners, Asian companies have got the main focus from the Russian O&G companies. Thus, the Asian, particularly Chinese, market benefited from the deterioration of the Russian-West relations during the researched period.

Importantly, the radical changes and modernisation of the Russian O&G and fishery businesses were fostered by the import substitution policy, which allocated immense financial and protective stimulus for Russian producers. The Russian companies due to the tremendous technological and knowledge gap, and the perilous import over-reliance, were compelled to develop a high-quality local labour pool and domestic production in order to substitute the imported goods and services. The crises forced the Russian fishing companies to develop own fish farming and fish processing on the base of domestic fish feedstock, fish feed, smolt, and technologies. Analogously, Russian O&G business, as main focus of the import-substitution strategy, received an immense “push” for its innovation and modernisation. Furthermore, the restricted access of imported goods and services to the market and the national currency slump are beneficial for the development of domestic industries.

Moreover, all researched firms in the O&G and fishery industries maintained their R&D investments during the economic turmoil, because the leadership, competitive advantages, and survival in these knowledge-intensive industries can be ensured merely by constant innovations and development. Thus, the Schumpeterian theory of creative destruction was proved by the current study, when the devastating external crises squeezed out the inefficient businesses, products and services, and compelled the companies to innovate, both in market-, service-, and production-related aspects, diversify their activities, and expand external collaboration in order to survive in the market and win the rivalry. Therefore, the entrepreneurial mind and willingness to take risks, innovate and develop further, foreordain the firm's survival during the economic downturn.

Which organisational, industrial and national institutional aspects fostered or hindered the firm's ability to survive, develop and innovate during the economic turmoil?

The master's thesis examined companies of diverse scale in various sectors, and in two different countries. These aspects reverberated on both the extent of the devastating affect of external shocks and the set of the undertaken crisis management strategies.

Concerning the significance of the business scope, the small fish companies demonstrated a less ability to adapt to the recession due to their financial constraints and limited market flexibility. All Russian tourism agencies were small-scale businesses and suffered from the external crises to a greater extent due to their financial constraints. Furthermore, small companies operating abroad are highly vulnerable to the external shocks due to the severe rivalry with local competitors. However, the small firms' proximity to the market and customers is highly beneficial during the crisis time due to better navigation in the changing market environment and higher sensitivity to the changing clients' demand, that is essential for the services sectors. Furthermore, small scale business employs mainly single decision maker strategies, while large and medium-size companies establish crisis-management team with engagement of both internal and external experts.

Compared to small and medium-sized firms, the large companies, such as ØSG, Technip, YarNPZ, VrTZ, and Cermaq, possessed a great advantage during the crises due to their vast financial and human resources, collaboration networks, and the diversified production pattern. Moreover, large international corporations with production in several countries adapt to the economic turmoil with less forfeits due to the possibility to relocate export volumes from one market in response to the closure of another one. Besides, parent company, such as Gazprom, often can reshape the subsidiary's (VrTZ) production and operations for the internal

corporations' needs during the recession times. Furthermore, tourism companies engaged in large untied networks were less vulnerable to the external shocks due to the greater financial and human resources. Hence, the large scale businesses demonstrated more efficient crisis management strategies. Importantly, in line with the Schumpeterian Mark II, the large firms invest more in R&D activities during the crisis, including both incremental and radical innovations, by virtue of their more profound financial resources and knowledge capacities in the internal R&D departments.

Besides, the peculiarities of industries foreordain the type of basal innovations. Hence, fishing businesses focused primarily on innovations related to the biological challenges that were the biggest obstacle for the industry. Moreover, the crucial for the fishery industry self-sufficiency for fishing farms in smolt and technologies, spurred innovation related the fish farming, and fish and smolt production. The peculiarities of O&G sector fostered mainly production-related innovations, ensuring the maintenance and the self-sufficiency of ongoing exploration and processing projects. Importantly, the study did not focus on SMEs in the O&G industry; thence, the correlation between business scope and innovative abilities in this sector during the crises, was unrevealed. Whereas, the tourism agencies focused more on service-related strategies, including customer retention and development of new tours, due to the importance of the clientele for the service sector. All studied Norwegian and Russian fish and O&G companies maintained their investments in R&D during the crises. Thus, in line with Mark II, greater innovators of the past are greater innovators during the crisis, by virtue of their substantial innovation spending and internal R&D departments.

The role of industry for national economy is essential. In Russia, key for national economy industries received the tremendous financial and regulatory support from the state, while less significant sectors had to survive on their own in the economic turmoil. Hence, the focus of the national import substitution strategy on the important for the Russian economy O&G and fishery industries spurred these sectors' innovations and modernisation. The state support and protection of the national producers during the crises, were unique and essential for Russian business aspiring to develop own knowledge, technology, and production, and substitute the Western imported products and services. Therefore, the state import substitution strategy is not merely an excellent way to combat lack of products and services; it is an effective method of promotion and development of domestic industries. However, the import substitution is a unique strategy merely for nations with large economies, such as Russia, substantial domestic producers' potential, rich resources capacities, and vast consumption in the domestic

market. Whereas, Norway is a small open economy that depends heavily on the export activities.

Furthermore, the competition in the market predetermines the character of crisis management strategies. High rivalry fosters innovations and further development in all sectors and all business scales. The immense rivalry in the Russian tourism sector spurred the customer retention strategies, including diversifying of the outbound tourism destinations, and elaboration of new domestic tourist programmes. Therefore, all companies in the contemporary economy are compelled to innovate and develop continuously to ensure their competitive advantage both in the domestic and international market.

Importantly, the significance of the cultural aspect was not evident during the research. Both Russian and Norwegian companies in all industries took risk, and maintained to innovate and develop despite the deteriorated market environment and high risks. Of course, the problem of corruption constrains the freedom of the business activities in Russia, but the O&G and fishing business are in focus of the state protective import substitution policy, that provides regulatory and financial stimulus, and eliminates the bureaucratic and corruption barriers. Moreover, the role of the state and reliance on the state support was more prominent in Russia compared to more independent Norwegian business.

Eventually, both business scope, industry peculiarities, and cultural aspect play a significant role during the crisis time. These factors foreordain the damaging impact of the crises, and predetermine the scale of crisis management strategies.

Implication of the Study

From a theoretical perspective, the master's thesis contributes to the theory in variorum ways. At first, the study analysed the demolishing effect of the external crises on different businesses in order to elucidate the perilous pitfalls in organisational and market's aspects, that should be avoided or eliminated during the recession. At second, the thesis scrutinised how outer shocks can foster the organisational, marketing and production-related innovations. At third, this study identifies the significance of the business scope and industry on the choice of crisis management strategies. Finally, the research verified the Schumpeterian theory of creative destruction, when the destroying power of external shocks can appear as a catalyst for innovations and modernisation. Moreover, the study verified the Schumpeterian Mark II model, the upper echelon theory, the theory of effective management of steep crises, and the efficiency of the import substitution strategy.

From the practical perspective, the study can be utilised for management purposes. The research has shown the different degree of the firms' vulnerability to the external shocks and the particular aspects, jeopardising the business survival in the economic turmoil. First, regarding the demolishing effect of the forfeit of core customers/suppliers, companies should eliminate the over-reliance on one single market and import, and diversify their markets and suppliers. At second, the master thesis has displayed the extensive data about the diverse companies' responses on the different stages of recession. Crisis management should combine both retrenchment and investment measures, and both internally- and externally-directed strategies in order to ensure both survival in the short-term period and development in the long-term perspective. Moreover, crisis management teams should engage both internal and external experts from various spheres, including external R&D institutes, state departments, and other firms with relevant experience and skills. Importantly, companies operating abroad should employ local management due to their proximity and familiarity with the market and the operation rules. And least but not last, the study shows the efficacy of the import substitution strategy for the innovation creation and business development in large economies with substantial domestic market and production capacities. However, the import substitution should be carefully tailored for every specific industry and protect the domestic producers in the long term perspective.

Areas for Further Research

During the research and analysis process, several enthralling areas for further research have appeared. First of all, the study focused merely on two countries and a limited number of research participants. Therefore, the future research can embody the wider scope of enquired countries and firms to reveal the more prominent overall pattern of the impact of the external shocks and the consecutive firms' responses. For instance, the Baltic countries, Finland, and Lithuania, suffered to a large extent from the Russian food embargo. Thus, the analysis of crisis management strategies undertaken by other EU countries would be thrilling for understanding the connection between the magnitude of the damages from the crises and the scope of responses. Furthermore, the future study can elucidate the effectiveness of the Russian import substitution policies in the long-term perspective, especially after the abolishment of the sanctions regime. Also, the further research may examine the longitude of the crises' impact on the companies' adaptation, whether it alter the business in long-term perspective or just during the crises. Therefore, the research topic embodies the broad range of possible angles for further inquiries.

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APPENDIX A: COMPONENTS OF INNOVATIVE ORGANISATIONS (Tidd &

Bessant, 2009; Mitra, 2012, 86)

Component	Key Features	Meaning and Scope
1. Shared vision, leadership and the will to innovate	Clearly articulated and shared sense of purpose; stretching strategic intent, "Top management commitment"	The idea and practice of innovation is not limited to a few people – for example, managers and technocrats – but shared across all levels and encouraged through different types of activities
2. Appropriate structure	Organisational design that enables creativity, learning and interaction. Not always a loose "skunk works" model; key issue in finding appropriate balance between organic and mechanistic options for particular contingencies	Adapting and experimenting with varied forms, structures, mechanisms and responsibilities to allow for proper understanding of change through new products, services and organisational practice
3. Key individuals	Promoters, champions, gatekeepers, and other roles that energise or facilitate innovation	Believers, supporters, providers and implementers of innovation who facilitate and make innovation happen
4. Effective team working	Appropriate use of teams (at local, cross-functional and inter-organisational level) to solve problems; investment in team selection and building	Individuals working with groups and across different functional activities to harness capabilities to best deal with the varied pressure of uncertainty
5. High-involvement innovation	Participation in organisation-wide continuous improvement activity	Together with structure to keep innovation on a level of meaningful alertness of business activity
6. Creative climate	Positive approach to creative ideas, supported by relevant motivation system	Generating, harnessing and using creative ideas through tension and cooperation of people across the organisation and through networks within which organisations operate
7. External focus	Internal and external customer orientation; exclusive networking	Reorganising and valuing the role of the organisation within its sector its geographical location, its network of stakeholders, as part of its strategic and operational focus, imbibing ideas from outside and influencing external environment with ideas generated within the firm

APPENDIX B: APPROACHES TO INNOVATION IN THE MID-SIZED FIRM (Simon, 2009; Mitra, 2012)

A. The scope of innovation	B. Levels of innovativeness	C. New products development
<p><i>Leadership</i> in technological innovation with high market share (e.g. 'Rational' with a share of 52% of global markets).</p> <p><i>High level investment in R&D</i> (e.g. Omicron, leader of tunnel-grid microscopes – 40% of people in R&D).</p> <p><i>Innovation in business processes</i> and ongoing improvements of processes.</p> <p><i>Innovation in distribution, sales & marketing</i> (e.g. Würth, world leader in direct trade with assembly and fastening products – core competency in sales and logistics system of order, system and automation, or Bosch Power Tools' shop-in-shop concept in large DIY stores enabling extension of existing value chains).</p> <p><i>Innovation in pricing</i> (Ryanair's charges for per-checked-in-item of baggage enabling price reduction of 9% for those not checking in any baggage).</p>	<p><i>R&D spend</i>; approximately 5.9% of revenue (twice the average of average innovators in Germany, and 50% more than the top 1,000 R&D firms in the world, and 68% more than mechanical engineering firms).</p> <p><i>Patents</i>: main reasons include own use and blocking of competition, but most firms do not use patents because of red tape, costs, time taken to file them, and unenforceability (cost of patent disputes for Blackberry in 2006 was \$202 million, 27% more than their R&D budget).</p> <p>But high intensity for those who consider it important (one patent per week since inception of Claas).</p> <p>Number of patent applications per 1,000 employees is 5.8% for large corporations, and 30.6% for mid-sized hidden champions but latter have lower level of R%D expenditure per patent.</p>	<p>Higher levels of revenue attributed to new products (e.g. AL-KO, world market leader in mobile home classics, hardly have any products less than four years old; Putzmeister, market leader in concrete pumps, earns 80% of its revenue from products less than five years in the market).</p> <p>Definitional issue creates problem of making comparisons (e.g. some manufactures produce individual products as for example builders of technical plants).</p> <p>Key technologies: many groundbreaking examples in microelectronics and nano technology (e.g. coated bonding wire that enables connection of semiconductor chips at room temperature).</p> <p>New products in mature markets: Claas Lexion model is the most innovative and powerful combine harvest).</p> <p><i>Global scope and push of international markets</i>, 56,1% of respondents of Simon's survey focus closely on feeding markets; only 9.9% depend primarily on home markets.</p>

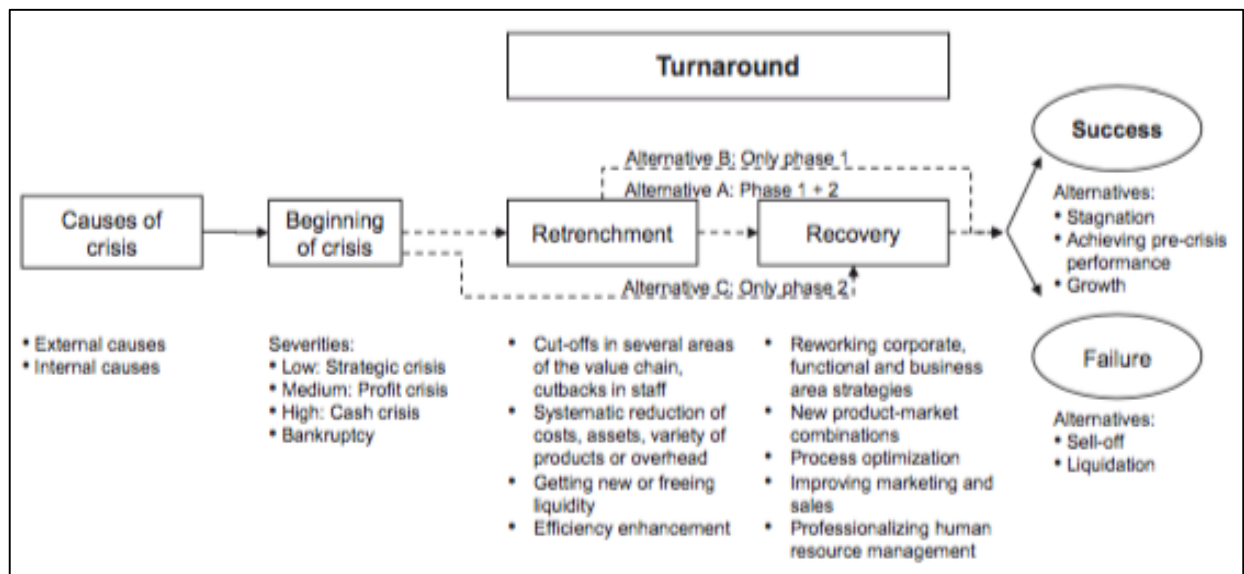
D. Stimuli for Innovation	E. Origins of innovation	F. Management leadership and strategy
<p><i>External:</i> customers, competitors, affiliated enterprises, suppliers and science – in that order.</p> <p><i>Internal:</i> top management; other company departments; R&D department.</p> <p>Practice of both resource driven and market-oriented strategies (markets and technology are equally important; with objective of achieving optimal synergies).</p>	<p><i>Identification of customer problem</i> (e.g. Weckerle, the lipstick machine manufacturer, the breakthrough for which came after discovery of manual production methods).</p> <p><i>Technological innovation finding different markets</i> (ion exchanger made originally by Bayer with no markets but a furniture seller sold products to gas stations to be used for producing water for batteries; this eventually led to birth of water filter produced by Brita).</p> <p><i>Application of problems and solutions from personal experience</i> (organic food production by Hipp grew out of Claus Hipp's grandfather mixing a porridge of milk, rusks and water in an emergency for the feeding of his twins).</p> <p><i>Meeting customer need.</i></p>	<p><i>Critical role of top management</i> – through entire process of innovation.</p> <p><i>Small budgets but greater reliance on quality of budget</i> (e.g. Vitronic, a leading player in image processing, making the groundbreaking European toll collection system – Toll Collection, small budget of \$7 million in R&D but has greatest concentration of specialists).</p> <p><i>Quality of employee</i> affects both final results and speed of innovation.</p> <p><i>Focus and continuity.</i></p> <p><i>Shared values and cooperation between functions:</i></p> <p><i>Co-development with customer.</i></p> <p><i>Significant role of women in management:</i> assuming leadership after husband's death; supervisory or advisory board membership; operational management as CEOs.</p> <p><i>Internationalization of management:</i> reflecting the high proportion of revenues generated abroad.</p> <p><i>Entrepreneurial managers and founding entrepreneurs.</i></p>

APPENDIX C: NATIONAL VARIATIONS IN CULTURAL CHARACTERISTICS

(Dicken, 2011, 175)

Group	1. Anglo	2. Germanic	3. Nordic	4. More developed Asian
Characteristics	Low power distance Low to medium uncertainty avoidance High individualism High masculinity	Low power distance High uncertainty avoidance Medium individualism High masculinity	Low power distance Low to medium uncertainty avoidance Medium individualism Low masculinity	Medium power distance High uncertainty avoidance Medium individualism High masculinity
Countries	<i>Australia Britain Canada</i>	<i>Ireland New Zealand USA</i>	<i>Austria Germany Israel</i>	<i>Italy South Africa Switzerland</i>
			<i>Denmark Finland Netherlands</i>	<i>Norway Sweden Japan</i>
Group	5. Less developed Asian	6. Near Eastern	7. More developed Latin	8. Less developed Latin
Characteristics	High power distance Low uncertainty avoidance Low individualism Medium masculinity	High power distance High uncertainty avoidance Low individualism Medium masculinity	High power distance High uncertainty avoidance High individualism Medium masculinity	High power distance High uncertainty avoidance Low individualism Whole range on masculinity
Countries	<i>India Pakistan Philippines</i>	<i>Singapore Taiwan Thailand</i>	<i>Greece Iran Turkey</i>	<i>Argentina Belgium Brazil</i>
			<i>France Spain</i>	<i>Chile Colombia Mexico</i>
				<i>Peru Portugal Venezuela</i>

APPENDIX D: AN ADJUSTED MODEL OF THE TURNAROUND MANAGEMENT PROCESS (Faghfour, 2012, 25)



APPENDIX E: EXAMPLES OF CRISIS MANAGEMENT SUCCESS AND FAILURE OUTCOMES (Faghfour, 2012, 27)

Crisis Concern	Failure Outcomes	Midground Outcomes	Success
Signal detection	All signals of impending crisis go ignored Organization is caught completely unaware	Signals of potential crisis send organization into stage of alert	Signals are detected early so that the appropriate responses are brought to bear
Incident containment	Crisis escapes beyond boundaries of organization External stakeholders are negatively impacted	Damage to those beyond organization boundaries is slight	Major impact is totally confined within organization There is no stakeholder injury or death
Business resumption	All organization operations are shut down Down time is lost in bringing organization back into operation	Areas of operation most affected by crisis are closed temporarily Functional down time is minimal with little effect on product/service	Business is maintained as usual during and after the crisis There is no loss of product or service delivery
Effects on learning	No learning occurs Organization makes same mistakes when similar incident occurs	Learning occurs but its dissemination is spotty	Organization changes policies/procedures as a result of crisis Lessons are applied to future incidents
Effects on reputation	Organization suffers long-lasting negative repercussions Industry reputation suffers as a result of organization crisis Public perceives organization as a villain as a result of ineffective crisis management	Negative effects of crisis are short lived Public perceives errors in details of crisis management effort but continues to consume product/service as usual	Organizational image is improved by organization's effectiveness in managing crisis Organization is perceived as heroic, concerned, caring, and a victim
Resource availability	Organization scrambles but lacks essential resources to address crisis	Organization scrambles and scrapes by on own and others' ad hoc assistance	Organization or external stakeholders' resources are readily available for response
Decision making	Slow in coming because of internal conflicts Fantasy driven	Slow in coming because of extraorganizational constraints	Ample evidence of timely, accurate decisions Grounded in facts

APPENDIX F: THE STUDY SAMPLE IN THE RUSSIAN FEDERATION

Name of Organization	Firm's Size	City/ Place of Interview	Activity/ Specialisation	Name and position of informant	Type of Applied Research Methods	Web-site
Oil and Gas Industry						
Gazpromtrubinvest-Volgorechensk Pipe Plant (VrTZ)	Large	Volgorechensk	Oil and gas tubular production	Lubov Anatoljevna Gradusova, engineer	Semi-structured interview	http://www.vrpp.ru/eng
Administration of the city district Volgorechensk	Expert	Volgorechensk	Head of Municipality	Alexandr Chuvilayev, Deputy Head of administration of the city of Volgorechensk	Semi-structured interview	http://www.volgorechensk.net/
Joint Stock Company "Yaroslavl Oil Refinery Named After D.I. Mendeleev" (YarNPZ)	Large	Yaroslavl	Petroleum refining	Anonym	Semi-structured interview	http://npz-mendeleev.ru/o-zavode/yanpz-segodnya/
Fishing Industry						
Russian Aquaculture (RA)	Large	Moscow	Production and distribution of fish and seafood	Anonym	Semi-structured interview	http://www.russiansea.ru/

Name of Organization	Firm's Size	City/ Place of Interview	Activity/ Specialisation	Name and position of informant	Type of Applied Research Methods	Web-site
Baltiyskiy Bereg (BB)	Large	Saint-Petersburg	Production and distribution of fish and seafood	Anonym	Semi-structured interview	http://baltberg.com/eng/
NGO "Union of Fishermen of the North-Trade Association" (SRPS)	Expert	Murmansk	Association of small and medium-sized fishermen in the North of Russia	Vasiliy Fedorovich Nikitin, CEO	Email-interview	http://srps.ru/
Tourism						
Globus	Small	Kostroma	Tourist service, domestic and overseas tours	Alexandra Shipanova	Semi-structured interview	-
Tourservice	Small	Kostroma	Tourist service, domestic and overseas tours	Sergey Hodchetkov	Semi-structured interview	-
Svetlana Tour	Small	Yaroslavl	Tourist service, domestic and overseas tours	Svetlana Tretyakova	Semi-structured interview	-

APPENDIX G: THE STUDY SAMPLE IN NORWAY

Name of Organization	Firm's Size	City/ Place of Interview	Activity/ Specialisation	Name and position of informant	Type of Research Methods	Web-site
Fishing Industry						
The Norwegian Seafood Association (NSL)	Expert	Trondheim	Promotion of common interests of the fishing, aquaculture and seafood processing firms of Norway	Svein A. Rappe, Administration director	Semi-structured interview	http://www.nsl.no/
Cermaq	Large	Trondheim	International fish farming	Lise Bergan, Corporate Affairs Director	Email-interview	http://www.cermaq.com/
Norwegian Royal Salmon	Mid-sized	Trondheim	Manufacturing and import of salmon	Ola Loe, CFO	Semi-structured interview	http://norwayroyalsalmon.com/
Oil and Gas Industry						
Technip Norge AS	Large	Orkanger	Subsea oil pipelines-production	Olga Lien, Commercial manager	Semi-structured interview	http://www.technip.com/

Name of Organization	Firm's Size	City/ Place of Interview	Activity/ Specialisation	Name and position of informant	Type of Research Methods	Web-site
Øglænd System Group	Large	Stavanger	Multi-discipline support systems, cable trays, cable ladders, and specialties for the oil and gas industry	Geir Austigard, CEO	Conference participation, short structured interview	http://www.oglaend-system.com/
Norwegian Oil and Gas Partners (INTSOK)	Expert	Stavanger	Network-based organisation where the partners exchange experience and knowledge of market developments	Håkon Skretting, Regional Director	Email-interview	http://www.intsok.com/
Tourism						
Visit Norway (Innovation Norway)	Small	Moscow	Promotion of tourism to Norway from Russia	Olga Philipenko, Director	Phone semi-structured interview	http://www.visitnorway.ru/
Innovation Norway	Expert	Saint Petersburg	Development and innovation of Norwegian enterprises in Russia	Nikolay Yurjevich Shavrov, Senior advisor	Semi-structured interview	http://www.innovasjon norge.no/

APPENDIX H: THE LIST OF PARTICIPANTS AT THE RUSSIAN SEMINAR “STILL BUSINESS OPPORTUNITIES FOR NORWEGIAN ENTERPRISES IN THE RUSSIAN O&G MARKET”

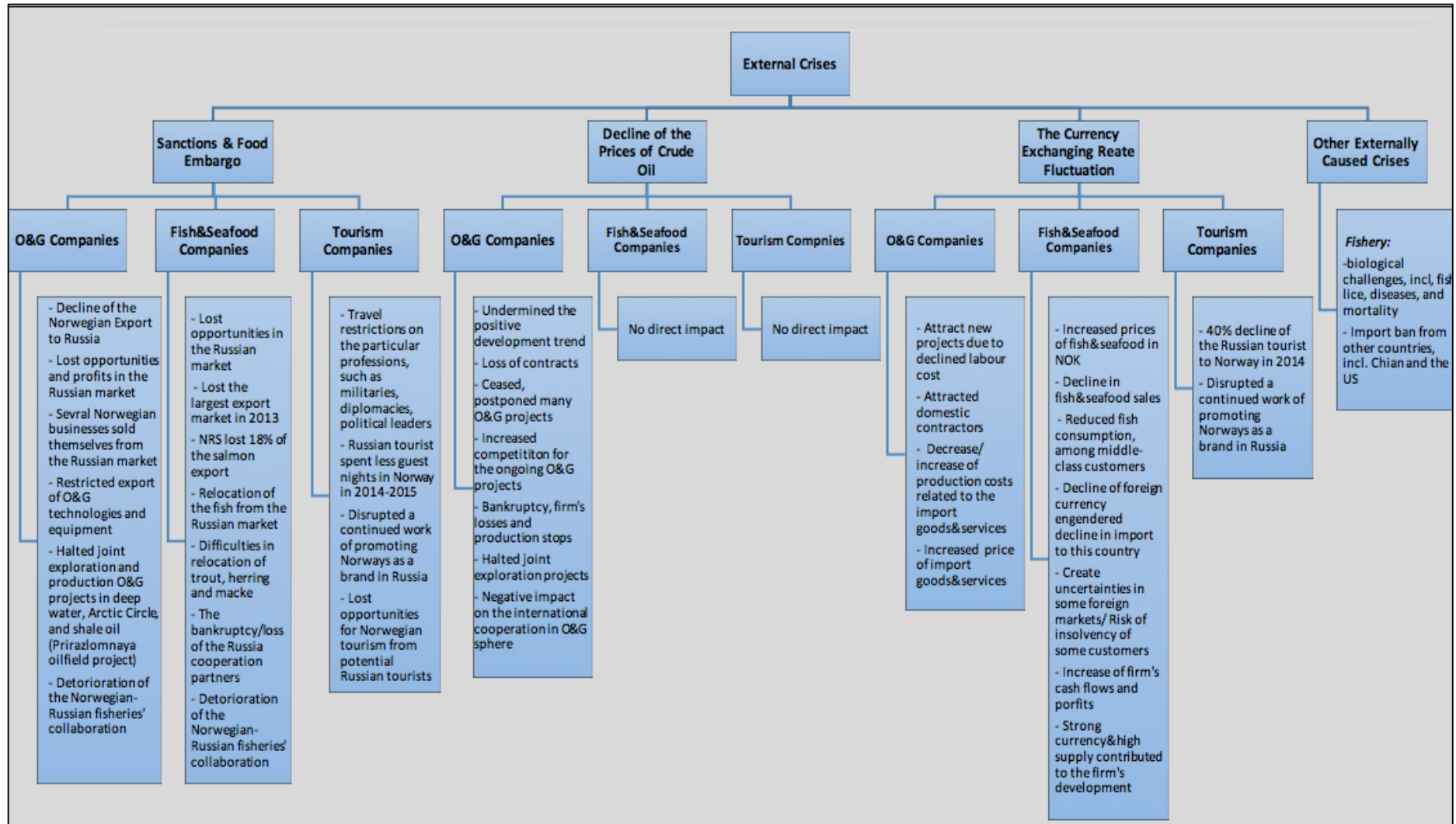
Name of Participant	Organisation	Occupation
Jarle Forbord	Norwegian-Russian Chamber of Commerce	Managing Director
Øyvind Nordsletten	Norwegian Embassy in Russia	Former Norwegian Ambassador in Russia
Svein Åge Dahl Olsen	Statoil	Head of Government Relations & Public Affairs
Geir Austigard	Øglænd System Group	CEO
Siv Kaspersen	Norwegian Ministry of Foreign Affairs, Section for Export Control	Deputy Director
Thor Christian Andvik	INTSOK	Project Director
Ola Smeby	Innovation Norway	Senior Advisor
Johan Bøe Bjørkevoll	Innovation Norway	Investment Manager

APPENDIX I: EXAMPLE OF QUESTIONNAIRE FOR THE FISHING COMPANY

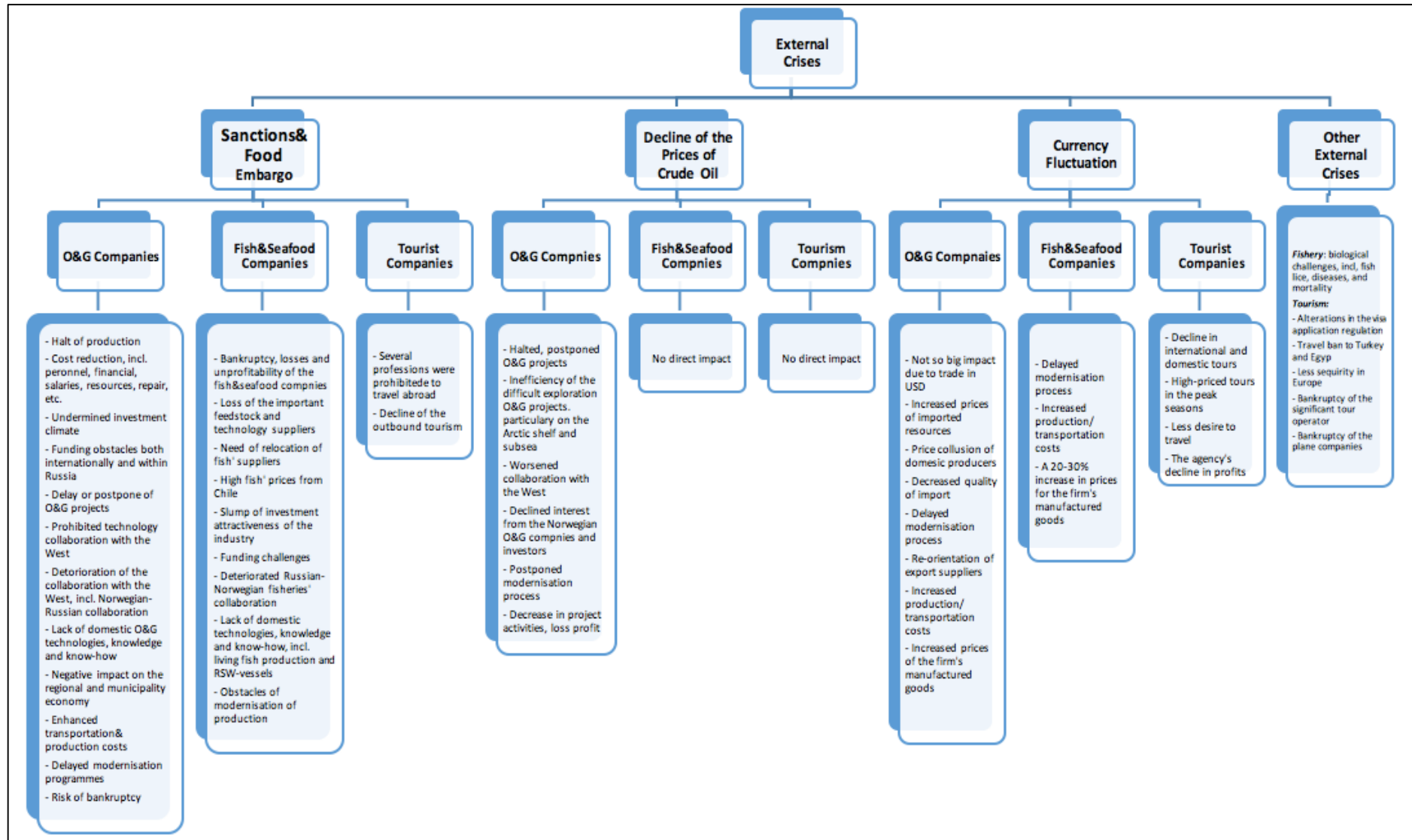
- 1) Hvordan kan du beskrive Norges fiskemarked i 2014-2015 sammenlignet med tidligere perioder? Har bedriften en positiv utviklingstendens de siste årene?
- 2) Hvilke fylker i Norge og land samarbeider bedriften innen fiskeindustrien med? Hvilke land er de mest viktige som samarbeidspartner, leverandør og kunder?
- 3) Hvilke eksterne kriser som for eksempel russisk matembargo, oljeprisene og valutakursene har påvirket bedriften og andre bedrifter innen fiskeindustrien i Norge? Hva mener dere om russisk matembargo mot norsk sjømat?
- 4) Har markeds-, leverandør- og kundestrukturen endret seg etter matembargoen?
- 5) Har krisen påvirket prisene på sjømat i Norge og i verden generelt?
- 6) Har rollen til Russland forandret seg for dere i 2014-2015? Var bedriften avhengig av det russiske fiskemarkedet?
- 7) Hvordan reagerte bedriften på de eksterne krisene i 2014-2015?
- 8) Har dere funnet nye markedsnisjer og samarbeidspartnere i andre land? Bruker dere det tredje markedet for å erstatte mangelen på fisk i Russland?
- 9) Har bedriften sitt innovasjonssystem forandret seg etter embargoen? Er det blitt større mangfold innen fiskeindustrien etter embargoen? Er det blitt omstilling og modernisering av produksjonsprosessene?
- 10) Har dere brukt krisehjelp for å unngå fall i produksjonen og inntekter? Har dere fått hjelp/støtte fra staten, universitet eller FoU o.l.?
- 11) Mener du at eksterne sjokk som sanksjonene og embargo kan bli utslagsgivende for videre bedriftsutvikling?
- 12) Hva er deres spådom, kvalifiserte gjetning for fremtiden til fiskemarkedet?
- 13) Hva tror du er det viktigste å gjøre når bedrifter treffer eksterne kriser/sjokk? Hva er «nøkkelen» til å unngå negative konsekvenser av eksterne sjokk?

P.S. Hvis du opplever noen av spørsmålene som upassende eller lite relevante, så er det ikke nødvendig å svare.

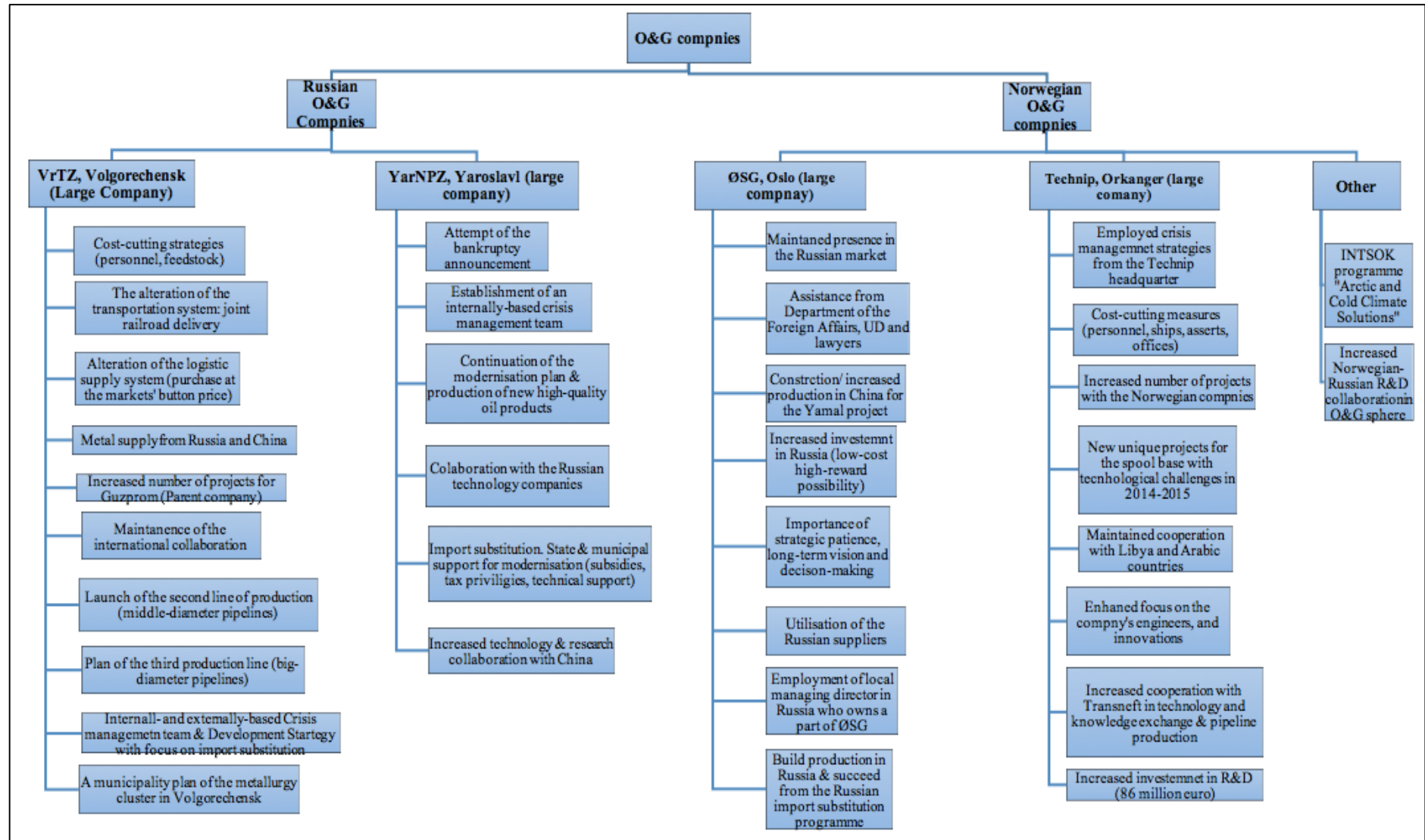
APPENDIX J: IMPACTS OF THE CRISES ON THE NORWEGIAN BUSINESSES



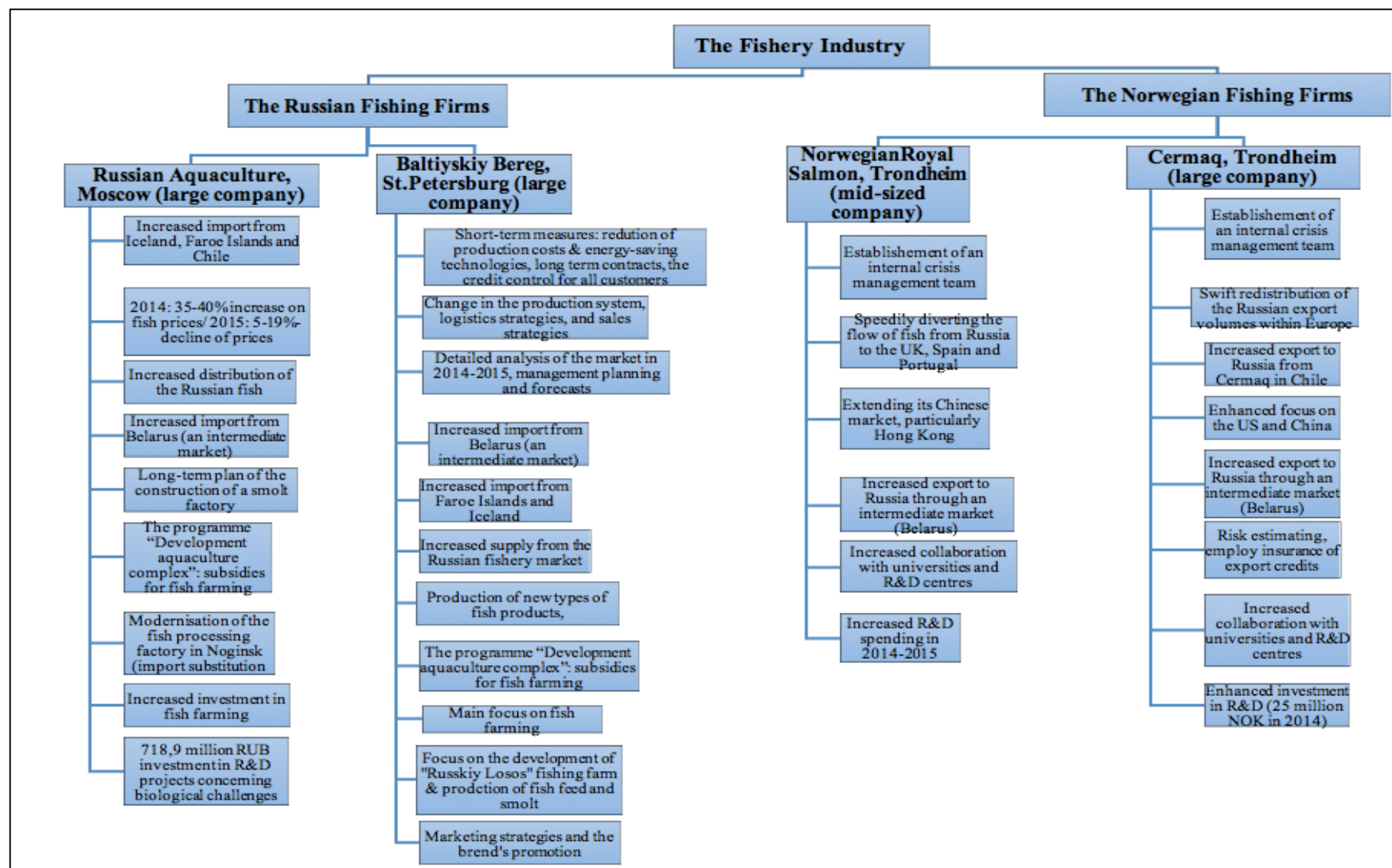
APPENDIX K: AFFECTS OF THE CRISES ON THE RUSSIAN BUSINESSES



APPENDIX L: THE O&G RESEARCHED COMPANIES' RESPONSES TO THE EXTERNAL CRISES



APPENDIX M: THE FISHING COMPANIES' RESPONSES TO THE EXTERNAL SHOCKS



APPENDIX N: THE TOURISM COMPANIES' RESPONSES TO THE EXTERNAL CRISES

