LUISS

DEPARTMENT OF BUSINESS AND MANAGEMENT

DEGREE - MANAGEMENT MASTER OF MANAGEMENT
INTERNATIONAL MANAGEMENT

MASTER THESIS

TOPIC: SIMILARITIES AND DIFFERENCES OF INTERNATIONAL OIL AND GAS COMPANIES' GROWTH STRATEGIES ON THE DOMESTIC AND FOREIGN EUROPEAN MARKETS: CASE OF GAZPROM IN RUSSIA AND GERMANY

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Rome, 2021-2022

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Introduction

The globalization has been the reason to be pushing the progress all around the world, attributed to the ease of movements and information transmission through developing technologies. The oil and gas industry stands at the centre of the globalization. When we look at the slowdown of the oil and gas prices demand which was kick-started by the corona-virus pandemic leading to the downside move of the pricing (Kissinger 2020, Laing 2020) suggest an energy security importance. At the brink of chaos at a global scale at a global level in geopolitics, supply chain, cross border movements, etc we are all steadfast at our levels to bring up necessary changes to adapt to the new environs (Galunic and Eisenhardt, 2001; Dhir and Mital, 2012). The businesses both small scale and the mega-giants have brought about necessary changes in the way they implement their strategies to be in pace with the ever-volatile market which became ever more unpredictable after the pandemic, to outgrow its competitor. The businesses at the same time have to push forth their growth strategies suited to the market condition so as to have a sustainable development (Doving and Gooderham, 2008). To study the growth strategies at an international level we can look specifically at the case of Gazprom in foreign and domestic market. This paper studies the Oil and gas industry on the backdrop of changing through the time and how the industry has been adapting to number of factors while considering major giants in the business and the proceeding forward for developing the case in different region.

The **object** of our research is growth strategies of international companies, while the **subject** is growth strategies of international Oil and Gas industry. The **goal** was set of the paper to be determination of similarities and differences of growth strategies of international oil and gas companies on domestic and foreign European market.

We had narrowed down our approach for the fulfilment of the research. To begin with we went through corporate governance as a primary factor in developing a growth strategy. There had to be done a thorough analysis of international oil and gas companies in the European market. Firstly, the Oil and gas Industry and how it initiated and later grew through the times using growth strategies was studied in Europe. Secondly, the oil and gas industry functionality and the broad structure were studied pertaining to the countries. Thirdly, the growth strategy of Gazprom was studied in the Russian and the German Market. Fourth, the outcomes were analysed to understand the similarities and differences of growth strategies in domestic and foreign market. Last but not the least, the growth strategies were explained and made outcomes from.

The key question around which our work will be defined is **What are the similarities and differences of international oil and gas companies' growth strategies on the domestic and foreign European markets?**

The timeline which we considered for Gazprom was from 1990 to 2021 to study the growth strategy without any major external influence. While 2022 was brushed through due to extraordinary circumstances development and huge number of events, where there was development of extremely volatile market with changes determined by constantly changing geopolitics.

In total this paper comprised of **three chapters each comprising individually of their sub chapter**. The three main chapters will be describing the theories and research till date, the studied case and the result comparing the practical applicability of the theories in different parts.

The **first chapter** will be working on the theoretical foundation to be set for understanding the theories which provide knowledge base for understanding the growth strategies of international oil and gas companies. The chapter is divided into 3 sub chapters of which to begin with the first sub-chapter specially brings into light the definition and exploratory search of the strategy and growth strategy and division of each into various types. Growth strategies specifically practiced widespread in the Oil and Gas industry is studied in the second sub-chapter to further bring forth practical approaches used by the company in the industries taking here the case of Oil and Gas industry. In the very last sub chapter, we will study the similarities and differences of different growth strategies applied by international oil and gas companies in the European market.

The **second chapter** we go through the international oil and gas industry in the European market. The industry study in that market will give us the reasonable practices, trends, developments, and other orientations of the company in various fields giving us the all over insight of the company Oil and gas industry with overview. This all will be elaborated in the first sub chapter. Later in the second and third sub-chapters we will consider the Gazprom's growth strategies in the Russian and the German market studying and describing each of them separately. The overview of Gazprom in both the markets will first be given in both the markets wherein position and orientation of how the company adapted to the environment of the market through the times will be discussed.

In the **third chapter** we will outline the key research finding explaining the similarities and differences of Gazprom in Russian and German market bringing up along the how they do with the oil and gas industry overall. Later we will provide recommendations to the companies working in the oil and gas industry to help them burnish their and enhance their presence in the market while also growing in the existing and new markets. Finally, we will discuss the limitations and recommendations for the research which can be performed in future.

The **methodology** that will be utilized in this study will consider both qualitative and quantitative data, primarily available from the industry's open-source platforms. We will analyse the company's official statements, websites, audits, financial statement, industry outlook, industrial databank, and other analysis of the industry. In parallel we will perform literature review through journals, articles, business review scholarly literature and other open-source data. Complimentary interviews were conducted to understand the Oil and Gas Industry at ground level.

The **theoretical basis** for the paper will be the following literature. Publications by A.Ilhan and Y. Durmaz, Al-Fattah and Saud, Victor and David, etc . While we also looked at Europa and various other energy journals and outlooks.

Chapter -1 Theoretical Aspects of Similarities and Differences of Growth Strategies of Oil and gas companies on domestic and foreign European market

In this chapter we will be covering the various international growth strategies that are undertaken by various international companies. The first sub-chapter will encapsulate the concept of strategy. Post the coverage of the growth strategies undertaken we will move to the growth strategies within the constraints of oil and gas industry in the second sub-chapter. The ending part of the chapter i.e., the third sub-chapter will then put up the growth strategies specifically in the oil and gas industry and against the ones practised in general throughout different industries.

1.1 Growth strategies of international companies

The growth strategies are primarily used for the development and achieving the sales and profit margin which the company has been aiming at thus giving the much-needed drive. Strategy is one of the areas and the founding stone for any firm throughout the globe to develop and keep the functionality of the business. Market needs, customer needs and respective advantages and drawbacks are to be researched in advance to sprout new strategies in the event of business participating in a new sector or new market. (Dixit, A. K., & Nalebuff, B. J. 2010). In this sub chapter the strategies and their parts will be studied in specific while the company cases will give us the glance over its applicability while not including the entry strategies because they are out of scope of our research.

Corporate Governance

The research point out the direction to attain maximized firm value begins with the corporate governance which further is linked to the market value.This not only is important when there is a single country but also against multiple countries with different foreign markets (Black, 2001; Black,Jang and Kim, 2006; Gompers, Ishii and Metrick, 2003; Durnev and Kim, 2005; Klapper and Love, 2004). Risk reduction, efficient management and undertaking of capitals and improvisation in the operation mechanisms all come under corporate governance. Board of directors play a important governing mechanism thus inculcating a positive push in the performance. Decision making is more visible in large board with more knowledge and diversity (Dalton et al, 1998; Van den Berghe and Levrau, 2004; Pearce and Zahra, 1992).

Organic Growth Strategies

Beginning with organic growth strategy which are also referred to as internal growth considers the economical, physical, social, and organizational growth that takes place within the organization staying free from the influence from the external factors or interactions (Oncer, 2012, p. 408). It comes into place when the business activities are expanded by introduction of practices such as pushing the quantity of sales and introduction of product portfolio to already existing commodity. The growth strategies on the other hand are subjugated to limitations which comes forth by the resources under the company. The functioning and utilization of organic growth encapsulates multiple equities such as finance movement within the company, acquiring new stocks for capital while also lending some (Simsek, 2008, p. 43). The growth within the technology and innovation while at the same time management and best use of the available assets, giving importance to improving customer-oriented relationships and shifting the focus to processes related to the product are all roots of organic growth (Bruner, 2004, pp. 44-50). The management is easy thanks to the tedious and simple approach undertaken in this type of growth (Colpan ve Hikino, 2008, p. 38).

The organic growth is visible in action when the companies engage in crossing the threshold of earlier existing product range and the size while also in case were with or without doing so engaging in international cooperation with businesses. The high magnitude of positive impact can be seen on capital stock, equity, feedstock, energy, and number of employees while growth is seen in business existing construction is also seen. Along with this increase of positive demarcated influence of the business with regards to public is also seen as organic growth (Oncer, 2012, p. 408). The organic growth diversification strategies also can lead to the business expanding into different domains (Karaevli, 2008).

Organic growth consists of following three categorizations:

A) Intensive Growth Strategy

Undertaking the factors product and market, the intensive growth strategies have been described by Ansoff and separated in 4 types. The 4 types which are come under the umbrella of intensive growth strategies are: Market penetration, market development, product development and diversification (Engin, 2005 p.24). This strategy finds its main application within the markets where there is no presence at all or there is very minimum share in the market.

A.1 Intensive Growth with Market Penetration

When the company uses already existing range of product into the market is called market penetration (Mucuk, 2010, p. 44). The market penetration though requires a thorough of knowledge extraction about the current situation of the market for the introduction of the product for a larger market share with the product available in stock (Timothy, Parpairis, MacDonald, & Tosun, 2013, p.8).

A. 2 Intensive Growth with Market Development

Market Development is the creation market divisions for current business products (Timothy, Parpairis, MacDonald, Tosun, 2013, p. 8). The market development strategy has a recurring critical role in hostile takeovers of the leadership. Special emphasis of such to be seen mainly in the industrial good sectors (Kiamehr et al.,2015) wherein a reluctance is seen to be absorbing the upcoming products which the laid forth in the market as a systematic competition to the already existing product of the leadership even if it displays a better resolve to the cost (Kim and Lee, 2008; Kwak et al., 2018).

The customer is at the focus point when it comes to developing a close and enduring relationship which resembles a partnership of cooperation format (Pavitt, 1984; Palmatier, 2008).

A.3 Intensive Growth with Product Development

Such type is seen in cases where the company is looking forward to upgrade or substitute the existing product base in the available stocks to influence the activities undertaken in the market (Simsek ve Celik, 2011, p. 68). The goal is concentrated on increasing the lifeline of the developed product while also utilizing the existing trademarks which at the time are attaining the popularity. The literature recalls till date point out to establish a relationship between innovation and the growth of the given enterprise.

The progress is much or less seen by the internal capabilities and capacity to launch innovation at the very forefront at the point when the country has mainstreamed technology (Hoekman et al., 2005). The R&D fetches into a space in which not only new technology is brought into the existing environs but also helps in the adaptability of same to bring it in tune for the domestic suitability. Public universities and research tie ups to the industry is one of the keyways to be aid such kind of domestication while R&D providing the ease for the technologies. The prior scenario is aided by the international transfer of the technology mainly when a country is lagging in the field with respect to a technologically advanced country (e.g., Grossman and Helpman, 1991; Coe et al.,1997).

A.4 Intensive Growth with Product Diversification

The strategy to diversify considers the very growth and development that a product goes through to place it into a new market for use. The use of this strategy inhibits the possibility of the entrance of into undiscovered market with minimal or no market knowledge with a new product catalogue. The technological expertise is of primary importance in application of this strategy (Ansoff, 1958). The motives for the product diversification are argued to be extracting benefits from economies of scale by targeting the resources to exploit and grow the market power, to increase the life of firm, reduction of bankruptcy risk while also taking into consideration the utilization of the same to benefit and help to find protection from tax (Copeland, Weston, and Shastri, 2004). The dynamics of the firm's diversification act in influence on the value of the firm. When a firm is diversifying into an industry which is in relation to the existing operations the firm increases the value while a diversification into a unrelated business cuts down on value (Berger and Ofeck 1995; Graham, Lemmon and Wolf 2002).The growth in which new products are evolved such as to make them adaptable to new market introduction encapsulates as Diversification (Timothy, Parpairis, MacDonald & Tosun, 2013, p. 8).

	CURRENT PRODUCTS	**NEW PRODUCTS**
CURRENT MARKETS	Market Penetration	Product development
NEW MARKETS	Market Development	Diversification

Table 1: Product-Market expansion grid
Source: (Ansoff, 1957)

B) Diversification

Diversification strategies is an exceptional case from the above-mentioned strategies given that it requires the development of new establishments with new assets, new technologies and new skill set for operation-ability despite already existing equities (Kocoglu, 2012, p. 720). Considering the value which the firm has to go through we can see that the geographical diversification adds value while a decrease is seen when there is an industrial diversification (Bodner, Tang and Weintrop, 1998). The family firms usually consider diversification as one of the founding pillars of their strategic vision (Pukkall & Calabro, 2014; Stadler, Mayer, Hautz, & Matzler, 2018; Zellweger & Kammerlander, 2014). While the family firm diversification has been largely an integration of the product and international diversification which have been thoroughly revised by multiple scholars in both strategic management and international business niches (e.g., Bowen & Sleuwaegen, 2017; Kumar, 2009). If a family firm aims for diversification, they are very likely to go for diversification strategies which tag along a comparative less financial and socio-emotional risk (Gomez-Mejia et al., 2018). The dominant firms which have not diversified and are working along together by inducing a grouping prove a better average return on equity with a better variance when compared to diversified firms which are inclined to give better results in the areas of risk vs return (Pandya and Rao, 1998).

B.1) Concentric diversification

In this the pushing of similar products for new market is at foremost attention and all the available resources utilization is placed at the disposal for the same. The focus is maintained on the technologically superior product or on markets where similar products are already existing (Ansoff, 1958). The existing research bring into account the relationship that existed between the given strategy and the profitability (Rumelt, 1974). Miller, 2020 and Palich et al. 2000 have both shown how there is inverted U-shaped and positive correlation between the concentric diversification strategy and firm performance wherein there had been 55 and 227 firms considered for each. 70-90% is the success range reported to be existing for the companies implementing concentric diversification strategy for growth while 90% failure has been in the companies which try to go beyond the scopes of their core and try to induce competencies in a new field (Zook and Allen,2001). Research and Development field finds itself enjoying the perks of this strategy given that it has a major cost-cutting and reducing time role if the implementation is feasible (Cantwell and Piscitello, 2000) while also giving up an upper hand by developing resonance with the businesses in the sphere (Patel and Pavitt, 1997; Valvano and Vannoni, 2003).

B.2) Horizontal Diversification

Horizontal diversification is the case build up when the enterprise is approaching the market with a product which doesn’t have similar competitor already in the market. The positioning in the market will not have a relationship with already existing state of the market or the different existing commodities. The revamp or upgrade of the products which are already existing are not included in this diversification strategy (Ansoff, 1958). The firm in this diversification prominently operates within the economic environment which resembles its existing operations thus there tends to be low flexibility (Laurila and Ropponen, 2003), while being responsive to cyclical fluctuations and competition (Wiersema and Bowen, 2008). The synergy which the firm has in the market along with the technological outreach are the variables which help to achieve efficient scale and high market power (Helfat and Eisenhardt, 2004). Resources suitable for the strategy, optimal knowledge and the lower resistance from the organizational structure are the ones which influence the decision while the regulatory proceedings and the characteristics pertaining to the industry have negligible impact (Shaffer and Hilllman, 2000).

B.3) Conglomerate Diversification

While implementing the conglomerate diversification strategy the businesses invest in areas where the process of the production varies from the one already in use. The strategy finds its use in multiple types of markets giving the businesses a competitive edge wherein they can be increasing their profitability by having a better margin within the development area (Ansoff, 1958). The good investment opportunities can surely influence the conglomerate diversification in a way that the utilization of the excess resources, capital and or provide a growth trajectory with promising profits (Williams et al. 1988; Montgomery, 1994). The company is provided by a chance to be able to bring out a genuine prospect for products and techniques by optimization of Research and development to be able to work on the by-products (Geinger et al., 2020).

C) Modernization Strategy

The old equipment when substituted with upgraded alternatives with better performance considering being more modern or technologically advanced is termed as Modernization. The increase in production and quality improvement are the areas where a major development takes place suiting the firm. The cost cutting by efficient process of conversion of input to output creates benefits for the firm (Engin, 2005, p. 24). The outcomes of any project for modernization are to require investment hailing from the investors. The investors could be either a state, individual or a collaborative group who require a prior assessment of the project using standard methods. The methodological aspects of the standard deprecation accounting are already brought forward in number of studies (Amanova, et al., 2016; Grigor'ev, 2018).

Inorganic growth consists of following three categorizations:

A) Strategic Alliances

A shared common goal for 2 or more firms for which they merge is termed as strategic alliance. The strategy can also act as a bridge for conjunction of sources and resources. The capital, skill, knowledge, and market outreach are some of the areas whereas mutual growth is seen by the participating enterprise. The outcomes of such partnership can help the business get an opportunity to be working on an international platform where the other players presence can suit the company. The enhanced quality of product provided at a better price range gives them a competitive edge in the market and help them expand (Östlund & Lindblad, 2008).

A.1) Joint Ventures

The alignment of multiple parent companies to be forming a child company wherein each company has their stake thus enabling them to align themselves towards the same goal. The formation of such mutually benefiting joint efforts enable them to maintain a source of income and generate income from the same. The company's product ownership is shared by all the participants (Kalia, 2019).

A.2) Equity Strategic Alliance

The acquisition of the shares of an enterprise by another firm or mutually interchange of share control by acquisition or purchase of block of shares from the other. (Kalia, 2019)

A.3) Non-Equity Strategic Alliance

The non-equity strategic alliance takes place when 2 or more firms agree to conduct research, fulfil production, or have exchange of technology without including capital availability. The informal conclusive nature of such agreements makes it more frequent (Kalia, 2019)

B) Merger

Merger happens when a equity is formed by unification of at least 2 companies on legal standards. The primary trigger is maintaining the suitability for survival which in some cases tend to be collapsing for either or both, growth of the company and obtaining a competitive edge over other players in the market. Horizontal, vertical, and conglomerate are the different types of mergers taking place (Östlund & Lindblad, 2008).

B.1) Horizontal Growth

Horizontal merger takes place between companies which are operating in the same business cycle thus having same environment with similar work and competition. Operation scale turns to be more efficient with the division integration hailing from both the companies (Ilhan & Durmaz, 2015).

B.2) Vertical Growth

Vertical growth mergers differ from the horizontal growth merger given that in this case the companies are operational at different levels of production cycle. The merger happens when the enterprise is expanding by including the different stages of same production process to the existing range of governed and expanding the business area. The businesses aim for the unification of the production processes while also working on the demand for the product existing in the market. Setting price, advertising, and contracting all are reduced with the merger which help to integrate businesses (Ilhan & Durmaz, 2015).

B.3) Conglomeration

The places where the business areas are not overlapped the companies can go for the conglomerate mergers where the enterprise either take over another company or unify with another company for joint effort such as to ascertain a source for raw material or benefit in the production inventory and aids. The strategy specially dwells in the supply chain field where problems originate from improper resource and material transfer (Ilhan & Durmaz, 2015).

C) Acquisition

During acquisition a firm either buys out another firm or takes over particular business units or partially buy the firm. The acquisition works around the fact that the purchased components of the firm were not efficient or working at maximum deliverance. The company puts forth decent capital even though shortcoming on efficiency (Ilhan &Durmaz, 2015).

C.1) Hostile Takeover

This type of acquisition takes place when the target company refuses to be acquired during the tender. This can be commonly seen in the case where the managing board of directors are not enjoying a majority shareholding. Whereas another situation it is visible that the company is lookout to acquire another firm and thus behaves aggressively by declaring and providing the offer to the board of the directors thus placing a pressure and preventing it to tackle the situation in their favour (Cornell Law School, n.d.)

C.2) Hostile Takeover

Friendly takeover happens when the pre and post scenarios are discussed and mutually accepted by both the companies. The composition is thoroughly gone through and accepted by everyone in the top management, shareholders, and directors. The bidding is done by introducing the proposal by the bidder to the board of directors which further takes accountancy and pace it towards the management and shareholder. All over the process being conducted in a friendly tone at every stage (Cornell Law School, n.d.).

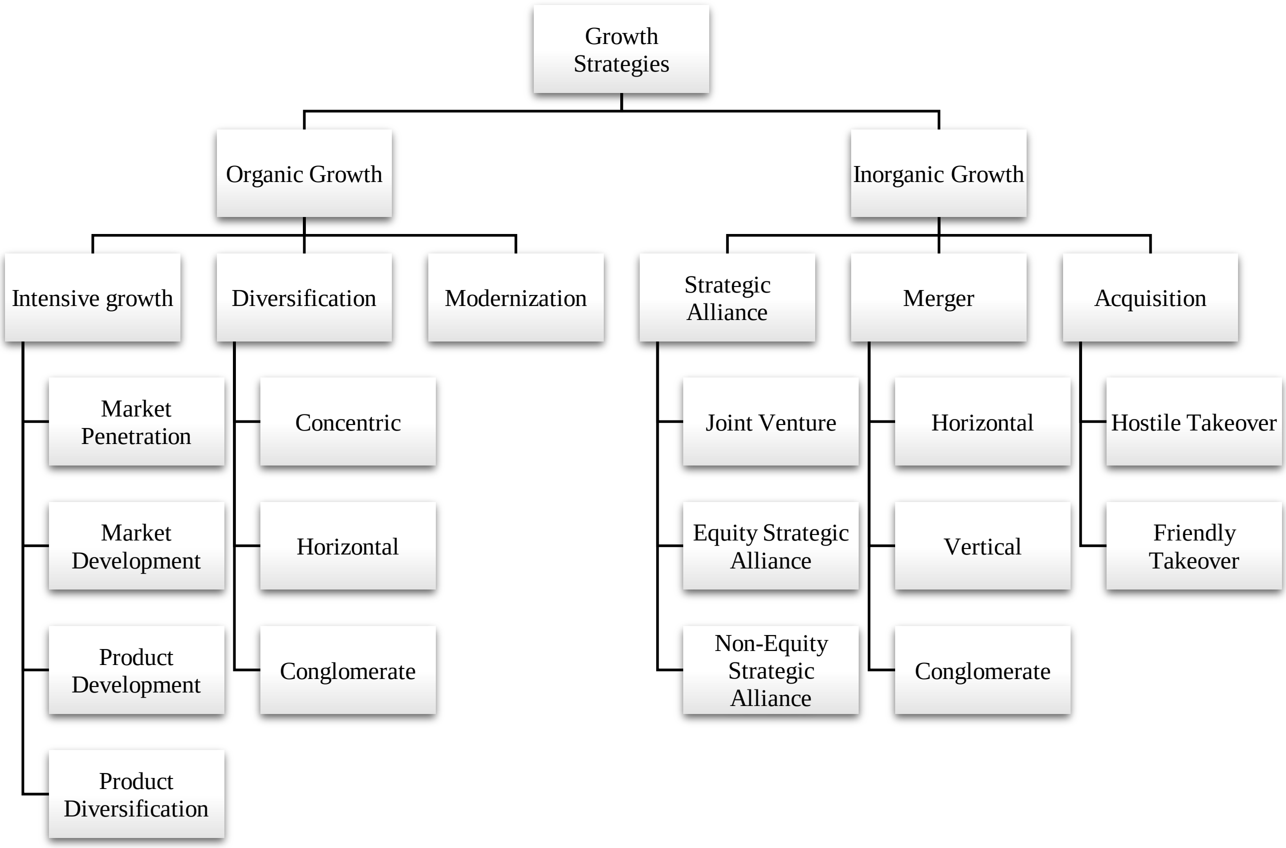

Figure 1: Types of growth strategies

Source: Ilhan & Durmaz; Ansoff; Kalia; Engin; Ostlund & Lindblad

The sub chapter 1.1 we went through the terms strategies and growth strategies understanding their scopes. The objective, goals, resources, competitors, policies, and other peculiarities of the business environment governs which strategy and with what implementation procedure be applied. The concept of growth is divided into organic and inorganic, which the organization continuously work towards to leverage its capabilities to attain a better position and state was studied.

1.2 Growth strategies of International Oil and Gas Companies

In this sub chapter we will be looking at the Oil and gas industry and its various aspects. We will firstly look at the overview of oil and gas industry then move towards the growth strategies which are operational in the oil and gas industry.

The oil and gas industry bifurcated into mainly three different sectors: upstream, midstream, and downstream (Attia et al., 2019). The upstream revolves around the works in the exploratory areas that includes the sub domain such as production and the use of drill for fetching the resources while other areas take into account the development of the oil and gas. The mid-stream sector labels the area of supply chain in which the transportation of the oil and gas is accounted for while also the marketing area where the burnishing of the enterprise is taking place. Lastly the downstream sector denotes the processing of the oil and gas to refine it, storage facilities to store the oil and gas while also working out on the sales process (Watson, 1998; Pike and Neale, 1997; Hyne 1995).

Oil and gas industry also has another segmentation which are 1. Service companies which are heavily skill dependent and provide engineering and management services for infrastructure development. These companies also are at the knife edge for innovation. 2. Pure downstream companies which work on operating the refineries and retail networks while their capital and finance being weaker areas. 3.The trading company which were formed after the deregulation of the oil and gas market post which they were sold in the forms of stocks bonds and other quantity (Newendorp, 1996; Ikoku, 1984).

For implementation of any strategy the oil and gas industry primarily looks into the oil reserves, capital, resources, industry concentration and economic development that is happening both home and host country (Xu, 1999).Secondly the overlook of the market knowledge, supply chain and the network, global production, crude oil prices, cost structure and the international strategies that is governing the industry pace at that time (Ng & Donker, 2013).

Corporate governance in Oil and Gas Industry

Oil prices uncertainty and firm performance are juxtaposed by the dominant role undertaken by the corporate governance (Song & Yang, 2022).The policies making and control of the oil and gas companies are very well looked into by the governing body with frequent meetings. While according to the study by Orzalin and Ospanova, 2015 of oil and gas industry in Russia were not to show any result of diversity and big board considering the diverse and big board which helps in the growth strategies.

Organic Growth Strategies

A) Intensive Growth Strategy

A.1) Market Development

The structural adjustment program for the Nigerian economy had deregulated the economy thus leading to oil and gas industry being the recipient of the effect. The Nigerian oil and gas companies utilized various market mix to help them reach the market and cover a broad range of consumer, introduce a new product ratio, position with new pricing, building up orientation which is more competitive to enable them to grow and survive (Johne and Davies, 2002). The commitments made during marketing which are perfectly concrete and in tune with the organization and the people working in the sales department. This is critical to the growth and survival of oil and gas industry keeping in mind the subtle, risky, and highly competitive market which envelops the businesses (Osuagwu, 1999).

A.2) Production Diversification

Alongside the running merger and acquisition the companies functioning in the oil and gas sector during the time between 1975-1984 had been working towards diversifying a better opportunity solution against what they have been looking forward in the exploration which were happening domestically and not being able to produce concrete results similar was the case in the company development effort. Amco invested in a food company, microelectronics, biotechnology, a solar energy company and coal mining and mineral companies. ARCO was another example which invested in Anaconda Copper, a metals producer, heart pacemakers, precision metal casting and high-tech business ventures. While Chevron was a case which divested towards uranium mining processing, metals mining and geothermal power. Exxon invested in nuclear activities microelectronics and office equipment an electrical motor company, semiconductors, coal mining and other metal mining activities (Weston et al., 1999).

B) Diversification

B.1) Horizontal Diversification

During the 1990 there were multiple businesses in the oil and gas sector that diversified into the petrochemical field in light of the adverse effect in the stock market (Weston et al., 1999) while the other which operated in Europe developed strategies to integrate into the natural gas supply chain forward while side-wards into the production of electricity. These businesses namely comprised of 6 companies in the business BP, Exxon, Hydro, Shell, Statoil and Total (Eikeland et al., 2004). These diversifications primarily in minority investment example BP undertaking stake in Lightsource, Equinor taking stake in Scatec and Shell acquiring power distribution company First Utility (Shojaeddini et al., 2019). The margins which were tallied forth in different zones of the supply chain and purchasing and selling of assets to develop a secure market and economies of scale were some of the motivations that were pillars from strategical viewpoint. While there had also be seen a forward integration oil supply chain for the reach out of the petroleum products into the retail energy consumers (Ã, 2007).

B.2) Conglomerate Diversification

Conglomerate Diversification in Oil and gas industry are very rare and barely evidence of occurrence. The very few cases could be associated by the social challenges faced by the large oil and gas upstream companies. The production of sports by OJSC Surgutneftegas was studied by Markarenko and Kornilov (2018). For the simplicity we can note that the Conglomerate Diversification as non-existential.

C) Modernization Strategy

Oil and gas industry which underwent multiple phases of restructuring from the time of regulated mechanism by inducing a deregulation has also made the oil and gas industry data-intense by overloading it with lots of data in form of paperwork further leading to monetary losses and the time used to execute them. The multiple parties positioning who have a stake or an interest in the business or the transaction taking place makes it the process cumbersome with a lot of fragments developing in the trust-base leading to a delayed slower development (Lu et al., 2019). Technology in the oil and gas industry giving the dependency of the companies over their data. This on the other hand leaves them being vulnerable through data breach and security issues (Khan et al., 2019).

Kazakhstan looking forward to increase oil production which won’t accelerate the profit by same margin. The Kazakhstani oil companies are placing innovation in production, data processing, monitoring, sensors, and balancing environmental requirements (Petrenko et al., 2022). The technology implementation in Oil and Gas Industry also comes with the requirement for the skill set to be present in the company for the customization and adaptability needs of the company for which the expert believe the Kazakhstani companies are ready (Sansyzbayev, 2019). The integration of the hardware and software for the free flow of information while replacing the components needed to be changed is prior constraints for the technology adaptation, the same being underuse by the different players of the industry.

Inorganic Growth Strategies

A) Strategic Alliances

The strategic alliances in the oil and gas industry could be defined on functional basis like for exploratory or production usage in constraints of a typical type of technology and on the other hand could be relinquished on the geographical scope where they specify the country or regional extent. The scope of venture to be engaged in is mutually agreed upon whereas also the areas left open for either of them to experiment and participate defined. Technologies, training, risk and project management experience, human resources and access to market are key exchanges (Robert A.James, 2011).

A.1) Joint Ventures

The oil and gas industry has a typical feature of having huge costs and very high risk associated with the projects as a requirement of infrastructure build-up is needed for a successful functionality. The very strict number of companies that are resourceful enough of conducting such projects are hesitant to undertake such risk on sole basis (Sayer, 1999). The companies therefore balance off this risk and associated cost by making joint applications for licence acreage thus distributing costs, risks, and benefits as agreed. The 6 Joint venture between Nigeria National Petroleum Corporation and multinational companies demarks how the national economic interest comes as a factor thus inculcating technology transfer by the participant multinational company. The ventures were Shell petroleum development company of Nigeria limited (SPDC) composed of NNPC (55 percent), Elf (10 percent) and Agip (5 percent) ; Cheveron Nigeria limited composed of NNPC (60 percent) and CNL (40 percent) ; Mobil producing Nigeria unlimited composed of NNPC (60 percent) and MPNU (40 percent) ; Nigerian Agip oil company composed of NNPC (60 percent), Agip (20 percent) and Philips Petroleum (20 percent) ; Elf petroleum Nigeria limited composed of NNPC (60 percent) and EPNL (40 percent) and Texaco overseas petroleum company of Nigeria unlimited owned by NNPC (60 percent), Texaco (20 percent) and Chevron (20 percent) (Marshall, 2016). While there can also be cases seen where the minor parties are started to work under some projects as affiliation to main project undertaking the risks solely thus creating sub-venture under Joint Venture (Bean,1995). While Shell and Exxon case where they exercised a monopoly position in the gas transmission in Netherlands where they jointly owned Gasunie. While in Germany they had extended roots wherein they had a history of ventures where they controlled BEB an upstream oil and gas company which had control over a good deal of pipeline networks in Germany.

A.2) Equity Strategic Alliance

On one side of a coin is availability for a company in the oil and gas industry to outright acquire another company for a beneficial integration. The company can on the other side go for subcontracted relationship based on monetary feasibility can acquire a partial portion by shares of a different company. This is common in the international oil company getting acquired by a national oil company where the political challenges present a hindrance in an absolute acquisition (Robert A.James, 2011).There are also cases of national oil companies whose foundations are not laid on the profit generation but other non-economically beneficiary undertakings by government such as maintaining employment, developing infrastructure or generating hard currency thus having government retain some shares. The great amount of retained earning that the middle east national oil companies have can be utilized and brought up when the revenues that have been generating from hydrocarbon reserves are to be falling at running low thus enabling them to provide issuance of equity and debt securities in the public market. While exercising equity or holding in an oil and gas companies is brings up complications.

ConocoPhillips acquiring 9.9% of common stock of Russian oil company LUKoil, Sinopec having 15% stake in AP LNG project from ConocoPhillips and Origin Energy Limited after having an agreement with Australia Pacific LNG are some examples of Oil and Gas company undergoing Equity strategic Alliance. While in the case of Saudi Arabia, Iran and Kuwait which together hold 40% of global oil reserves will use the royalty agreements, development agreements and fiscal agreements in replacement for equity stakes (Robert A.James, 2011).

B) Mergers

Companies in the oil and gas industry can obtain better economical profiting by making strategic decisions alongside remodelling supply chain and by working on field development, storage planning and the way the product is getting distributed (Abdussalam et al., 2021 ; Sahebi et al. 2014 ; Shah et al. 2011).The previous researched also brought into light that collaboration and integration were the primary strategies if the company is looking forward for economic growth (Cedilllo-Campos et. al., 2020; Er Kara et al., 2020 ; Long, 2018). The horizontal or vertical integration by the means of merger between two or more companies thus providing a rearranged and transformed business opportunity can help the company grow (Khan et al., 2019).

B.1) Horizontal Mergers

The primary founding explanation for horizontal mergers in oil and gas industry is the cost reduction and generation of better profit margins (e.g. Combining of duplicator functions) (Alnaqbi et al., 2022). Horizontal merger primarily takes place when the two companies are working in production, distribution which are to be brought under a single umbrella of management. Competitiveness existing in the market is also reduced by some definite amount due to the merging of two companies competing in the same field (Hsu et al. 2017). The additions of economies of scale and economies of scope are the 2 fields which enhances the growth. Exxon and Mobil merged for bringing down the cost and battling and improving the oil prices by reduction in the competition.

B.2) Vertical mergers

These types of merger during the 1980s and 2000s in the oil and gas industry where it was seen to be more attentive towards the overhead costs and build oil and gas reserves (Caiazza et al., 2013). The drive towards such mergers being the unstable oil prices which provided a relatively scare return on the capital (Graham and Sheeren, 2015). Ghanian company which merge with the Western companies which bring in innovation and technical expertise where the local company get restricted to providing labour is example of vertical merger (Scholvin, 2020).

C) Acquisition

C.1) Hostile takeover

Hostile takeover brings a both positive and negative image. Post the takeover the allocation of the assets which comes from the firm taken over are seen to be assigned mostly in the firm operating in the same industry or has business operations closely related to the target firm (Bhagat et al., 1990). DNO's takeover of Faroe Petroleum, Obsidian Energy hostile takeover of Bonterra Energy and Brookfield taking over Inter Pipeline are examples during the period 2019-2021 (Nasralla, 2019). While one of the most prominent examples of the hostile takeover shielding attempt in the oil and gas industry can be taken as the campaign by Gulf Investors Group. The Gulf Investors utilized the strategy of spun-off of the corporate assets. The campaign in 1983 under T. Boone Pickens, Jr., was on a very extensive scale launched proposing a royalty trust which would be made of 50% of Gulf's U.S. oil and gas reserves promising a raise of shareholder value (Regan & Reichel, 1985).

C.2) Friendly takeover

The example of Calima Energy's friendly takeover of both of its joint venture partner in Montney oil and gas Basin in Canada post which Calima will not only get the outright ownership of the Montney project but also grow the company's size and profile in the Canadian Basin (*Calima Launches Friendly Takeover of Oil and Gas Partners*, n.d.).The oil and gas industry sees the Friendly takeover within the companies which already have been engaged in knowledge exchange.

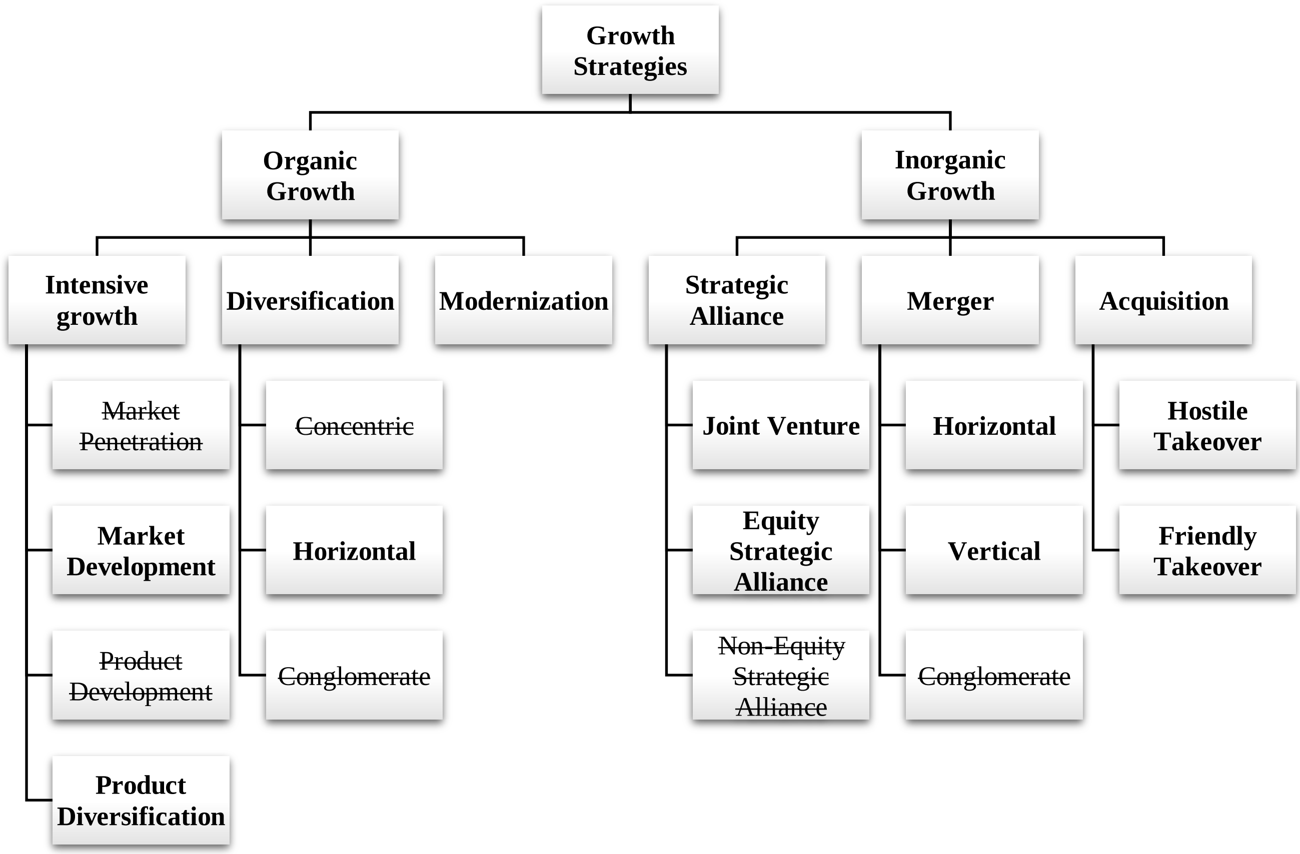

Figure 2: Types of growth strategies in oil and gas industries

Source: Ilhan & Durmaz; Ansoff; Kalia; Engin; Ostlund & Lindblad

Modified by authors to bring in line with oil and gas industries

The oil industry can be segmented into multiple parts depending on the decisive factors. Market Development, Product Diversification, Horizontal diversification, Joint Ventures, Equity Strategic Alliance, Horizontal Merger, Vertical Merger, Hostile takeover and friendly takeover are the strategies that find their use in oil and gas industry.

1.3 Similarities and differences of growth strategies of Oil and Gas Companies on domestic and foreign European Market.

In this subchapter we will begin by understanding the domestic and foreign markets its various functionality and specifics. Then we will go through the understanding of the European markets. The growth strategy will be overlooked separately for implementation in domestic and foreign European market of Oil and Gas companies. We will conclude with the similarities and differences which accounts in the domestic and foreign European market of oil and gas companies.

Domestic and Foreign Market

Domestic Market is the market within the national boundaries of a company's home country. In theory when a company has to strategic to a focal host country it utilized its prior knowledge gained either in the domestic of foreign country wherein the knowledge transfer is happening specifically to country (Anand Delios, 1997 ; Barkema and Vermeulen, 1998 ; Delios and Beamish, 2001).The experimental knowledge can more easily be transferred when the home and host country both have similar cultural (Hong & Lee, 2015).The competition taking place at the domestic forefront and the trailing government regulations have often been cited to influence the success of enterprise in the international market (D. Kim & Marion, 1997). At the domestic field the big company with less competitor and larger market share with corporate which is consolidate makes it's a better player against global rivalry (Adams and Brock, 1987, p. 3). While a different viewpoint can be stated that when the domestic competition is at minimal it exfoliates costs, brings down active innovations while inadaptability to adapt on the customer response thus making it vulnerable to market penetration by foreign firms (Marion, 1992, p. 46). Porter,1990 stated that the most important success factor which influence the global market is the rivalry presence in the domestic market. Local competition helps in placing pressure amongst the player in the market to best utilize the resources and engage in research and development while taking in the information from the markets (Porter,1990). Foreign market defined geographically is any market outside company's country of citizenship. Transition from a domestic to foreign market should have the components of both exploitation and exploration for making the viable for a longer period than a short-term performance (Levinthal & March, 1993; Auh & Menguc, 2005 ; Lavie, Kang, & Rosenkopf, 2011).

European Market

The internationalization of the firms have been thoroughly examined and established by multiple theoretical lenses but still the internationalization in Europe still remains Scant (Vecchi & Brennan, 2022). The European commission has set forth the integration of the European oil and gas market in a transparent mechanism to make it more cost-effective while maintaining the stability. There have been multiple reformatory practices applied such as to setup the market conditions, where there is minimum hindrances for the free flow in the region while also increasing the efficiency for a better connect of the market conditions for energy businesses (Broadstock et al., 2020).

Growth strategies in domestic and foreign European market of Oil and Gas Companies

One of the most critical aspect for any business is the external factors present in the environment which further effects the opportunities for investment to be undertaken and the customary domain (Kato, 2004).

Market Development-

There has always been a great disparity when it comes to production and consumption (*EU Energy in Figures*, n.d.).In Europe, market development in the Oil and gas industry is at the fulcrum of multiple agents acting on the industry by the environment presence both domestically and in foreign state. The energy security its integration for multiple states while also the giving importance to the players is what is being looked at in Europe. There had been in history multiple literature which brought the accountability of the leaders and politics to be affecting the outcomes and the bureaucratic environment present (Cropper et al,1992; Rigquist, 1995; Shipan, 2004; Weingast and Moran, 1983; Wood, 1988; Wood and Waterman, 1991). The permit to base the drilling location of oil and gas and manage their remittance such as to comply with the positive approach to the domestic audience and the various requirements (Maguire, 2012). The geopolitics in this case plays a major role in the degree of alignment between the home and host market and the cooperation existing between them for market development of the oil and gas (T. Kim & Shin, 2021).The competition and cooperation are both functionary of geographic influence driven by political, military, and existing economic motivation both at the national and regional level (T. Kim & Shin, 2021).

The firm will not be able to approach a foreign market if the experimental knowledge is fungible only within a single country (Ghemawat,2003). The economic difference, the cultural difference, institutional difference, geographic distance comes into play when developing a market withing the host country. This when tallied with the country specific international experience and the oil and gas company's knowledge determines its success post the usage of growth strategy (Chang,1995; Johanson & Vahlne,1977).

Product Diversification

Varouji et al., 2019 showcased how the diversification was a natural defence against the worsening economic conditions. The ever changing oil prices with the multiple economic and non-economic uncertainties motivates diversification (*Making the Most of Public Investment in MENA and CCA Oil-Exporting Countries*, n.d.). The falling of energy related subsidies and the rising fees and taxes thus leading to the companies find a way around it. With the existing certain degree of knowledge towards the energy transition and the capital the industry in Europe is investing towards greener energy resources and low-carbon fuel like Hydrogen, Biomethane and Advanced Biofuels. Continuous growth is being seen in the way oil and gas companies are diversifying outside their core businesses. The capital investment of the companies in non-core businesses until 2015 was approximately 1% which rose to 5% by 2019 and has been gradually rising. The largest move was to be seen in solar PV while there were some oil and gas companies to be seen acquiring existing non-core businesses (Energy Agency, n.d.).

The Europe home and host market product diversification strategies are similar in the way that the countries are making the move towards transition towards green energy in compliance with their green energy goals while also helping them build resistance towards fluctuating oil and gas prices and other uncertainties in the market. The differences come in place because the strategies get affected by countries infrastructure, geographical location, resources availability, government influence, business constraints and economic conditions. The time restrictions and goal prioritization also affect the efficiency of the strategy implementation (Harbo, 2008). Boehe Jimenez (2019) showcased how geographical outreach leads to diversification of products in future while product diversification hampers the geographical expansion.

Horizontal Diversification

The threats that the oil and gas industry get is from the products substitution and the new entrants (Kirichenko, 2019). The European countries more inclined towards environmentally friendly product, the new technological advancement and the renewable energy development is the key concern (Nazarova et al., 2017). While the foreign players in the market are looked upon as a threat by undertaking energy dependency. The falling gas oil and gas prices also drops the profit making thus making the companies to diversify in European market (Filimonova et al., 2019). PJSC TATNEFT development of new cost-effective products in Mechanical engineering are some of the examples while Total S.A. projects in the areas of liquified natural gas production, renewable energy sources, biofuels are some examples.

The Horizontal diversification in the home market often influence the production structure at the downstream companies in the oil and gas companies while in foreign market its more related to the non-fuel sale approach happening at the consumption zone. The diversification work as a risk management and feasibility while also providing opportunity for alliance of feasible products with market. (Belogurova, 2014: Lenkova, 2018). The diversification in manufacturing mitigates the negative market effect from the global as well as individual level but the domestic risks are not that well shielded from (Jafarinejad et al., 2019).

Modernization

The infrastructure laid during the Soviet Union have been ever since going under upgradation to save assets. The push for new updated infrastructure through renovation and repair across Europe has always been there to tackle the energy security while also inclusive efforts to bring in more infrastructure (Europeenne et al., n.d.).

While in the domestic and foreign environment the strategy depends on the primary capital and the technology transfer through the wide network the company has in the oil and gas industry. The difference when strategizing at domestic and foreign level is the tuning with the requirement of the process and conditions at the place while also aligning with the other players usage of the same technology harnessing the best outcomes (Huang, 2019).

Strategic Alliance- Joint ventures and Equity Strategic Alliances

The domestic oil and gas joint ventured projects often mitigated and aided by the government. Both in the domestic and foreign the company provides knowledge transfer from their region thus aiding the partner company to better progress and with ease in the alien market. While also opening market for each other for future scope. The joint venture in Europe in Domestic market is specially seen to happen in the Downstream companies while that is seen to happen in upstream within the foreign market. Angola LNG a joint venture between BP, Chevron, ENI, Sonangol and Total which tarnished the competition by huge margin in Europe. NAM in Netherlands is an example of Equity Strategic alliance between Shell Plc and Exxon Mobil Corp. in 50-50 ratio. The low capital as a reason for joint venture were barely seen (Cromwell, 2015; Caiazza et al., 2013).

Horizontal Merger

Oil and gas industry in Europe while undergoing liberalization and efficient transition to drop the existing backlog of energy which is unable to move freely through states undergoes horizontal merger thus increasing the profit and developing and sharing of energy infrastructure. The Europe while merging in a foreign environment helps to inculcate provide way to expand in that region while also it is looked like a threat of foreign competitor entry. Eon-Ruhrgas merger is example of such strategy usage (Dias & Jorge, 2016).

Vertical Merger

The vertical mergers in oil and gas industry are primarily as seen throughout the industry to be happening more in upstream segment of the supply chain in the foreign market while in the domestic market it was seen to happen in the downstream segment. While the midstream acts as a connectivity between home and host environment where there is both influence of domestic and foreign market. Vertical mergers give way for the company to expand and minimize the need for dependency and knowledge sharing with competitors segment while also helping the company exercise monopoly and extract needed profit.Exxon Mobil and Royal Dutch are an example as practicing from Oil drilling to operating stations. (Marchak, 2013).

Takeovers - Hostile Takeover and Friendly

Preventative effort taken by government and domestic alliance by providing defence to the home company. In the Oil and Gas Industry in European market when the company is taking over a company it is specially challenged by the Legal system pertaining in the market, so the legal system governance is the one to look out for irrespective of home or host. Prior scrutiny of the competitor and its assets tune-up with the existing infrastructure of the primary company. Increases competition and pushes player to provide better end results and keep up with market and competitors. Takover bid of Endesa by Gas Natural is such an example (Maguire, 2012).

Growth Strategy	Similarities in Domestic and Foreign European Market	Differences in Domestic and Foreign European Market
Market Development	Focus on the factors affecting market like geopolitics, brand image, oil prices and energy security.	The relationship with the home market, the psychic distance between the home and host market and need of knowledge through experiments is mostly visible in the foreign market.
Product Diversification	Transition in line to green energy and helping them to have resistance towards uncertainties in Oil and Gas Industry.	Strategies get affected by countries infrastructure, geographical location, resources availability, government influence, business constraints and economic conditions thereby adapting strategy to host.
Horizontal Diversification	The diversification work as a risk management and feasibility while also providing opportunity for alliance of feasible products with market.	The horizontal diversification in the foreign market its more related to the non-fuel sale approach happening at the consumption zone while in the home market often influence the production structure at the downstream companies. The diversification cuts down the risks in foreign environments but less effective in-home environment.
Modernization	The modernization both in foreign and domestic market is capital centric while also	The modernization at the domestic and the foreign market can differ by the physical

	heading from the transfer of knowledge between the companies.	conditions which exists in the market while also alignment with different technology inculcation by the competitors in both markets.
Strategic Alliance-Joint Venture and Equity Strategic Alliance	Governmental influence at both domestic and foreign market. Provides market opening opportunity to each other for future projects and also aiding in knowledge exchange.	Joint ventures enjoyed by upstream companies in foreign market while in downstream companies are often seen to go through joint ventures in home market.
Horizontal Merger	Development and sharing of energy infrastructure thus increasing profit and decreasing the obstacles.	While merging in a foreign environment helps to inculcate provide way to expand in that region while also it is looked like a threat of foreign competitor entry.
Vertical Merger	Expansion of the company and thus eliminating need for dependency over other players and exercising monopoly for suited profit increments.	In foreign market the vertical mergers happen in the upstream segment while in the downstream segment is vertically merged in domestic market.
Takeover-Hostile and Friendly	Legal system strength and overwatch over the market governs the takeovers. Prior scrutiny of the competitor and its assets tuneup with the existing infrastructure of the primary company. Increases competition and pushes player to provide better end results and keep up with market and competitors.	Governmental and domestic alliance influence to protect the domestically operating companies from Hostile takeover. In foreign market it is an alternative approach of taking the market penetration.

Table: 1 Similarities and Differences of domestic and foreign European market of Oil and Gas companies

Source: Compilation by the authors

In the introductory part of sub chapter 1.3 we went through the understanding of the domestic and foreign market. Then we specifically had an overlook of the European market and its elements. In the finalization we studied about the various similarities and differences of the domestic and foreign European market of oil and gas companies.

Concluding the theoretical part of our research, chapter 1, we went through the various concept of strategy. We also went through the various aspects of Oil and Gas industry to give the understanding of how the industry is formed. The scientific articles and textbook setup the foundation of various organic and inorganic case studies that took and how their implementation in the Oil and Gas industry worldwide and then concentrated approach over European market took place thus helping us to proceed with the case study.

Chapter-2 Analytical part of Similarities and Differences of Growth Strategies

In this chapter we will start with the Oil and Gas Industry Market overview and then move to and then move to the market study specifically in Russia and Germany in 2 different sub-chapters. The study of the individual market condition will be done with the help of the case of Gazprom. With the case of Gazprom, we will analyse the growth strategies used by Gazprom in both the domestic and market thus getting an understanding how an oil and gas companies implements growth strategy in domestic and foreign market.

2.1 Oil and Gas industry market overview

In this sub chapter we will have an overlook at the Oil and Gas industry market. Its development throughout the years and various specific characteristics existing in the market. The existing players and where the industry stand.

Oil and gas industry function as the pivot of the whole energy market and governs the dynamics of the global economy has complex mesh of systems and processes accounting for the production and distribution of oil and gas. This requirement leads to the industrial components of this industry being complex, capital intensive further requiring state-of-art technology.

Oil and gas company source

The industry on its upfront depends on the various hydrocarbon resources. Looking at the production that is taking place around the world to produce the conventional hydrocarbons, we can see that they are on a constant decline. Without a magnitude change in the demand structure of the hydrocarbons or the introduction of non-conventional hydrocarbons there is dwindling hydrocarbons, which will soon finish. The political constant has been the main factor for risky oil supply guided by formation of close supply chain network dependent on regional geopolitics, the global geo-political influence and using the same as a tool for influencing states security by utilizing the oil and gas dependency for the state sustainability (Energy Outlook Report, n.d.).

The middle east countries have a very little extra un-utilized capacity on the balance so there is a very limited extent to which growth of production can be seen in that region, exception of Iraq where other constraints come into action like the absence of infrastructure and delays for setup. The shortage of oil looks like to be present in very near future unless tackled by scaling up the output from Middle East for the demand (globaldatabase.com). Even though this scales up will only delay the depletion date does not bring a solution to the problem. The large investments that the in the industry will also be unable to prevent to uplift the available resource limit but will pave a way to exploit and harness more of it. The quantity and length of time the demand can be fulfilled also depends on the size of the natural reserves in the region which for Middle East has been quite vague with unreliable reports. The fulfilment of the demand by the means of transition to alternative oil substitute and non-conventional resources is not in line with the rate these resources are depleting. Looking into the conventional gas the endowment comes to almost the same scenario of depleting reserves though as the oil declines the pressure on the gas will be up. There was a decline seen in conventional oil production that was happening rapidly in near term (Energy and Power-Research Databases)

Growth in Oil and Gas companies

The outlook of the growth strategies impacting the Oil and Gas Companies cover a wide range of strata. The transition from 19th century to 20th century of the Oil industry saw a rise of oil majors or so called “Big Oil” comprising of the American Exxon Mobil and Chevron while Europe was represented by BP, Royal Dutch Shell, Total Energies and Eni (Energy Outlook, 2010). Since the beginning of 1960 the continuous uplift of the national oil companies owned by the state have dramatically undertaken the control of critical oil and gas reserves distributed in various regions around the world thereby redesigning of the balance of control over most of world’s oil and gas reserves. Saudi Amaro and Nation Iranian Oil Company were the prominent names among the National Oil Companies created through the conversion of countries resources for nations interest by their nationalization in 1980s and 1990s .When we look at other companies growth under supervision of the state we can see that the China National Petroleum Corporation and Rosneft came out as tools through which the states China and Russia respectively were able to have a managing control over the countries resources in the 1980s to 1990s. The Western Major have had seen the deepest impact of shift wherein them having the dominance over 90% of the world’s hydrocarbon resources in 1970s which was reduced to a great extent until it was squeezed to 14% in 2019. In 2020 the European international oil companies comprising of Total Energies, BP, Equinor, Eni, and Shell were liable for 7% of the oil production that was taking across the world and 10% of global oil production which can be tallied with Gazprom which had a share of 12% alone internationally (Maguire, 2012). The shift of focus has been taking place from international oil companies towards more nationalistic approach in which the National oil companies and hosting countries are coming at the focal.

Western international oil companies to have their stake as one of the key players in the industry. Keeping in consideration the value chain, the integration has been throughout when looking at the oil and gas industry. The distributed capabilities come to tally placing components like financial strength and investment capacity, technological and technical expertise while also accounting for skill that are much needed in the projects scaled at a bigger picture, which tagged along human resources and risk mitigation. There has been growth in various sectors, but western international oil companies stand out of all with the size and the influence they cast on the public at the trade outs (United Nations Publications, 2021).

International oil companies have always been a spotlight for the critical controversies launched through the ripples in the global politics as they become a legitimate driver of governments outgoing foreign policy while in some cases governments trying to work out their influence by using the same as factor. The leverage the transportation channels, storage facilities and other related components of the supply chain of the purchasing country has over these international oil companies is huge thus this dependency foreplay the importance of these companies in the national security mechanism to handle supply chain while talking the inherit disruption. The international oil companies have been also eagerly blending and incorporating the technologies to make the best out of it on the other hand giving girth to the network of partnerships and influence (ibm.com).

The climate resolution and demands have set forth a climate policy adherent such as the investor place a pressure on the industry players to bring down the economic competitiveness through the usage of low-carbon energy. The prominent names in the European oil and gas industry namely Eni, Total Energies, BP and Shell have made it known that they have a resolution to be achieving net-zero emissions by 2050 on absolute basis which takes into account throughout dealings from production at home to the global usage taking part the consumer level who use their energy products (Enel Annual Report, 2021).

The transition of the global energy sector drives a view that the shift from the existing fossil to the renewable energy technologies may find its way to geopolitical and strategic reshuffle, stating because the countries and regions around the world have their own benefits and downfall from either of the two choices. The energy raw material dependency also has its own existing ecosystem which has been optimized such as to suit a particular country and the abrupt change to new sources and new channels will give rise to change of leadership bringing forward new winners, loosers and develop an intense competition around critical material (e.g., lithium, cobalt, copper). The countries which are having an upper hand in critical material availability thus enjoys a much a better position by giving them legitimate interest of enjoying the surplus of renewable energy. When a foreign state becomes too dependable on another state for energy needs the use of power cuts comes into play as one of the important mechanism exercise foreign influences. With the advent of technology, it has been particularly the contest ground for multiple actors to use it as a mechanism to power against a foreign entity. Attacks on the grids furnishing electricity of one state can also be seen have also increased as an attempt to cripple their energy infrastructure thus leaving them vulnerable.

The technology adaptation has also been taking place in the oil and gas industry since a long time. Technology acts as a backbone for the industry specially having a name in the innovation sector. 3-D seismic, seismic imaging, hydraulic fracturing, data security mechanisms and gesturing have been some of the examples where the use of innovative approach had been taken in the industry to tackle problems (Financial Times, 2017).

Outlook of Oil and Gas Industry

The 2022 outlook of the oil and gas industry by the Deloitte shows the global economic slowdown tends to rebound and take over the existing circumstances and gain the much-needed momentum in the year 2022 which had been subjugated to bottom. Oil demand and mobility had been rising since the end of 2021. The companies have been practicing bringing up a disciplined capital approach highlighted by the global upstream capex projected to rise by 4% in 2022. The depth reduction of 4% that took place in 2021 showcased that the companies are considering the financial health. The climate change has been a focal for high commitment to be seen as the North American Oil and Gas companies join their European counterparts while also business models have been undergoing through transformation. While the roadmap to the next 12 to 18 months was look forward by the oil strategists with the purpose-driven, tech-enabled, and human-powered organizations coupled with smart interim goals and progressive communication and disclosure strategies-

1. Undertake optimization and streamlining of the resource portfolios.
2. Develop goals to undergo a smooth energy transition while also work on their implementation.
3. Employees needed to be attracted trained and retained in a tight labour market.

While as the climate is a critical issue which is driving factor of the market orientation the companies should come in terms with additional environmental, social and governance (ESG) requirements.

Oil price bubble has been on rise after a dip in April of 2020. On side-line of this the companies have become more disciplined in the way they manage their capital or the production chain by reducing the number of semi-finished projects in the completion phase, while also working on the debt reduction which did not gain such a clout earlier.

The high oil price of the companies is giving them the budget and a profit margin to implement the transitional goals to fund their net-zero commitments. The European Oil and Gas companies net-zero commitments in 2020 were followed by the same undertakings by the US Oil and Gas companies, Canadian Oil sands producers and few other national oil companies who have joined the net-zero group in 2021.The monetary profit is hence diverted towards mechanisms like carbon capture, utilization, and storage (CCUS) which are indeed more risky expensive green energy solutions. The investment provided are subjugated to share between upstream, midstream, and downstream whose involvement are required at multiple stages to the planning of the projects.

Company	**BP**	**Chevron**	**CNPC**	**ENI**	**Equinor**	**ExxonMobil**
Factors determining strategy	Environment and sustainability, capability and scale, safety and risk, investment economics, cash flow certainty, optionality	Price of Crude oil and natural gas	China's Economic growth and low carbon, secure and efficient system	Price for Brent and other commodities; climate change	Geopolitical shifts, industry fundamentals, market dynamics and the need for low carbon future	Energy needs worldwide, energy alternatives, GHG emissions, government policies
Company	**Gazprom**	**OPEC**	**Petrobas**	**Repsol**	**Royal Dutch Shell**	**Total**
Factors determining strategy	LNG competition, geopolitical issues, EU policies, Oil prices, sustainable approach,	Diversification and economic sustainability	Domestic market, Oil price, Competitiveness of alternative energy, regulation	Economic trends, digitalization, Geopolitics, Currency exchange	Macroeconomic risks, regulations, technologies, climate	Energy demand, Climate change, Energy transition, market volatility.

	fluctuation in drilling and production and currency fluctuation.			rates,	change risks	

Table: 2 Factors determining strategies for oil and gas companies

Source: Annual Reports of BP, Chevron, CNPC, ENI, Equinor, ExxonMobil, Gazprom, OPEC, Petrobas, Repsol, Royal Dutch Shell, Total; (Shaton and Morgunova, 2022)

In the above factors we can see that Gazprom specially has exceptional focus on the geopolitical isssues, fluctuation in currency and EU policies. To understand factors which even more influence growth strategies we conducted interviews to understand oil and gas companies at ground level. The interview was conducted with O. P. Sharma director of sales for SMK Petrochemicals India Pvt. Ltd. to understand the oil and gas industry with help of his 28 years of experience in the international oil and gas industry. The discussing with him foretells that “Oil and Gas industry is quite restricted and the natural growth strategies are not functional as in other industries”. He points out that the Geopolitics, Demand and Supply Gap and Forecasts of the industry are primary influential factors for strategy development. The clients and their network play a huge role which becomes a driver for bringing up constraints for interaction with players from different region. While in joint ventures which are backed mostly by government entry into foreign geography puts up a definitive reservation for the domestic consumption. The second interview was conducted with Mr. A.K. Singh proprietor of Vaibhav Auto Pvt. Ltd. a regional distributor for Raj Petro Specialities Pvt. Ltd. in North India brought into light that the interaction between consumers, dealers and the zonal sales team is the topmost influence for domestic growth (Conducted by Authors).

Main Players in Oil and Gas Industry

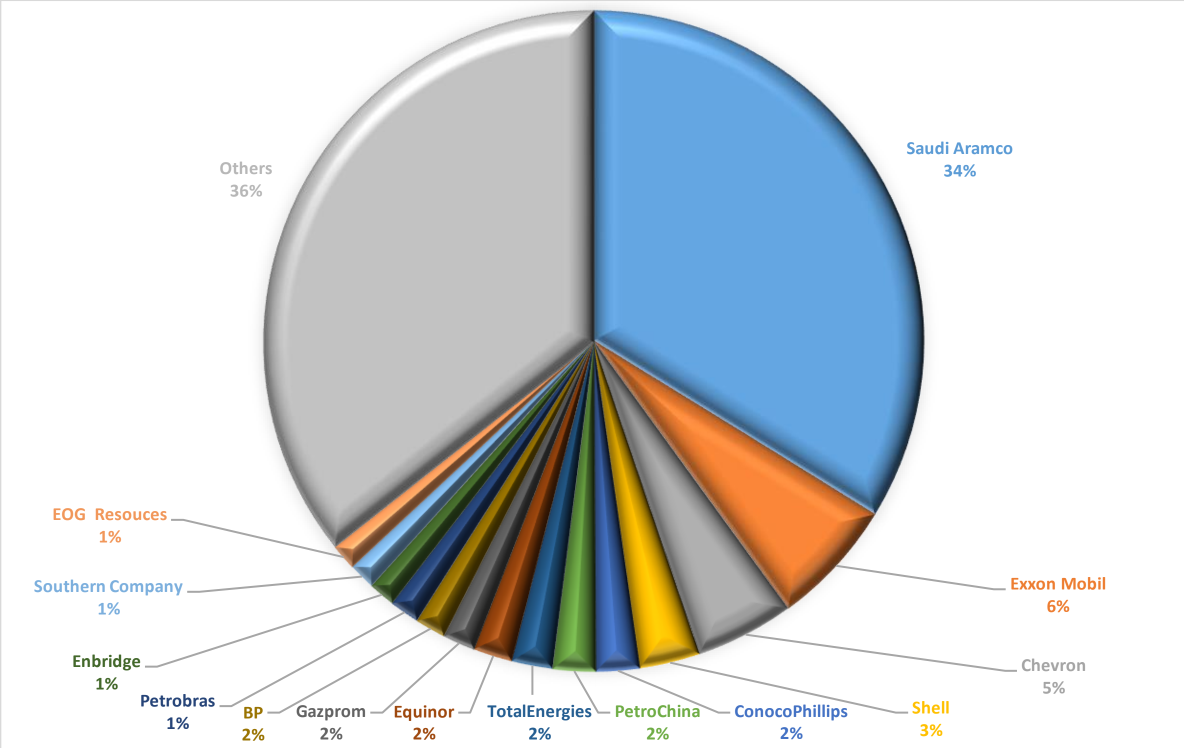

Figure: 3 Main players in the Oil and Gas Industry

Source: companiesmarketcap.com and compiled by author

From the above figure we can see that Saudi Aramco enjoys the highest market capitalization of 2.173 trillion US Dollar while also being one of the most profitable companies. Gazprom holding 16% of global gas reserves leads the gas production. In Asian region Sinopec owned primarily by Chinese government is Asia's largest oil refiner while in Europe Shell is making investment in energy transition while ExxonMobil has been making oil shore discoveries in Offshore Guyana (CompaniesMarketcap.com).

Oil and gas in Russia

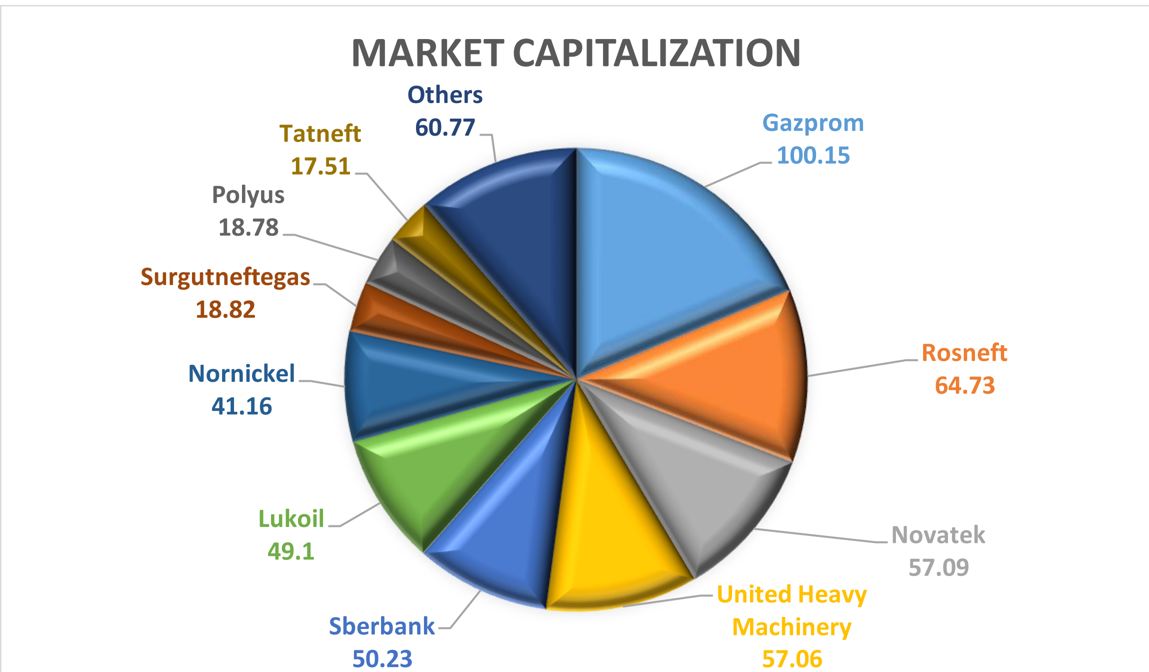

Figure: 4 Main players in Russian oil and gas industry by market capitalization
Source: companiesmarketcap.com and compiled by author

The Russia is maintaining the role of a major player in the global energy market being one of the top three crude producer along with Saudi Arabia and United states (companiesmarketcap.com) This in turn also nourishes the existence of reverse dependency in which the Russian economy has developed a heavy dependency on revenues generating from oil and natural gas as seen in 2021 constituting to about 45% of the Russia's federal budget. The Russian oil and gas industry in the recent times have been undergoing a through transformation with each passing period specially because of the influence of the geopolitics. The oil and gas industry due to the magnitude of scale, importance, and dependency that it has created for both the Russian government and foreign powers has led to the sought-after tool for practicing foreign policies on both sides.

The output generated from Russia in crude and condensate output reached nearly 10.5 million barrels per day making a tune of about 14% of the world's total supply. Looking at the geographical distribution of the field we can see that they find most of them are concentrated in the western and eastern Siberia. The 2021 year saw Russia to export an estimate of around 4.7 million barrels per day of crude to countries around the world with maximum share constituted by China followed by Europe. The Russia's variety of crude oil with export blend being Urals the medium sour crude followed exports comprising of ESPO blend crude that mainly takes place through East Siberia-Pacific Ocean pipeline supporting supply to Asia. Sokol, Siberian light, Novu port, Arctic oil and Sakhalin blend are the other primary grades. Russian oil industry had been undergoing consolidation through the recent years with the remains of only several major players. A state-owned producer, Rosneft takes the lead in producing oil which is followed by a private enterprise Lukoil. The two companies are further followed by Gazprom Neft, Surgutneftegaz, Tatneft and Russneft who have assets spread across the country.

The Russia and Europe market had been interdependent on each other for export and import respectively of the energy. The dependency on other on the other end tends out to add on to the risk factor by not expanding the business outreach. The ESPO pipeline by Russia providing connectivity to the Asian markets such as the likes of China and Japan was one of the diversifications of the business. The pipeline lifted the pivot from the European market with ad on like transfer of crude through ships from Northwest ports of Ust-Lunga and Primorsk and the Black Sea port of Novorossiysk and Kozmino in Far East and the rail medium used for transfer.

Russia handling the production as the world's second largest for natural gas just behind United States, being backed by the largest reserves of gas present as a natural asset for the country. Due to huge proportionality difference of consumption between the United States and Russia we can see that Russia is world's largest gas exporter. The year 2021 saw the 762 barrels cubic meter of natural gas of Russian origin.

Gazprom and Novatek are the lead producers whereas the other Russian companies namely Rosneft also operate on gas production. The state-owned Gazprom held the title of being the largest producer, but the production share has been falling over the last decade due to the takeover and rise of competitors Novatek and Rosneft with increasing production capacity (iea.org). The Russian gas production in 2021 had the 68% share taken by Gazprom.

The factors which have been affecting the movement of the crude oil for longer run were against multiple conditions. The pipeline additions, the growth in the international atmosphere of the Russian oil sector and transit of oil originating from foreign land. By the look of it the development of new pipelines for the growing needs looks to have come to a stagnated point while the ESPO furnishing the Asian market continues to be expanding. The Energy strategy insight for the future of the Russian energy market is a bit of conservative approach.

While the west bound exports through the pipelines are on constant decline the Asia bound are on a constant rise. The shipment routes towards the West direction's shipments were also seen to be falling which altogether could have affected the pipeline strategy of Russia also making the pipelines dormant like the Druzhba and Black Sea route. The alternative arrangement which Russia could thereafter undertake is the shipment of the petroleum products through the same routes.

Looking at the Natural gas export undertaken by Russia replicates the scenario developed by the oil exports. The surplus has been present over the pipeline networks where the transfer of natural gas was taking place. The outreach towards Europe is done with the help of five pipelines helping the Russia's penetration to the non-FSU market. The Gazprom is one of those company the distribution of which through the pipeline remains non-homogeneous. As per article from Pipeline and Gas Journal in 2012 it was brought to light that there were some existing anomalies in agreement wherein the access to onshore pipeline was allowed in Germany. This was further affecting the movement of gas and led to continuous decrease in the transfer of the same from 2004 to 2014. There was also a smaller version of a pipeline feeding into Finland which was barely operational. The full capacity utilization of Yamal-Europe pipeline which ran through the Belarus region was undertaken by Gazprom and Blue stream pipeline streaming through Turkey.

The 2022 situation development

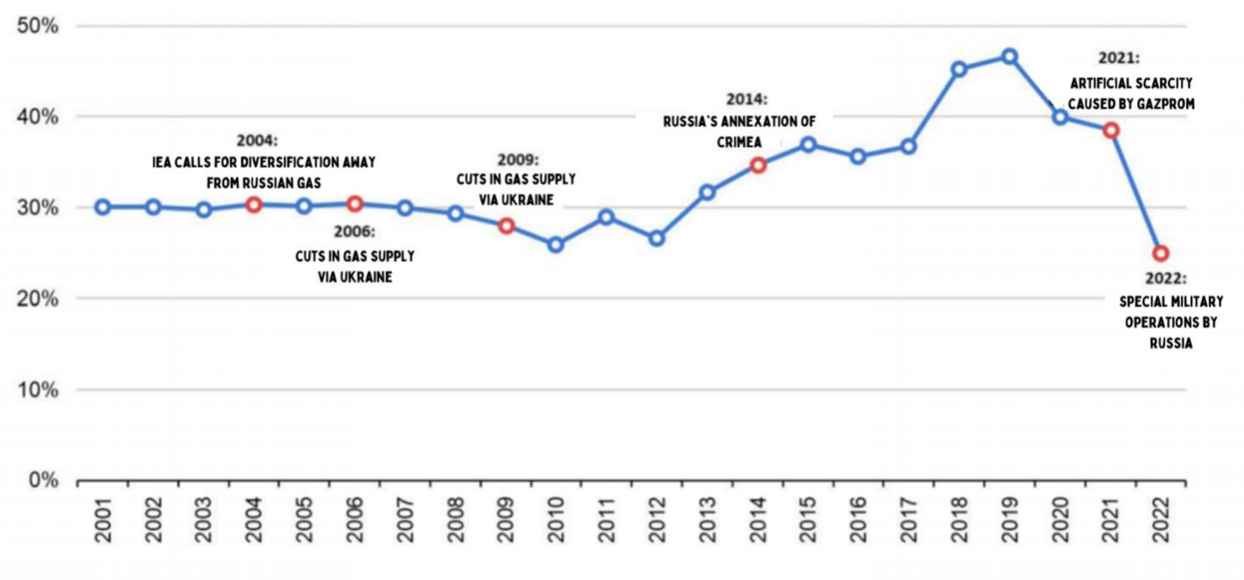

Figure: 5 Europe Reliance on the Russian Oil and Gas

Source: Gas Market Report 2022 and IEA Energy data centre

With the developments in 2022 due to the special military operations undertaken by Russia there has been an influx of the geopolitical influence on the scenario wherein the Russian company are facing partial to full restriction due to the cut-off from the European market. There had been hostile takeovers by the governments on assets, there had been effective agreement closure, there had been new supply chain development, burn off gas at terminals, energy crisis thus effecting the entire energy structure of Europe. All these effects are volatile and changing within a fraction of time to gain any understanding from. While Gazprom still recorded profit in 2022 due to rising demand.

Oil and Gas in Germany

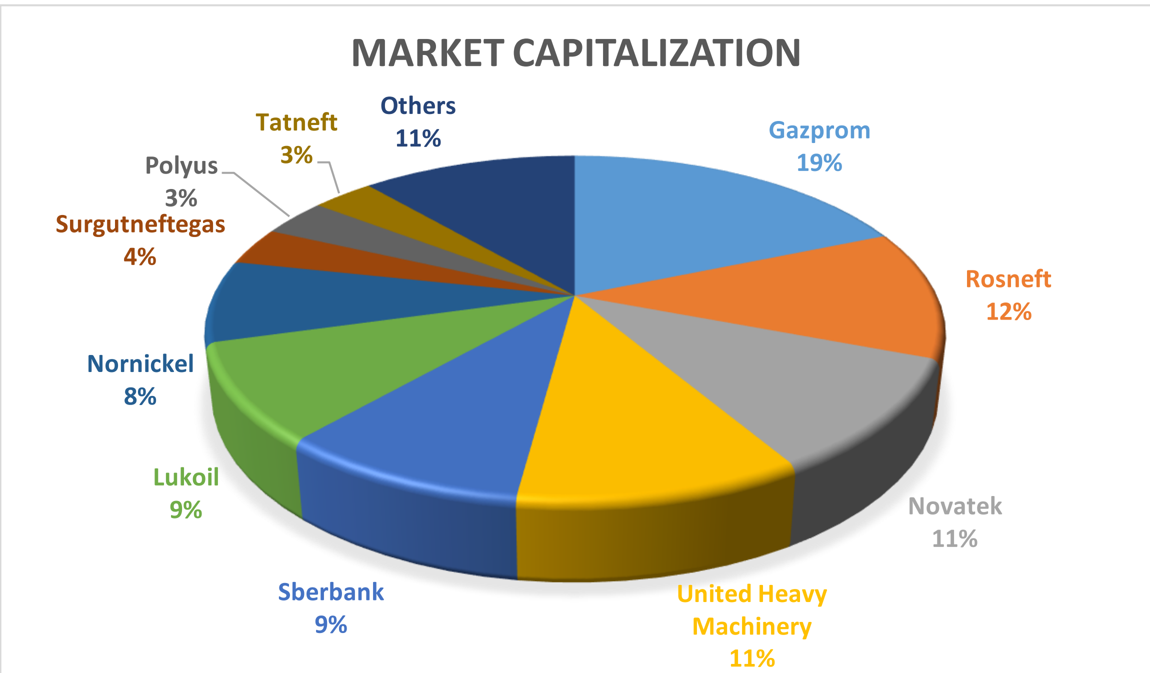

Figure: 6 Main players in German oil and gas industry by market capitalization
Source: companiesmarketcap.com and compiled by author

The electricity infrastructure and electricity grid in Germany stay influenced by number of factors. The gas distribution network has a major influence over how the energy distribution network. The optimization of the gas network acts as a beneficiary to the energy transition.

2.2 Analysis of Gazprom in Russia

To understand the Oil and Gas Industry dynamics and understanding how they are getting influenced with the regionally present factors we use the case of Gazprom. While the Gazprom is both under the Government and private control, we can see both the characteristics of reaction from a private enterprise and from a governmental enterprise. The case of the company can be first studied in the Russian market which sandwiched and acts as a bridge between the developing region and developed region thus giving us the backdrop of how the companies penetrate markets into both kind of regions.

1989 was the year which saw the birth of Gazprom under the significant conversion of the Soviet Ministry of Gas Industry into a corporation. This conversion made Gazprom one of its kind giving it the title of first state-run corporate enterprise in the era of Soviet Union. When the Soviet Union was bifurcated into multiple states the resources and assets owned by the Soviet Union were divided and distributed to individual countries, in the same time the Gazproms privatization was introduced giving the company a Russian based identity. The Gazprom has been able to set up roots very well by diversification both in front and backward direction thus enhancing their capabilities in different areas of gas industry which stretches over exploration of resources, production process, refinement, transportation, distribution and much further also in marketing and power generation mechanism.

The 12 percent of the generated natural gas around the world is the sourced from Gazprom. This huge outflux of the gas is discharged from Russia towards other regions through the means of pipeline mesh setup by Gazprom over the years. Gazprom is mainly concentrated on the use of Nord Stream and TurkStream for the functional export of the Natural gas. In the oil sector Gazprom through its subsidiary produces a large amount of output at around 41 million tons of oil while the reserves being 2 billion tons (statia.com). The presence of the company in other sectors can also be noted given the diversification in finance, media and aviation industries with majority stake.

The quarter of natural gas reserves spread across the globe fall in the region of Russia giving it the capability to harness second highest output of natural gas. The concentration of the natural gas reserves ca be mainly seen in the west Siberia zones falling under the Nadyam-Pur-Taj which was historically has setup a historically important region growing and exploited from early 90's to the years beginning phase of 2000 providing a rough estimate of about 85% of production. Urengoyskoe, Yamburgskoe and Medvezhe have always held a prominent in the gas fields, but they have been slowing down. This has been reasonably been considered by Energy Strategy Institute who oversaw a positive outcome for the given condition predicting a rise of the export in the 2010 to 2030 period. This rise has also been supported by the IAE's Word energy outlook but on more reasonable grounds with a softer production since they had been specially looking at the domestic demands.

In the upstream area of the Gazprom has specifically been of strategic pinpoint which holding the weight of approximately 2/3rd of the natural gas reserves. Given the scenario that the top fields which had been generating the natural gas and were responsible for the main outflow have been falling short in the production. The decline is made reasonable with the fact that the growing domestic prices are not able to setup a netback parity, but the company will still be under the public pressure thus becoming obliged to fulfilling the needs of the domestic market. There has been a maintained price difference with respect to the domestic market as compared to the foreign market example Europe thus giving the company incentives to bring about a subsidized support for domestic market which can be cross balanced with the export.

Corporate Governance in Gazprom

Company's key management and supervisory bodies are the basis of Gazprom's corporate governance. The general shareholders meeting, the board of directors, the management committee, the Chairman of the Management Committee, and the Audit Commission. External auditors are the one who review the company performance in finance and business. While the board of directors are the one which perform management of activities and development while also strategizing, policy making while also developing core operating principle. Meanwhile the management committee and the chairman of the committee administer the day to operations and bring about the implementation of the resolution of general shareholders meeting and bord of directors. Meanwhile internal regulations govern the activities of the governing body. The diverse and big governing body wherein having detailed expertise in the field help Gazprom to grow to large extent in multiple fields. The body also contains a lot of influence in and around the industry.

Gazprom strategies in Russia

For understanding the growth strategies, we will use the time period where the particular strategies had a major influence to learn how they helped the company in developing in the Oil and gas Industry in comparison to earlier years. We will also go through how Gazprom has been inculcating the strategy in its growth.

A) Intensive Growth

A.1) Market Development-

Regulated gas segment of Russian oil and gas market have a great share of Gazprom while in gas almost total while the independent oil and gas producers are unregulated segment thus leaving competitors very less scope to develop. The Market development strategy of Gazprom in Russia has been greatly under effect through the government influence thus decrease competitiveness of private enterprises. The government having a governing role is thus also inhibits mutually beneficiary strategies for market development. The Gazprom has ever been enjoying the monopoly status on also the export from Russia and control over pipeline structure, thus the incentives generated from foreign market help it to subsidize and control prices in the domestic market to develop the home market. The build-up of pipelines to outreach more efficiently the unconnected zone and diversifying its foreign operation also towards Asia thus helping it to better manage the home market is a way of market development Gazprom has been critically focused. The home market due to the government backup doesn't greatly develops major marketing rather it represents the state. Presence of Gazprom in Multiple smaller company's further burnishes brand which also is look forward by competitors whose lookout for alliance with the monopolist determines their survival. While the rising oil and gas prices are profitable for Gazprom it also increases the domestic competition due to rising profit margin. Unified gas supply system helps it to serve its consumers both Russian and foreign noting that 82% of all gas distribution networks in Russian region are owned and maintained by Group's gas distribution subsidiaries and associates while 74% of gas penetration rate was seen by the year end of 2020. The ability to shift productions from one field to another.

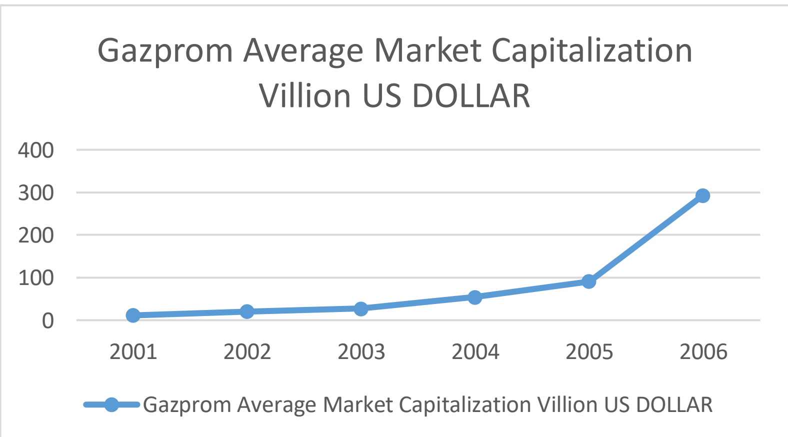

Figure: 7 Gazprom Average Market Capitalization Billion US dollar

Source: Gazprom Annual Report 2006

The year 2001- 2006 saw the rise of the independent gas provider accessing the Gazprom supply network while in 2005 affixing the minimum government share at 50% plus 1 share and the liberalization of the share market helped the company to better utilize market development strategy.

A.2) Product Diversification

Approaching the Chinese market with LNG and petrochemical thus developing the same at home. The energy need of the company had made it to diversify into other dependent sources of green energy which not only sustain domestic but foreign environment. The Gazprom has been doing the same to catch up with the need of population.

B) Diversification

B.1) Horizontal Diversification

The horizontal diversification of the companies happening in the downstream companies took place in oil sector, the coal sector, nuclear power sector and various other non-energy related sectors to lessen the total dependency of the company over the oil and gas market. The supplementary good that the company PJSC Gazpromneft develops for sale is quite promising development in the retail business in Russia thus ensuring the growth performance. The cafes, targeted pricing, development of own brand good production, new coffee machines with the menu expanded and the TV-Media projects were some that were determining factors in strategic growth. There has also been investment by Gazprom in the gas transportation mechanism thus calling for diversification.

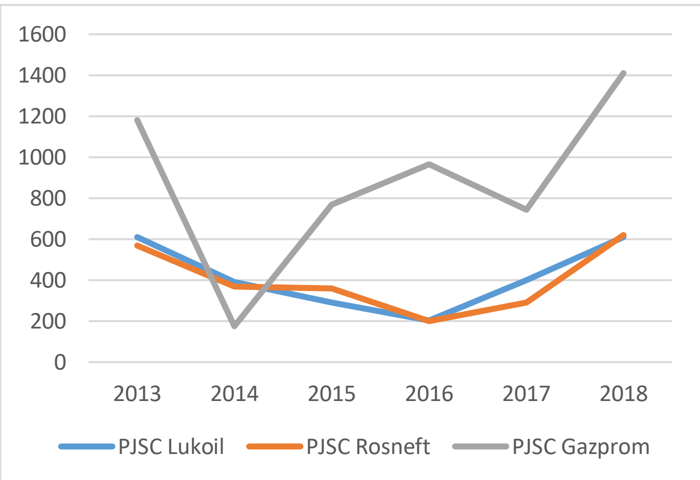

Figure: 8 Net profit of Russian oil and gas companies

While during the year 2013-2018 wherein PJSC Gazprom company was seen implementing such strategies on the forefront contact with consumers and had considerable influence on the growth unlike competitors

PJSC LUKOIL and Rosneft who were implementing projects on the beginning part of the supply chain working on production structure and raw material sourcing.

C) Modernization

Gazprom has continuously been uplifting the modernization by spending on Research and development while also looking at unexplored locations such as Arctic. While in the upstream exploration for new geographical outreach while increasing of patents which were 2365 as of 31 December 2017 and 427 including those in operation to 2786 as of 31st December 2020 and 516 including those in operation. Though there was seen a magnitude increase of spending in 2020 we can see that the economic effect was not imminent and would be seen in a longer time frame. While in the years 2002-20013 we can see how company modernized and uplifted the supply structure to increase efficiency while dropping the number of failures.

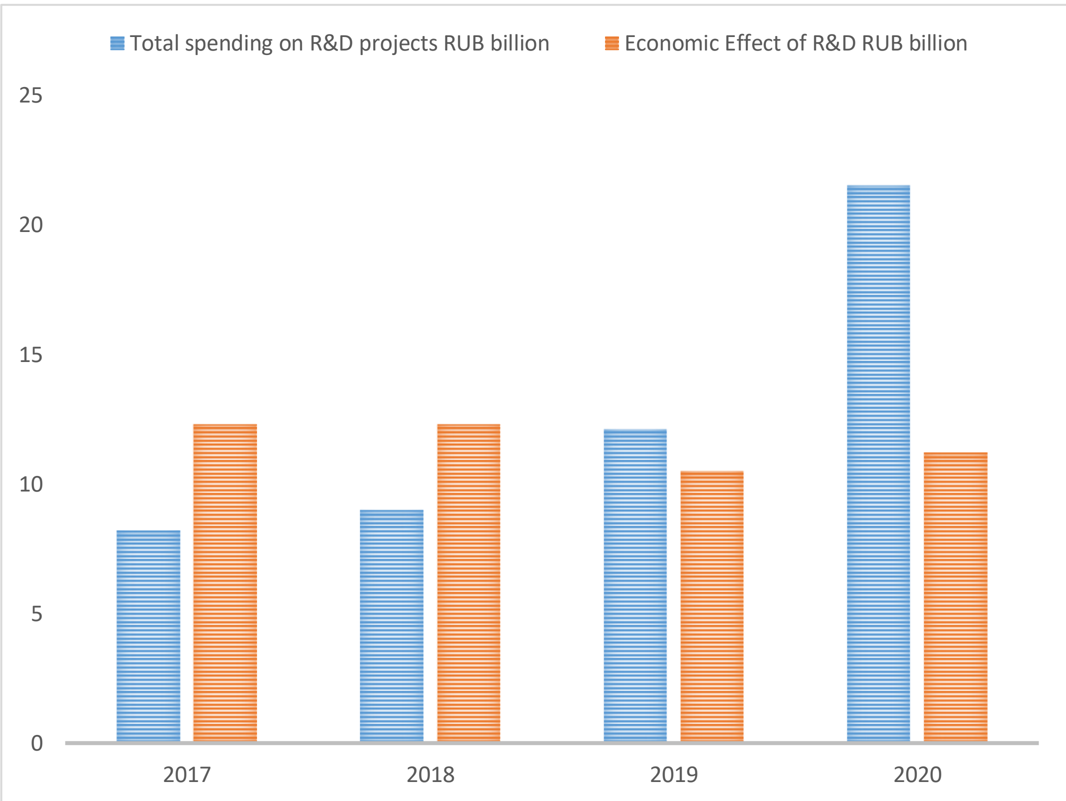

Figure: 9 R&D spending and its economic effect in Billion roubles

Source: Annual Report Gazprom 2017-2020

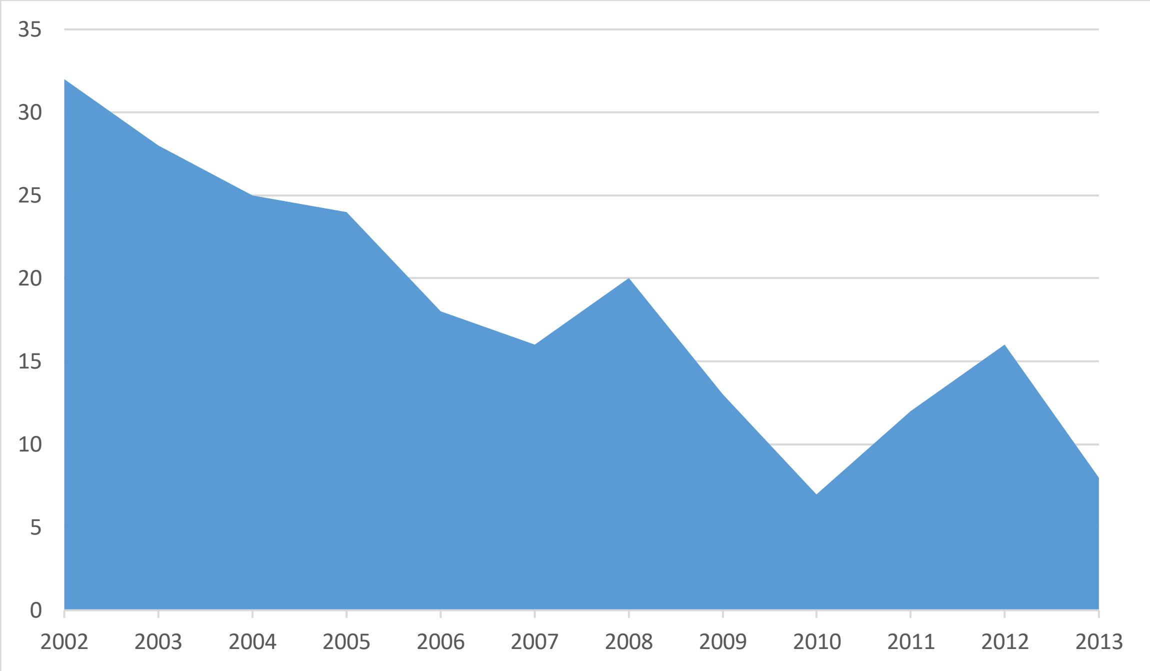

Figure:10 Breakdown in Gas trunk supply pipeline

Source: Annual Report 2002-2013

Inorganic Growth Strategies

A) Strategic Alliance

A.1) Joint Venture

Urengoy/Urengoyskoye field that are in Western Siberian basin. In terms of recoverable reserves they are the one of the world's biggest onshore gas and condensate fields. Achimaz which is a 50:50 joint venture between Gazprom's subsidiary Gazprom Dobycha Urengoy and Wintershall Dea maintains the Ahimov block 1A of the fields while blocks 4A and 5A 50% of interests are taken by Gazprom while other 50 shared by Wintershall and OMV Norge in 25.01:24.98 ratio.

A.2) Equity Strategic Alliance

Rosneft stands at the second position when it comes to oil global oil companies when considering the recoverable reserves. During the IPO of 2006, 49% shares of the company was marked up for a value of 10.4 billion dollar which were acquired by multiple other players from oil and gas industry like BP, China National Petroleum and Petronas where Gazprom took 2.6 billion stakes by remaining unidentified. The year also marked the largest growth of primary oil refining as compared to its competitors at 12.28%. The rising domestic prices which were backed by Gazprom also gave it way to invest more. While the risk factor with respect to the competition and processes happening in the industry market remained insignificant there developed some minor risks in the social, political, judicial, regulatory, and economic areas with the effect on international financial rating of Russia. The development in line with the expansion also offered company with some moderate risks. The low diversification in the year was compensated by the financial stability.

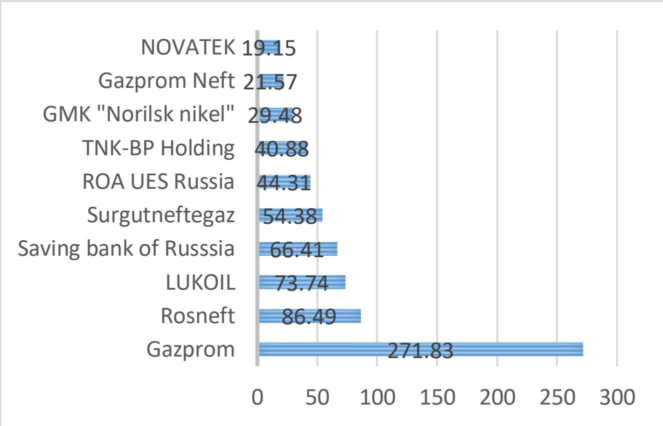

Figure: 11 Capitalization of Gazprom with respect to competitors by 31st December 2006

Source: Annual report Gazprom 2006

The company Gazprom has been very actively building the market capital by joint ventures and equity strategic alliances as of the years prior to 2006 and specially in the year 2006 thus giving it a very competitive edge with respect to the competitor by a huge margin.

B) Mergers

B.1) Vertical Merger

The value chain of the Gazprom showcases how it is a vertically integrated company which can further be proven by Gazprom ever increasing vertical integration. The existing gas supply system in Russia was the property of Gazprom and came to existence only in 1970-1990 that covered a wide variety of stages in the supply chain at different geographic distance. It covered almost all collection, processing, storing and complex movement of the gas both at the internal and export routes. The 150000-kilometre gas-pipeline infrastructure in Russia that included compressing station for the control over the domestic and export market was owned by Gazprom.

The added advantage was fetched by Gazprom through acquisition or setup of the warehouse and storage infrastructure in Austria, Belgium, Romania, Turkey and the United Kingdom. Later there was a subsidiary setup by the name Podzemgaz to maintain facilitate and administrate over the facilities and infrastructure.

C) ACQUISITION

C.1) Hostile Takeover

The Russian environment in Oil and gas industry nurtures the hostile takeovers due to the non-public dealings and the interests of the management in the deals. The confidential dealings also bring about the connectivity of the leading individuals controlling the dynamics of oil and gas industry. One example of preventive action was showed by Vedomosty today a newspaper which reported that the Zapsibgazprom (a company which was earlier under the Gazprom control) managers secretly indulged in a sell-off the primary unit of the company controlling the license of gas fields thus making Gazprom no longer willing to move forward even with large amount of capital investment ready. The Gazprom being backed by state makes takeovers less hostile and more of a development where the board of the company to be taken over agrees such can be seen in the case of VK. The Gazprom also was able to take back all the assets that were dismantles soon after the soviet times to merge back into the company by progressive takeovers.

C.2) Friendly Takeover

Gazprom takeover of the SUEK a coal and power business by acquisition of 50% share and 1 share in joint venture altogether expanded the monopoly in the energy business. This takeover was looked at to as damaging to the Russia's power restructuring where separation of generating firms and distributor were fetched forward to. There were strong opposition from the Europe Union and Russia's antimonopoly agency but looking at they still adhered to different market in the Energy sector no concrete obstruction to the move could be made.

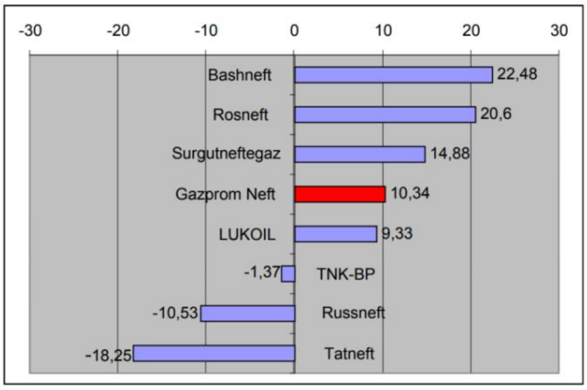

Figure: 12 Gazprom in Russian Gas consumption and Growth of Russian Oil exports in 2006

Source: Gazprom Annual Report 2011-2021

While Gazprom has been working well in the oil and gas industry it finds itself still not able to tackle the build-up of the market competition by takeovers during the volatile changes. During the year 2011-2015 the independent gas producers supplying gas to domestic market at unregulated price thus being able to attract the new and financially big and stable customers in market by being more flexible while also using priority access to Gazprom transportation system.

Growth Strategies					
Inorganic Growth Strategies			**Organic Growth Strategies**		
Strategic Alliance	**Merger**	**Acquisition**	**Intensive Growth**	**Diversification**	**Modernization**
Joint Venture	Horizontal	Hostile Takeover	Market Penetration	Concentric	
Equity Strategic Alliance	Vertical	Friendly Takeover	Market Development	Horizontal	
Non-Equity Strategic Alliance	Conglomerate		Product Development	Conglomerate	
			Product Diversification		

Table:3 Growth strategies of Gazprom in Russian Market

Source: Compiled by Author (Green- Strategy Used Red- Strategy Not Used)

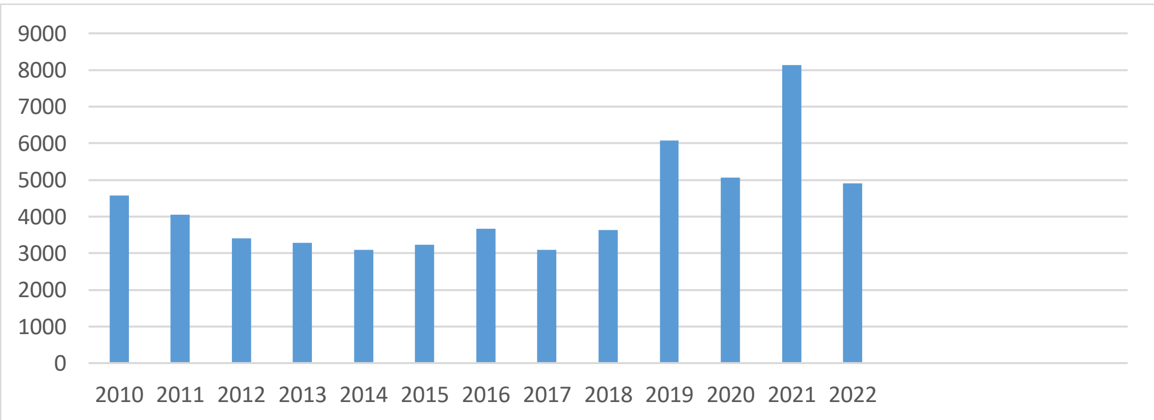

Figure 13: Market Capitalization of Gazprom (Billion Roubles)

Source: Tradingeconomics.com Compiled by authors

The Gazprom has been maintaining decent position in market with high market capitalization through years suggesting positive feedback from growth strategies.

2.3 Analysis of Gazprom in Germany

In this sub-chapter we will look at the growth strategies implemented by Gazprom in Germany to understand the influence of foreign market on oil and gas company.

The socialist time the export from Russia were planned in such a way that it could be segmented roughly into 2 parts that were centrally planned economies, otherwise called as Council of Mutual Economic Assistance (CMEA) trading area and the world market. The world market comprised of mainly only the Western Europe economies since there was a very large requirement to setup an infrastructure in place for making the gas deliveries possible resulting in difficulty for transfer to remaining regions. The post socialist times see the merging of the Western Europe Economies with the Central Europe Economies who can be grouped together forming a unified structure called the world structure and share a similar rule book which was early only in use by the Western Europe Economies. Looking towards the former Soviet Union countries we can see that they bring about a lot of difference in institutional structure as compared to the western counterparts. The former institutions have been seen as the direct recipient of the internationalization approach undertaking in the former Soviet Union countries. The look at the post-socialist foreign market showcases a shift of central European economies towards the western European economies thus segregation of the all over market into 2 primary divisions one the western and central European economies and the former soviet countries. The Gazprom's approach in the business environment and market in some cases of central European economies remain same as the for the former Soviet Union countries. The example of countries like Bulgaria and Hungary, Gazprom tends to be using the mechanism with the help of methods and instruments which were seen to be employed in the former Soviet Union countries. The reasonable grounds for the non-functioning of the outcomes to the implement alternative business strategies ad tools which align to the international conventions and rules. The first seen transfer to the German democratic republic was seen in 1973 whereas Bulgaria, Hungary and Yugoslavia and Romania received their first supplies in 1974,1976,1979 and 1980 respectively.

The Ukraine had been dwelling as a pivot of gas exchange between Russia and Western Europe thus enjoying a near monopoly position. This gave Ukraine a opportunity to utilize this scenario to replenish being a debtor to Gazprom and a customer to Russian gas thus leading to discrepancies in the transit fees. There had been also issues pertaining to the depletion in some quantity of gas during the transit thus Gazprom abstained for falling into the situation by diverting and utilizing alternative routes to break-off from the transit monopoly which Ukraine had been befitting from thus cutting down from the transit routes across FSU to the maximum. The Yamal pipeline which ran from the Western Siberian Gas fields which were in the Yamal peninsula bypassing the Uraine's territory. The result was that now the distance was completed by directly moving through Belarus and Poland to ultimately reach Germany by covering approx. 4105km thus helping the Russian.

Organic growth Strategies

A) Intensive Growth Strategy

A.1) Market Development-

With the cooperation with Gaz de France, ENI or E.on Ruhrgas and subsidiaries namely Wingas, Nord Stream Gazprom marketing strategy is about the brand recall within the consumers in the German Market.

A.2) Product Diversification

The European goal to get free of carbon free emission has been placing the same pressure on Gazprom to create a better image in the European sector thus joint collaboration and initiative for carbon free mechanism are underway. The transportation development by Gazprom is also reducing trace of carbon as far as possible.

B) Diversification

The vertical and horizontal expansion has been very mutual where the European and German companies getting the opportunity to diverse vertically into downstream and midstream sector of the oil and gas industry in Russia thus helping the Russian to use the same to enter the European market. The European market downstream and midstream sector thus helps the company expand its roots in other product section.

B.1) Horizontal Diversification

The strategy paper of the European commission president Barroso launched in January 2007 put into statement that there will be sale of the assets in the infrastructure network of integrated gas and power provider making it available for foreign based companies to provide power, regulation still being unaccounted for. This would thus shift the focus on the consumer and make the market for oil and gas more competitive. Gazprom takes over these assets like distribution channels and storage facilities not just for profit making but to also have influential role.

C) Modernization

The company has been ever adapting learning through modernization while also assessing its own profitability. The company specially in the sector of transport network focused specially on Nord Stream 2 have been utilizing the maximum approach to use the technology for advancements. The company also has been working in the storage sectors and optimization of supplies. While it has been trying to also use the technologies in the best orientation to fulfil the requirements of subsidiary joint ventures by also adapting to geographical conditions.

Inorganic Growth Strategies

A) Strategic Alliance

A.1) Joint Venture

With reference to the statement by Alexander Medvedev, Deputy Chairman of the Management Committee, Gazprom though Bloomberg in 2007 Gazprom wanted to become the most Capitalized company in the world. Later it was brought to light that the Gazprom had an investment plan, but the German Government opposed the foreign takeover in the energy sector while the European Commission also proposed the unbundling of energy companies, Gazprom paused its expansion due to volatile legal environment during the late 2000'.

VNG, E.ON are the companies with which the Gazprom has initiated other projects of joint ventures while DITGAS Handel shaus Gmbh with 49% share, Gerogas with 51% shares, Verbundnetz Gaz with 5.26% shares, ZMB Mobil with 100% shares, Wingas with 49% share, Wingas Transport with 100% stake, Wingas Tansport Beteiligungs GMBH with 16.7% share, EuroHub GmbH with 16.7% share, Wintershall Erdgas Handelshaus GmbH and Co, KH with 50% share Gazprom Germania with 100% share.

A.2) Equity Strategic Alliance

E. on Ruhrgas AG is termed as the one of the major partners of Gazprom to maintain its presence in Europe. E.on Ruhrgas in assistance from BASF which further channels through Wintershall Holding partner in the planned pipeline project that is to pass through Baltic Sea (Nord Stream). In turn Ruhrgas holds even a significant share in OAO Gazprom.

Gazprom along with Wintershall created a gas marketing joint venture Wingas GMBH thus giving Gazprom a access to the German gas market.

B) Merger

B.1) Vertical Merger

WINZ and Winterhsall services in Germany are examples of vertical merger of Gazprom in Germany. This was taken place on 14/11/2012 as a swap agreement in which Wintershall shall be granted 25% plus 1 share of Achimov Formation of the Urengoy gas fields in Western Siberia. While gas transmission business in Germany controlled and operated by Gazprom is one such example.

C) Acquisition

C.1) Hostile and friendly takeovers

When we look at the conditions in takeovers like the required stakes to be made public, preventing parties from acting in concert and the minority shareholder protection the German corporate law is weak thus making it possible for acquisition of any public company without making any offer to the shareholders. There were still negligible instances of the takeovers which on contrast happened quite a few times in other European countries like Hungary (German Law handbook, n.a.)

Growth Strategies					
Inorganic Growth Strategies			**Organic Growth Strategies**		
Strategic Alliance	**Merger**	**Acquisition**	**Intensive Growth**	**Diversification**	**Modernization**
Joint Venture	**Horizontal**	**Hostile Takeover**	**Market Penetration**	**Concentric**	**Modernization**
Equity Strategic Alliance	**Vertical**	**Friendly Takeover**	**Market Development**	**Horizontal**	
Non-Equity Strategic Alliance	**Conglomerate**		**Product Development**	**Conglomerate**	
			Product Diversification		

Table: 4 Growth strategies of Gazprom in German market

Source: Compilation by Authors (Green – Strategy Utilized Red-Strategy Unutilized)

Figure: 14 Gazprom's Gas sale in Germany (billion cubic meter)

Source: Compilation by author from Gazprom Annual Report 2002-2021 and Europa

In this sub chapter we went through the growth strategies undertaken by the Gazprom in the German market. While looking at the European market we can see that the company utilized both the proportion of Inorganic and Organic Strategies. There were multiple cases of hostile that were seen in other European countries while in Germany they were in forms of alliances than complete dominance.

Chapter-3 Findings and Recommendations

3.1 Key Findings of similarities and differences of growth strategies of Oil and Gas Companies on domestic and foreign European Market

The outcomes from the application of each growth strategies can be seen by the effect in the segment of Gazprom. The positive effect can be seen with the help of the graph in the above specific strategic cases. The steady growth and maintained lead position showcase that Gazprom's growth strategies are the one to be considered while strategic development. There are multiple similarities and differences pointed out from case of Gazprom.

Growth Strategy	Similarities in Domestic and Foreign European Market: Case of Gazprom	Differences in Domestic and Foreign European Market: Case of Gazprom
Market Development	Performing marketing and brand recognition through	Exercising monopoly in the home market making them

	partnership with multiple frontline companies.	dependent and utilizing the revenue generated abroad at home market which is feasible in foreign environment
Product Diversification	Greener objectives and goals as the primary motive.	Varies depending on the economic, geographical, business, and other constraints present.
Horizontal Diversification	The company's approach towards acquiring assets for horizontal diversification.	Providing evident goods as complimentary initiative in home market while in foreign market providing additional service.
Modernization	Supply and transport network at the focal of modernization.	Geographical outreach in new unexplored locations on focus for foreign market while patent development at home.
Strategic Alliance-Joint Venture	Exchanging knowledge, market expertise and database.	Influence and burnish brand in foreign market while increasing the production in the home market.
Equity Strategic Alliance	Effected by liberalization in both markets.	Influence and burnish brand in foreign market while increasing the independency in the home market.
Vertical Merger	Market access and increasing profitability to both players.	Downstream companies to undertake operation in foreign market while upstream companies in domestic market.
Hostile Takeover	While hostile takeovers in both home or host happened with great influence from the politics either in aid or in obstruction.	The hostile takeover in domestic market were seen to have private dealings to protect or proceed with the dealings while in foreign market it was a key role in utilizing foreign

Table 5: Similarities and Differences in Domestic and Foreign European Market: Case of Gazprom in Germany and Russia.
Source: Compilation by authors

The theory foundation of strategies shows that there are two types of growth strategies one being organic growth while the other being inorganic growth. It was found out that not all the strategies were functional in the oil and gas industry. There were almost none examples of market penetration, product development, concentric diversification, conglomerate diversification, non-equity strategic alliance to be found in the oil and gas industry. Conglomerate mergers were scarcely and non-existentially used in oil and gas industry. We derive that features like geopolitics, transition to green energy, diversification to minimize risks, capital centric modernization for transfer of knowledge between players, government influence, mutual market growth, sharing infrastructure to maximize profit, monopoly quest, legal system and market competitions are the similar features in both foreign and domestic European market, understanding the case of Oil and gas Industry in Europe, while differences due to psychic distance, infrastructure, resources, geographical location, business constraints, economic conditions, downstream/upstream companies, competitor adaptation, threat and advantage come to light. When Gazprom was considered in Russia and Germany it further made some strategies applicable in oil and gas industry redundant in usage. Gazprom in Russia saw application of only Joint Venture, Equity Strategic Alliance, Horizontal Mergers, Vertical Mergers, Friendly Takeover, Market Development, Horizontal Diversification and Modernization while Gazprom in Germany only saw the application of Joint Venture, Equity Strategic Alliance, Vertical Mergers, Market Development, Horizontal Diversification and Modernization strategies.

Similarities and Differences of Growth strategies-

1. Oil and uses different companies and have stake in them to burnish its brand and increase brand recall within consumers both in domestic and foreign environment.
2. The geopolitical and national politics determine a major role in the strategic dominance in both the domestic and foreign market.
3. Gazprom has modernization strategy at the fulcrum for both the domestic and foreign supply chain network. While it also foresees a dominating role in asset control of the same.
4. The Strategic alliances and joint ventures play an important role in market outreach foreign market outreach while increase production at domestic level with respect to player.
5. Gazprom has multiple projects to diversify in the green sector and other industry to minimize the dependency of volatile oil and gas industry.
6. The outreach in a foreign market is restricted by the government interaction in the industry while in domestic market it is helped.
7. The geography, resources, economic conditions, competitions etc. add up to differentiated approach for both domestic and foreign market.
8. Upstream companies find vertical integration practices in foreign market while the downstream companies find vertical integration practiced at domestic market.

9 Focus of Modernization at domestic level is on developing patents while in foreign market geographical outreach. It also gives competitive edge and helps in placing dominance amongst players.

The interviews very well matched up with the findings that the company should investigate the forecasts, pricing, geopolitics, government influence and direct brand recognition at the consumer interaction level. Gazprom very well reflects the oil and gas industry and is in tune with the industry implementation of growth strategies. This all are very well organised and managed by the big and diverse corporate governing body with expertise in respective field and audited externally for better improvement. The governing body also exercises influence in and around the university.

3.2 Recommendation on introduction of growth strategies in International Oil and Gas Companies

The implementation of strategies plays a very governing role in shaping the company's future. The strategy directly affects the segment in which they are to be playing an influential role. The volatile environment also brings up the need for the progressive and swift approach to develop the trajectory thus aiding by the disruption and not being hampered. The oil and gas industry specially has become more volatile due to the existing factors at global scale thus bringing up uncertainties. In the study we tried to develop a thorough understanding of growth strategies taking place in the oil and gas industry while taking into the effect at both domestic and foreign environment.

The following recommendations might be advised.

1. The strategy in Oil and Gas industry is at a very high degree influenced by the government and the economic reliance of the market over oil and gas industry, thus a study about the **government agenda, the geopolitical situation in the market, relationship** between home and host market government should be **studied** prior to strategy implementation.

2. The oil and gas industry being highly capital intensive each strategy requires investment so **primary focus should be directing investment plan** for hassle free strategy implementation.

3. **Alliance** with the existing players in the market **to build up the knowledge, experience and technological understanding** of the oil and gas companies surviving in the region.

4. **Diversification is the need of the hour** in other sectors and industry such as to balance of any extreme condition arising in the industry.

5. **Lookout for growth and changes in the same and related industries** and any agent whose change can affect your industry e.g., factors effecting demand supply gap.

6. **Building up the brand image** within the consumer by affiliation with other brands of same or different industry while having a proactive team reaching out to consumers.

3.3 Limitations and recommendations for further research

The Russian and German market can be studied more thoroughly by gaining more date that is not available through open sources in the Oil and Gas Environment. Due to large number of operations through stakes and subsidiary bringing the strategies could be understood more specifically by analysing case by case study of the subsidiaries while considering one environment. The foreign market analysis can be conducted through the means of Asian market where the geo-politics play not a disrupting role to the very hard extent and strategies can be developed considering other factors in which politics is not the major player. The different segments of Oil and Gas industry can be studied separately. Companies with a different level of national government influence can be studied.

The strategies can be studied over a longer time period, and we can have a look over them how they come to effect on longer term. The scope of our study restricted us to study the strategy in a particular time frame where they had the most impact of overall growth. The Gazprom in the German market can be while looking at each strategy effect wherein getting additional data source in depth specific to the Gazprom's play in the German market.

The year 2022 will be seeing multiple developments happens due to swift moves against the normal course of the Oil and gas Industry. The strategical environment is exception with pullbacks from agreements and the oil and gas companies being influenced by geopolitics to a very great extent. This exceptional condition can be studied further after the normalcy is return because deriving any results from any move is impossible due to the least duration of the of saturation in the environment.

Conclusion

To conclude we brought about the similarities and differences of growth strategies of international oil and gas companies' growth strategies in foreign and domestic European market. The study was segmented into 3 parts theory, analysis, and findings/recommendations.

To begin with foundation of theory we first went through the growth strategy, to later understand inorganic and organic type of growth strategies and its component. Next, we understood the oil and gas industry and the strategies implemented within the industry. We developed an insight that not all the growth strategies are used in oil and gas industry. There were almost none examples of market penetration, product development, concentric diversification, conglomerate diversification, non-equity strategic alliance to be found in the oil and gas industry while there were scarce cases of conglomerate mergers. To finalize our theory, we went through the European market to further study oil and gas companies' growth strategies in the foreign and domestic market. We could see that geopolitics, green energy, diversification, economic situation, resources and physic distance between home and host market play a determining role in the growth strategies implementation.

In the analytical part of the oil and gas industry went through the oil and gas industry, its main players, and different characteristics of the industry. To understand the oil and gas industry we took the case of Gazprom while the foreign and domestic European market outlook was given by Germany and Russia respectively. We went through Gazprom's competitors in both the markets and analyzed the positive impact of the Gazprom's growth strategy as influential factor in the segment its utilized. We went through the Gazprom strategy outcome by learning the development in the segment of Gazprom during the years when the strategy implementation was at the forefront. These changes helped Gazprom have a steady growth and maintain a dominant position in both the domestic and foreign market. The government backing was a significant factor while monopoly practice and joint ventures helped it to expand greatly. The corporate governance structure with diversity and strength helped it exercise positive influence on growth.

In the last part of our research, we concluded with understanding the oil and gas industry with the case of Gazprom. The company surely provides a concrete backing to the theoretical researched and practices in use. There were multiple strategies that were further not seen in the foreign market of the oil and gas industry like product diversification, hostile and friendly takeovers while hostile and product diversification in the domestic market. Other strategies worked in tune with the earlier studied and practical strategies functioning in the oil and gas industry. The similarities and differences of the oil ang gas were far or less like the theoretical part of our study. Recommendations for the companies would be to watch out for developing geopolitical situation, government agenda, and changes/forecasts in oil and gas industry and related industries. Alliance formations and diversification is need of hour while knowledge capture and strategic implementation of capital should be the focus. Company should also burnish their name by brand recall with partnerships in projects and events.

There is multiple option for further expanding the research and improvising it for better understanding the oil and gas industry. The year 2022 would provide a more differential look into the industry, while understanding segments of the vast oil and gas industry could be done in future. The different geographical locations and supply chain networks can be investigated while the effect of other industries over oil and gas industry and vice versa can be further approached to. The research will surely help to analyze those directions and fields.

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Appendix

Extra details - Supply Chain of Oil and Gas industry in Russia

As the companies in Russia are diversifying the geographical outreach for the production, Yamal and Eastern Siberia and Far East along with offshore Arctic are getting added to the concentration around West Siberia.Nord Stream, Blue Stream and TurkStream are the key routes for the Russian gas export outreach thus pumping up the supply of Russian gas though Belarus and Ukraine to Europe. The certification for Nord Stream 2 was not approved by the German government considering the geopolitics situation revolving around Ukraine. Like oil diversification Russia uses 3000 km -long power of Siberia pipeline to be able to be sending gas from the far eastern fields directly to China. Siberia-2 pipeline is mere extension of the capacity for the same diversification.

For the last 2 decades Russia has been placing a lot of resources to invest in several new pipelines. Russia's energy strategy and the utilization of the pipelines have been focused on oil or the gas while this is beneficial for Russia it hampers the energy security of the countries importing the energy. The oil export was happening through primarily through the five-pipeline serving on regional basis. Baltic pipeline system which compromised of 2 different pipeline network BPS-1 and BPS-2 for exports via Russian ports on Baltic coast, one of the export systems from Black Sea port of Novorossiyk called Novorossiysk pipeline and the ESPO pipeline for the Asian market largely of which China and Japan are the major benefactor. These pipelines even in lieu of any lapses and degradation exceed by a great proportion the Russia's oil shipment.

The additional export capabilities also push up the surplus capacity for Russia's network considering the segment of oil export. Transnet furnishing the main accountability for this pipeline network laid down to support the export resonating with the 2014 figure of about 10% being transferred on the grid of Transneft. This threshold can further be broken by introducing economically suited shipments to act as a replacement if in case the need arises i.e., 25mt. Druzhba pipeline which transited through Belarus and Ukraine was supported with the transit routes to non-FSU market through the regions of former Soviet republic Ukraine, Kazakhstan, and the Baltic states. There existed a multiple spectrum of transit roues connected with Transneft which have been going through existential hindrance to have need-based functionality granted the influence of politics. Looking at the old picture Druzhba pipelines southern branch transited 15mt of oil through Ukraine. Transneft having multiple connectivity through Ukraine's oil pipeline network suggest that Ukraine infrastructure was providing additional transit specially Ukrtransnafta a Ukraine's oil pipeline provider. Odessa and Yuzhniy ports are no longer functional through the Russian companies abstaining from utilization due to diversion towards the Baltic Export (carnegieendowment.com).

Omsk-Pavlodar pipeline provides connectivity between Russia and Kazakhstan and further provides the connection between Kazakhstan-China for further transfer of the shipment. The arrangement with Kazakhstan with the involvement of the Kazakhstan's oil pipeline operator KazTransOil in 2014 gave way for Russia to ship out 7mt of Oil to China through this route Pipelines through the Baltic republic further strengthen the export. At the junction of Russia-Belarus border Northwestern branch of Druzhba pipeline covers Belarus to destination Butinge and Ventspils of Lithuania and Latvia respectively with joint total capacity of 15mt which has been not in use since 2006. The highest is still acclaimed by Transit shipment of Caspian oil through the Transneft's network.

LUISS

DEPARTMENT OF BUSINESS AND MANAGEMENT

DEGREE - MANAGEMENT MASTER OF MANAGEMENT
INTERNATIONAL MANAGEMENT

MASTER THESIS-SUMMARY

TOPIC: SIMILARITIES AND DIFFERENCES OF INTERNATIONAL OIL AND GAS COMPANIES' GROWTH STRATEGIES ON THE DOMESTIC AND FOREIGN EUROPEAN MARKETS: CASE OF GAZPROM IN RUSSIA AND GERMANY

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Globalization is the determining factor in pushing up progress all around the world with fulcrum over the oil and gas industry. The ever volatile market has brought up competition in which each player is pushing to outgrow its competition.The need of growth strategies come into place for sustainable developing while adapting to market condition.

The **object** of our research is growth strategies of international companies, while the **subject** is growth strategies of international Oil and Gas industry. The **goal** was set of the paper to be determination of similarities and differences of growth strategies of international oil and gas companies on domestic and foreign European market. To achieve the end goal, we selected Gazprom as the company from the oil and gas industry to better understand the market nuances existing. The key question defined was What are the similarities and differences of international oil and gas companies' growth strategies on the domestic and foreign European markets?

In total this paper comprised of **three chapters each comprising individually of their sub chapter**. The three main chapters will be describing the theories and research till date, the studied case and the result comparing the practical applicability of the theories in different parts. The timeline that was considered for the analytical part of the research is considered for Gazprom from 1990 to 2021 to study the growth strategies without any major external influence. While 2022 was brushed through to extraordinary circumstances development leading to extremely volatile market with changes determined by constantly changing geopolitics.

The **first part of the research, Chapter 1** comprised of developing a foundation through the theories related to the growth strategies of oil and gas companies. We divided this part into 3 different sub-part. In the beginning of first sub-part, we discussed growth strategies which are primarily used for the development and achieving the sales and profit margin which the company has been aiming at thus giving the much-needed drive. Prior to discuss the different segments of growth strategies we go through the corporate governance as the research point out the direction to attain maximized firm value begins with the corporate governance which further is linked to the market value. We can see that the growth strategies are divided into two parts inorganic and organic growth strategies. We start with the organic growth strategy which are also referred to as internal growth considers the economical, physical, social, and organizational growth that takes place within the organization staying free from the influence from the external factors or interactions. The organic growth is visible in action when the companies engage in crossing the threshold of earlier existing product range and the size while also in case were with or without doing so engaging in international cooperation with businesses.

The organic Growth strategy can further be segmented into Intensive Growth, Diversification and Modernization. The intensive growth is comprised of 4 different strategies- Market Penetration, Market Development, Product Development and Product Diversification. Market Penetration is utilized by company for an existing product to push it in the market to expand the consumer base, market development is utilized for engaging into an unexplored part of the market, product development is bringing about changes in the product to better suit the consumer needs while product diversification is firstly developing of a product and then outreach new consumer profiles which do not already exist in the company's reach. The second type of organic growth strategies is diversification strategies. The diversification strategies are of 3 types- Concentric Diversification, Horizontal Diversification and Conglomerate Diversification. In concentric diversification the company pinpoints the existing potential to bring about growth in a certain area. Horizontal diversification takes place when the company grows the position in the market with offering unrelated products to ones not existing in the market. Conglomerate diversification takes place the company builds up a different process for production. Modernization focuses on research and development to improve the quality or drive better production.

Similarly, there is another branch of growth strategies i.e., inorganic growth strategies which initiates fast market advancements post mergers or acquisitions. Strategic alliances are the first in the subcategory wherein it is divided into 3 types – Joint ventures when multiple companies join hand to bring up a child company to achieve a common goal, Equity strategic alliance when there is sale out of shares from one company while another one buys it, this can be also mutually interchanges shares case. Non-equity alliances occur when the organisation undergoes agreement but still not engaging in any capital sharing. Another type of inorganic growth strategies are mergers. Horizontal mergers take place between companies existing in the similar business cycle thereby increasing efficiency. Vertical mergers formed when companies are located at different stages of production thus such mergers help in expansion and improve in path from production to consumer. Conglomeration the last type of merger strategy takes place when a company undertakes a company such as to develop a supply of production resources and raw materials. Acquisition is the last branch of inorganic growth strategies made up further of hostile takeover when
the target company is not compliant with the takeover while in a friendly takeover in which the target company is compliant.

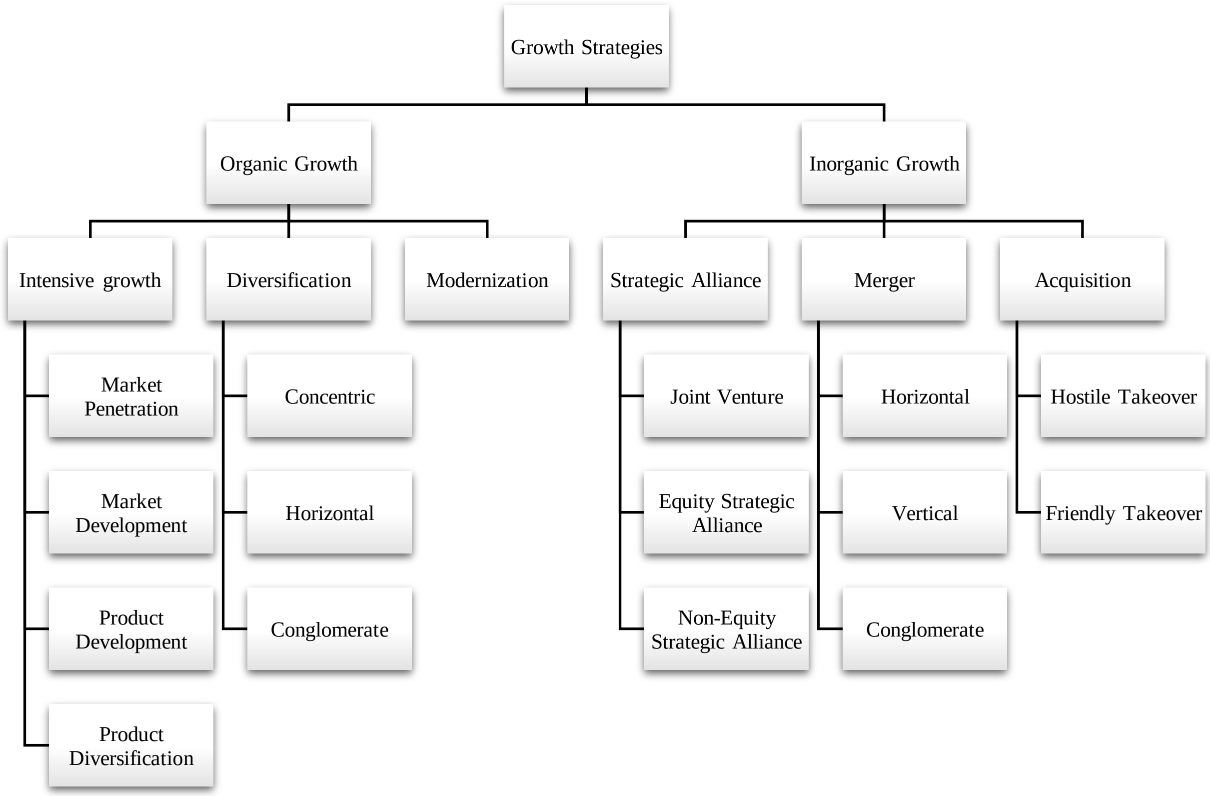

Figure 1: Types of growth strategies

Source: Ilhan & Durmaz; Ansoff; Kalia; Engin; Ostlund & Lindblad

In the **second sub-part of chapter 1** we start with the different segmentation of the oil and gas. The segmentation broadly happens in 2 ways one division being based on sectors upstream (exploratory area), midstream (supply chain) and downstream (processing, refining and sales) while the other segmentation being service companies (engineering and management for infrastructure development), pure downstream company (comprised of refineries and retail network) and the trading company (formed post deregulation in trade exchanges).

Organic strategy in oil and gas industry brings up the applications of these strategies-

1. Market Development (Intensive growth strategy) – The example of oil and gas company in Nigeria shows the utilization of market mix to reach the market.
2. Product Diversification (Intensive growth strategy) – The oil and gas sector during 1975-1984 had been working towards diversifying. Amco, ARCO, Chevron and Exxon provide current scenario.
3. Horizontal Diversification (Diversification) - BP, Exxon, Hydro, Shell, Statoil and Total developed strategies to integrate while 1990 also provide evidence wherein multiple businesses in the oil and gas sector diversified into the petrochemical to develop a secure market and economies of scale.
4. Conglomerate Diversification (Diversification) - Oil and gas industry were very rare and barely evidence of these occurrence, the very few cases could be associated by the social challenges.
5. Modernization - The Kazakhstani oil companies are placing innovation at different segments of the company is an example. Data handling and operations become more efficient with these strategies.

Inorganic growth strategies in oil and gas industry brings up the applications of these strategies-

1. Joint Ventures (Strategic Alliances) - 6 joint ventures between Nigeria National Petroleum Corporation and multinational companies while exon and shell cases are an example wherein national economic interests and monopoly exercise were motives.
2. Equity Strategic Alliance (Strategic Alliances) – Monetary feasibility and non-economic benefits play a role. Seen in ConocoPhillips acquisition of LUK oil and Sinopec having stake in AP LNG.
3. Horizontal Mergers (Mergers) - Exxon and Mobil merging to lower cost and competition fetches an example. Cost reduction and generation for better profit margins seen by function reduction.
4. Vertical Mergers (Mergers) – Ghanian company merging with Western companies to capture innovation and technical expertise restricting one provide labour. Overhead costs and oil and gas reserves build-up in 1980s and 2000s while unstable prices and scare return on capital were a drive.
5. Hostile Takeover (Acquisition) - DNO's takeover of Faroe Petroleum, Obsidian Energy of Bonterra Energy are examples. Close relations between firms factor while spun-off of assets as defence.
6. Friendly Takeover (Acquisition) - The example of Calima Energy's friendly takeover of both of its joint venture partner in Montney oil and gas Basin in Canada see in one already having knowledge exchange.

In the **third sub-part of chapter 1** we began with comparing home and host market where we could see that the experimental knowledge can more easily be transferred when the home and host country both have similar cultural. The most important success factor which influence the global market is the rivalry presence in the domestic market. In the European, European commission has set forth the integration of the European oil and gas market in a transparent mechanism to make it more cost-effective while maintaining the stability. Learning this we move on to understand the growth strategies in domestic and foreign European market of Oil and gas companies by taking key features and examples in some.

Organic strategy in oil and gas industry in the European market brings up the applications of these strategies-

1. Market Development (Intensive growth strategy) – The geopolitics in this case plays a major role in the degree of alignment between the home and host market and the competition and cooperation are both functionary of geographic influence driven by political, military, and existing economic motivation both at the national and regional level.
2. Product Diversification (Intensive growth strategy) – The Europe home and host market are similar making the move towards transition towards green energy. The countries infrastructure, geographical location, resources availability, government influence, business constraints conditions, time restrictions and goal prioritization brought about differences.
3. Horizontal Diversification (Diversification) - The European countries more inclined towards environmentally friendly approach while in the home market often influence the production structure

at the downstream companies in the oil and gas companies while in foreign market its more related to the non-fuel sale approach happening at the consumption zone.

4. Modernization - Domestic and foreign environment the strategy depends on the primary capital and the technology transfer through the wide network which in turn effects the pace to modernize.

Inorganic growth strategies in oil and gas industry in European market brings up the applications of these strategies-

1. Joint Ventures and Equity Strategic Alliance (Strategic Alliances) – The joint venture in Europe in Domestic market is specially seen to happen in the Downstream companies while that is seen to happen in upstream within the foreign market for knowledge transfer and market opening.
2. Horizontal Mergers (Mergers) – Inculcate a way to expand while a threat of foreign player entry. Profit, development and sharing of energy infrastructure for energy transfer are motivations.
3. Vertical Mergers (Mergers) - upstream segment of the supply chain in the foreign market while in the domestic market it was seen to happen in the downstream segment minimize the need for dependency and knowledge.
4. Hostile and Friendly Takeover (Acquisition) - Challenged by the Legal system pertaining in the market, so the legal system governance is the one to look out for irrespective of home or host. Preventative effort taken by government and domestic alliance as a hindrance.

To **begin with the analysis part**, we now touched the case of Gazprom to understand the foreign and domestic market taking the case in Germany and Russia.

In chapter 2 we began with first sub part in which we discussed firstly the oil and gas industry and current standpoint. Then we moved on to the growth that the industry had been undertaking while in the third sub-part The middle east countries have a very little extra un-utilized capacity on the balance so there is a very limited extent to which growth of production can be seen in that region, exception of Iraq. The large investments that the in the industry will also be unable to prevent to uplift the available resource limit but will pave a way to exploit and harness more of it. Looking at the growth in the oil and gas industry transition from 19th century to 20th century of the Oil industry saw a rise of oil majors or so called “Big Oil” comprising of the American Exxon Mobil and Chevron while Europe was represented by BP, Royal Dutch Shell, Total Energies and Eni. Saudi Amaro and Nation Iranian Oil Company were the prominent names among the National Oil Companies created for nations interest by their nationalization. When we look at other companies’ growth under supervision of the state, we can see that the China National Petroleum Corporation and Rosneft came out as tools through which the states have a managing control over the country’s resources. Components like financial strength and investment capacity, technological and technical expertise while also accounting for skill that are much needed in the projects scaled at a bigger picture, which tagged along human resources and risk mitigation helped western international oil companies stand

out of all with the size and the influence they cast on the public at the trade outs. Climate resolutions, transition of global energy sector, geopolitics technology adaptation was discussed to drive growth in upcoming scenarios.
The 2022 outlook of the oil and gas industry by the Deloitte shows the global economic slowdown tends to rebound and take over the existing circumstances and gain the much-needed momentum in the year 2022 which had been subjugated to bottom. While the roadmap to the next 12 to 18 months was look forward by the oil strategists with the purpose-driven, tech-enabled, and human-powered organizations coupled with smart interim goals and progressive communication and disclosure strategies.

Looking at factors affecting growth strategies we can see that Gazprom specially has exceptional focus on the geopolitical issues, fluctuation in currency and EU policies. To understand factors which even more influence growth strategies we conducted interviews to understand oil and gas companies at ground level. The interview was conducted with O. P. Sharma director of sales for SMK Petrochemicals India Pvt. Ltd. to understand the oil and gas industry with help of his 28 years of experience in the international oil and gas industry and Mr. A.K. Singh who is a regional distributor for Raj Petro Specialities Pvt. Ltd. It was found that the geopolitics, demand and supply gap and forecasts of the industry are primary influential factors for strategy development while the interaction between consumers, dealers and the zonal sales team is the topmost influence for domestic growth.

Looking at the main players in oil and gas industry by market capital globally we can see that Saudi Aramco enjoys the highest market capitalization of 2.173 trillion US Dollar while also being one of the most profitable companies. Gazprom holding 16% of global gas reserves leads the gas production. Russia handling the production as the world's second largest for natural gas just behind United States, being backed by the largest reserves of gas present as a natural asset for the country. With the developments in 2022 due to the special military operations undertaken by Russia there has been an influx of the geopolitical influence on the scenario wherein the Russian company are facing partial to full restriction due to the cut-off from the European market making the market highly volatile with developing changes. While in Germany the gas distribution network has a major influence over how the energy distribution network.

While the Gazprom is both under the Government and private control, we can see both the characteristics of reaction from a private enterprise and from a governmental enterprise while Russia gives a market sandwiched between developed and developing market thus helping gain more clarity in the difference. The Gazprom has been able to set up roots very well by diversification both in front and backward direction thus enhancing their capabilities in different areas of gas industry which stretches over exploration of resources, production process, refinement, transportation, distribution and much further also in marketing and power generation mechanism.We look into briefly corporate governance and its relation to growth of Gazprom..

Organic strategy of Gazprom in Russia brings up the applications of these strategies-

1. Market Development (Intensive growth strategy) – The Market development strategy of Gazprom in Russia has been greatly under effect through the government influence thus decrease competitiveness while enjoying the monopoly status on also the export. While build-up of pipelines to outreach more efficiently the unconnected zone and diversifying its foreign operation also towards Asia. Presence of Gazprom in Multiple smaller company's further burnishes brand without engaging much in marketing strategies.
2. Product Diversification (Intensive growth strategy) – Approaching the Chinese market with LNG and petrochemical thus developing the same at home. The energy need of the company had made it to diversify into other dependent sources of green energy which not only sustain domestic but foreign environment.
3. Horizontal Diversification (Diversification) - The horizontal diversification of the companies happening in the downstream companies took place in oil sector, the coal sector, nuclear power sector and various other non-energy related sectors to lessen the total dependency of the company over the oil and gas market. While also investment in supplementary products in cafes, coffee machines production TV media and transportation has been other ways company diversified.
4. Modernization - Gazprom has continuously been uplifting the modernization by spending on research and development for increasing patents while also looking at unexplored locations such as Arctic. It also has been catching up with failures in supply chain by modernization.

Inorganic strategy of Gazprom in Russia brings up the applications of these strategies-

1. Joint Ventures (Strategic Alliances) – Achimaz which is a 50:50 joint venture between Gazprom's subsidiary Gazprom Dobycha Urengoy and Wintershall Dea maintains the Ahimov block 1A letting it exchange markets in both countries.
2. Equity Strategic Alliance (Strategic Alliances) – There developed some minor risks in the social, political, judicial, regulatory, and economic areas with the effect on international financial rating of Russia but still multiple cases of strategic alliance to harness control with domestic environment.
3. Vertical Mergers (Mergers) – The vast supply chain control extent that the company took under control and having dominance over the domestic market. The company has control over multiple export routes and compressing stations are some of the examples.
4. Hostile Takeover (Acquisition) - The confidential dealings also bring about the connectivity of the leading individuals controlling the dynamics of oil and gas industry. The Gazprom being backed by state makes takeovers less hostile.
5. Friendly Takeover (Acquisition) - Gazprom takeover of the SUEK a coal and power business by acquisition of 50% share and 1 share in joint venture altogether expanded the monopoly in the energy business while takeover was looked at to as damaging to the Russia's power restructuring where separation of generating firms.

Growth Strategies					
Inorganic Growth Strategies			**Organic Growth Strategies**		
Strategic Alliance	**Merger**	**Acquisition**	**Intensive Growth**	**Diversification**	**Modernization**
Joint Venture	Horizontal	Hostile Takeover	Market Penetration	Concentric	
Equity Strategic Alliance	Vertical	Friendly Takeover	Market Development	Horizontal	
Non-Equity Strategic Alliance	Conglomerate		Product Development	Conglomerate	
			Product Diversification		

Table:2 Growth strategies of Gazprom in Russian Market

Source: Compiled by Author (Green- Strategy Used Red- Strategy Not Used)

The socialist time the export from Russia were planned in such a way that it could be segmented roughly into 2 parts that were centrally planned economies, otherwise called as Council of Mutual Economic Assistance (CMEA) trading area and the world market. The post socialist times see the merging of the Western Europe Economies with the Central Europe Economies who can be grouped together forming a unified structure called the world structure and share a similar rule book which was early only in use by the Western Europe Economies. Gazprom diverting and utilizing alternative routes to break-off from the transit monopoly which Ukraine had been befitting from thus cutting down from the transit routes across FSU was one of the critical strategies to develop better growth.

Organic strategy of Gazprom in Germany brings up the applications of these strategies-

1. Market Development (Intensive growth strategy) – With the cooperation with Gaz de France, ENI or E.on Ruhrgas and subsidiaries namely Wingas, Nord Stream Gazprom marketing strategy is about the brand recall within the consumers in the German Market.
2. Product Diversification (Intensive growth strategy) – The European goal to get free of carbon free emission has been placing the same pressure on Gazprom to create a better image in the European sector thus collaboration and initiative for carbon free mechanism are underway. The transportation development by Gazprom is also reducing trace of carbon as far as possible.

3. Horizontal Diversification (Diversification) - Sale of the assets in the infrastructure network of integrated gas and power provider making it available for foreign based companies was seen in Germany. This would thus shift the focus on the consumer and make the market for oil and gas more competitive. Gazprom takes over these assets like distribution channels and storage facilities not just for profit making but to also have influential role.
4. Modernization - The company has been ever adapting learning through modernization while also assessing its own profitability. The company specially in the sector of transport network focused specially on Nord Stream 2 have been utilizing the maximum approach to use the technology for advancements. The company also has been working in the storage sectors and optimization of supplies. While it has been trying to also use the technologies in the best orientation to fulfil the requirements of subsidiary joint ventures by also adapting to geographical conditions.

Inorganic strategy of Gazprom in Germany brings up the applications of these strategies-

1. Joint Ventures (Strategic Alliances) – With reference to the statement by Alexander Medvedev, Deputy Chairman of the Management Committee, Gazprom though Bloomberg in 2007 Gazprom wanted to become the most Capitalized company in the world. VNG, E. ON are the companies with which the Gazprom has initiated other projects of joint ventures. While legal environment in Germany curbed its expansion.
2. Equity Strategic Alliance (Strategic Alliances) – Gazprom along with Wintershall created a gas marketing joint venture Wingas GMBH thus giving Gazprom a access to the German gas market. E. on Ruhrgas AG is termed as the one of the major partners of Gazprom to maintain its presence in Europe.
3. Vertical Mergers (Mergers) – WINZ and Winterhsall services in Germany are examples of vertical merger of Gazprom in Germany. This was taken place on 14/11/2012 as a swap agreement in which Wintershall shall be granted 25% plus 1 share of Achimov Formation of the Urengoy gas fields in Western Siberia. While gas transmission business in Germany controlled and operated by Gazprom is one such example.
4. Hostile Takeover (Acquisition) - When we look at the conditions in takeovers like the required stakes to be made public, preventing parties from acting in concert and the minority shareholder protection the German corporate law is weak thus making it possible for acquisition of any public company without making any offer to the shareholders. There were still negligible instances of the takeovers which on contrast happened quite a few times in other European countries like Hungary (German Law handbook, n.a.)

Growth Strategies					
Inorganic Growth Strategies			**Organic Growth Strategies**		
Strategic	**Merger**	**Acquisition**	**Intensive**	**Diversification**	**Modernization**

Alliance			Growth		
Joint Venture	Horizontal	Hostile Takeover	Market Penetration	Concentric	Modernization
Equity Strategic Alliance	Vertical	Friendly Takeover	Market Development	Horizontal	
Non-Equity Strategic Alliance	Conglomerate		Product Development	Conglomerate	
			Product Diversification		

Table: 3 Growth strategies of Gazprom in German market

Source: Compilation by Authors (Green – Strategy Utilized Red-Strategy Unutilized)

To conclude there were almost none examples of market penetration, product development, concentric diversification, conglomerate diversification, non-equity strategic alliance to be found in the oil and gas industry. Conglomerate mergers were scarcely and non-existentially used in oil and gas industry. We derive that features like geopolitics, transition to green energy, diversification to minimize risks, capital centric modernization for transfer of knowledge between players, government influence, mutual market growth, sharing infrastructure to maximize profit, monopoly quest, legal system and market competitions are the similar features in both foreign and domestic European market, understanding the case of Oil and gas Industry in Europe, while differences due to psychic distance, infrastructure, resources, geographical location, business constraints, economic conditions, downstream/upstream companies, competitor adaptation, threat and advantage come to light. When Gazprom was considered in Russia and Germany it further made some strategies applicable in oil and gas industry redundant in usage. Gazprom in Russia saw application of only Joint Venture, Equity Strategic Alliance, Horizontal Mergers, Vertical Mergers, Friendly Takeover, Market Development, Horizontal Diversification and Modernization while Gazprom in Germany only saw the application of Joint Venture, Equity Strategic Alliance, Vertical Mergers, Market Development, Horizontal Diversification and Modernization strategies. The big and diverse corporate governing body had positive outlook over growth.

Similarities and Differences of Growth strategies-

10 Oil and uses different companies and have stake in them to burnish its brand and increase brand recall within consumers both in domestic and foreign environment.

11 The geopolitical and national politics determine a major role in the strategic dominance in both the domestic and foreign market.

12 Gazprom has modernization strategy at the fulcrum for both the domestic and foreign supply chain network. While it also foresees a dominating role in asset control of the same.
13 The Strategic alliances and joint ventures play an important role in market outreach foreign market outreach while increase production at domestic level with respect to player.
14 Gazprom has multiple projects to diversify in the green sector and other industry to minimize the dependency of volatile oil and gas industry.
15 The outreach in a foreign market is restricted by the government interaction in the industry while in domestic market it is helped.
16 The geography, resources, economic conditions, competitions etc. add up to differentiated approach for both domestic and foreign market.
17 Upstream companies find vertical integration practices in foreign market while the downstream companies find vertical integration practiced at domestic market.
18 Focus of Modernization at domestic level is on developing patents while in foreign market geographical outreach. It also gives competitive edge and helps in placing dominance amongst players.

The implementation of strategies plays a very governing role in shaping the company's future. The strategy directly affects the segment in which they are to be playing an influential role. The volatile environment also brings up the need for the progressive and swift approach to develop the trajectory thus aiding by the disruption and not being hampered. The oil and gas industry specially has become more volatile due to the existing factors at global scale thus bringing up uncertainties. In the study we tried to develop a thorough understanding of growth strategies taking place in the oil and gas industry while taking into the effect at both domestic and foreign environment.

The following recommendations might be advised.

7. The strategy in Oil and Gas industry is at a very high degree influenced by the government and the economic reliance of the market over oil and gas industry, thus a study about the **government agenda, the geopolitical situation in the market, relationship** between home and host market government should be **studied** prior to strategy implementation.

8. The oil and gas industry being highly capital intensive each strategy requires investment so **primary focus should be directing investment plan** for hassle free strategy implementation.

9. **Alliance** with the existing players in the market **to build up the knowledge, experience and technological understanding** of the oil and gas companies surviving in the region.

10. **Diversification is the need of the hour** in other sectors and industry such as to balance of any extreme condition arising in the industry.

11. **Lookout for growth and changes in the same and related industries** and any agent whose change can affect your industry e.g., factors effecting demand supply gap.

12. **Building up the brand image** within the consumer by affiliation with other brands of same or different industry while having a proactive team reaching out to consumers.

There is multiple option for **further expanding the research** and improvising it for better understanding the oil and gas industry. The year 2022 would provide a more differential look into the industry, while understanding segments of the vast oil and gas industry could be done in future. The different geographical locations and supply chain networks can be investigated while the effect of other industries over oil and gas industry and vice versa can be further approached to. The research will surely help to analyze those directions and fields.