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**THE CURRENT STATE
OF THE WORLD OIL MARKET**

The main issue of the world economy today is the global rise in oil prices. Oil remains the most important primary energy source in the world for the next 30-40 years. According to experts, by 2030 this figure will reach 116 million barrels per day. However, the share of OPEC countries in the world's proven oil reserves is 83%. The world is facing the threat of a prolonged oil crisis and should be prepared for the fact that oil prices will be high for a long period.

OPEC expects an increase in demand for gasoline and distillates in 2018 by almost 1 million barrels per day. The optimism of the cartel is based on the growing demand for petroleum products in the US and the increase in global car sales. The healthy growth of the world economy, good sales figures for cars in recent months and increased consumption in the US will lead to an increase in demand for gasoline and distillates in the world by 0.993 million barrels per day. This will have a positive impact on oil and oil products stocks, which OPEC and non-OPEC countries seek to reduce by limiting production. The main driver of the reduction in petroleum products OPEC sees consumption in the US. For the first time in past 25 years, the demand for diesel fuel and gasoline in the US increased by 846 thousand barrels per day. The reserves of gasoline and distillates in the US declined over in 2017 and fell below the average for five years. Oil reserves also fell below this indicator.

Nowadays, OPEC continues to play a huge role in the functioning of the world economy, but it is clear that its role in the international arena is getting lower and lower every year. This is due to many indicators. Here are the main ones. First, due to the fact that already today OPEC is not able to cope with the fall in oil prices, it has to seek support from other oil-exporting countries, that is, its dependence on other countries increases. Secondly, the recent rationalization of the use of natural resources and the shift to the use of alternative energy sources, leads to a reduction in demand for oil. In these conditions, OPEC pursues a policy of reducing the production of oil. But, with the reduction in oil production in the OPEC countries, the states that are not included in it, on the contrary, are trying to increase production of «black gold», gradually reducing the role of OPEC in the functioning of the world economy.

The dynamics of energy demand is affected by many factors, including weather, the price of petroleum products, the growth rate of the economy, etc. The proposal is also difficult to calculate. Despite the very specific goals of the OPEC + countries and other exporters, there are periodic accidents, spills, man-made and natural disasters that can dramatically change the market situation. Many risks have to be neglected. IEA, OPEC and the US Ministry of Energy regularly publish their estimates of the future oil market and are the most authoritative organizations in this regard.

This article considers the dynamic of changes in the world market of «black gold», also many factors due to the influence of various geopolitical processes on extraction and export of oil.

Key words: oil, price, OPEC, petroleum, barrel.

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Әлемдік мұнай нарығының қазіргі жағдайы

Әлемдік экономиканың басты мәселесі мұнай бағасының әлемдік артуы. Мұнай алдағы 30-40 жылда әлемдегі ең маңызды энергия көзі болып қала береді. Сарапшылардың бағалауынша, 2025 жылға қарай бұл көрсеткіш тәулігіне 116 миллион баррельге жетеді. Дегенмен, әлемдегі мұнайдың дәлелденген қорларындағы ОПЕК елдерінің үлесі 83% құрайды. Әлем мұнай дағдарысының ұзаққа созылу қаупімен бетпе-бет келіп, мұнай бағасының ұзақ уақыт бойы жоғары болуына дайын болуы керек.

ОПЕК 2018 жылы бензин мен дистилляттарға деген сұраныстың күніне шамамен 1 миллион баррельге артуын күтеді. Картельдің оптимизмі АҚШ-тағы мұнай өнімдеріне сұраныстың артуына және әлемдік автомобиль сатылымының өсуіне негізделген. Әлемдік экономиканың өсуі, соңғы айларда автомобильдер үшін оң сату көрсеткіштері және АҚШ тұтынуының артуы әлемде бензин мен дистилляттарға тәулігіне 0,993 миллион баррельге сұраныстың артуына әкеледі. Бұл ОПЕК пен ОПЕК-ке кірмейтін елдердің өндірісті шектеу арқылы қысқартуға тырысатын мұнай мен мұнай өнімдеріне оң әсерін тигізеді. ОПЕК-тің мұнай өнімдерінің қысқаруының басты драйвері АҚШ-та тұтынуды қарастырады. Соңғы 25 жылда тұңғыш рет АҚШ-та дизель отыны мен бензинге сұраныс күніне 846 мың баррельге ұлғайды. АҚШ-та бензин мен дистилляттардың резервтері 2017 жылы төмендеп, орташа есеппен 5 жылға төмендеді. Мұнай қорлары да осы көрсеткіштен төмен болды.

Қазіргі таңда ОПЕК әлемдік экономиканың жұмысында үлкен рөл атқарады, бірақ оның халықаралық аренадағы рөлі жыл сайын төмендеп, төмендейтіні анық. Бұл көптеген факторларға байланысты. Міне, бастысы. Біріншіден, ОПЕК қазіргі уақытта мұнай бағасының төмендеуімен күресуге қабілетсіз болғандықтан, басқа елдерге мұнай экспорттаушы елдерден қолдау табу керек, яғни басқа елдерге тәуелділігі артады. Екіншіден, соңғы уақытта табиғи ресурстарды және альтернативті энергия көздерін ұтымды пайдаланудың ұлғаю салдарынан мұнайға деген сұраныстың төмендеуіне әкеледі. Мұндай жағдайда ОПЕК «қара алтынның» өндірісін қысқарту саясатын жүргізеді. Алайда, ОПЕК елдерінде мұнай өндіруді қысқарту арқылы, оған кірмейтін мемлекеттер, керісінше, ОПЕК-ті біртіндеп әлемдік мұнай нарығынан ауыстыруға бағытталған өндірісті ұлғайтуға тырысуда.

Энергия тасымалдаушыларына деген сұраныстың динамикасы көптеген факторларға әсер етеді, оның ішінде ауа райы, мұнай өнімдерінің бағасы, экономиканың өсу қарқыны және көптеген факторлары. Бұл ұсыныс деңгейін есептеу, сондай-ақ, қиын. ОПЕК+ және басқа да экспорттаушылардың ерекше мақсаттарына қарамастан, нарық конъюнктурасының күрт өзгеруіне алып келетін жазатайым оқиғалар, төгілулер, техногендік және табиғи апаттар орын алады. Көптеген тәуекелдер назардан тыс қалуға мәжбүр. ХЭА, ОПЕК және АҚШ Энергетика министрлігі тұрақты түрде мұнай нарығының болашақ бағалауын жариялайды және осы орайда ең беделді ұйымдар қатарына кіреді.

Бұл мақалада әлемдік мұнай нарығындағы «қара алтынның» бағасының өзгерістері және мұнай өндіруіне, экспортына түрлі геосаяси процестердің әсер етуі есебінен көптеген факторлар қарастырылады.

Түйін сөздер: мұнай, баға, ОПЕК, бензин, баррель.

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Современное состояние мирового рынка нефти

Повышение цен на нефть на сегодняшний день является самым основным вопросом в мировой экономике. В перспективе на ближайшие 30 – 40 лет нефть будет самым важным и основным энергоносителем в мировой экономике. Эксперты прогнозируют, что к 2030 году использование нефти будет составлять 116 млн баррелей в сутки. Тем не менее, доля стран, входящих в ОПЕК, по запасам доказанной нефти в мире составляет 83%. Ожидается возможность долгого нефтяного

кризиса в мировой экономике, вследствие чего страны должны быть готовы к продолжительной повышенной отметке цен на нефть.

Страны ОПЕК прогнозируют повышение спроса на дистилляты и бензин в текущем году около 1 млн баррелей в сутки. Их прогноз основывается на наблюдениях за ростом спроса на автомобили и повышением использования нефтепродуктов в США. Стабильный рост продаж автомобилей, продолжительное повышение основных показателей в мировой экономике, а также растущий спрос на нефтепродукты в США ведут к повышению спроса на дистилляты и бензин на 0,993 млн баррелей в сутки. Это положительно отразится на запасах нефти и нефтепродуктов в мировой экономике. Страны ОПЕК считают, что повышенное потребление нефтепродуктов в США является основным фактором снижения их запасов. В первый раз в США наблюдается спрос на дизельное топливо и бензин до 846 тыс. баррелей в сутки за последние 25 лет. Наблюдалось снижение запасов бензина и дизельного топлива среднего показателя за последние 5 лет в течение 2017 года в США. Также и запасы нефти опустились ниже этого показателя.

Уже несколько лет как ОПЕК лидирует по добыче и экспорту нефти в мировой экономике, но в последнее время ее роль в функционировании мирового хозяйства начала снижаться. Объяснением этому служат следующие индикаторы: 1) так как в настоящее время ОПЕК не может повлиять на падение цен на нефть, вследствие чего, опираясь на поддержку других стран, она становится зависимой от этих стран; 2) снижение спроса на основной энергоноситель обуславливается также переходом к использованию альтернативных источников энергии и наиболее рациональным использованием природных ресурсов в мировой экономике. В следствие этих факторов ОПЕК стремится к сокращению добычи нефти. Но, несмотря на такую проводимую ОПЕК политику, страны, не входящие в ОПЕК, наоборот, увеличили добычу «черного золота», тем самым снижая роль ОПЕК в функционировании мирового хозяйства.

Спрос на нефть, бензин и дистилляторы меняется в зависимости от многих факторов, таких как погодные условия, цены на энергоносители, макроэкономические показатели экономики и другие. Динамику предложения также нелегко определить. Хотя страны ОПЕК+ и другие страны-экспортеры нефти преследуют вполне определенные цели, все же происходят техногенные и природные катаклизмы, аварии, разливы нефти при добыче и транспортировке, в следствие чего резко меняются цены на мировом рынке. Но рисковать все же приходится. В настоящее время самыми авторитетными организациями на мировом рынке нефти являются МЭА, ОПЕК и Минэнерго США, поэтому их регулярные публикации о состоянии мирового рынка нефти и прогнозы являются значимыми.

В данной статье рассматривается динамика изменения цен на «черное золото» на мировом рынке, а также многочисленные факторы, влияющие на добычу и экспорт нефти вследствие влияния различных геополитических процессов.

Ключевые слова: нефть, цена, ОПЕК, бензин, баррель.

Introduction

In 2017, the implementation of the OPEC agreement and a number of countries on reducing oil production led to a significant increase in world oil prices. In January-November 2017, the price of oil in the world market averaged \$ 52 per barrel, or increased by \$ 10 per barrel in comparison with the previous year. In late November, it was decided to extend the agreement until the end of 2018. This allows us to forecast a higher level of oil prices in 2018 compared with the average level of the current year. The steady rise in the world supply of oil over demand in recent years has led to a significant decline in oil prices. The main factor in the growth of supply was a rapid increase in the production of shale oil in the US, which occurred due to the use of new technologies. OPEC under these conditions did not go on reducing production and actually moved

to a policy of preserving its share in the world oil market.

Literature review

The content analysis of oil production in the world showed that the main issue of the world economy today is the global rise in oil prices. Oil remains the most important primary energy source in the world for the next 20-30 years. According to experts, by 2025 this figure will reach 114-115 million barrels per day. Various aspects are considered in the studies of scholars and researchers of the CIS countries as an Anton Mesnyanko, (Mesnyanko: 2015, 638). Mesnyanko does an excellent job of focusing on how higher energy prices could impact the economy and on the investment implications. Igolkin analyzes the corruption among the elite and governments, mismanagement and the squandering

of the petroleum wealth are endemic (Igolkin: 2017, 236). Far abroad scientist Daniel Yergin, Daniel Yergin showed the history of the global petroleum industry from the 1850 s through 1990. Also, problems, ways to improve and prospects for oil production were considered by such Kazakh researcher as Shokan Medetov (Medetov: 2014, 379). In this popular text that has trained thousands in the petroleum industry for years, Dr. Medetov takes readers through upstream operations--from how oil and gas are formed; how to find commercial quantities; how to drill, evaluate, and complete a well--all the way through production and improved oil recovery. Although, studies of economists in the context of theoretical and methodological aspects of studying problems of improving the regulation of oil production is poorly explored and creates opportunities for further research. In this regard, the purpose of this study is to research the current state of the world oil market.

Materials and methods

In conditions of low prices in 2015-2016 the production was curtailed at high-cost deposits, primarily shale oil in the United States. But such a reduction in production was in fact neutralized by an increase in production in the OPEC countries, which sought at least partially to compensate for the reduction in revenues (Kiyotaki: 2016, 63-77).

However, a significant drop in oil prices in 2016 prompted the oil-producing countries to move to sufficiently decisive actions to limit the extraction volumes and. At the end of 2016, OPEC countries and a number of other oil-producing countries reached an agreement to cut production by six months, starting January 1, 2017. Under this agreement, OPEC countries pledged to cut their production by 1.2 million barrels per day, and participating in the agreement of 11 countries that are not part of OPEC – by 558 thousand barrels per day. (Table 1)

Table 1 – Oil production in the US and OPEC countries in 2015-2017, million barrels. per day

	2015	2016	2016 IV qu.	2017 I qu.	2017 II qu.	2017 III qu.	2017 IV qu. rating
USA	9,42	8,86	8,81	8,99	9,10	9,29	9,57
OPEC countries	31,75	32,68	33,25	32,08	32,32	32,89	32,53
Saudi Arabia	10,01	10,42	10,55	9,98	10,09	10,18	
Iraq	4,03	4,43	4,61	4,46	4,44	4,50	
Iran	2,80	3,57	3,73	3,80	3,81	3,83	
Source: Thompson Reuters Eikon, U.S. EIA							

In order to further reduce the excess supply, OPEC countries and other parties to the agreement at the end of May 2017 decided to extend the agreement for the next nine months, i.e. from July 2017 to March 2018.

The implementation of this agreement led to a reduction in the excess supply and a marked increase in world prices. So, the price of Brent oil rose from 44 dollars per barrel in 2016 to 53.5 dollars per barrel on average in January-November 2017.

Redundant commercial oil reserves (oil reserves in storage facilities) have significantly decreased, which indicates a gradual rebalancing of the market. According to the International Energy Agency (IEA), if in January 2017, commercial oil reserves in the OECD countries of the average five-year level

exceeded 302 million barrels, in October 2017 – 111 million barrels. There was a decrease of more than 60%.

A positive impact on market balancing and oil prices has also had a noticeable increase in demand. According to the IEA, in 2017 global demand for oil increased by 1.5 million barrels per day (or 1.6% over the previous year) (Lotz: 2018, 563-588).

At the same time, the effect of the agreement under consideration was reduced by restoring the growth of shale oil production in the US, as well as an increase in production in some other countries that are not part of OPEC. Improving technology and lowering costs allowed the US oil industry to adapt to relatively low oil prices. As a result, in the current year in the United States there was an

increase in the number of operating drilling rigs and oil production (Figures 1, 2). According to the US Energy Information Administration, in 2017, US

oil production amounted to 9.24 million barrels per day, which is 0.38 million barrels per day (4.3%) higher than the level of the previous year.

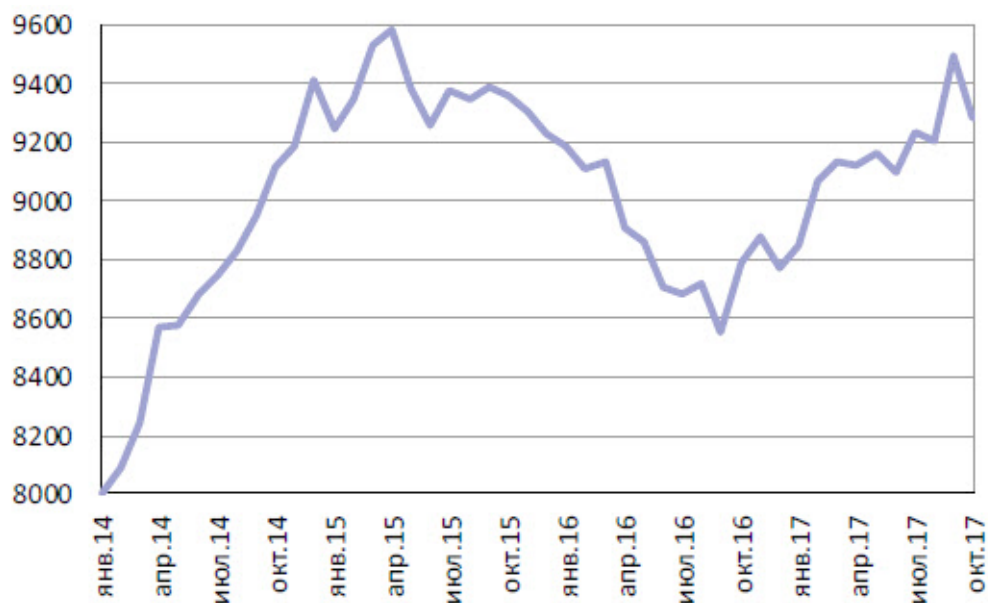


Figure 1 – Oil production in the USA in 2014-2017, thousand barrels. per day
Source: Thompson Reuters Eikon, U.S. EIA

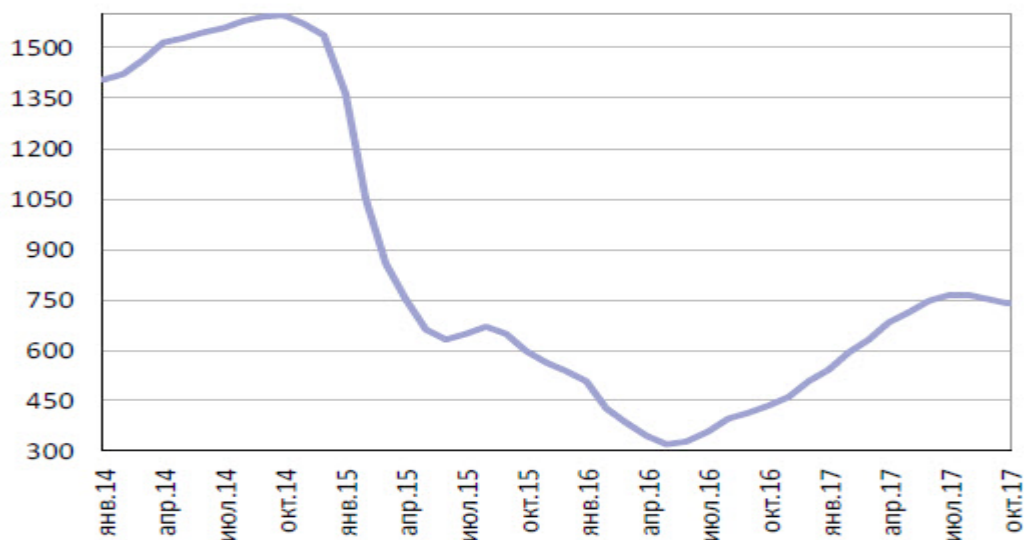


Figure 2 – The number of operating oil drilling rigs in the US in 2014-2017
Source: Thompson Reuters Eikon, U.S. EIA

According to the latest forecasts, in 2018, against the backdrop of further market balancing, a higher level of world oil prices is expected compared to the average level of the current year. According to the forecast of the US Energy Information Administration, the world price of Brent in 2018 will be 57.26 dollars per barrel, according to the forecast of the World Bank – 56.0 dollars per barrel (the average price of varieties Brent, Dubai and WTI). Forecasts of leading foreign banks (Goldman Sachs Group, UBS, Credit Suisse, JPMorgan, Citigroup, Barclays) at the Brent price in 2018 are in the range of 54-62 dollars per barrel (Koch: 2017, 6).

The most significant risks to positive price dynamics can be identified: first, the growth in oil production in the US, as well as in some other countries, which can largely neutralize the effect of the agreement on limiting production; secondly, the

resumption of production growth in OPEC countries and other participating countries in 2018, i.e. before the expiration of the agreed term of the agreement.

The forecast for the oil market from the International Energy Agency for the most part relates to estimating the level of demand / consumption and supply / production, i.e. world balance. Recently, the problem of raw material stocks has become very important. The group of OPEC + countries, which have concluded a pact to limit production, sets the goal of its deal to reduce the level of oil reserves in the main countries of consumers to the level of an average five-year value (Kiyotaki: 2017, 927-954).

The forecasted demand dynamics according to the IEA version is presented in the figure below. It is expected that in 2018 it will grow by 1.3 million barrels per day (b / s) to 98.9 million b / s, or by 1.3%. (including condensate and biofuel) (Figure 3).

Global Oil Demand (2016-2018)

(million barrels per day)*

	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
Africa	4.1	4.3	4.2	4.1	4.3	4.2	4.5	4.3	4.2	4.4	4.3
Americas	31.3	30.9	31.5	31.6	31.6	31.4	31.2	31.6	32.0	31.8	31.7
Asia/Pacific	32.9	34.2	33.9	33.2	34.2	33.9	35.0	34.4	33.8	35.1	34.6
Europe	14.8	14.6	15.0	15.4	14.9	15.0	14.5	15.0	15.4	15.0	15.0
FSU	4.8	4.6	4.7	5.0	4.9	4.8	4.7	4.8	5.1	5.0	4.9
Middle East	8.3	7.9	8.5	8.7	8.2	8.3	8.1	8.6	8.9	8.3	8.5
World	96.1	96.6	97.8	98.0	98.2	97.7	97.9	98.7	99.4	99.7	98.9
Annual Chg (%)	1.4	1.2	2.3	1.4	1.5	1.6	1.4	0.9	1.4	1.5	1.3
Annual Chg (mb/d)	1.3	1.2	2.2	1.3	1.4	1.5	1.3	0.9	1.4	1.5	1.3
Changes from last OMR (mb/d)	0.0	-0.1	0.0	0.2	-0.3	-0.1	0.0	-0.4	-0.1	-0.2	-0.2

* Including biofuels

Figure 3 – Global oil demand (2016-2018)
Source: Thompson Reuters Eikon, U.S. EIA

In November 2017, the OPEC + group decided to extend the production reduction agreement by 1.8 million b / s by the end of 2018. Thus, it can be assumed that the average output of the cartel will remain approximately at the level of October, or 32-32.5 million b / s. The plan to reduce production within the OPEC + deal is almost 100% complete.

In turn, the agency forecasts an increase in production in non-OPEC countries by about 1.6 million b / s following 2018. Approximately half of the growth in production, of course, will be in the United States. (Figure 4)

Thus, according to IEA estimates, the growth in oil production by countries outside the cartel and the OPEC + agreement will be offset by an increase in demand in 2018.

It should be noted that in November the estimate of growth in demand was reduced by 200 thousand b / s. Experts expect a warm winter and a slowdown in demand due to rising commodity prices. At the same time, the latest trend in the rate of production in the US shale deposits suggests that the overall growth in the supply may well be higher than the growth in oil demand by about 300 thousand b / s. (Wolswijk: 2018)

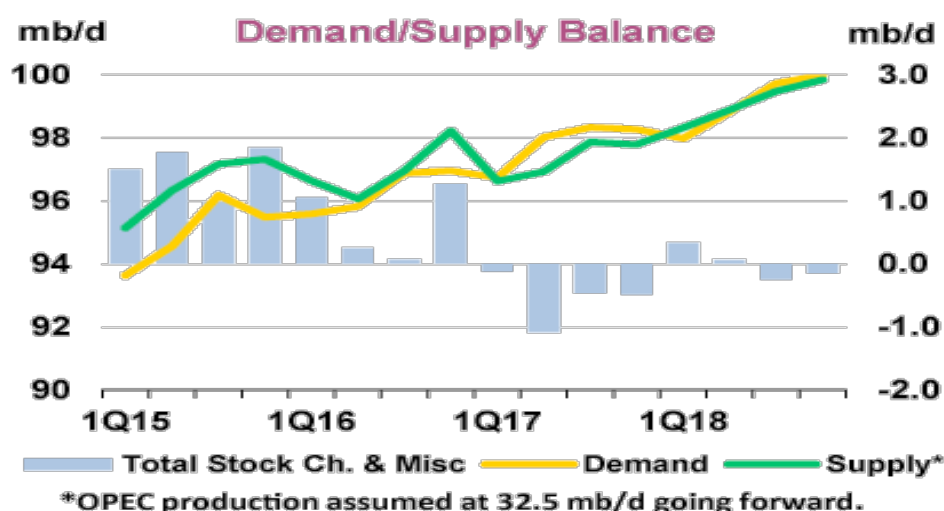


Figure 4 – Demand/Supply Balance
Source: Thompson Reuters Eikon, U.S. EIA

Добыча нефти вне ОПЕК 2018	Oil production outside OPEC 2018						Change 2018/17	
	2017	1Q18	2Q18	3Q18	4Q18	2018	Growth	%
Americas	21.30	22.07	22.29	22.40	22.67	22.36	1.06	4.96
of which US	14.24	15.00	15.24	15.37	15.54	15.29	1.05	7.37
Europe	3.84	3.93	3.81	3.75	3.96	3.86	0.02	0.64
Asia Pacific	0.40	0.40	0.43	0.44	0.45	0.43	0.03	7.23
Total OECD	25.54	26.40	26.54	26.59	27.08	26.65	1.11	4.35
Other Asia	3.63	3.60	3.59	3.58	3.55	3.58	-0.04	-1.20
Latin America	5.23	5.31	5.29	5.43	5.34	5.34	0.11	2.17
Middle East	1.24	1.24	1.24	1.24	1.24	1.24	0.00	-0.03
Africa	1.85	1.90	1.90	1.91	1.91	1.91	0.06	3.04
Total DCs	11.94	12.05	12.03	12.15	12.05	12.07	0.13	1.05
FSU	14.03	13.97	13.94	13.81	13.94	13.91	-0.11	-0.81
of which Russia	11.13	10.98	10.98	10.98	10.98	10.98	-0.15	-1.36
Other Europe	0.13	0.13	0.13	0.13	0.12	0.13	0.00	-0.63
China	3.98	3.89	3.80	3.79	3.79	3.82	-0.16	-4.12
Total "Other regions"	18.14	17.99	17.87	17.73	17.85	17.86	-0.28	-1.53
Total non-OPEC production	55.62	56.43	56.44	56.47	56.97	56.58	0.96	1.72
Processing gains	2.21	2.23	2.23	2.23	2.23	2.23	0.03	1.32
Total non-OPEC supply	57.82	58.67	58.67	58.70	59.21	58.81	0.99	1.71
Previous estimate	57.67	58.42	58.38	58.37	59.00	58.54	0.87	1.51
Revision	0.15	0.25	0.29	0.34	0.20	0.27	0.12	0.20

Figure 5 – Oil production outside OPEC
Source: Thompson Reuters Eikon, U.S. EIA

OPEC in November raised the forecast of growth in oil demand in 2018 to 1.51 million b / s. On average, the demand in 2018 should reach 98.45 million b / s. Demand for oil cartel countries

was reduced by 0.2 million b / s to 33.2 million. This is higher by 0.3 million b / s than in 2017. In the second half of the year, demand should reach 34 million b / d, which is 1.4 million b / d higher

than the level of production by the cartel in October 2017 (Rogoff : 2018).

Thus, when the production is frozen, the cartel clearly loses market share. The supply shortage should be compensated by the decrease in the volume of stocks. At the same time, the share of suppliers not included in the OPEC + group will grow. The recent increase in the forecast of global demand

growth in OPEC is explained by the greater than expected demand for oil in China.

In December, OPEC raised production growth forecasts in countries outside the cartel by 0.12 million b / s in 2018, to nearly 1 million b / s. Moreover, in the US, production will grow by 1.05 million b / s. Of these, shale deposits, according to OPEC, production will be increased by 0.82 million b / s. (Figure 5)

World oil demand and supply balance, mb/d

	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
World demand											
OECD	46.9	47.1	46.9	47.7	47.7	47.3	47.3	47.2	48.0	48.0	47.6
Americas	24.7	24.6	25.0	25.3	25.0	25.0	24.8	25.2	25.5	25.3	25.2
Europe	14.0	13.8	14.2	14.5	14.3	14.2	14.0	14.2	14.6	14.3	14.3
Asia Pacific	8.1	8.6	7.7	7.9	8.4	8.2	8.6	7.7	7.9	8.4	8.2
DCs	31.4	31.5	31.9	32.3	32.0	31.9	32.2	32.6	32.9	32.7	32.6
FSU	4.6	4.5	4.4	4.8	5.1	4.7	4.6	4.5	4.9	5.2	4.8
Other Europe	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7
China	11.8	11.9	12.4	12.3	12.5	12.3	12.3	12.8	12.7	12.9	12.7
(a) Total world demand	95.4	95.7	96.3	97.7	98.1	96.9	97.2	97.8	99.2	99.6	98.5
Non-OPEC supply											
OECD	24.8	25.4	25.1	25.4	26.2	25.5	26.4	26.5	26.6	27.1	26.7
Americas	20.6	21.1	20.9	21.4	21.9	21.3	22.1	22.3	22.4	22.7	22.4
Europe	3.8	3.9	3.8	3.7	3.9	3.8	3.9	3.8	3.8	4.0	3.9
Asia Pacific	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
DCs	11.9	11.9	11.9	11.9	12.1	11.9	12.0	12.0	12.2	12.0	12.1
FSU	13.9	14.1	14.1	13.9	13.9	14.0	14.0	13.9	13.8	13.9	13.9
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.1	4.0	4.0	3.9	3.9	4.0	3.9	3.8	3.8	3.8	3.8
Processing gains	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Total non-OPEC supply	57.0	57.8	57.5	57.5	58.5	57.8	58.7	58.7	58.7	59.2	58.8
OPEC NGLs + non-conventional oils	6.1	6.2	6.3	6.3	6.4	6.3	6.4	6.5	6.5	6.5	6.5
(b) Total non-OPEC supply and OPEC NGLs	63.2	64.0	63.7	63.9	64.9	64.1	65.1	65.1	65.2	65.7	65.3
OPEC crude oil production (secondary sources)	32.6	32.1	32.3	32.7							
Total supply	95.8	96.1	96.0	96.6							
Balance (stock change and miscellaneous)	0.4	0.4	-0.3	-1.1							

Figure 6 – World oil demand and supply balance
Source: Thompson Reuters Eikon, U.S. EIA

Based on the table below, the difference between the demand for OPEC oil and the frozen supply of 32.5 million b / s in 2018 will be an average of 0.7 million b / s. This means that hypothetically about 250 million barrels of reserves can leave the market in a year (Figure 6).

It also means that, other things being equal in the I quarter. In 2018 there will be overproduction. Already in the II quarter. the market will be balanced.

Below in the diagram of the balance of oil production and consumption, the redline indicates the expected level of freezing of oil production by the cartel (32.5 million b / s) (Figure 7).

In this case, oil and oil products in OECD countries in the III quarter. 2017 fell below 3 billion barrels (2.985 billion), which is still 154 million more than the average for the past five years. It is this volume that can be a guide for the appearance of talk about the exit from the deal on freezing production.

The Energy Information Agency of the US Energy Ministry (EIA) forecasts not only the levels

of supply and demand for raw materials, but also the average price for the year. So in 2018 it is expected that the price of Brent will be about \$ 57 per barrel. WTI will be cheaper by \$ 4.

As for the level of consumption, according to the version of the Ministry of Energy, it will grow by 1.6%, to 99.96 million b / s. Consumption is projected to be above 100 million b / s starting from III quarter. Meanwhile, production will grow to 100 million b / s already in the II quarter (Les Echos: 2018).

Deficiency in the global oil market, according to analysts of the Ministry of Energy of the United States, will be observed only in the III quarter. due to a sharp increase in demand. At the same time, the agency predicts an increase in oil production in the US in 2018 to 10 million b / s, against an average of 9.2 million b / s in 2017. This is the same order of figures with the forecast value of the IEA. But in OPEC, such data is considered an obvious underestimation of American slates (Figure 8).

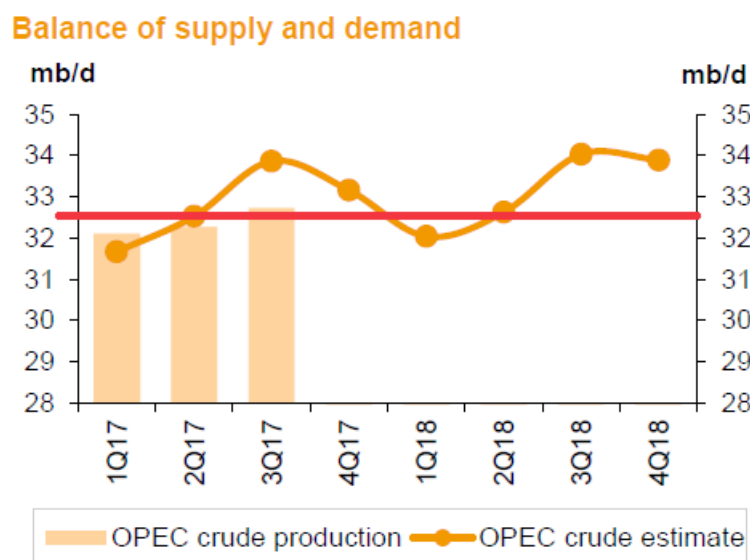


Figure 7 – Balance of supply and demand
Source: Thompson Reuters Eikon, U.S. EIA

OPEC and the countries entering into the agreement on freezing of extraction are guided by the reduction of world reserves to the average five-year values. It's about commercial reserves. In its analytical reviews, OPEC considers reserves in various countries, including stocks in tankers. But for simplicity, you can focus on their level in the OECD countries. (Baele: 2017, 270-276)

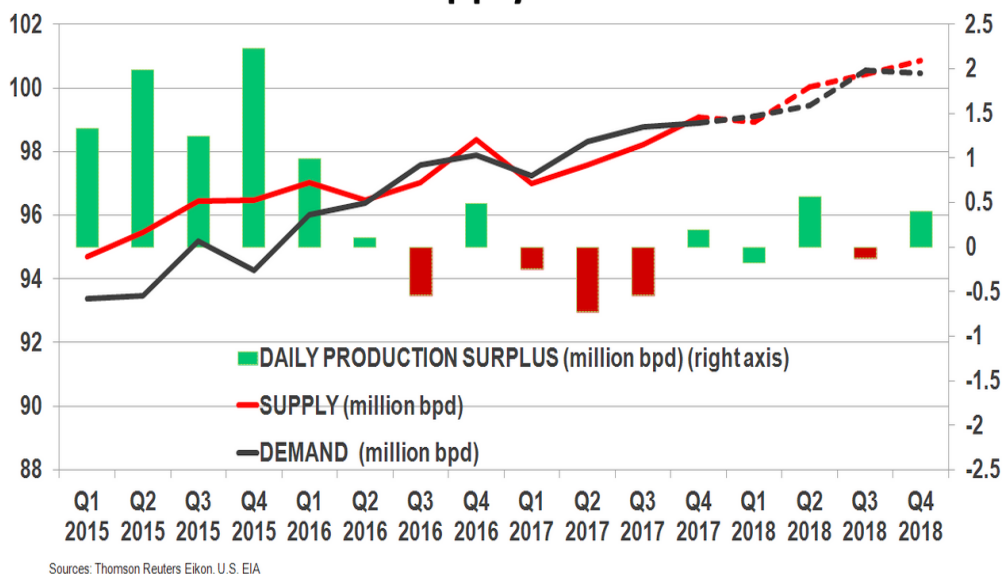
So, during this year commercial inventories in developed countries declined. In October 2017,

their level was 107 million barrels lower than the corresponding month of 2016, but still 137 million barrels higher than the average for 2012-2016 (about 2,800 million barrels). (Figure 9)

In North America, reserves are shrinking more energetically than in Europe or Asia.

If to speak in terms of ensuring uninterrupted global demand, then in October stocks fell to 62.1 days. This is 2.2 days lower than in the same period in 2016, but 1.8 days higher than the average five-year period.

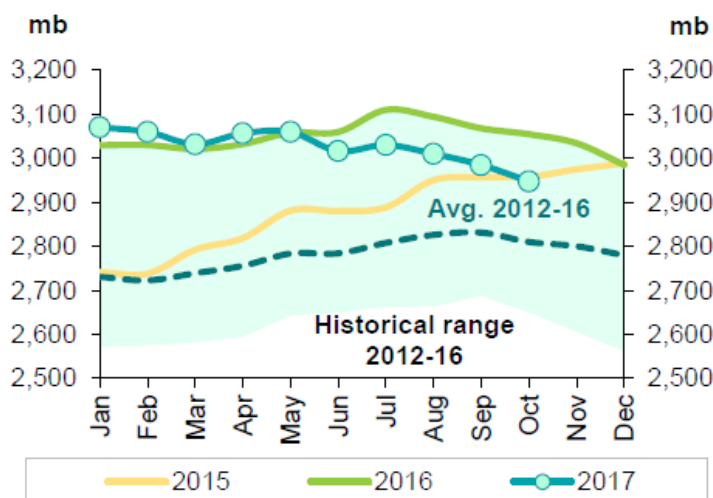
Global crude oil supply & demand balance



Sources: Thomson Reuters Eikon, U.S. EIA

Figure 8 – Global crude oil supply and demand balance
Source: Thomson Reuters Eikon, U.S. EIA

OECD commercial oil stocks



Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US Energy Information Administration.

Figure 9 – OECD commercial oil stocks
Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US Energy Information Administration

Thus, we can clearly understand the intentions of the OPEC + group in terms of maintaining a deal to limit production as the data on reserves are received. For simplicity and efficiency, you can rely on statistics from the EIA. Decrease in inventories is an indicator of the approach of conversations about

changing the terms of the OPEC + deal. (Genre: 2017, 232)

To estimate the approximate oil dynamics in the future, forecasts of oil consumption and production in different parts of the world are required. It so happened that after the notorious

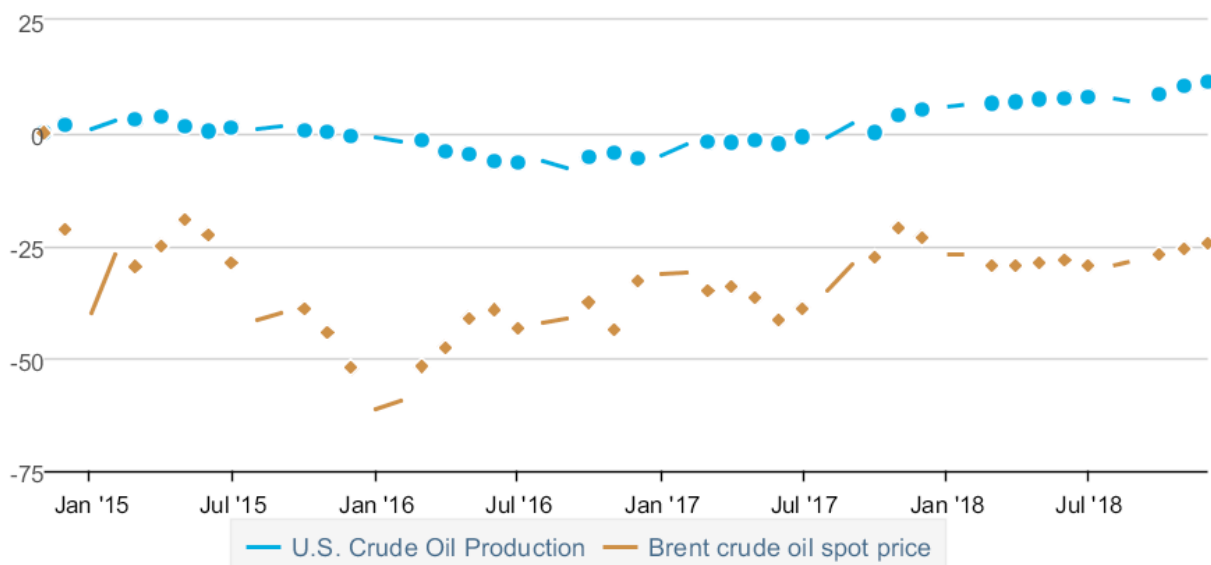
slate revolution, despite the significant decline in commodity quotations, the main driver of production is the American slate producers. Looking ahead, it should be noted that one of the most important negative risks for oil dynamics in

2018 is the level of raw materials extraction in the United States.

The following chart shows a graph of Brent oil prices and production dynamics, expressed as a percentage of November 2014 (Figure 10).

Correlation of BRENT prices and production growth rates in the US

Indexed to Nov 2014 as percent
Percent



Source: U.S. Energy Information Administration

Figure 10 – Correlation of BRENT prices and production growth rates in USA
Sources: US Energy Information Administration

According to this illustration, it is obvious that production follows the price of oil. However, this happens with a certain lag and without sharp failures due to the peculiarities of production processes. After the fall of oil to \$ 27 per barrel of Brent in early 2016, production in the US continued to decline for another 6 months. But at the moment, American manufacturers have completely restored the level of production (Winkler: 2018, 636-705).

According to the forecast of the Ministry of Energy of the United States, production in 2018 will exceed the level of 10 million b / s at a price of \$ 58-60 per barrel.

The temporary delay between the dynamics of oil prices and production is due to technological moments and specific investment decisions. As you know, the start of production is preceded by service drilling operations. The correlation diagram for active drilling rigs in North America is shown

below from mid-February 2015. The drilling volume depends on the price of oil, but it is not entirely possible to call this dependence strictly linear (Figure 11).

For the first half of 2017 was characterized by a continued increase in the number of active drilling in the US. However, in the second half of the year the situation simply stabilized. Despite the rise in oil quotations, the increase in drilling activity is no longer observed. And you can not write everything off on a time lag. A long period of time has already passed.

Results and discussion

Positive risks to the oil market in 2018

1. Fall of production in Venezuela. IEA predicts a decline in production in Venezuela due to political and other factors by 0.5-0.6 million b / s on average

through 2018. Undoubtedly, in the medium-term horizon OPEC partners will try to replace the loss of production, but it is likely that promptly this can

not be done. The worse the situation in Venezuela is from the economic and political point of view, the more the positive risks for oil quotes.

Dependence of drilling activity on the price of BRENT

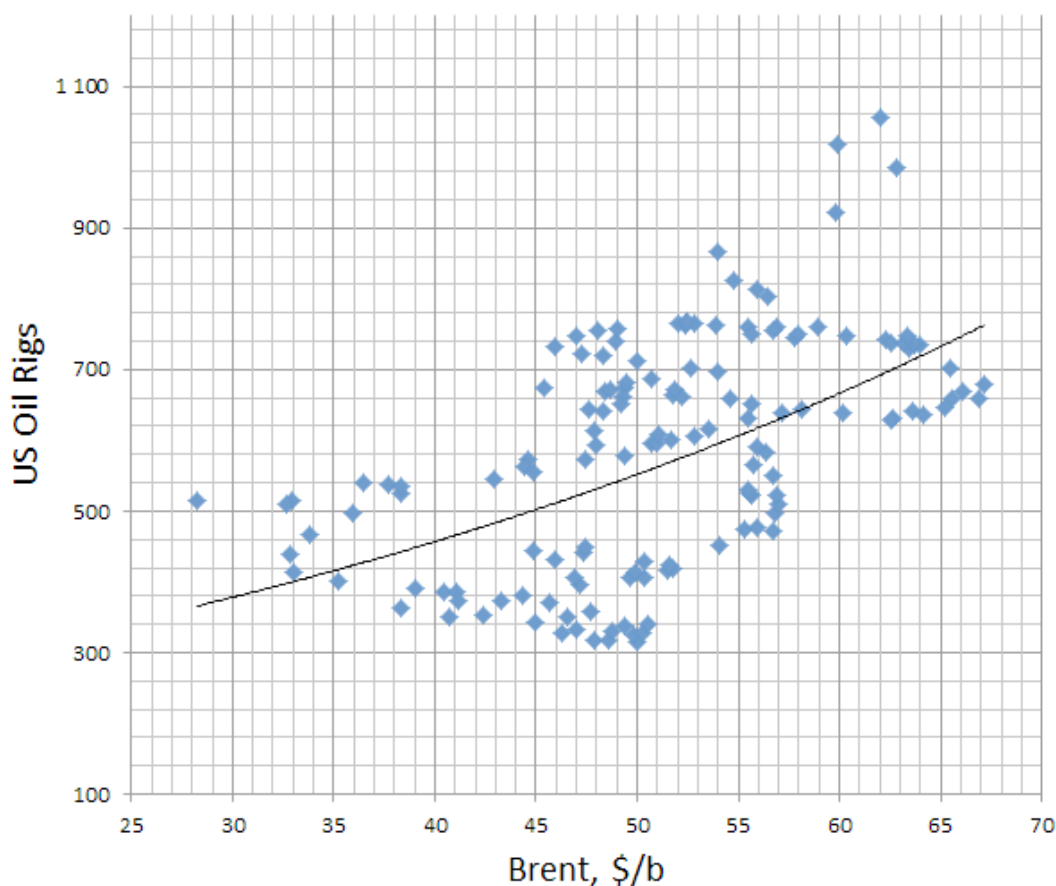


Figure 11 – Dependence of drilling activity on the price of BRENT

Sources: US Energy Information Administration

2. Weather phenomena. In the IEA forecasts in 2018, warmer winters and summers are expected in the northern hemisphere, as a result of which the number of heating days will decrease. Given the rather poor predictability of weather events, the opposite situation can be considered a positive risk, with lower average temperatures and more precipitation (Anderton: 2017, 400).

In addition to the risks of a cold winter, it is worth mentioning the hurricane season in the US in the second half of the year. Stopping some of the production capacity with a relatively small drop in demand could provide a significant support to oil quotes. The example of 2017 is indicative.

3. Libya and Nigeria are OPEC members, but until 2018 they did not participate in the OPEC

+ deal. But from next year, production quotas extend to them at the level of 1 and 1.8 million b / s, respectively. However, the political situation in these countries contributes to permanent disruptions in supply. In November 2017, Libya produced 0.97 million b / s, Nigeria – 1.79 million b / s. Despite the fact that from spring to October, these two oil producers increased production by 0.7 million b / s, the growth looks unstable. This factor is poorly projected.

4. Complicating the political situation in the Middle East, as a result of which the extraction or transportation of raw materials may be threatened. We are talking about a wide range of countries that are somehow involved in production and logistics chains. This is Saudi Arabia, Iran, Iraq,

Qatar, Yemen. The complication of the political conjuncture both within each individual country, and the deterioration of relations between them, can support raw material quotes.

5. Accelerate economic growth. There is no reason to expect a more rhythmic growth of the economy in Europe or Asia than what is already implied in the forecasts of energy agencies. Nevertheless, one can note the rapid advance of the tax reform in the United States. This may somewhat push the US economy's growth towards 3% y / y, which may indirectly affect the increase in demand. It is true to say that the effect of tax cuts will come about in 2018, too early.

Negative risks to the oil market in 2018

1. Acceleration of US oil production. The majority of analytical agencies are inclined to consider extraction as the most important negative risk for the price dynamics of oil in the USA. Private slate producers are persistently looking for ways to reduce the cost of production. There is a risk that drilling activity in the US may begin to grow again, even at current oil prices. Based on the correlation diagram and the increase in hedging operations (the sale of long-term futures contracts), such a scenario is quite realizable.

The American shale shadow threatens the negotiators from OPEC and Russia from the very beginning of the idea of a pact. Today, companies like Apache Corp, Pioneer Natural Resources or EOG Resources Inc plan to invest billions in production for decades at the largest American deposit, Permian.

December 22, 2017 Donald Trump finally signed the law on the new tax reform. In addition to possible economic growth and a potential increase in the demand for oil, this step will to some extent affect the cost reduction and cost reduction of US oil companies, further enhancing their competitiveness in the global market. Formally, this is a negative factor for oil prices, but its influence is stretched in time.

2. Acceleration of production in Canada. In this country there is an increased drilling activity, which in the end can lead to an increase in production volumes.

3. Exit from the OPEC + deal. It is necessary to distinguish between two scenarios. Unexpected and planned exit from the deal to limit production. We can not predict the first. But for the second you can follow. This may be preceded by the active rhetoric of politicians from the countries participating in OPEC +, the elaboration of an exit strategy, on which

an adequate short-term reaction of oil quotations should be expected. The scenario of the planned completion of the collective pact can be realized if the level of stocks approaches the target values of the cartel.

4. The slowdown of the world economy. The risks of China's slowdown are discussed not for the first year. Globalization in this case can result in a slowdown in the entire Asian region. In addition, the Fed is actively pursuing an anti-cyclical policy, which can also contribute to cooling not only the American, but also the world economy.

5. Strong growth of the dollar against the background of the continuation of the rate increase cycle in the US. The tightening of monetary policy in the US will help increase demand for the dollar, which will have some restraining influence on all actively traded commodities.

6. Abnormally warm weather conditions. As indicated above, the natural factors are poorly predictable. In particular, the IEA is already being laid for the warmer winter and spring of 2018.

Baseline scenario

The basic scenario for the development of price dynamics of oil in 2018 assumes the absence of negative risks or their insignificant influence. Nevertheless, even in this case both OPEC and IEA forecast a significant surplus of production in the I quarter. 2018 This is due in large part to the seasonal decline in demand. Stocks of raw materials, most likely, will stop the decline. As a consequence, locally this may negatively affect oil quotations and general market sentiment. It is possible that Brent at the beginning of next year can reach the \$ 56-60 mark.

In the II quarter. the growth in demand with a slight change in production will lead to a market balance. This is evidenced by the forecasts of the IEA and OPEC. In the Ministry of Energy, the US believes that production will exceed consumption by about 0.5 million b / s. Seasonal decline in inventories should resume and last up to the fourth quarter (Baryshnikov: 2018).

In the baseline scenario, given the projected growth in production in North America and the absence of negative risks, Brent prices may return to the area of \$ 65 per barrel. At the same time, we note that in the first two quarters the deviation from the expected temperature conditions in the northern hemisphere will play an important role among the risks, in one direction or another.

In the III quarter. in the absence of negative risks, all analytical agencies predict a deficit in the

oil market, on average, at about 0.65 million b / s. Optimistic OPEC with a figure of 1.5 million b / s. A conservative forecast, which, in our opinion, most realistically reflects the situation on the market, is presented by the US Energy Ministry. According to him, in the III quarter. the deficit will be 0.25 million b / s.

This moment can become the apogee of the growth of oil quotations. Given the expected positive dynamics at the end of the II quarter. it is possible that the price will be about \$ 70 per barrel or even higher, but only short-term.

During the deficit period (from the end of the second quarter to the end of the third quarter) and due to the freezing of the level of oil production within the OPEC + deal, stocks could fall by 60 million barrels based on the average deficit (according to the IEA, EIA, OPEC). This is not enough to reduce inventories in OECD countries to 5-year averages, but enough to be a reason for discussing the exit strategy from the OPEC + deal. Such a news background will put pressure on quotes, which could again return below \$ 65-63 at the beginning of the IV quarter.

In the IV quarter. According to the IEA and OPEC, there will be a generally balanced situation on the market with a possible small deficit. Again, the forecast of the US Energy Ministry indicates a return to a small overproduction, according to the current estimate – 0.35 million b / s.

According to OPEC + plans, the deal on limiting production has been extended until the end of 2018. Therefore, only the cartel itself predicts a deficit of 0,7 million b / s for the whole of 2018. EIA and IEA do not believe that the market will be balanced, mainly due to the growth in production in the US.

Thus, throughout the year the market will be more sensitive to the data on drilling activity in North America and the growth of oil production in the US, rather than to the dynamics of reserves.

Negative scenario

The negative scenario is mainly based on the onset of a number of relevant risks. First of all, these are the risks of supply, namely the acceleration of production in North America as a whole. That is, the rate of increase in supply will be steadily outpacing the growth in demand. This will interfere with the balancing of the oil market. In this scenario, we can see a noticeable adjustment of oil prices relative to today's levels. As an option, it is possible to drop to \$ 50-54 by Brent.

Any manifestations of disagreements in the OPEC + deal can also hit hard at prices, as soon

as the grounds for a new price war begin to be laid along with a race to increase production. This is not the most likely scenario, but its implementation can lower the price confidently below \$ 50.

Positive scenario

The implementation of any scenarios of oil shock with the take-off of quotations towards \$ 75 and above looks difficult to predict. It is not necessary to expect a sharp acceleration of demand for oil above expectations. So as a positive driver there is only a scenario with any problems in the Middle East. We will not consider its probability. Let's just say that any significant increase in oil quotes will immediately activate production in the OPEC + regions of the world that are not involved in the deal, which in turn will subsequently act as a reduction factor.

Conclusion

The world oil market will reach a balance of supply and demand in the second half of next year, but if necessary there is an option to extend the deal to reduce global oil production after 2018.

We can only say that the overall mood is very good – the deal is 100% executed, which has never happened. Therefore, if some actions are necessary for further balancing, of course, such an option (extension) always exists, and no one will argue that the deal must in any case be terminated.

The parameters of the exit from the OPEC + deal will be discussed closer to the period when the market balancing is outlined. Therefore, even when we reach a balance of supply and demand, and there is a consensus among ministers (OPEC +), we must prevent the creation of an excess of raw materials on the market when we exit the transaction and, as a consequence, return the situation to the starting positions.

We all perfectly understand that in summer demand is growing, which speeds up the rebalancing, but at the same time we must predict what will happen in the fall and in December... We have a common understanding on this issue, but we would not like to discuss hypothetical scenarios – first it is necessary to achieve a balance in the market.

Meanwhile, we also consider premature any talks about making changes to the global OPEC pact, because the oil market is likely to come to balance no earlier than in the second half of next year. So far stocks have been falling in line with our expectations. But the surplus is still about 150 million barrels, which are unlikely to leave the

market before the second half of 2018. According to our calculations, oil reserves will either change little, or increase in the first few months of 2018, which is due to seasonal factors. In connection with

this, we consider premature any talk about possible changes in the policy. The earliest, when it will be possible to assess the condition of the market, is June (next year).

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