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Economic Analysis of BP Company

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Objectives of thesis

BP p.l.c. is the parent company of the BP group of companies. The objectives of this diploma thesis are the following: analysing the overall financial status from 2013 to 2017 of BP p.l.c.; understanding the different tools of economic analysis can be used in corporate governance, for instance, the evaluation of key performance indicators, the levels of competitors, the potential threat and new opportunities; investigating the factors from different aspects which may influence the industry and the company; proposing the suggestions to adjust the company's strategy for the future development.

Methodology

The economic analysis includes the analysis of financial statement, which identifies the disadvantages from the perspective of finance, evaluates the results of business operations and whether an entity is stable, solvent, liquid and profitable enough; Besides, the economic analysis could help reveal the changes of economic environment, adjust current strategy and seek for new opportunities, which fill the gaps of the financial analysis. So PEST analysis is applied to analyze macro environment, SWOT analysis is applied to provide a comprehensive view of BP's development.

The proposed extent of the thesis

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Keywords

Economic analysis, financial analysis, profitability, SWOT, PEST, strategic management

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Declaration

I declare that I have worked on my diploma thesis titled "Economic Analysis of BP Company" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 27th November 2019 _____

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Economic Analysis of BP Company

Abstract

This thesis focuses on the economic analysis of company BP (British Petroleum) between 2014 and 2018. With a history of over one hundred years, BP is a vertical integrated company which conducts business in all areas within the oil industry.

The objectives of this diploma thesis are the following: analysing the overall financial status from 2014 to 2018; understanding the different tools of economic analysis can be used in corporate governance, for instance, the evaluation of key performance indicators, the levels of competitors, the potential threat and new opportunities, investigating the factors from different aspects which may influence the industry and the company, proposing the suggestions to adjust the company's strategy for the future development.

The findings of the thesis are following: external environment analysis which includes oil demand, oil consumption and also the oil price change; internal analysis of company's profile, board of directors' details, financial analysis of BP from 2014 to 2018 with interpretation of selected ratios. Besides, SWOT analysis, PEST analysis and Porter's five forces are implemented in practical parts and the results are explained. In the end, there is a discussion about BP's oil crisis in 2010, after that in conclusion the key figures of BP's financial performances are presented, and recommendations for BP's further development are provided.

Keywords: economic analysis, financial analysis, profitability, liquidity, gas and oil industry, oil price, SWOT, PEST, Porter's five forces model.

Ekonomická Analýza Společnosti BP

Abstrakt

Tato práce se zaměřuje na ekonomickou analýzu společnosti BP (British Petroleum) v letech 2014 až 2018. BP je s více než stoletou historií vertikálně integrovanou společností, která podniká ve všech oblastech ropného průmyslu.

Cíle této diplomové práce jsou následující: analýza celkového finančního stavu mezi lety 2014 a 2018; porozumění nástrojům ekonomické analýzy, které lze použít v podnikové správě, například při hodnocení klíčových ukazatelů výkonnosti, úrovně konkurentů, potenciální hrozby a nových příležitostí, zkoumání faktorů z různých hledisek, které mohou ovlivnit průmysl a společnost, předkládá návrhy na přizpůsobení strategie společnosti budoucímu vývoji.

Zjištění práce jsou následující: analýza vnějšího prostředí, zahrnující poptávku po ropě, spotřebu ropy a také změnu ceny ropy; interní analýza profilu společnosti, informace o představenstvu, finanční analýza BP v letech 2014 až 2018 s výkladem vybraných ukazatelů. Kromě toho jsou v praktických částech implementovány SWOT analýzy, PEST analýzy a Porterova analýza pět sil a výsledky jsou vysvětleny. Na konci se diskutuje o ropné krizi společnosti BP v roce 2010, poté jsou představeny klíčové údaje o finanční výkonnosti společnosti BP a jsou poskytnuta doporučení pro další rozvoj společnosti BP.

Klíčová slova: ekonomická analýza, finanční analýza, ziskovost, likvidita, plyn a ropa, cena ropy, SWOT, PEST, Porterův model pěti sil.

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List of abbreviations

ADS	American Depositary Share
BP	British Petroleum
CNPC	China National Petroleum Corporation
DPS	Dividends per Share
EPS	Earnings per Share
FTSE	Financial Times and Stock Exchange
GDP	Gross Domestic Product
IEA	International Energy Agency
NWC	Net Working Capital
NYSE	New York Stock Exchange
OPEC	Organization of the Petroleum Exporting Countries
ROA	Return on Assets
ROE	Return on Equity

1 Introduction

In modern society, with the rapid developments of information technology，changes of market environment and increase of competitions in all spheres of economy, how to achieve long-term development remains a major goal for both startup companies and enterprises with a long history. Conducting the comprehensive analysis of a company, the shareholders and investors should focus on the past financial performance, understand the current situation and also evaluate the market environment. Under these circumstances, the economic analysis of a company is needed before decision making.

On one side, the economic analysis includes the analysis of financial statement, which identifies the disadvantages from the perspective of finance, evaluates the results of business operations and whether an entity is stable, solvent, liquid and profitable enough; On the other side, the economic analysis could help reveal changes of economic environment, adjust current strategy and seek for new opportunities, which fill the gaps of the financial analysis.

BP p.l.c., the British multinational oil and gas company headquartered in London, England. With operations in 78 countries and over 73,000 employees worldwide (BP annual report 2018), it has become one of the world's seven "supermajors" in oil industry. This thesis analyzes the internal and external growths of the company, and draws the conclusion of its general status of financial operation and gives recommendations on the future development according to analysis of external environment.

2 Objectives

BP p.l.c. is the parent company of BP group of companies, which is an oil company including four main businesses: exploration and production; gas, power and renewables; refining, marketing and chemicals. Operating in 78 countries and 18,700 retail sites among the Europe, the U.S., central Asia and so on, it has 18,411 million barrels of oil equivalent – proved hydrocarbon reserves. And generated $9.5bn profit to BP shareholders in 2018. (BP annual report 2018).

The objectives of this diploma thesis are the following: analysing the overall financial status from 2014 to 2018; understanding the different tools of economic analysis can be used in corporate governance, for instance, the evaluation of key performance indicators, the levels of competitors, the potential threat and new opportunities; investigating the factors from different aspects which may influence the industry and the company; proposing the suggestions to adjust the company's strategy for the future development.

Therefore, according to these objectives, this thesis is mainly divided into three parts. The first part is theoretical part, which consists of the literature review of history of the gas and oil industry and also the development of the BP p.l.c., definition of the economic analysis tools and explanation of why these techniques are applied. The second part of this thesis is the practical part, which demonstrates the result of calculation and discussion of the selected data between 2014 to 2018, besides, the analytical methods like SWOT analysis and PEST analysis will be applied to have a comprehensive perspective of the company's market environment. Last but not least, the conclusion part summarizes the analysis results and discussion, based on the company's internal growth, market environment and position and such facts, the recommendations for further development will be provided.

3 Literature Review

3.1 Industry

3.1.1 Overview of the gas and oil industry

As this thesis deals with the economic analysis of the BP p.l.c., it is vital to have a clear view upon the gas and oil industry. In today's economic and social life, oil prices have been one of the world's most popular topics. Oil is a commodity which price is in line with the law of supply and demand of commodities. This industry is considered as the world's most economically valuable industry, a global powerhouse that hires thousands of employees worldwide each year and generates hundreds of billions of dollars worldwide. In those regions where locate many oil companies, these gas and oil companies are essential, and in most of time they significantly contribute to national GDP.

The exploration and utilization of oil and natural gas has a history of over thousand years, but this industry has been established for only about 100 years. As a high-quality energy source and a multi-purposes valuable chemical raw material, oil has been rapidly and widely used in various sectors of the national economy since the beginning of 20th century, causing huge changes in the structure of the world's consumption energy. In 1950s, the world's energy consumption also mainly relied on coal. In 1960s, oil and gas consumption grew rapidly against other energies. In the mid of 1960s, oil and gas replaced coal, ranking first in the world's energy consumption.

The oil and gas industry is usually divided into three main components: upstream, midstream and downstream. The upstream component is also referred to exploration and production; the midstream includes the process of transportation and storage; and the downstream means refining crude oil and purifying natural gas. Main products of this industry are fuel oil and petrol. And petroleum can be used for many chemical products, for example, pharmaceuticals, synthetic fragrances and plastics. Due to the economic value and variety of its products, oil is also called “black gold”. (Hu, Feng et al., 2013, p.1-p.3)

Oil is a special commodity, which is considered as the important strategic material. When talking about international oil prices, there are many influencing factors should be

taken into consideration. Although the determinant is relations between supply and demand, it is influenced by the international economy a lot. Also, the influence of politics, diplomacy, military, as well as the speculation of huge amounts of hot money in the world, all have great impacts on them. These factors other than supply and demand always affect oil prices in short time. Therefore, the fluctuations in oil prices are always difficult to predict. In a word, the following reasons may be concluded to drive supply and demand:

- Change in the US dollar value
- Activities of OPEC (Organization of the Petroleum Exporting Countries)
- Production and inventory supplies
- Deals and treaties
- Development of global economy (Hu, Feng et al., 2013, p.33-p.35)

3.1.2 Five periods of oil price changes

Accoring to Maugeri (2006, p.103-p.145), over the past half century, there are mainly five periods of crude oil price changes.

- **Low price period before 1973**

Before 1960 when OPEC established in Baghdad, the capital of Iraq, the production and demand of oil were controlled by western countries, and the price of oil was at a low level of monopoly of US $1.5 to US$1.8 per barrel. After its establishment, OPEC continued to struggle with western multinationals around the production rights and pricing power of oil.

From the establishment of OPEC to 1970, crude oil prices have remained at the level of US$1.8 to US$2 per barrel. It can be seen that OPEC's ability to control oil prices in the international oil market was negligible throughout the 1960s. From 1970 to 1973, with the victory of OPEC in a series of negotiations, the body of the decision on crude oil prices began to change, and the price of crude oil showed signs of rising. By October 1973, the price of oil was close to US$3 per barrel.

- **1973-1978 Rising stage and first oil crisis**

During this time, OPEC took some actions which includes joining forces on the basis of nationalization of petroleum resources, seizing the international oil pricing power, using

oil as a weapon to attack developed countries in Europe and the United States, and safeguarding national interests. The fourth Middle East war broke out in October 1973, and oil prices rose sharply, from nearly US$3 per barrel in October to US$11.65 per barrel in January 1974, causing the first energy crisis in western countries.

In February 1974, Nixon proposed the first meeting of the oil consumer countries and the establishment of the International Energy Agency (IEA). The energy issue has become an important issue in international political diplomacy, and OPEC's international status has risen rapidly. Crude oil prices remained stable at US$10-12 per barrel from 1974 to 1978.

- **1979-1986 Second oil crisis and digestion phase**

During the second energy crisis which is between 1979 and 1981, Brent oil prices soared to US$36.83 per barrel. With two oil crises, OPEC completely regained the pricing power of oil from the hands of international oil monopoly capital. From 1981 to 1986, during the higher oil price period in which OPEC implemented the crude oil production quota system, Brent oil prices slowly dropped from US$36.83 per barrel to US$27.51 per barrel.

With the growth of crude oil production outside OPEC and the development of energy conservation and substitutes, OPEC's ability to control oil prices has been declining, and crude oil prices had begun to fall. In 1986, oil prices fell sharply to around US$13 per barrel.

- **1987-1997 Lower market price period**

From 1987 to 1997, the cost of oil kept declining because of the improvement of oil exploration and advancement of new technology, together with the inscresing output efficiency. OPEC, as the main decisional body of international oil price, controlled the price to basic market price. Except hort-term huge fluctuations in oil prices during the Gulf War in 1990-1991, the average price of Brent crude oil fluctuated from US$14.3 to US$20 per barrel.

- **After 1997 crude oil price fluctuated dramatically**

Influenced by the Asian financial crisis, there was declining demand in OPEC, Brent crude oil prices fell from US$24.53 per barrel in January 1997 to US$9.25 per barrel in December 1998. Then it began to rebound from March 1999 and started climbing all the way. In August 2000, it broke through US$30 per barrel. In September 2000, it reached US$37.81 per barrel, wich just increased by 3 times within 18 months. The oil price since the Gulf War has reached a new peak.

After 2003, the oil price started raising. It eventually reached a record high of nearly US$150 per barrel in July 2008, and it dropped to the bottom of US$40 per barrel at the end of 2008 which was five months later.

3.2 Economic analysis

3.2.1 Purposes of economic analysis

Economic analysis is a process to understand how key economic factors affect the functions of an organization, with the purpose of making wiser decisions for the future. From Sorger's opinion, the economic analysis is the most beneficial when it is carried out dynamically and not statically. Based on the economic theories and practical data, the process of economic analysis uses various indicators. (Sorger, 2015, p.11)

In business sphere, the analysis helps the company assess both internal and external conditions which aims to provide valuable improvements. The economic analysis also helps the company to evaluate the efficiency when the business is operating, because the ultimate of it is to measure if the company is allocating their resources in the most effective way.

Economic analysis explains the internal economic situation facing the company. The economic goal of the organization is to maximize its output and efficiency when it is restricted. The internal economic conditions that affect an organization include its labor quality, machinery, capital, and innovation. Common restrictions include adhering to budgets and withdrawing funds from a limited workforce.

External conditions include the overall economic climate, technological change, competition and the impact of globalization. All of these factors affect the company's performance and long-term development. An economic analysis identifies which external conditions pose the greatest threat to the company and how best to prepare for these imminent changes. (Williams, 2009, p.18)

3.3 Financial analysis

3.3.1 Sources of financial analysis

Financial analysis is dedicated on evaluating the performance of an entity which means analyzing if a company is stable, solvent, liquid or profitable enough. Hence those who wish to value companies and invest successfully in the long term have to be able to understand and interpret financial statement. With the help of results from financial analysis, a company can find out current defects and may also predict future development and risks. (Schmidlin, 2014, p.2)

Financial statement is considered as the most important part of any annual or interim report, which contains mainly three parts, they are: income statement, balance sheet and cash flow statement. The reporting frequency will vary due to the size and location of the organization. And the reporting data is based on the accounting standard used by the company.

The income statement (also referred to as profit and loss statement) presents the operating results of a company over a specific accounting period (can be monthly, quarterly or annual). It provides an overview of revenues and expenses during this period, the balance of these two figures explains the profit or loss. So analyzing income statement can assess profitability of a company.

The balance sheet explains the liabilities and assets of the company’s funds at the reporting date. Assets, liabilities and shareholders’ equity of the company are presented in the form of accounts. It follows the equilibrium that the assets must equal to the sum of

equity and debt. Therefore, a balance sheet shows all the assets of a company and how they are financed.

The cashflow statement is considered as the central element of any financial statement analysis. It reflects the inflow and outflow of cash or cash equivalents of a company during the certain accounting period. According to the reasons for the cash flow and the purpose of payment, it is divided into the following three categories: cash flow from operating activities, investing activities and financing activities. The cash flow statement can be used to analyze whether a company or an organization is eligible to pay enough cash to cover expenses in the short term. (Schmidlin, 2014, p.7-p.25)

3.3.2 Users of financial analysis

In general, the company's stakeholders are the users of financial analysis. Considering the financial statement provides the sharing accounting information to both internal and external information users, who are mainly composed by shareholders, enterprise administrative staff, employees, suppliers of goods and services, creditors, customers, government, rivals and so on.

Different users have different purposes to analyze financial statement. Hence they will use different data even though the financial statement cannot provide all the information they need. Besides the analysts require information in different depth and width. (Zhang and Qian, 2011, p.2-p.3)

3.3.3 Types of financial analysis

Conducting financial analysis we may know solvency, operational capability and profitability of the company. The main methods are as following.

A method for **comparative analysis** of economic indicators is to determine differences or trends between indicators. Comparative analysis can be divided into multiple classifications, for example, according to the requirements and objectives of financial analysis: comparison of actual indicators with historical indicators of the company; comparison with budget indicators; comparison with the industry average value. According to different classifications of indicator data forms: comparison of absolute numbers;

comparison of relative indicators; comparison of average indicators. A comparative financial statement is a statement that combines the statements of recent years together and usually shows the increase and decrease amount also the percentage change.

Horizontal analysis refers to the analysis and comparison of the same items in the two financial statements before and after. The accounting data of the company for two consecutive years or longer is arranged together, and the columns of "absolute amount" and "percentage growth" are added to reveal the changes. Horizontal analysis is usually compared with advanced companies of the same industry in the same industry, and then the difference between the two is seen in order to find problems in the enterprise.

Vertical analysis is the proportional analysis of a financial statement, where each line item on a financial statement is listed as a percentage of another item. By conducting vertical analysis, we can have a better view on the structure of the assets, liabilities, revenues and expenses of the company.

Ratio analysis refers to as the analysis of total amounts of items related to financial statements, and a series of financial ratios with certain meaning and logical relationship to reveal the financial status, business results and cash flow of the enterprise. Ratio analysis is mainly divided into five major indicators, they are:

- Solvency analysis
- Operational capability analysis
- Profitability analysis
- Development capability analysis
- Comprehensive financial analysis

Trend analysis refers to comparing financial statements for several years and studying and revealing their development trends. Trend analysis can analyze the direction and causes of changes to reveal trends in financial conditions and operating results. The focus is on comparing changes at the meanwhile, reflecting the changes in financial statement items as the world changes. Trend analysis can reduce uncertainties. When doing this analysis, each data must be continuous. (Zhang and Qian, 2011, p.22-p.27)

4 Methodology

4.1 Financial analysis

4.1.1 Liquidity ratios

To measure a company's aility to satisfy payment obligations to suppliers, employees, and creditors for short-term borrowings, the current portion of long-term debt, and other short-term liabilities, short-term liquidity is a vital indicator. Hence, the analysis of short-term liquidity asks for a clear perspective on the operating cycle of a firm. (Schmidlin, 2014, p.86-p.90)

- Current Ratio

Current ratio = Current assets ÷ Current liabilities	***1***

The current ratio indicates that to what extent the short-term assets can cover the short-term liabilities. Large current ratios indicate substantial amounts of current assets are available to repay obligations coming due within the next year. Prior to the 1980s, the average current ratios for most industries exceeded 2.0. The ideal value is around 1.5, while nowadays, it is moving in the direction of 1.0, or even below 1.0, it becomes common considering the leverage ability of big companies. Although this trend suggests an increase in short-term liquidity risk.

- Quick ratio

Quick ratio = (Current assets – Inventories) ÷ Current liabilities	**2**

Quick ratio, also called acid-test ratio, which is a variation of current ratio, measuring a company's ability to pay its short-term obligations by using liquid assets. When interpreting the quick ratio, value 1 is considered that the company has ability to cover the current liabilities and if it is higher than 1.5, it means the company gets rid of the risk.

- Cash ratio

Cash ratio = Cash ÷ Current liabilities	***3***

Repaying the current liabilities by cash or cash equivalent, cash ratio is considered as the best way for a company to measure its ability to pay current liabilities. Also, cash ratio is an efficient indicator for creditors and analysts to know how many assets can be converted to cash.

Compared with current ratio or quick ratio, the most significant difference is that the cash ratio requires the asset portion of the equation to only the most liquid of assets, such as cash on hands, demand deposits, and also cash equivalents.

- Net working capital (NWC)

Net working capital = Current assets – Current liabilities	***4***

Net working capital is calculated by the difference between current assets and current liabilities, which is used for measuring the short-term solvency of a company. Working capital indicates the operational efficiency. A positive value of NWC explains that the company's current funds can cover its liabilities. On the contrary, a negative value means the company is having trouble or even go bankrupt.

4.1.2 Profitability ratios

Profitability ratio measures a firm's ability to generate profits from its operations. It indicates the efficiency of controlling costs and how well companies can achieve profits from their operations. A higher value presents a stronger profitability of a company. (Schmidlin, 2014, p.52-p.56)

- Gross profit margin

Gross profit margin = Gross profit ÷ Sales	***5***

Gross profit margin ratio measures how profitable a company sells its inventory. This ratio compares the gross margin of a business to its net sales.

- Operating profit margin

Operating profit margin = Operating profit ÷ Sales	***6***

Operating profit margin analyzes the percentage of operating incomes (earnings before interest and tax) in the company's net sales, which is differ from gross profit margin. There is no reference value for this ratio, while generally speaking, the higher value the better performance of the company.

- Net profit margin

Net profit margin = Net profit ÷ Sales	***7***

This ratio also measures how well a company manages its expenses relative to its net sales. A low value indicates a low margin of safety. It rather shows the condition of profitability in the short-term perspective.

- Return on equity (ROE)

Return on equity (ROE) = Net income ÷ Shareholder's equity	***8***

ROE illustrates the effectiveness with which the company uses its shareholders' equity for generating net profit. The higher the value of ROE, the more effectively the company uses its equity for generating the best financial performance. This indicator provides the most valuable information when analyzed in dynamics for several periods.

- Return on assets (ROA)

Return on assets (ROA) = Net income ÷ Average total assets	***9***

ROA describes the effectiveness of the company's use of own assets for generating net income. The higher this ratio's value, the better for the company. Similarly to ROE, it should better be analyzed in dynamics.

4.1.3 Leverage ratios

The leverage ratios (also referrers to debt ratio or equity ratio), which measures the degree of financial risk in the balance sheet and income statement. It indicates the value of equity by analyzing the company's total debt. In another word, it shows how much of a company's assets belong to shareholders rather than creditors. When the company's leverage is low, it means shareholders have more assets. So this metric is vital for investors when they decide if it is worth investing to the company. (Schmidlin, 2014, p.70)

- Debt ratio

Debt ratio = Total liabilities ÷ Total assets	***10***

Debt ratio analyzes the share of the company's liabilities against its assets. It is a ratio of total debt and total assets. The higher ratio value, the more that company is dependent on external borrowed funds.

- Long-term debt to equity

Long-term debt to equity = Long-term debt ÷ Shareholder's equity	***11***

Long-term debt to equity reveals the ratio between non-current liabilities and shareholders' equity. The greater this value, the greater the risks incurred by the company in the long-term perspective.

- Long-term debt to assets

Long-term debt to assets = Long-term debt ÷ Total assets	***12***

Long-term debt to assets investigates the ratio between long-term debt and total assets. The greater the ratio's value, the higher the company's risks.

4.1.4 Activity ratios

Activity ratio serves to explain a company's use of assets and process of running the operations are efficient or not. It includes calculating a set of indicators that allow making conclusions on how effectively the firm uses its inventories, accounts receivable and fixed assets. (Schmidlin, 2014, p.93-p.95)

- Inventory turnover

Inventory turnover = Cost of Goods Sold ÷ Average inventory	***13***

Inventory turnover indicates how long a firm usually needs to turn inventory into sales. When the ratio value is low, the company will need less time to convert inventory into sales. Also, the decreasing trend of company's inventory turnover explains the improvement of its working capital.

- Account receivable turnover

Accounts receivable turnover = Cost of Goods Sold ÷ Average accounts receivable	***14***

Account receivable turnover measures how long accounts receivable can be turned by a firm into cash. This ratio indicates the liquidity of the accounts receivable. The calculation result may be presented either in number of times per year or in how many days. By different measurements the results will be interpreted differently. When measured in times, the increasing trend of this ratio is desirable.

- Account payable turnover

Accounts payable turnover = Cost of Goods Sold ÷ Average accounts payable	***15***

On the contrary to accounts receivable turnover, this ratio measures how long a company pays its debt to suppliers. The value of this ratio explains a firm's ability to pay its debt to creditors, if the measure the result by how many times per year, the higher value means the firm is eligible to pay suppliers more frequently. If we measure by days, the higher value means the company has less ability to pay creditors.

4.1.5Capital market ratios

Capital market is the market for bond market and equity securities where companies and governments raise long-term funds. Capital market ratios indicate the relations between share price and some elements from financial statement. (Schmidlin, 2014, p.117)

- Earnings per share

Earnings per share (EPS) = Net earnings ÷ Number of shares	***16***

Earnings per share is calculated as a company's profit divided by the number of common stock shares it has outstanding. The higher value of EPS indicates more value of the company. Because EPS presents how much money a company makes for each share of its stock.

- Dividends per share

Dividends per share (DPS) = Dividends ÷ Number of shares	***17***

Dividends per share is the sum of declared dividends issued by a company for every ordinary share outstanding. DPS is an important indicator for investors to see the income

of shareholders. Usually a growing DPS is a good sign to show a firm's sustainable earning growth.

4.2 PEST analysis

PEST analysis is based on a comprehensive and objective analysis of the external environment in which the company is located. The impact of various factors on enterprises, identify the development opportunities they provide and the threats they pose, and use them as a starting point, basis and constraints to develop strategies. The core is to avoid disadvantages. (Hou and Liu, 2008, p.6)

1. Political and legal factors

The political and legal environment explains the analysis of the political system, political situation, principles and policies, laws and regulations of the countries and regions involved in the business. As one of the factors influencing corporate strategic decision-making, the political environment has the following characteristics: the political environment directly affects the operating conditions of enterprises and it is difficult for enterprises to predict the changing trend of the national political environment. In addition, once the political environment affects enterprises, such changes are irreversible.

2. Economic factors

The economic environment of a company is mainly composed of four elements: social economic structure, economic development level, economic system and macroeconomic policy. The analysis of the economic environment of enterprises should include a variety of macro and micro factors, such as: GDP and its changing trends, disposable income levels of residents, consumption propensity of residents, interest rates, inflation rates, unemployment rates, exchange rates, price changes, monetary policy, tax rate, etc.

3. Social-cultural factors

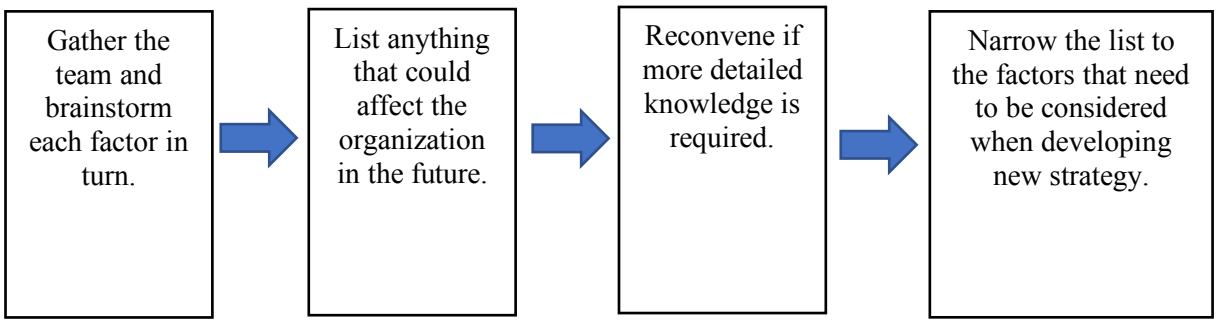
The social and cultural factors refer to as the national characteristics, cultural characteristics, values, religious beliefs, educational standards, customs, and natural environment of the areas involved in the direct business. Different groups have different attitudes, hobbies and behaviors, thus showing different market needs and different consumption behaviors. The maintenance and development of the enterprise and the

harmonious integration of the social and cultural environment, the establishment of a good corporate image is an important aspect of business management.

4. Technological factors

The technological environment refers to the technical level, technical policies, new product development capabilities and technological developments of countries and regions designed by the business. Technological factors not only refer to inventions that have revolutionized the times, but also include new technologies, new processes, new materials, trends and application prospects. Technology mainly affects the future development of the company from the following two aspects: creating opportunities and meeting challenges. (Hou and Liu, 2008, p.9-p,15)

According to Williams (2009, p.20), a PEST analysis can be done by the following steps:



4.3 SWOT analysis

SWOT analysis is often used to develop a team's development strategy and analyze competitors. It is one of the most commonly used methods in strategic analysis. The company uses a variety of survey methods to analyze the various environmental factors the company is in, namely external environmental factors and internal capacity factors. External environmental factors include opportunities and threats, which are favorable and unfavorable factors that directly affect the development of the external environment. They are objective factors. Internal environmental factors include dominant factors and weakening factors. They are the existence of the company's own development. Positive and negative factors are subjective factors. When investigating and analyzing these factors, we

must not only consider history and current situation, but also consider future development issues.

The strengths are the internal factors of the organization which includes favorable competitive conditions; adequate sources of funds; good corporate image; technical strength; economies of scale; product quality; market share; cost advantage and advertising offensive.

The shortcomings are also internal factors of the organization which includes: equipment aging; management confusion; lack of key technologies; backward research and development; lack of funds and poor management.

Opportunities are external factors of the organization which includes new products; new markets; new demands and foreign market barriers.

Threats are also external factors of the organization which includes new competitors; increased alternatives; market austerity; industry policy changes; economic depression and changes in customer preferences. (Hou and Liu, 2008, p.151-p.155)

4.4 Porter's five forces analysis

The five-force analysis model was proposed by Michael Porter in the early 1980s and has a profound global impact on corporate strategy development. The five forces are: the bargaining power of the supplier, the bargaining power of the buyer, the ability of the potential competitor to enter, the replacement ability of the substitute, and the current competitiveness of the competitor in the industry. Changes in the different combinations of the five forces ultimately affect the changing profit potential of the industry. (Hou and Liu, 2008, p.50-p.53)

In the industry with fierce competition, the entire industry will not have amazing gains. In a relatively moderate industry, the company's profits can be obtained. Due to the continuous development of the industry, investment income will soon decline until the low return of competition. If the return on capital has been at a low level for a long time,

investors will invest capital in other industries and even cause existing companies to terminate operating. In the opposite case, it will stimulate capital inflows and stimulate existing competitors to increase investment. Therefore, the comprehensive strength of the industry's competitive strength also determines the degree of capital flows in the industry. All of these factors will ultimately determine the company's income.

1. Bargaining power of suppliers

Bargaining power of suppliers can be divided into increasing supply prices and reducing product quality. Generally speaking, the bargaining power of suppliers depends on the following factors: the size and quantity of suppliers, whether suppliers need to compete with substitute products, the importance of suppliers to industries and enterprises, the cost of conversion, and whether suppliers have trend to integrate.

The supplier industry is controlled by companies with relatively stable market positions that are not subject to fierce competition in the market. The buyers of such products are so many that each individual buyer cannot become an important customer of the supplier. The products of each supplier have certain characteristics, so that it is difficult for the buyer to convert or convert cost is too high, or it is difficult to find a substitute that can compete with the supplier's products.

2. Bargaining power of buyers

Buyers may request lower purchase prices, require high-quality products and more quality services. As a result, competitors in the industry compete with each other, leading to a decline in industry’s profits. The degree of competition is mainly determined by the following circumstances: whether it is relatively concentrated and purchased in large quantities, the industry's conversion cost of the buyer, the profit of the buyer, the buyer's information of the supplier, and whether the buyer has a tendency to integrate backwards, and the seller is unlikely to be forward integration.

3. Threat of new entrants

This threat, on the one hand, due to the entry of new competitors, will cause the competition of existing enterprises to lead to price decline; on the other hand, new entrants need resources, which will lead to higher production costs in the industry.

Entry barriers are very important factors which include the followings: whether new entrants need to face the risks of mass production, whether there are obstacles caused by product differentiation, whether they need a lot of capital investment, how easy it is to establish sales channels, and other cost advantages.

4. Threat of substitutes

Subsitutes are the products which have the same function as the products within the industry. Substitutes limit the highest price of a company's products, but they also generate opportunities. If the price of the substitutes is relatively low, it will cause the price ceiling of the product in the industry to be at a lower level, which limits the income of the industry. The more attractive price of the products, the stronger the restriction will be, and the greater pressure on the industry. Because of this, the industry's struggle with other industries that produce special products often requires joint promotion and collective action by all companies in the industry. Substitutes are superior in price and performance to products in the industry. Substitutes come from high-yield industries. In this case, if some development changes in the special industry add up to the competition there, which will cause the price to fall or the improvement of the back activity, it will generate the substitution. The substitutes may caused by the following reasons: progress in new technology, change in economic factors, shortage of materials and so on.

5. Rivalry

In most industries, the interests of each other are closely linked. The strategic strategy of each enterprise as part of the overall strategy of the company is to make its own enterprises gain advantages over competitors. Therefore, in the process of implementation, conflicts and confrontation will inevitably occur. These conflicts and confrontations constitute competition among existing enterprises. Competition among existing companies is often reflected in price, advertising, product introduction, after-sales services, etc. The intensity of competition is related to many factors, for example, the number of existing competitors in the industry, industry growth rate, industry fixed cost or inventory cost, industry conversion cost, industry overall production scale and capacity, competitors' differences, barriers to exit the industry. (Hou and Liu, 2008, p.54-p.56)

To summarize, business in each industry has to deal with the threat posed by the above forces. When it is considered necessary and beneficial to make a positive confrontation, such as requiring a large market share, customers can protect themselves by setting barriers to enter, including differentiation and conversion costs. When a customer determines its strengths and weaknesses, the customer must be positioned to take advantage of the situation rather than the expected environmental factors, such as product life cycle, industry growth rate and so on. And be prepared to respond effectively to the actions of other companies.

According to the above discussion of the five types of forces, companies can take as much as possible to isolate their own operations from the competitiveness, and strive to influence the industry's competition rules from their own interests, first occupy favorable market positions and then launch offensive competition actions. And other means to deal with these five kinds of competitiveness to enhance their market position and competitiveness.

5 Practical Part

5.1 Company profile

5.1.1 Basic information

As one of the world's largest gas and oil company, BP has a long history as well. Originally date back to 1908, it was Anglo – Persian Oil Company which was a subsidiary of Burmah Oil Company to exploit oil discoveries in Iran. After nearly one century's expansion, in 1998 it merged with Amoco and became BP Amoco plc, then with acquisition of ARCO and Burmah Castrol, it formally became BP p.l.c. in 2001. There was also a decade for BP to be a partner of TNK-BP joint venture in Russia.

By the end of 2018, BP operates in 78 countries around the world, producing approximately 3.6 million barrels of oil equivalent per day (570,000 m3/d) and a total proven reserve of 18,441 billion barrels (2.9319×109 m3) of oil equivalent. The company has approximately 18,700 gas stations worldwide. Its largest division is BP America in the United States. In Russia, BP owns a 19.75% stake in Rosneft, the world's largest public trade oil and gas company, through hydrocarbon reserves and production. BP is listed on the London Stock Exchange and is a constituent of the FTSE 100 Index. It is listed on the Frankfurt Stock Exchange and the New York Stock Exchange.

BP p.l.c. is a vertical integrated company which conducting business in all areas of the oil and gas industry, its main activities includes: exploration and production, refining, distribution and marketing, petrochemicals, power generation and trading. It also has renewable energy benefits from biofuels and wind energy.

As BP is a multinational gas and oil company and also one of the world biggest players in this industry, it has many competitors all over the world, for instance, Exxon Mobil corp., Chevron corp. and Valero corp. from the U.S.; the Total S.A. from France; the Lukoil from Russia and so on.

BP ordinaty shares traded publicly on the London Stock Exchange and the Frankfurt Stock Exchange in Germany. BP American Depositary Shares (ADSs) trade publicly on

the New York Stock Exchange (NYSE). One BP ADS represents ownership rights in six BP ordinary shares. The company is mainly owed by institutional investors with the percentage of 69.0 % and general public with an ownership of 28.6%. There are big institutional investors, for example: Barrow Hanley Mewhinney and Strauss LLC; The Vanguard Group; State Street Corporation; Dimensional Fund Advisors, Inc and so on. Here we can see BP p.l.c. is a fragmtented capital company. Also, these major shareholders do not have different voting rights. (BP annual report 2018)

5.1.2 Executive bodies

As for the executive bodies of BP, the positions of chairman and CEO are seperated. The chairman of company is Carl-Henric Svanberg, who became chairman of the BP board on 1 January 2010. The Chief Executive is Bob Dudley, who became group chief executive on 1 October 2010. There are differences and links between CEO and Chairman. Although they are both evaluated by the chairman's committee. But the duty is different. Carl-Henric, the chairman of the board of directors presides over a board meeting to make major decisions on the company. He regularly holds meetings to assess the performance of the company's managers and then plan for the direction of the company's development. If there is something that the business manager cannot decide and involves the company's major interests, he will convene the board of directors to make decisions. He supervises and orders the manager and is the shareholder of the company and is one of the owners of the company.

Bob, the CEO, is the manager of the BP. He is directly responsible to the board of directors and is hired by the board of directors. He can also make decisions about the company's personnel appointments and appointments and major administrative events, but daily administrative affairs are not involved in his management. Also he can make major decisions on behalf of the board during the board's recess.

As the CEO and the president are two people in BP, then Bob is the board representative during the intersessional period of the board. The goal is to be responsible for the interests of the shareholders and the board of directors. In 2018, there are totally 13 board of directors in this company. They are:

- The Chairman, Mr Carl-Henric Svanberg;
- The CEO, Bob Dudley
- The CFO, Brian Gilvary
- 10 other independent non-executive directors.

The Board's actions are carried out within the framework of the AFEP/MEDEF Code. The company is compliant with the French guidelines of AFEP/MEDEF code except for Gender. Compared to the AFEP-MEDEF Code. we can see that the size of board of director is a little bigger, but the company have all the important committees. All the 13 directors have a variety of background in Oil & gas/extractives/energy, Engineering/technology, Financial expertise, Safety Brand/marketing/reputation, Regulatory/government affairs and so on. In the board, there is a good British-American balance of power within the board of directors as the numbers of British and American are equal. Among the thirteen directors, three directors are female, the proportion of female directors is 23.1 %. Although the proportion of women in the board is a little low, the board looked at gender and wider diversity across the group as part of its annual review of HR, capability and talent management. (BP annual report 2018)

Table 1. BP's board of directors in 2018

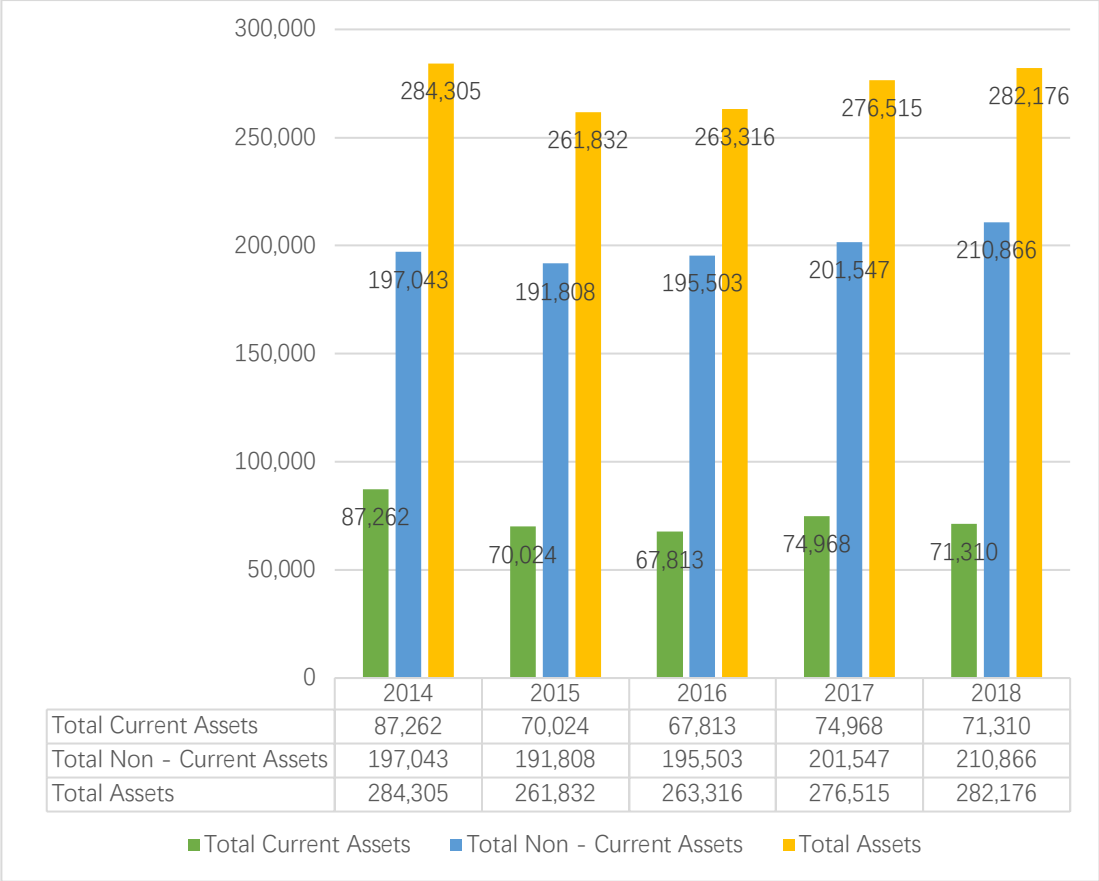
Company	**Size**	**Separation CEO and Chairman**	**Member nationality**	**Gender**	**Independency**	**Committees**
BP	13 members	Yes	5 British 5 American 1 Swedish 1 Danish 1 American and British	10 men:76.9 % 3 women:23.1 %	11 out of 13	Geopolitical, Nomination, Audit, SEEAC, compensation and Chairman's
AFEP-MEDEF code	No	No	Not applicable	40 %	> 50 %	At least audit, compensation and appointment

(Sources: BP's Annual Report, table created by author)

5.2 Financial analysis

5.2.1 Horizontal analysis

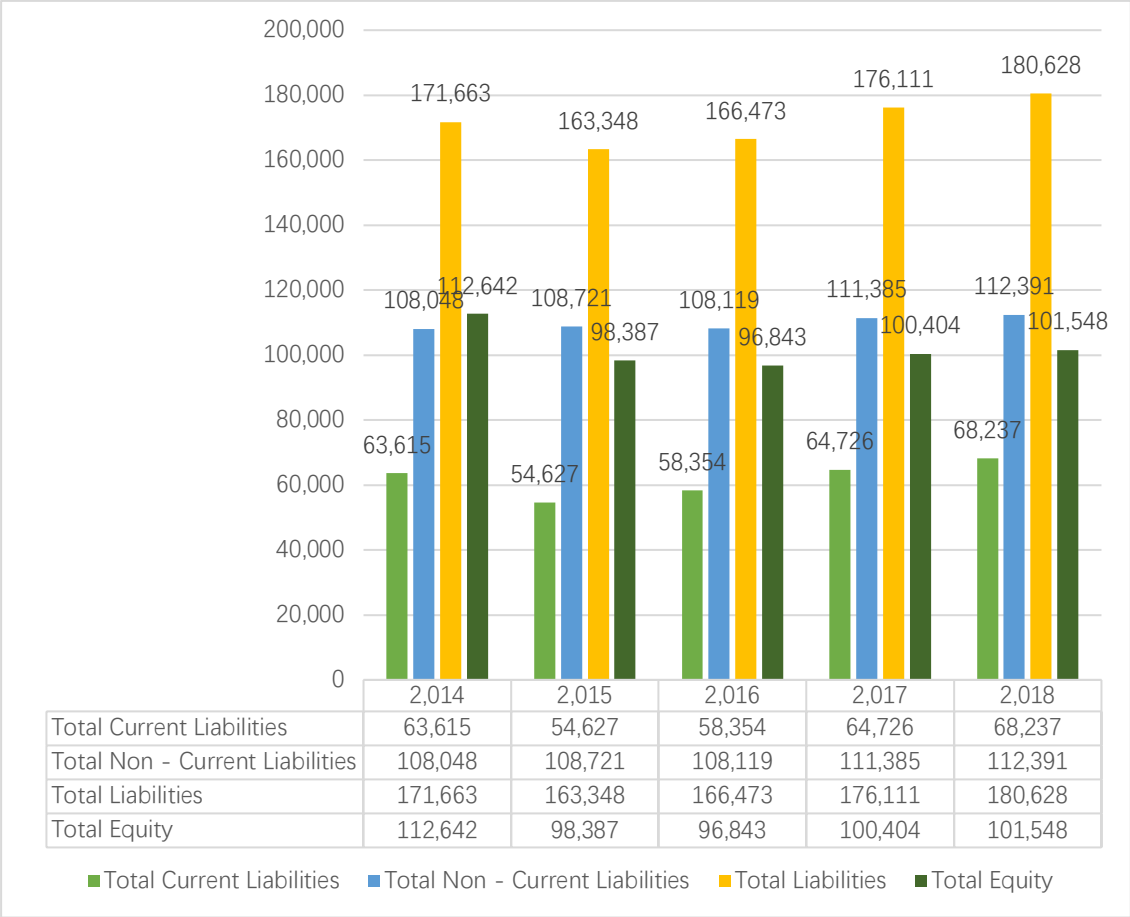
Graph 1. Dynamics of BP's assets, in USD million (2014-2018)



(Source: BP annual report 2014-2018, graph created by author)

From graph 1 we can see that during the year 2014 and 2018 BP's total current assets are fluctuating around US$70 bn. The highest value is in the year 2014 which is US$87,262 million, on the contrary, the lowest value is in the year 2016 which is US$67,813 million, so there is no significant trend in total assets. However, when analyzing total non-current assets of past five years, generally speaking, there is a slightly upward trend except the value in 2014. In this case, when looking at BP's total assets, we find the similar tendency as non-current assets, so we can understand that the increase in assets is a positive signal, but it comes from non-current assets other than current assets. The less assets in 2015 may be interpreted as the effect from low oil price. In 2015 crude oil price reached the bottom during the last ten years.

Graph 2. Dynamics of BP's liabilities and equity, in USD million (2014-2018)



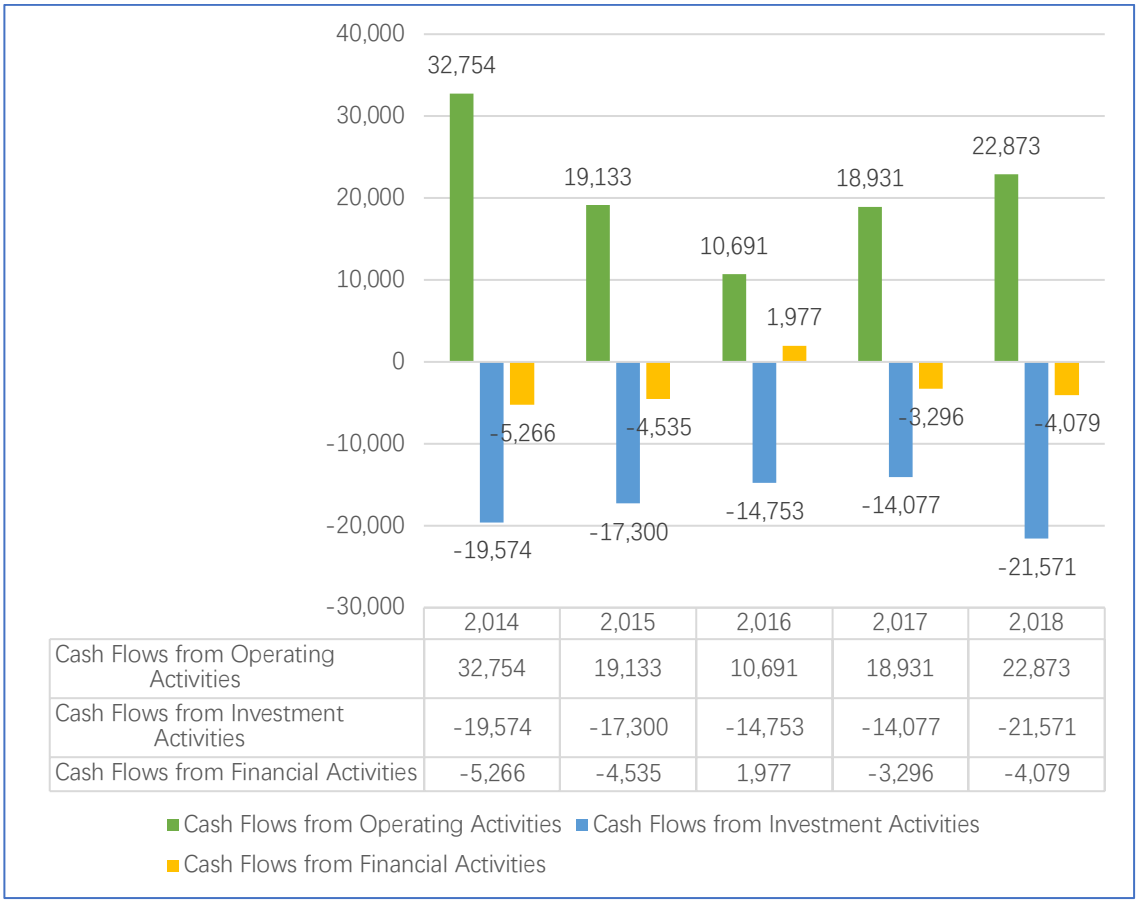
	2,014	2,015	2,016	2,017	2,018
Total Current Liabilities	63,615	54,627	58,354	64,726	68,237
Total Non - Current Liabilities	108,048	108,721	108,119	111,385	112,391
Total Liabilities	171,663	163,348	166,473	176,111	180,628
Total Equity	112,642	98,387	96,843	100,404	101,548

(Source: BP annual report 2014-2018, graph created by author)

Graph 2 illustrates the dynamics of BP's liabilities details and equity. As the tendency of BP's assets is already interpreted, it is also necessary to get a comprehensive on the changes of liabilities and equity because of the low oil price in 2015.

On one hand, when analyzing liabilities, there is no significant trend for non-current liabilities and the values are comparatively steady, however in 2017 it increased by 3.2% when compared with non-current liabilities in 2016. Current liabilities reached the lowest value in 2015, after that it kept the upward trend. And in 2018, it reached the highest value. On the other hand, when analyzing assets, the value was firstly dropped and then increased with the highest value and lowest value in 2014 and 2016 respectively. So these facts result in the tendency of total liabilities, the total value was increasing from 2015 to 2018, and due to the positive situation of oil industry, the overall performance was higher than average of last five years.

Graph 3. Dynamics of BP's cash flows, in USD million (2014-2018)



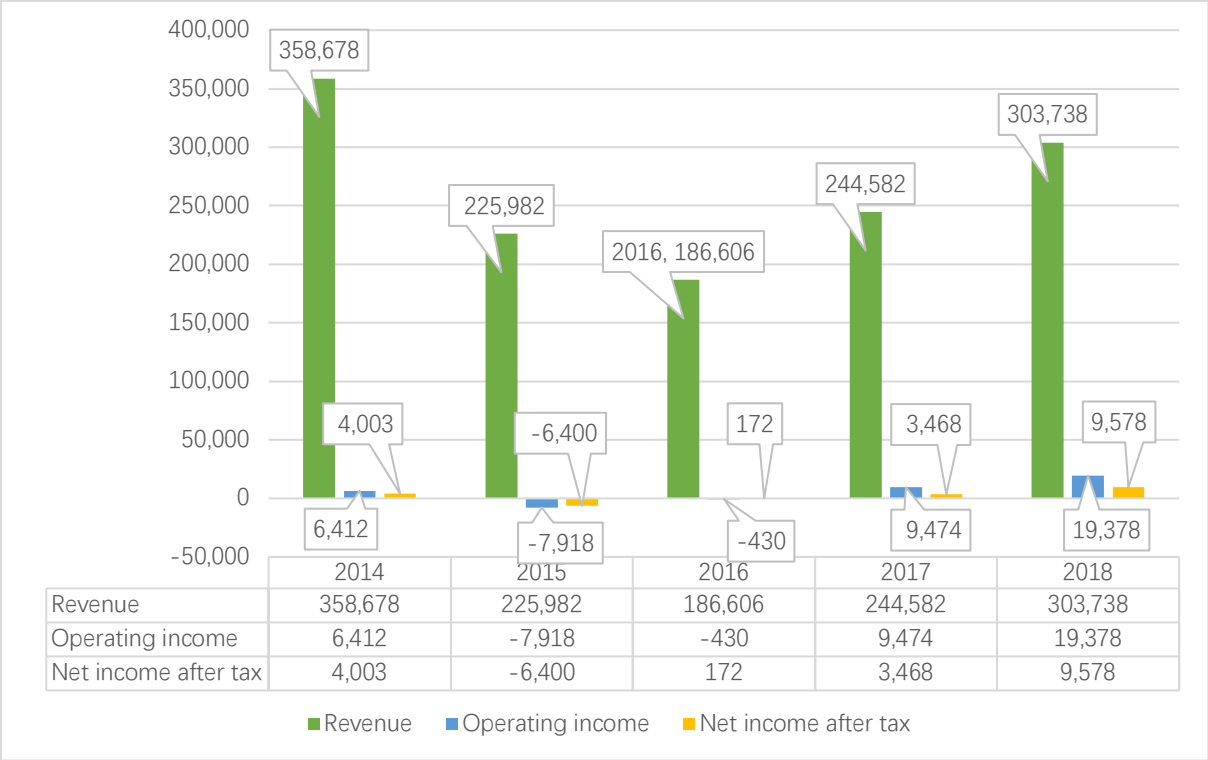
	2,014	2,015	2,016	2,017	2,018
Cash Flows from Operating Activities	32,754	19,133	10,691	18,931	22,873
Cash Flows from Investment Activities	-19,574	-17,300	-14,753	-14,077	-21,571
Cash Flows from Financial Activities	-5,266	-4,535	1,977	-3,296	-4,079

(Source: BP annual report 2014-2018, graph created by author)

From the graph 3, the dynamics of cash flows from different activities are demonstrated separately. There are no significant trends for each cash flow, and in investment activities and financial activities, there were negative values in most time. But cash flows from operating activities were always positive with big value, in this case it is not hard to see the company's main activities are from operating side.

Besides, there is an exception in 2016 with cash inflow from financial activities. In the other years, it was always cash outflow.

Graph 4. Dynamics of BP's profits, in USD million (2014-2018)



	2014	2015	2016	2017	2018
Revenue	358,678	225,982	186,606	244,582	303,738
Operating income	6,412	-7,918	-430	9,474	19,378
Net income after tax	4,003	-6,400	172	3,468	9,578

(Source: BP annual report 2014-2018, graph created by author)

When analyzing BP's profits during last five years, the performance is notable from 2014 to 2015. 2014 was a challenging year for oil industry due to economic, geopolitical and other factors. However, the situation in 2015 still remained negative. The demand of crude oil was increasing however the production were much higher which caused another drop of oil price. In this case, the net income was negative in 2015 which is US$-6,400 million. Since 2016 the oil price recovered which directly indicated an upward trend of BP's profits. And in 2018, the net income reached the peak value which was US$9,578 million.

5.2.2 Liquidity analysis

Table 2. BP's liquidity ratios from 2014 to 2018

	2014	2015	2016	2017	2018
Current ratio	**1.37**	**1.29**	**1.16**	**1.16**	**1.05**
Quick ratio	**1.08**	**1.03**	**0.86**	**0.86**	**0.78**
Cash ratio	**0.55**	**0.56**	**0.45**	**0.44**	**0.39**

(Source: author's own calculation. Data from BP annual report 2014-2018)

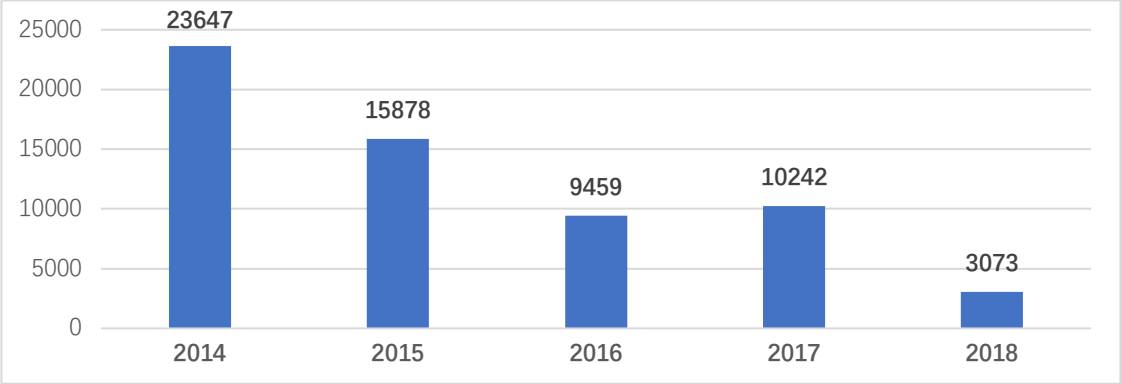
According to the table 2, in general, there was a downward trend for all liquidity ratios from 2014 to 2016, then turned into comparatively stable until 2018. As analyzed before, 2014 and 2015 were quite challenging for oil industry due to many reasons which caused dramatically drop in crude oil price.

When looking at BP's current ratio, it ranged from 1.05 to 1.37 in the last five years. For current ratio, 1.5 is an ideal value, however, nowadays the reference value varies from industry to industry, in oil industry if the value is above 1.0, it means the company is eligible to pay current liabilities by its current assets. So in case of current ratio, BP's performance is positive.

When analyzing quick ratio, there was an downward trend for BP with the lowest value of 0.78 in 2018. The ideal value is 1.5. Below 1.5 means BP cannot cover the current liabilities by its liquidity assets. and it is in a risky liquidity position.

Cash ratio can explain how much current liabilities can be paid by cash or cash equivalent. When it's higher than 0.20, it's considered as a good sign for the company. BP's cash ratio ranged from 0.39 to 0.55.

Graph 5. Dynamics of BP's working capital in USD million (2014-2018)



(Source: author's own calculation. Data from BP annual report 2014-2018)

Working capital is a significant indicator to analyze how much capital does a company have to spend on it's daily operations. Net working capital can measure company's liquidity and operational efficiency. A negative value means company's less

ability to grow and pay back to creditors. In this case, it is a good sign for BP, as it's working capital was always positive. However, there was a decreasing trend in generally from 2014 to 2018. This face may indicate that BP's ability or efficiency to pay creditors were decreasing as well.

5.2.3 Profitability analysis

Table 3. BP's profitability ratios from 2014 to 2018

	2014	2015	2016	2017	2018
Gross profit margin	**12.95%**	**10.23%**	**13.20%**	**15.89%**	**16.24%**
Operating profit margin	**1.79%**	**-3.50%**	**-0.23%**	**3.87%**	**6.38%**
Net profit margin	**1.05%**	**-2.87%**	**0.06%**	**1.39%**	**3.09%**
Return on equity (ROE)	**3.35%**	**-6.59%**	**0.12%**	**3.37%**	**9.24%**
Return on assets (ROA)	**1.33%**	**-2.48%**	**0.04%**	**1.23%**	**3.32%**

(Source: author's own calculation. Data from BP annual report 2014-2018)

When looking at BP's profitability ratios, the same trend apply to its results: performance in 2015 is always an exception because of the weak price of crude oil. So during the last five years, gross profit margin reached the bottom in 2015 which is 10.23%, after 2015 there was an upward trend with the highest value of 16.24% in 2018.

As the net income in 2015 was negative, the operating profit margin, net profit margin, ROE and ROA were all negative, and these results recovered from 2016. In 2018, after several years oil supply exceeded demand, the oil price went back to the reasonable quota. So the profitability ratios had a sharply rise from 2017 to 2018 which caught up with the average performance of oil industry, this was an optimistic sign for BP's shareholders, and it also explained a higher leverage will increased the return for the stockholders.

5.2.4 Leverage analysis

Table 4. BP's indebtedness ratios from 2014 to 2018

	2014	2015	2016	2017	2018
Debt ratio	**60.38%**	**62.42%**	**63.22%**	**63.69%**	**64.01%**
Long-term debt to assets	**16.17%**	**17.65%**	**19.62%**	**20.07%**	**20.00%**
Long-term debt to equity	**40.82%**	**46.98%**	**53.35%**	**55.27%**	**55.57%**

(Source: author's own calculation. Data from BP annual report 2014-2018)

According to the table 4, there was an upward trend for all indebtedness ratios, this may be concluded as negative sign for BP and potential risks. The ideal value for debt ratio is below 50%. When it exceeds 50%, it means most of company's assets are financed through debt, and the company is more relied on external borrowed funds. Long-term debt to assets / equity ratios explain how much the non-current liabilities accounts for total assets / equity. There are obvious increasing operational risks for BP.

5.2.5 Activity analysis

Table 5. BP's activity ratios from 2014 to 2018

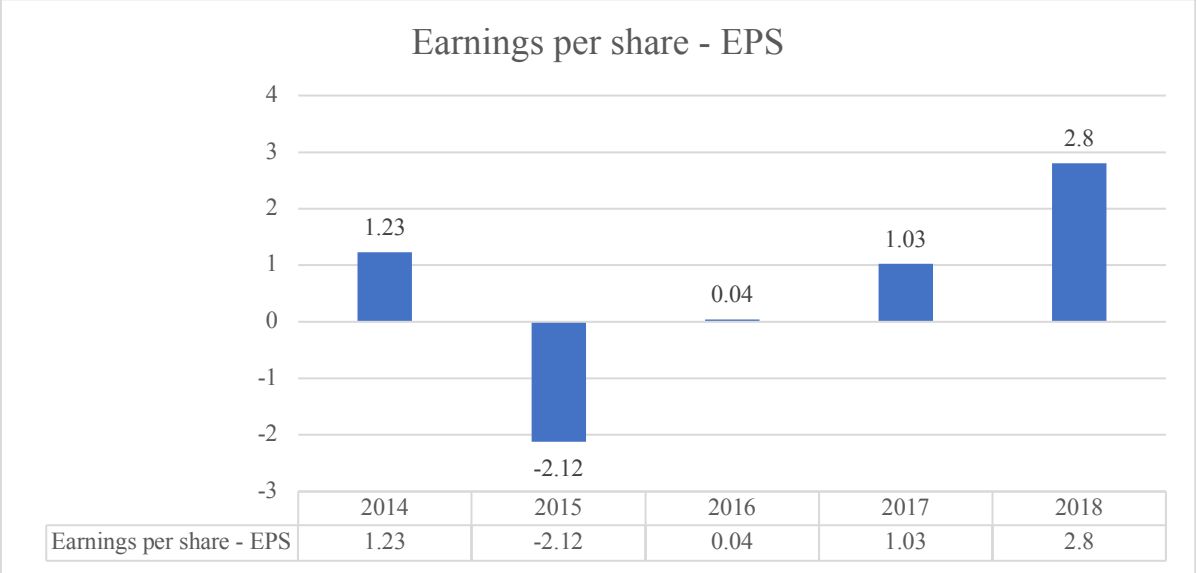
Activity ratios	2014	2015	2016	2017	2018
Inventory turnover	**13.12**	**12.48**	**10.19**	**11.22**	**13.75**
Account receivable turnover	**12.89**	**12.16**	**11.97**	**12.74**	**13.28**
Account payable turnover	**7.16**	**5.63**	**4.64**	**5.01**	**5.62**

(Source: author's own calculation. Data from BP annual report 2014-2018)

When analyzing BP's activity ratios, it is notable that all ratios reached the lowest value in 2016 although all values were relatively stable. So in 2016 BP needed more time to convert inventory into sales. From 2016 to 2018 there would be an increase in working capital. In 2016, BP also had the lowest liquidity of account receivable, also the worst ability to pay creditors. From 2016 to 2018, it is desirable that BP's efficiency to sell products, and collection of account receivable and also ability to pay its debts were improving.

5.2.6Market analysis

Graph 6. BP's earnings per share from 2014 to 2018 (in US$)



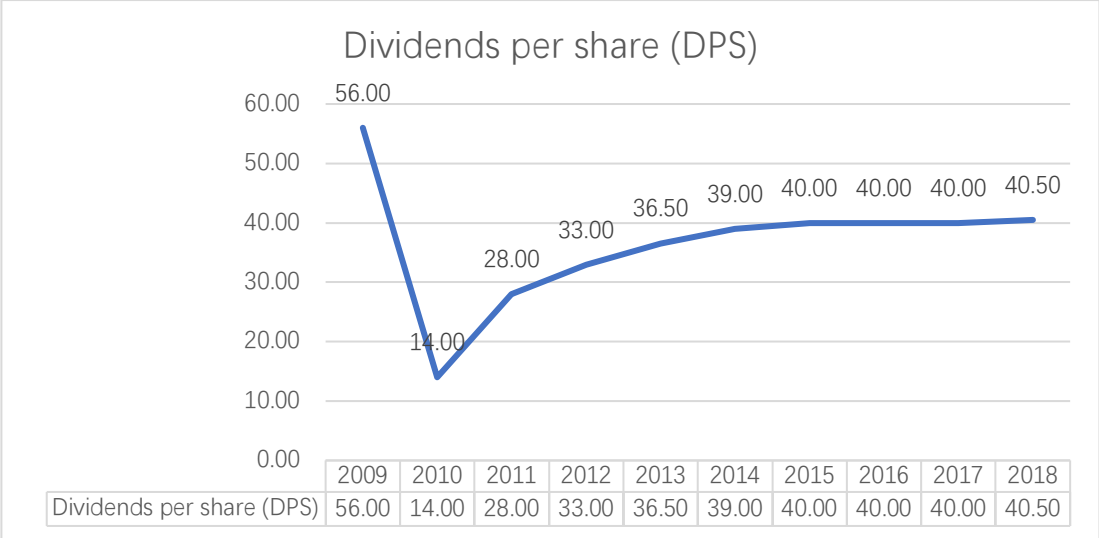
(Source: BP annual report 2014-2018)

BP pays quarterly dividends and has a scrip dividend programme approved in 2010. This programme enables shareholders to obtain upon request new fully paid BP ordinary shares instead of USD.

The dividend policy over the last 5 years is very consistent. BP paid out US$0.40 per share in every year with the sole exception of 2013. This is preferred by risk averse investors because steady dividends are a signal of financial strength. Furthermore, BP is an incumbent firm in a mature market. Hence, shareholders expect steady dividends because substantial growth is not possible in the oil manufacturing industry.

It is remarkable that the earnings per share were not always above the dividend of US$0.40. This means that the company's gain was less than its payment to shareholders. As we can see in the chart, BP had negative EPS in 2015 amounting to US$-0.18 due to a loss incurred in this year. Still BP aimed for a $0.40 dividend to keep its dividend policy consistent. This resulted in a negative pay-out ratio for the year 2015 as well.

Graph 7. BP's dividends per share from 2009 to 2018 (in US cents)



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Dividends per share (DPS)	56.00	14.00	28.00	33.00	36.50	39.00	40.00	40.00	40.00	40.50

(Source: data from Statista, graph created by author)

From the graph 7, when looking at the DPS over last firv years, the values were quite steady and no significant findings. So review the DPS over the last ten years we may founded that there was a dramatic drop in 2010 due to the Gulf of Mexico oil spill (more details please see discussion part). Then from 2011 to 2014 there was an obvious upward trend for DPS. As DPS interpretes the portion of a company's earnings that is paid out to its shareholders, so the higher value of DPS, the better effect to its shareholders. In this case, after oil crisis in 2010, BP was recorvering and came to comparatively period after 2014.

5.3 External environment analysis

5.3.1 Crude oil prices overview

Graph 8. Brent crude oil prices in last 10 years (US$ per barrel)

(Source: Statistia)

Interactive daily chart of Brent (Europe) crude oil prices over the last ten years. Values shown are daily closing prices. The current price of Brent crude oil as of November 12, 2019 is US$62.19 per barrel.

- Oil price in 2014

The crude oil price decreased rapidly in 2014 because of the cut down of high range price between 2011 to 2013. There are lots of factors lead to that situation such as the development lagging. Many developing countries like China had fast growth before 2010 using pretty large amount of oil. After 2010 oil demand was no more the most important part to theirs' economics that compressed the oil orders. So such countries smaller demand influenced the oil price. Not only the developing countries, other large rising countries had the same trend as China growing slower after 2010.

From another side, big players in oil industry affect oil price as well. Saudi Arabia's operations made oil price in2014 lower. They made the decision, one was letting prices decrease smoothly the other one was canceling market share by stopping producing. The middle Eastern country made its production steady, seeing low oil prices gave more of a long-term benefit than giving up market share. With the cheap producing process and

biggest oil reserve Saudi Arabia can bear low oil prices for many years without any treat to its economy. Compare with these two ways, additional methods such as fracking are more expensive and gainless if oil prices fall too low. (Source: Investpedia)

- Oil price in 2015

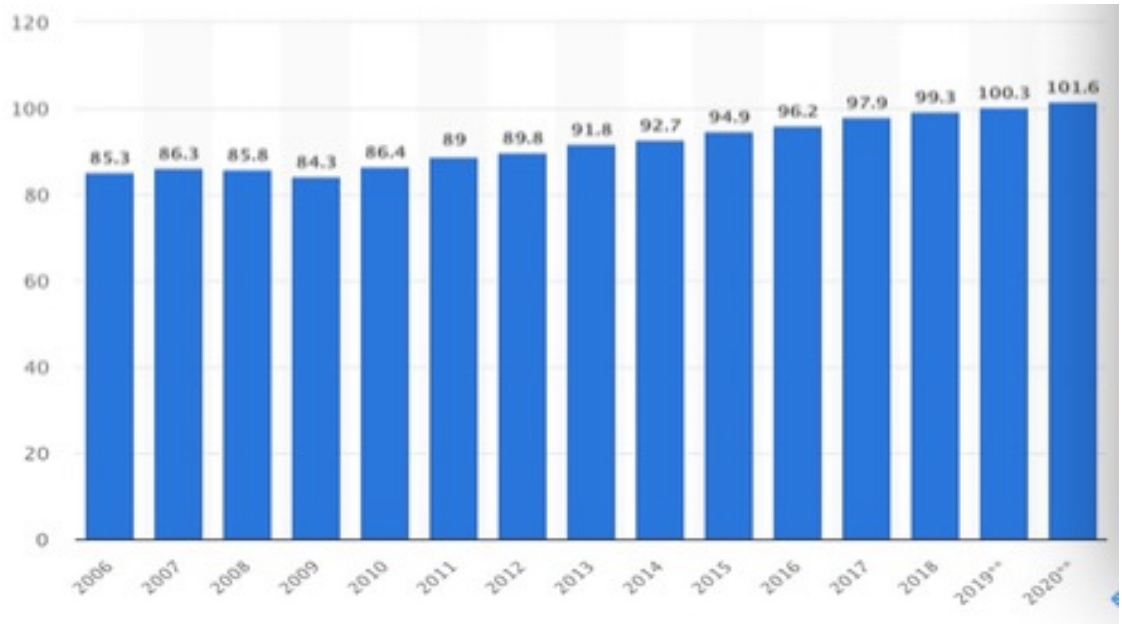
Unless in 2014, the oil prices dropped in 2015 was the result from different multiple factors. The strong US dollar value was the most important reason for the falling down price of crude oil. In 2015, the US dollar reached the highest value against the euro making appreciation in the dollar limit index and a decrease in oil price. That put market under so much high pressure.

Another main reason is the huge production from OPEC. Its' standard crude oil prices had dropped almost 50% since the group began object against stopping production at a 2014 meeting in Vienna. Also in BP's annual report 2015, the chairman pointed out that the demand for oil did not decrease but the supply increased, which caused the non-financial performance.

Besides, the Iran nuclear deal was a preparation structure agreement signed between Iran and a group of world powers. The construction indicated redesign, convert and limit Iran's nuclear equipment. Iran can export oil because the deal undocked Western sanctions. Investors were afraid that would intensify the world's oversupply of oil.

5.3.2 Supply and demand of crude oil

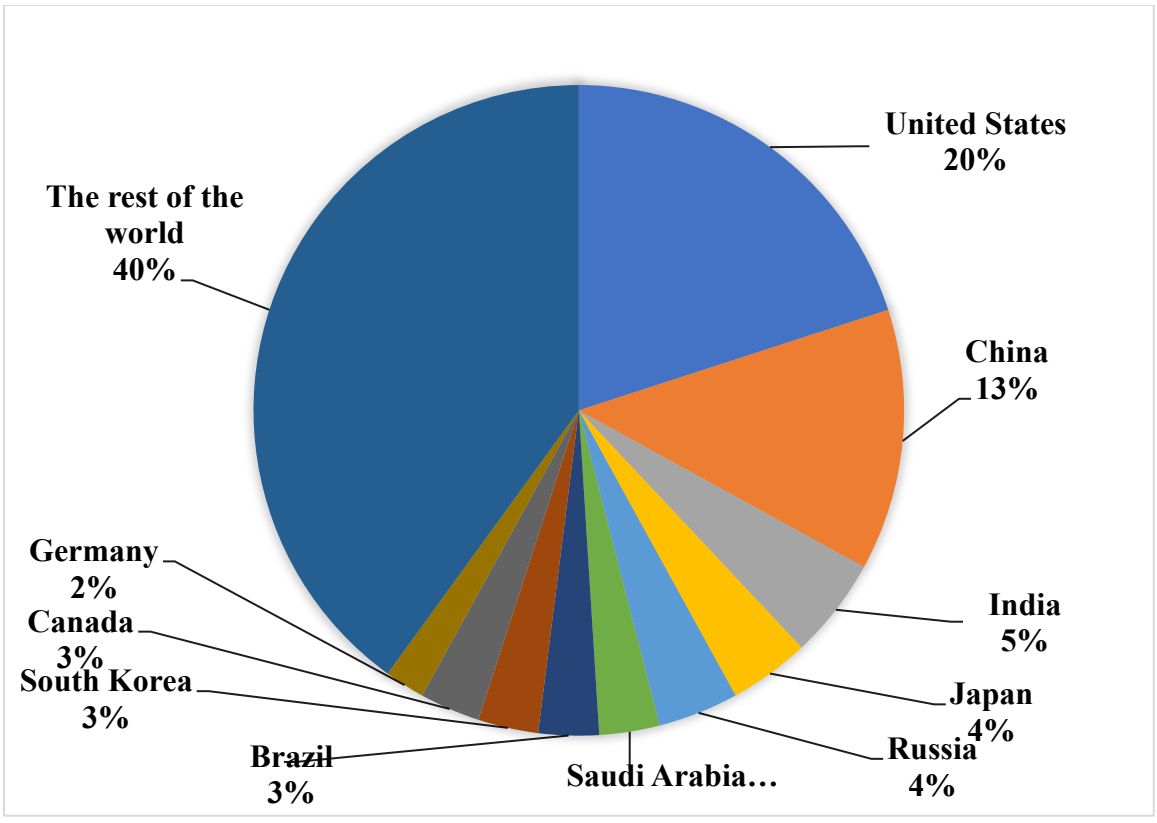
Graph 9 Daily demand for crude oil worldwide from 2006 to 2020 (in million barrels per day)



(Source: Statistia)

From graph 9, the daily demand on crude oil was slowly increasing in the past five years, and it is predicated the demand will still increase in 2020.

Graph 10. Top 10 oil producers and share of total world oil production in 2018



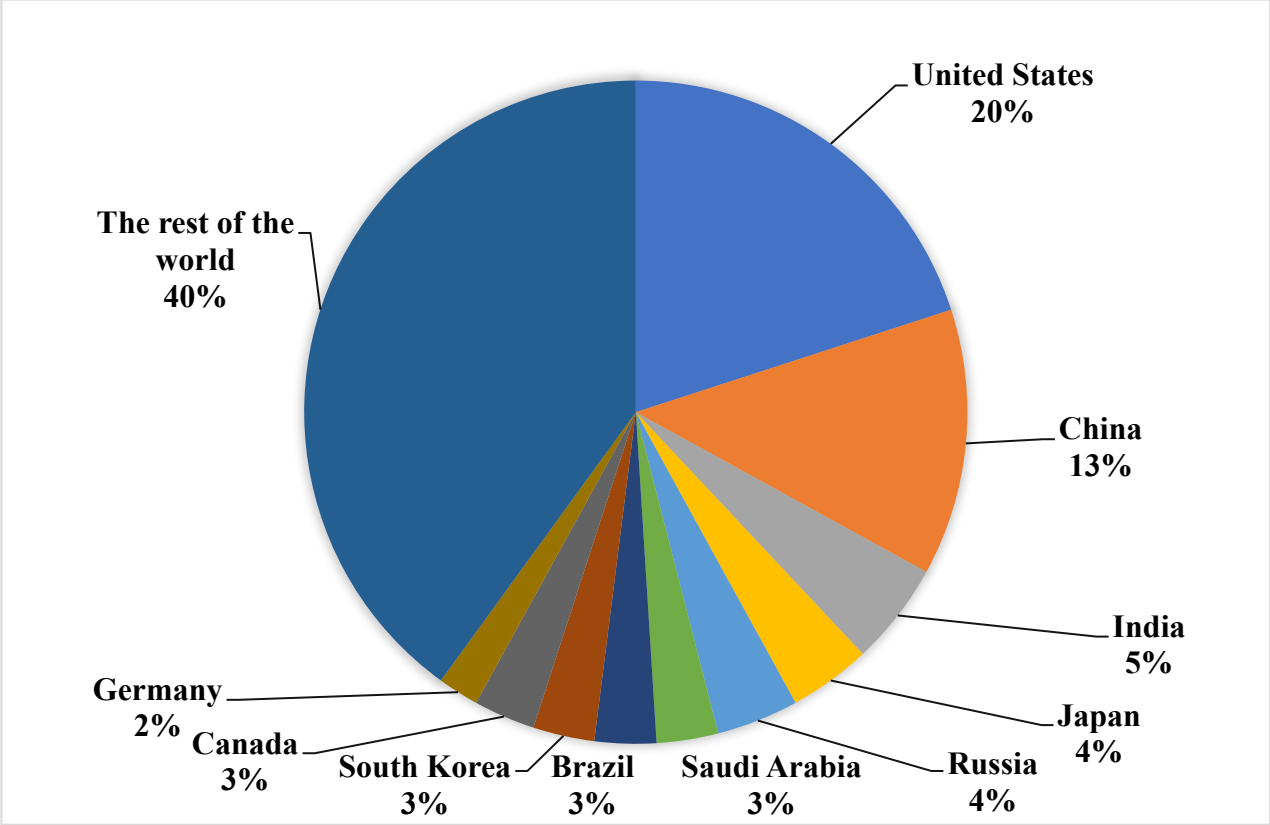
(Source: data from Worldbank, graph created by author)

(Note: Oil includes crude oil, all other petroleum liquids, and biofuels.
Production includes domestic production of crude oil, all other petroleum liquids, biofuels, and refinery processing gain.)

From the grahp 10, in 2018 the top 3 world oil producers are United States, Saudi Arabia and Russia with the share of world total 18%, 12% and 11% respectively, which are much higher than the 4th largest producer Canada. Although United States has a leading production of oil, the Organization of Petroleum Exporting Countries (OPEC) has the dominated position among all big players of oil producers. Among top 10 producers, there are half from OPEC, which are Saudi Arabia, Iraq, Iran, United Arab Emirates and Kuwait with a total share of 28% from the whole world oil production, the whole OPEC has 44% of global oil production and 81.5% of world's "proven" oil reserve. So OPEC has a major influence on global oil price which will affect multinational oil companies includes BP.

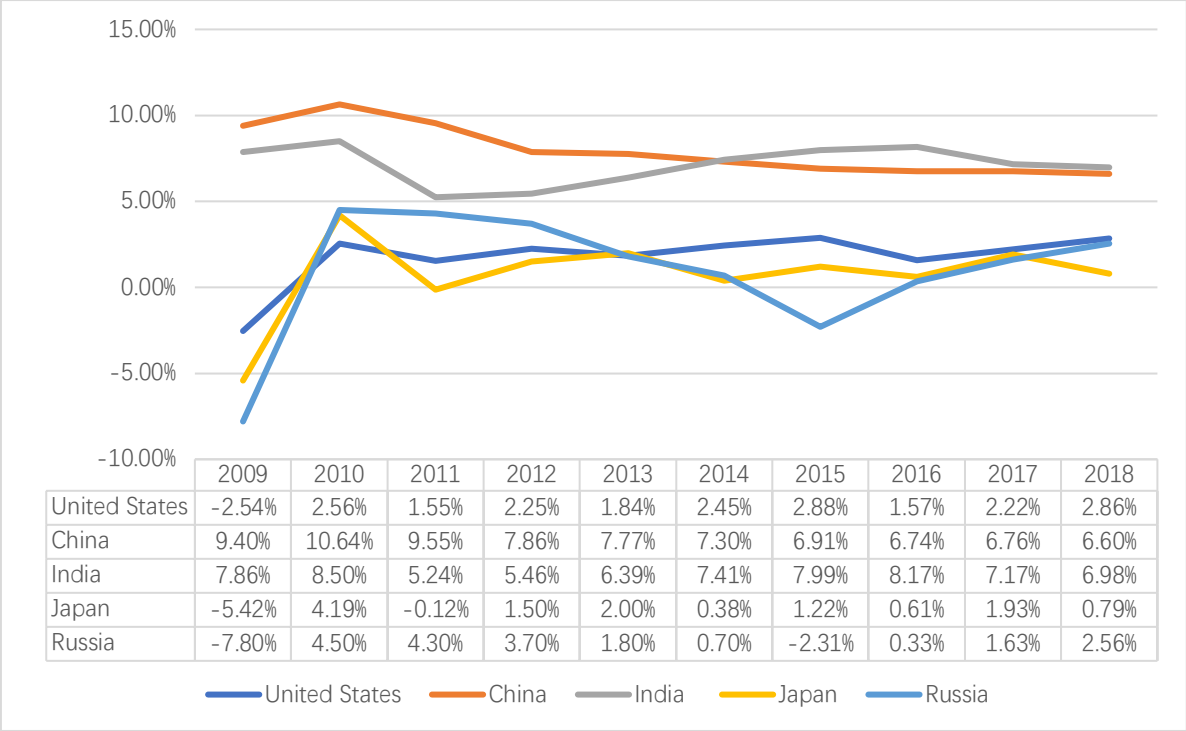
5.3.3 Consumption if crude oil

Graph 11. Top 10 consumers and share of total world oil consumption in 2016



(Source: data from Worldbank, graph created by author)

Graph 12. GDP growth of main consuming countries from 2009 to 2018 (%)



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
United States	-2.54%	2.56%	1.55%	2.25%	1.84%	2.45%	2.88%	1.57%	2.22%	2.86%
China	9.40%	10.64%	9.55%	7.86%	7.77%	7.30%	6.91%	6.74%	6.76%	6.60%
India	7.86%	8.50%	5.24%	5.46%	6.39%	7.41%	7.99%	8.17%	7.17%	6.98%
Japan	-5.42%	4.19%	-0.12%	1.50%	2.00%	0.38%	1.22%	0.61%	1.93%	0.79%
Russia	-7.80%	4.50%	4.30%	3.70%	1.80%	0.70%	-2.31%	0.33%	1.63%	2.56%

(Source: Worldbank, graph created by author)

From the graph 11 and 12, the United States was the largest oil consumer in the world in 2016 (the most recent year for which data is available from the U.S. Energy Information Administration). Followed by BRIC countries: China, India, Russia and Brazil and also developed country Japan. So from the graph above, since 2010 with the slow of GDP growth in those emerging economies especially China, the demand of oil will also be influenced.

Table 6. Average GDP growth of main consuming countries from 2009 to 2018

Country	United States	China	India	Japan	Russia
Average GDP growth From 2009 to 2018	1.76%	7.95%	7.12%	0.71%	0.94%

(Source: data from Worldbank, result calculated by author)

When comparing last five years GDP growth with the average of last 10 years, China's growth was keeping decreasing. Although India and Japan's GDP growth was

fluctuating, still seldom higher than the average. From 2016 to 2018, there were upward trends for Russia and United States, this may be caused by removing sanction to Russia. However, the trade war between China and the U.S. in 2019 leaves unpredictable influence on these two countries economy and oil industry.

5.4 PEST analysis

5.4.1 Political factors

When talking about international political situation, peace and development are still the themes of the current era. Countries around the world have stepped up economic cooperation and political construction. However, peace and development should simultaneously see changes in the world political arena, especially the oil-rich resource-state politics. Unsettled foreign investment with unsound laws and regulations should attract the attention of the petroleum industry.

Although BP is a public limited company, it has suspected ties with the UK government. Also, BP is trying to exact more from the North Sea. Besides, according to BP'a annual report 2018, BP has been assessing the potential impact of Brexit on BP. And as a result, BP gets fully prepared for all scenarios for the UK's exit from the EU and do not believe any of these scenarios will pose a significant risk to its business.

5.4.2 Economic factors

The trend of economic globalization and regional economic integration has been continuously strengthened. On the one hand, it has brought more intense international competition, and it has also brought international experience and opportunities.

North America, Europe and Asia-Pacific region have always been major energy consumers and an important consumption area for petrochemical products. However, with the continuous development of economies such as China and the increasing environmental protection requirements in countries such as North America and Europe. Refineries in Europe and other places have stopped working, and they have switched to lower-cost, new

large-scale refineries in developing countries that do not have such high environmental requirements. BP has invested in Middle East due to its rich oil reserve. Petrochemical projects will also grow up.

5.4.3Social factors

With the growth of the economy, the improvement of consumption levels, the pursuit of material life and the increase in purchasing power, the number of private cars in the world is also increasing, so the demand for oil is also greater. However, despite the improvement in consumption levels, people's environmental requirements and consumer attitudes are also changing. People are increasingly demanding environmental, health and safety. Therefore, while the petroleum industry is developing, it should develop new energy sources and adhere to green energy conservation and environmental protection.

As one of the world's top energy companies, BP pays attention to its benefits while also fulfilling its social responsibilities and fulfilling its social obligations. And through BP’s operating activities, it has been making contributions to the society as a whole in some terms. In 2016, BP contributed US$61.1 million in social investment.

5.4.4Technological factors

The development of science and technology provides consumers with more products and innovations, which also improves the production and quality at the same time provides advanced instruments to reduce service and production costs.

BP is continuously growing its own technology through constant developments. Focus is on managing safety and operational risk, capturing business value and competitively differentiating itself from others.

5.5 SWOT analysis

5.5.1 Strengths

As one of the world's oldest gas and oil companies, firstly, BP has a strong brand portfolio. BP is a vertical intergreted company whose business activities includes: exploration and production, refining, distribution and so on. Also BP has a broad coverage of retailing and exploration in the whole world.

Table 7. Number of BP-branded retail sites by regions from 2016 to 2018

	2016	2017	2018
US	7,100	7,200	**7,200**
Europe	8,100	8,100	**8,200**
Rest of world	2,800	2,800	**3,300**
Total	18,000	18,300	**18,700**

(Source: BP's annual report 2018, table created by author)

So from the table 7 we can see that the overal number of BP-branded retail sites is increasing, and mainly outside the Europe and America which includes Afarica and Asia. In terms of retail sites, BP is expanding its business to a broader coverage. Secondly, from the results of finance analysis, we can see that BP's total assets were increasing in the past three years. Also from activities ratios, we may concluded that BP has a strong business operation in dealing its inventories and a good relations with its customers to get debts paid in a shorter time when comparing with competitors. Besides, in terms of human resources, BP has highly skilled workforces and providing trainings to its employees. In terms of innovation, BP is focusing on new technology with a cost of US$429 bn in research and development in 2018. (Source: Statista)

5.5.2 Weaknesses

From financial analysis results, BP's ablility to generate profit was behind its peers in the last few years. Also, BP's DPS and EPS results were not very optimistic which means BP's rewards to its shareholders were not ideal. Although BP's total assets were increasing,

when considering its structure, we may found that liabilities take a huge portion. In general, there still remains huge opportunities for BP to improve its financial portfolio.

Another weakness for BP is its avoidless work accidents and injuries. Although due to BP's annual report, this number is decreasing, there are still accidents happen every year. Besides, BP is expanding its business to more countries but at the same time its facing difficulties in integrating in different work cultures. Last but not least, BP spent huge money on research and development, its technology is still not in the top level within the industry.

5.5.3 Opportunities

As the term sustainable development is quite popular in recent years, people's demand on renewable energies is more and more stronger. BP is focusing on developing renewable energies such as solar energy, biofuels and also developing renewable products.

New opportunities will create an equal playing field for all participants in the industry. For BP p.l.c., this is a great opportunity to take advantage of new technologies and gain market share in new product categories. After years of recession and slow industry growth, economic growth and increased customer spendings will give BP the opportunity to seize new customers and increase market share.

5.5.4 Threats

As discussed before, oil price is decided by many geopolitics factors or big events which influnce BP's profit and further development. For example, OPEC increase oil production which exceed actual demand, the flucation of US dollar's exchange rate.

Different countries have different liability laws, and Bp Plc may face various liability claims in view of policy changes in these markets. Rising wages, especially such as US$5 an hour, and rising Chinese prices, may put BP profitability under severe pressure.

New technologies developed by competitors or market disruptors may pose a serious threat to the industry in the medium to long term. Based the discussion above, the results of SWOT analysis may be concluded as the following:

Table 8. Summarization of SWOT analysis

Strengths	**Opportunities**
Vertical integrated business; Broad coverage; Highly skilled workforces; Good relations with customers.	Developing renewable energies; Using new technologies to gain more market shares; Seizing new customers.
Weaknesses	**Threats**
Ability to generate profits; Low returns to shareholders; Facing difficulties in different work cultures; Lack of advanced technologies within industry.	Effect from geopolitical factors and OPEC; Market disruptors; Raising costs in operations; Changes of liability laws in different countries.

(Source: author's own analysis)

5.6 Porter's five forces analysis

5.6.1 Bargaining power of suppliers

Most companies in the oil and gas industry buy raw materials from a wide range of suppliers. A dominant supplier may reduce the profit that BP p.l.c. can make in the market. Powerful suppliers in the oil and gas sector use their negotiating capabilities to extract higher prices from companies in the same sector. The overall impact of higher supplier bargaining power is that it reduces the overall profitability of oil and gas.

5.6.2 Bargaining power of buyers

First of all, oil as an important strategic resource, plays a pivotal role in the national economy. Once a country's oil resources are short, there is no ability to bargain. Secondly, petroleum resources are pecial non-renewable resources, and the development of petroleum resources is limited. As the demand for oil increases, the amount of exploitation increases, the total amount of oil will only gradually decrease, and the decrease in supply will cause prices. As the price rises, the ability of customers to bargain will also weaken. Thirdly, the distribution of petroleum resources has a certain regionality, and a few countries in the world will have abundant oil and gas resources. This status determines that the seller's market for petroleum resources is limited, which also determines the ability of customers to bargain. In addition, the development and utilization of new energy sources is still in its infancy, and the emergence of some oil associations in the world has made oil industry customers' bargaining power very low.

5.6.3 Threat of new entry

In the international market, most countries are likely to set up new oil companies, and international competitors are likely to increase at any time, making the international potential competitors relatively more.

New entrants in the oil and gas sector bring innovation, new ways of doing things, and put pressure on BP p.l.c. by lowering pricing strategies, reducing costs and providing new value propositions to customers. BP p.l.c. must address all of these challenges and build effective barriers to maintain its competitive advantage.

5.6.4 Threat of substitutes

With the development of the economy and the destruction of the environment, all countries in the world are aware of the importance of environmental protection, and the use of petroleum resources as a fossil fuel will cause certain pollution to the environment. Most countries adhere to the sustainable development strategy, and energy conservation and emission reduction are receiving more and more attention. To this end, most countries

have begun to actively develop and use new energy sources, such as solar energy, wind energy and other green energy. As the development and use of new energy sources expands, there will be more and more alternatives to petroleum products. At the same time, the state and the government support and encourage green energy, and with policy support, the market prospects for clean energy are broad. The increase in the market share of clean energy will inevitably lead to an increase in more alternatives, and prices will fall as the market generally uses. This will increase the competitive pressure on the oil industry. With the development of social economy, the competition between this traditional energy and new energy will gradually intensify, and the development of alternative products will become the main source of competition in the petroleum industry.

5.6.5Rivalry

As we all know, oil and gas industry is always very competitive, the following table shows top ten oil and gas companies by revenue in 2018.

Table 9. Top 10 oil and gas companies by revenue in 2018:

Rank	Name of the company	Nationality	Ownership
1	SINOPEC	China	Stated-owned
2	Saudi Aramco	Saudi Arabia	Stated-owned
3	China National Petroleum Corporation	China	Stated-owned
4	Royal Dutch Shell	UK-Netherlands	Public Limited
5	BP	UK	Public Limited
6	ExxonMobil	U.S.	Private Limited
7	Total	France	Public
8	Valero	U.S.	Public
9	Gazprom	Russia	Public
10	Phillips 66	U.S.	Public

(Source: U.S. Energy Information Administration, table created by author)

From the table 9, in 2018 the 3rd biggest oil company by revenue was China National Petroleum Corporation (CNPC). Founded in 1998, CNPC is a state-owned corporation which has 86.51% control of PetroChina. The following are key indicators comparison between BP and CNPC.

Table 10. Balance sheet comparison of BP and CNPC in 2018 (in million USD)

	BP	CNPC	BP/CNPC (%)
Cash and Equivalents	**22,468**	**61,896**	**36.30%**
Accounts Receivable	**19,414**	**18,732**	**103.64%**
Inventories	**17,988**	**37,384**	**48.12%**
Other Current Assets	**11,440**	**90,693**	**12.61%**
Total Current Assets	**71,310**	**208,705**	**34.17%**
Total Non-Current Assets	**210,866**	**411,165**	**51.28%**
Total Assets	**282,176**	**619,870**	**45.52%**
Accounts Payable	**46,265**	**58,434**	**79.18%**
Other Current liabilities	**21,972**	**130,316**	**16.86%**
Total Current Liabilities	**68237**	**188,750**	**36.15%**
Long-term debt	**56,426**	**41,197**	**136.97%**
Other Non-Current Liabilities	**55,965**	**31,400**	**80.63%**
Total Non-Current Liabilities	**112,391**	**72,597**	**178.23%**
Total Liabilities	**180,628**	**261,347**	**69.11%**
Total Shareholder's Equity	**101,548**	**358,522**	**28.32%**
Total Liabilities and Shareholder's Equity	**282,176**	**619,870**	**45.52%**

(Source: author's own calculation. Data from BP annual report 2014-2018)

(Note: the results of CNPC were recalculated to US$ by average yearly ex.rate)

Table 11. Income statement comparison of BP and CNPC in 2018 (in million USD)

	BP	CNPC	BP/CNPC (%)
Sales	**303,738**	**410,852**	**73.93%**
Gross profit	**49,319**	**96,951**	**50.87%**
Operating profit	**19,378**	**23,544**	**82.30%**
Total profit before tax	**16,723**	**16,584**	**100.84%**
Net profit	**9,578**	**7,889**	**121.41%**

(Source: author's own calculation. Data from BP annual report 2014-2018)

(Note: the results of CNPC were recalculated to US$ by average yearly ex.rate)

From the table above, BP's sales were 73.93% of CNPC in 2018 and the gross profit was nearly half of CNPC. However, due to BP's less operating and other expenses, the net profit of BP was 21.41% higher than CNPC.

Table 12. Average liquidity ratios of BP and CNPC (2014-2018) (in million USD)

	BP	CNPC	BP/CNPC (%)
Current ratio	**1.21**	**1.09**	**111.01%**
Quick ratio	**0.92**	**0.87**	**105.75%**
Cash Ratio	**0.48**	**0.33**	**145.45%**

(Source: author's own calculation. Data from BP annual report 2014-2018)

(Note: the results of CNPC were recalculated to US$ by average yearly ex.rate)

From the table 12, BP's average current ratio during last five years was 111.01% of CNPC, the average quick ratio was slightly lower than this value but still 5.75% higher than CNPC. Positively, BP's average cash ratio was much higher than CNPC which means BP had more cash or cash equivalent which could be considered as a good sign.

Table 13. Average profitability ratios of BP and CNPC (2014-2018) (in million USD)

	BP	CNPC	BP/CNPC (%)
Gross profit margin	**13.70%**	**23.60%**	**58.05%**
Operating profit margin	**1.66%**	**4.37%**	**37.99%**
Net profit margin	**0.54%**	**2.25%**	**24.00%**
Return on equity (ROE)	**1.90%**	**2.29%**	**82.97%**
Return on assets (ROA)	**0.69%**	**1.33%**	**51.88%**

(Source: author's own calculation. Data from BP annual report 2014-2018)

(Note: the results of CNPC were recalculated to US$ by average yearly ex.rate)

According to table 13, all the profitability indicators of BP were much lower than CNPC which was quite negative for BP's investors. The most significant reason is that the nature of business are different, CNPC relies on oil import. So in 2014 and 2015 BP was influenced badly by the drop of oil price, this resulted in absolute low values in 2014 and 2015 which generated much lower average value.

Table 14. Average indebtedness ratios of BP and CNPC (2014-2018) (in million USD)

	BP	CNPC	BP/CNPC
Debt ratio	**62.75%**	**41.42%**	**151.50%**
Long-term debt to assets	**18.70%**	**8.83%**	**211.78%**
Long-term debt to equity	**50.40%**	**15.06%**	**334.66%**

(Source: author's own calculation. Data from BP annual report 2014-2018)

(Note: the results of CNPC were recalculated to US$ by average yearly ex.rate)

According to the indebtedness ratios above, it is obvious to see that CNPC had a better assets composition with more equity, because BP's debt ratio was 51.50% higher than CNPC. Unless CNPC, BP was more relied on external borrowed funds. And when comparing average long- term debt to assets / equity ratios, BP was facing much higher operational risks than CNPC, which was a quite negative sign for BP.

Table 15. Average activity ratios of BP and CNPC (2014-2018) (in million USD)

	BP	CNPC	BP/CNPC (%)
Inventory turnover	**12.15**	**9.26**	**131.21%**
Account receivable turnover	**12.61**	**16.99**	**74.22%**
Account payable turnover	**5.61**	**6.42**	**87.38%**

(Source: author's own calculation. Data from BP annual report 2014-2018)

(Note: the results of CNPC were recalculated to US$ by average yearly ex.rate)

From the table 15, BP had better ability to clean its stocks with a higher inventory turnover. However, CNPC had more qualified customers which can pay the debts more faster. And also CNPC's ability to pay its debt was higher than BP. So there are still some opportunities for BP to improve its activity operations.

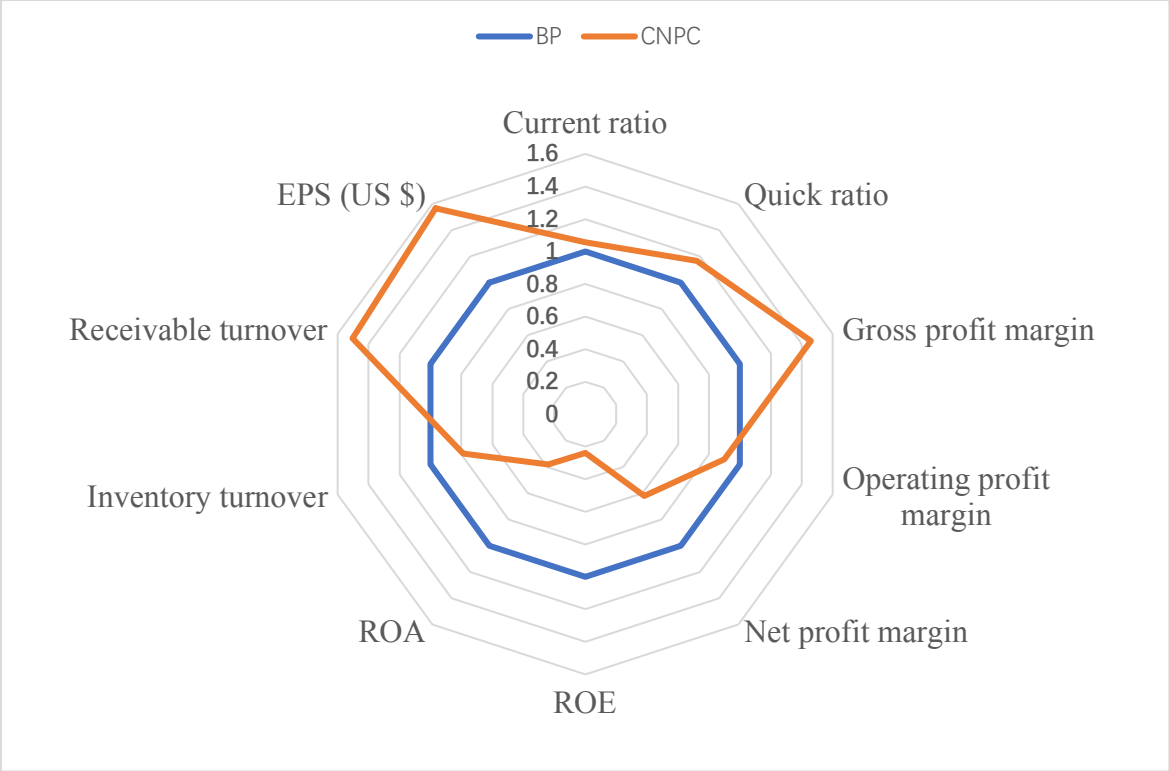
In order to have a comprehensive perspective of BP's financial performance, it is worth comparing BP with its competitors. So the following part will compare BP's overall performance with China National Petroleum Corporation (CNPC), and also comparing selected liquidity ratios, activity ratios with another two competitors, which are Royal Dutch Shell PLC (Shell) and American company Valero Energy (Valero).

Table 16. Selected financial ratios of BP and CNPC in 2018

	BP	CNPC	CNPC/BP
Current ratio	1.05	1.11	1.06
Quick ratio	0.78	0.91	1.17
Gross profit margin	16.24%	23.70%	1.46
Operating profit margin	6.38%	5.73%	0.90
Net profit margin	3.09%	1.92%	0.62
ROE	9.24%	2.20%	0.24
ROA	3.32%	1.27%	0.38
Inventory turnover	13.75	10.86	0.79
Receivable turnover	13.28	19.97	1.50
EPS (US $)	2.80	4.38	1.56

(Source: author's own calculation, data from BP's and CNPC's annual reports 2018)

Graph 13. Benchmarking analysis results (with CNPC)



(Source: author's own calculation, data from BP's and CNPC's annual reports 2018)

From the graph 13 we can see that when comparing with CNPC, BP's quick ratio and current ratio are a little bit lower than CNPC which means CNPC could cover more current liabilities by its current assets or cash. Also, when comparing profitability ratios, although CNPC's gross profit margin was higher than BP, in case of operating profit margin, BP caught up with CNPC, and BP's net profit margin was much higher than CNPC, this means BP had a better ability to generate net profit. Besides, BP could bring more profits with higher values of ROA and ROE. Also BP's ability to clean up its stock was better than CNPC with a higher inventory turnover, but CNPC may have more qualitied customers to pay the debts faster with a higher account receivable turnover. Last but not least, in terms of return to shareholders, CNPC's earnings per share was 1.5 times against BP, which means investing in CNPC could get more returns than BP in 2018.

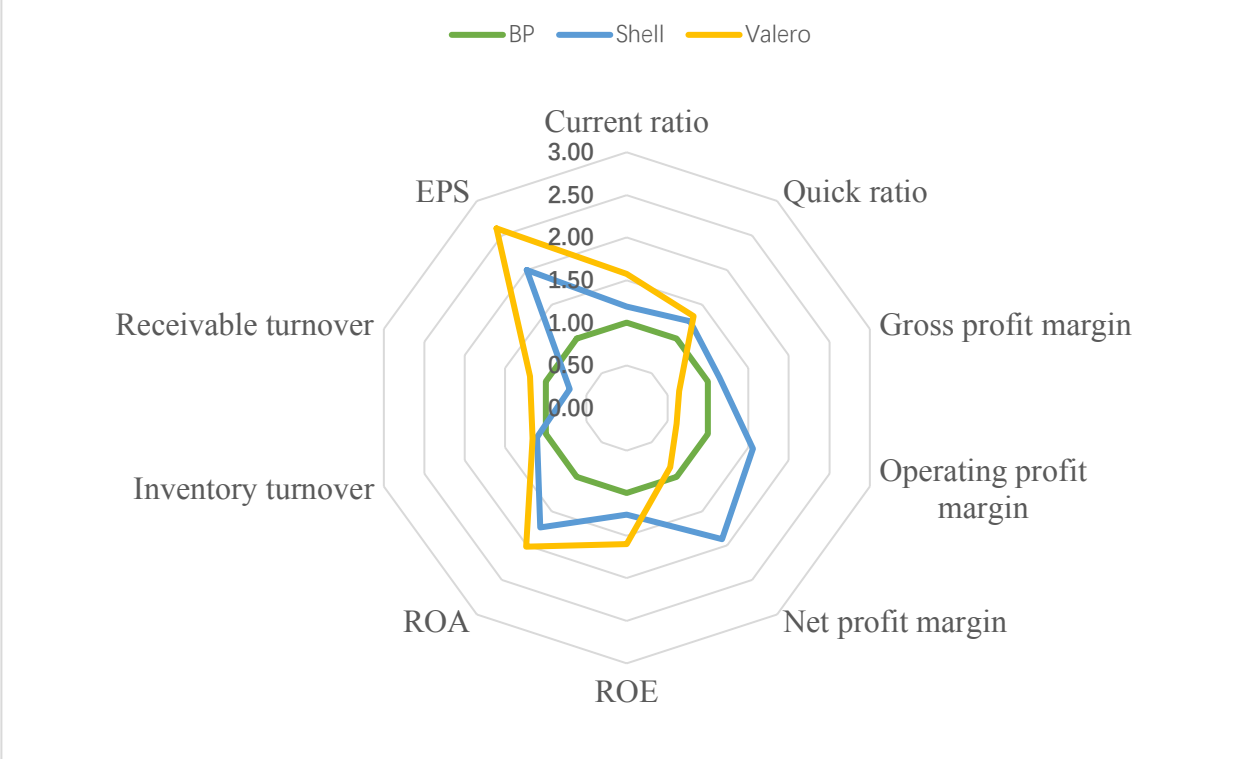
The following part will continue benchmarking analysis with competitors Royal Dutch Shell PLC (Shell) and American company Valero Energy (Valero).

Table 17. Selected financial ratios of BP, Shell and Valero in 2018

	BP	Shell	Shell/BP	Valero	Valero/BP
Current ratio	1.05	1.25	1.19	1.65	1.57
Quick ratio	0.78	0.98	1.26	1.04	1.33
Gross profit margin	16.24%	18.62%	1.15	10.51%	0.65
Operating profit margin	6.38%	9.93%	1.56	3.91%	0.61
Net profit margin	3.09%	5.89%	1.91	2.67%	0.86
ROE	9.24%	11.58%	1.25	14.75%	1.60
ROA	3.32%	5.75%	1.73	6.69%	2.02
Inventory turnover	13.75	15.28	1.11	16.03	1.17
Receivable turnover	13.28	9.35	0.70	15.93	1.20
EPS(US$)	2.80	5.60	2.00	7.29	2.60

(Source:table created by author, data from Macrotrendes)

Graph 14. Benchmarking analysis results (with Shell and Valero)



(Source: graph created by author, data from Macrotrendes)

From the graph of benchmarking analysis above, BP's overall performance (in green line) fell behind its main competitors in 2018. In liquidity ratio aspect, Shell and Valero had better abilities to cover their current liabilities by their current assets and cash or cash equivalent.

From the aspect of profitability ratio, BP's performance was not very optimistic in 2018 when comparing with Shell, but it was much better than Valero. Company Shell's net profit margin was almost two times against BP. In case of activities ratios, BP could manage its stock properly, BP had a relatively strong sell operations and sold its products almost the same speed as another two competitors. When comparing account receivable turnover, BP's collection of accounts receivable was efficient and had a higher share of quality of customers who pay their debts quickly.

To sum up, on one hand, BP had strong sales operation and more qualified customers to pay debts which can be considered as good signs for company's lone-term development. On the other hand, BP's ability to generate profit was somehow behind its main competitors or in the same level. Also its assets structure is worse than Shell and Valero due to its lower current ratio and cash ratio in 2018. And the earnings per share (EPS) of BP was US$2.80, which was only half of Shell's EPS and 38% of Valero's EPS. So investing in BP brings back less profits to its shareholders.

6 Discussion

Oil and gas industry, as one of the most profitable industries in the world, contributing a lot to world economy and creating many job vacancies in different countries. However, behind these benefits, there are also downsides brought by this industry. One of the most well-known example was BP oil crisis in 2010.

Reviewing BP's long hisroty, it experienced different periods with oil price fluctuating and in most times of the past, it always had a good brand image within public unless 2010 – Gulf of Mexico oil spill. It also called Deepwater horizon oil spill, the largest marine oil spill in history, caused by an April 20, 2010, explosion on the deepwater horizon oil rig, approximately 41 miles (66 km) off the coast of Lousiana, and its subsequent sinking on April 22. BP tried to activate the rig's blowout preventer (BOP), this fail-safe mechanism was designed to shut down the suction channel, but the device still failed. (Gramling and Freudenburg, 2012, p.9-p.11)

The economic prospects are severe, as the spill has affected many industries in which residents live. More than one-third of the federal waters in the Gulf region are banned from fishing during peak oil spills due to concerns about pollution. The promulgation of the suspension of offshore drilling, Barack Obama's government, despite the abolition of the District Court, is estimated to be 8,000-12,000 temporarily unemployed. Few travelers are willing to face oil-poor beaches, while those who rely on tourism are trying to increase their income. In line with Obama's request, BP had set up a $20 billion compensation fund for people affected by the oil spill. A year later, nearly one-third of the funds have already been paid, although the lack of supervision has allowed government entities to file false claims, some of which have nothing to do with oil spills. By 2013, the fund was almost exhausted. (Gramling and Freudenburg, 2012, p.12-p.15)

As it's discussed already, since 2014 the oil price dropped dramatically, and in 2015 there was higher supply than demand, the whole oil and gas industry was influenced negatively, which definitely included BP. BP was facing a challenging time until its financial performances caught up with the peers in 2018. And the oil crisis may also explain why one of the previous "seven supermajors" performance was totally behind its

peers. At the same time, during past nine years since Gulf of Mexico oil spill happened, BP was improving its management, ensuring safe working conditions and reducing pollutions on environment all the time. Also it is trying hardly to recovering its public image by putting more efforts on its social responsibilities.

7 Conclusion

In this thesis, economic analysis are implemented to one of the world oil and gas "seven supermajors" companies – British Petroleum (BP p.l.c.). In the practical results, in terms of financial performances, due to the fluctuation of the whole industry and own oil spill crisis in 2010, BP's performances were not optimistic especially in 2014 and 2015. Since 2016 it recovered and demonstrated an upward trend in all aspects. And finally in 2018, its performances almost caught up its peers. In 2018, BP's annual revenue was US$303,738 million with 124.19% increase form 2017; net income was US$9,382 million with 176.92% increase from 2017, EPS was US$2.80 with 171.84% increase from 2017.

When comparing BP's financial performances of 2018 with other competitors, we found that on one hand, BP had strong sales operation and more qualified customers to pay debts which can be considered as good signs for company's lone-term development. On the other hand, BP's ability to generate profit was behind its main competitors. Also its assets structure is worse than Shell and Total due to its lower current ratio and cash ratio in 2018. And the earnings per share (EPS) of BP was US$2.80, which was only 50% of Shell's EPS and 38% of Valero's EPS. So investing in BP brings back less profits to its shareholders.

From strategic management analysis, BP is facing opportunities and challenges at the meanwhile. Overall, there are several suggestions for BP's futhuer development:

BP should pay more efforts to adjust its assets structures, improving its ability to generate profits, reducing its long-term debts, keeping good performances according to its inventory turnover and account receivable turnover ratios. And the most important is that improving earnings per share in order to attract more investors.

BP should also try its best to gain comprehensive competitiveness, which includes improving the current company management, establish good company imagine, pay more efforts to social responsibilities, improving technology to gain a leading position within industry, ensuring safe working conditions and reduce environmental pollution by exploring renewable energies. After years of recession and slow industry growth,

economic growth and increased customer spending, these factors will give BP more opportunities to seize new customers and increase market share.

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9 Appendix

Balance Sheet of BP 2014-2018 (in million USD)

	2014	2015	2016	2017	2018
Cash and Equivalents	35,257	30,850	26,544	28,743	26,536
Accounts Receivable	19,671	13,682	13,393	18,912	19,414
Inventories	18,373	14,142	17,655	19,011	17,988
Other Current Assets	13,961	11,928	10,221	8,302	7,372
Total Current Assets	87,262	70,602	67,813	74,968	71,310
Total Non-Current Assets	197,043	191,230	195,503	201,547	210,866
Total Assets	284,305	261,832	263,316	276,515	282,176
Accounts Payable	40,118	31,949	37,915	44,209	46,265
Other Current liabilities	23,497	22,775	20,439	20,517	21,972
Total Current Liabilities	63,615	54,724	58,354	64,726	68,237
Long-term debt	45,977	46,224	51,666	55,491	56,426
Other Non-Current Liabilities, Total	62,071	62,497	56,453	55,894	55,965
Total Non-Current Liabilities	108,048	108,721	108,119	111,385	112,391
Total Liabilities	171,663	163,445	166,473	176,111	180,628
Total Shareholder's Equity	112,642	98,387	96,843	100,404	101,548
Total Liabilities and Shareholder's Equity	284,305	261,832	263,316	276,515	282,176

Cash Flow of BP 2014-2018 (in million USD)

	2014	2015	2016	2017	2018
Cash Flows from Operating Activities	32,754	19,133	10,691	18,931	22,873
Cash Flows from Investment Activities	-19,574	-17,300	-14,753	-14,077	-21,571
Cash Flows from Financial Activities	-5,266	-4,535	1,977	-3,296	-4,079
Net Cash Flow	7,243	-3,374	-2,905	2,102	-3,107

Income Statement of BP 2014-2018 (in million USD)

	2014	2015	2016	2017	2018
Revenue	358,678	225,982	186,606	244,582	303,738
Cost of Goods Sold	312,240	202,866	161,979	205,720	254,419
Gross Profit	46,438	23,116	24,627	38,862	49,319
Research and Development Expenses	3,632	2,353	1,721	2,080	1,445
SG&A Expenses	12,266	11,553	10,495	10,508	12,179
Other Operating Income or Expenses	-8,965	-1,909	1,664	-1,216	-860
Operating Expense	352,266	233,900	187,036	235,108	284,360
Operating Income	6,412	-7,918	-430	9,474	19,378
Total Non-Operating Income/Expense	-1,462	-1,653	-1,865	-2,294	-2,655
Pre-Tax Income	4,950	-9,571	-2,295	7,180	16,723
Income Taxes	947	-3,171	-2,467	3,712	7,145
Net Income after Taxes	4,003	-6,400	172	3,468	9,578

Balance Sheet of CNPC 2014-2018 (in million USD)

	2014	2015	2016	2017	2018
Cash and Equivalents	49,933	51,416	53,812	60,424	61,896
Accounts Receivable	21,584	19,897	18,351	20,491	18,732
Inventories	43,449	34,247	32,026	34,736	37,384
Other Current Assets	50,179	58,276	71,214	88,018	90,693
Total Current Assets	165,146	163,835	175,403	203,668	208,705
Total Non-Current Assets	459,862	441,279	394,363	411,140	411,165
Total Assets	625,007	605,115	569,766	614,808	619,870
Accounts Payable	59,910	48,090	43,960	54,584	58,434
Other Current liabilities	118,324	111,550	99,777	122,436	130,316
Total Current Liabilities	178,235	159,640	143,737	177,020	188,750
Long-term debt	59,248	65,171	52,204	49,671	41,197
Other Non-Current Liabilities	31,794	20,560	31,540	27,571	31,400
Total Non-Current Liabilities	91,042	85,731	83,744	77,242	72,597
Total Liabilities	269,277	245,371	227,481	254,262	261,347
Total Shareholder's Equity	355,730	359,743	342,285	360,546	358,522
Total Liabilities and Shareholder's Equity	625,007	605,115	569,766	614,808	619,870

(Note: the results of CNPC were recalculated to US$ by average yearly ex.rate)