OPEC+ Agreement and Global oil market in 2019 - 2020

Working Materials of the Energy Initiatives Expert Platform

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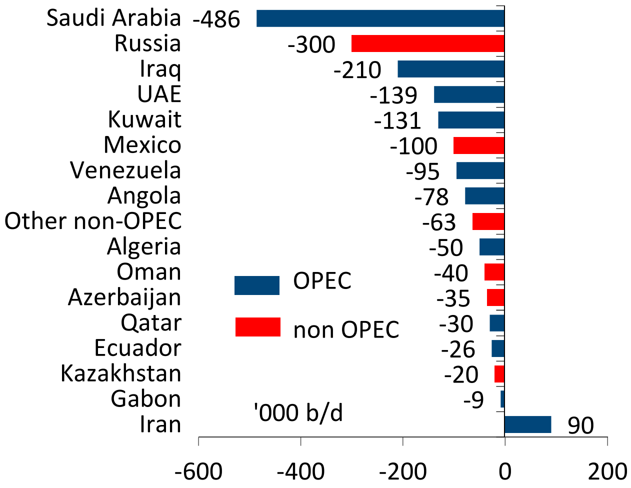
OPEC+ Agreement evolution

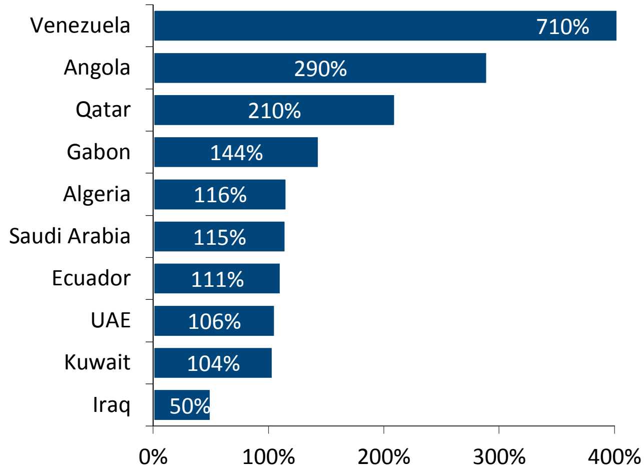
The OPEC countries agreed in December 2016 to cut crude oil production by 1.167 mb/d from October 2016 levels. The cuts began in January 2017 and were intended to bring production to a level of 32.7 mb/d in total. Also, OPEC entered into an agreement with another 13 non-OPEC oil producing countries to join in this production cut. In total, these countries were to gradually reduce crude oil production by 558,000 barrels a day during the first half of 2017 when compared to November and December 2016 levels. Required production cuts were determined and agreed upon for each country (Figure 1).

Figure 1. Oil production cuts under the Agreement



Source: IEF based on OPEC, Bloomberg, and Interfax data

Figure 2. Execution of production cut obligations in May 2018?



Source: IEF based on OPEC, Bloomberg, and Russian Energy Ministry data

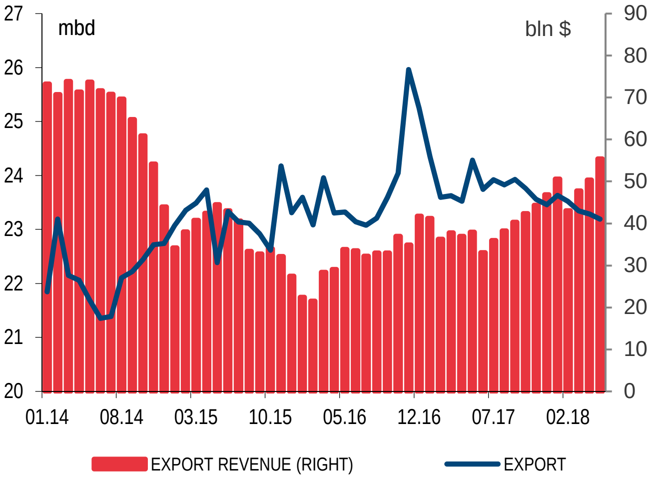
This Agreement to cut oil production (the "OPEC+ Agreement") was an attempt to achieve several goals:

1. Raise the level of global oil prices that in the first half of 2016, prior to the conclusion of the Agreement, were near $45 per barrel. This would increase oil export revenues.
2. Dispose oil supply glut in the global oil market and reduce the volume of accumulated OECD commercial stocks to ensure growth in prices. As of January 2017, OECD commercial stocks exceeded the average level of 2012-2016 by approximately 300 million barrels, or 11% of the average.
3. Create a tool for co-operation among leading oil producers and open an opportunity to influence global oil markets, as opposed to the previous policy that had helped destabilize things in late 2014: a policy focused on simply increasing exports and then struggling for market share.

The OPEC+ Agreement on the whole made it possible to achieve these goals and showed that co-operation among oil producers has a positive effect on member-countries. The growth in oil prices proved to be more significant to producing countries than the reduction of export volume. As a result, total revenues from oil exports grew considerably for countries that participated in the Agreement. According to the Russian Institute for Energy and Finance (IEF), the Agreement enabled OPEC countries to increase the estimated value of exports in 2017 by 24% as compared with 2016, despite the fact that 2016 saw a significant growth in the physical volumes of export;

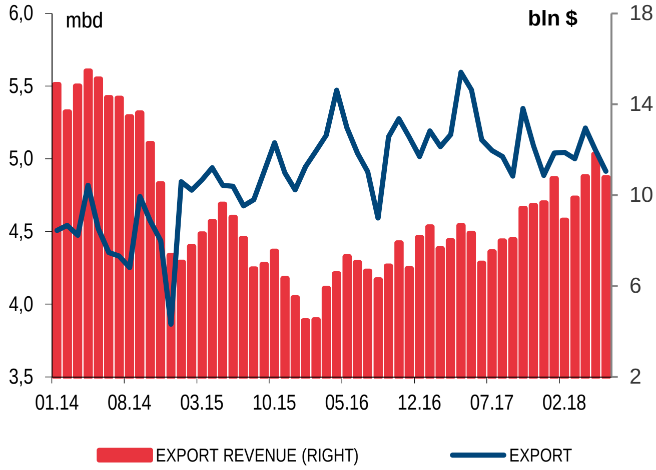
and by another 18% by May 2018 (compared with December 2017). Russia also increased export revenues for the same periods by 28% and 22%, respectively (Figure 3 and Figure 4).

Figure 3. Crude oil export volume from OPEC and oil export revenue



Source: IEF based on OPEC and Bloomberg data

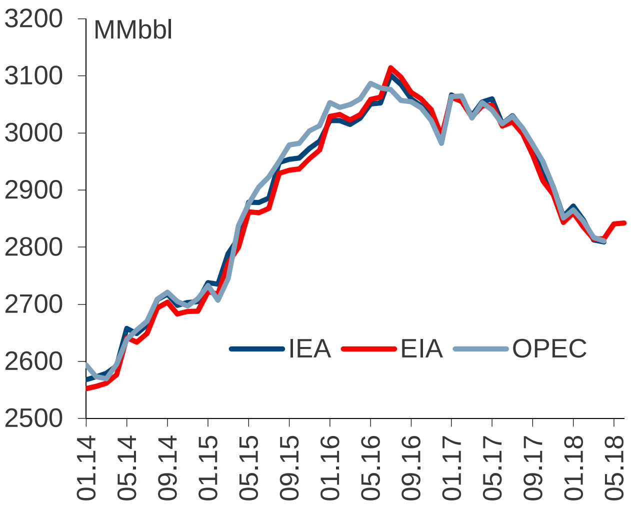
Figure 4. Crude oil export volume from Russia and oil export revenue



Source: IEF based on Russian Energy Ministry and Bloomberg data

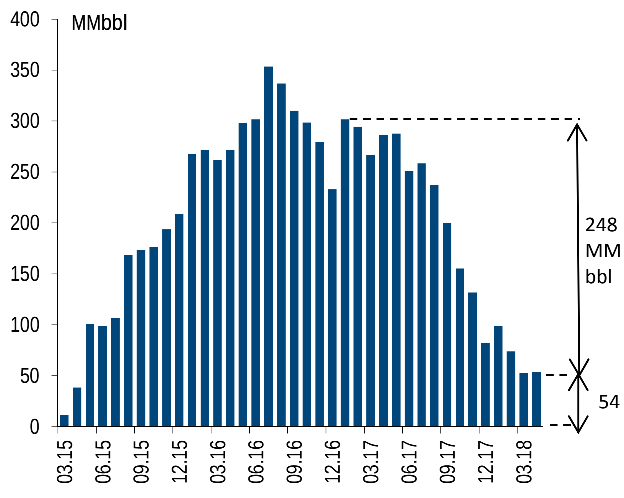
The OPEC+ Agreement led to a reduction in OECD commercial stocks to nearly average levels of 2012-2016. This had been one of the goals of the Agreement (Figure 5 and Figure 6). Commercial stocks of crude oil in the US (data on these reserves is published on a weekly basis and has a significant impact on oil prices) also nearly reached the average level of 2012-2016.

Figure 5. Commercial reserves of crude oil and petroleum products according to different agencies



Source: IEF based on EIA, IEA, and OPEC data

Figure 6. Commercial reserves of crude oil and petroleum products in developed countries compared with the 2012-2016 average level



Source: IEF based on EIA data

Extension of the Agreement through the end of 2018 is what made these results possible.

Member-countries adjusted the Agreement in June 2018 because total production cuts had already exceeded originally declared volumes. In May 2018, OPEC countries produced 31.87 mb/d (according to OPEC). This represented a reduction of 2.37 mb/d, or over 1 mb/d in excess of declared obligations. In fact, all OPEC countries had exceeded their obligations as of May 2018 (Figure 2).

Such a production decline was due not only to strict compliance with the Agreement, but also to production cuts by a number of countries that were not even party to the Agreement. First and foremost, was the drop in Venezuela's production by 675,000 barrels a day (compared with October 2016), which was brought about by political and economic crisis and US sanctions. Angola, Gabon, and Qatar also showed a fall in production (Figure 2). Another factor is the revival US sanctions against Iran, which will result in a new and significant decline in that country's production.

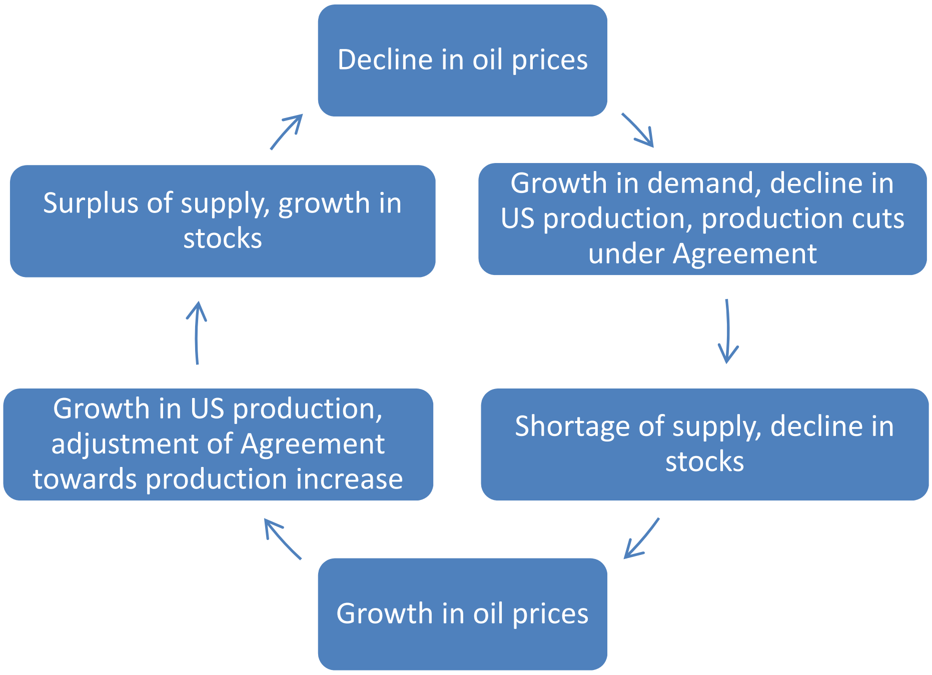
As a result, experts have begun talking about the risks of an excessively short supply in the global market and the need for a gradual increase in crude oil production. At the same time, leap of production restrictions by OPEC may destabilise the market.

The modification of the Agreement in June 2018 provides for a transition from the oil production quotas for each country to total production limit. Since not all parties to the Agreement have spare capacities for increasing production during the remaining term of the Agreement, quotas will not be distributed proportionally among the participants. New distribution of quotas will be made by the Ministerial Monitoring Committee and by Summits organized by the relevant countries, depending on the market situation.

Thus, parties to the Agreement are gradually moving from quotas to a tool of market monitoring, management of supply-demand balance, and flexible regulation of the aggregate supply of crude oil by participants.

The OPEC+ Agreement as formation of an End State scenario

Transition to a more flexible production regulation tool in June 2018 is connected with the cyclic nature of the global oil market. As confirmed by a large number of analytical reviews, the situation in the global oil market will be developing in the short term in the following way (presented in an extremely simplified form).



As the global oil market goes through these cycles, it is also influenced by other factors that may reinforce the fluctuations, which cause a destabilising peak or fall in market prices. This was observed in late 2014 and in 2015 when the cycle of declining oil prices received a significant, additional kick from OPEC whose refusal to co-operate in November 2014 was coupled with weak growth in demand.

Using Agreement, the participants try to manage oil market fluctuations, reduce its volatility and prevent shocks. The participants have set targets (price, supply-demand gap, stocks, etc.) for desired state of the oil market. Also, the parties do not want to yield any significant market share to other oil producers. The question arises then of how to achieve this, given the uncertainty and instability of the global oil market. The End State approach can be used to accomplish this task.

An End State approach is a vision of what the future state of the energy system must be and accordingly, a description of the path to this state. As a result, the task of prediction is replaced with the task of "navigation" to future opportunities. Among the advantages of this scenario is the formation of a more comprehensive picture of possible progress towards this future state of the global oil market. Also, End State scenarios allow for an assessment of the degree of influence exerted by other events or actions along such path.

Let us consider possible goals of the participants in the Agreement as they work on an End State scenario.

OPEC+ Agreement goals

In accordance with the logic behind forming an End State scenario, the End State must emerge as a consensus reached between most market players. Accordingly, it is extremely important that participants in the Agreement agree on their final goal as well as the milestones they will hit along the way. At the present time, it is possible to identify the following short-term goals and the success criteria achievement:

1. The price goal. It may be not only the level of prices that is important in this case, but also an absence of extreme fluctuations, and predictability of prices so that countries can forecast export revenues and plan budgets.
2. The balance between demand and supply and of the stocks level. To prevent shocks in the oil market, the Agreement participants must influence market dynamics in such a way as to prevent a significant surplus or shortage of crude oil. Because different experts have different data on demand for and supply of crude oil and these data are often revised, the most frequently used indicator is OECD commercial stocks level.
3. The degree to which all participants in the Agreement support the adopted decisions. Because the Agreement offers no strict enforcement tools, the participants should not allow serious disagreement that may result in some countries withdrawing from the Agreement, as this may be very negative for the Agreement in general.
4. Creating a working tool of influence both on the physical indicators of the global oil market and on the expectations of market players. The OPEC+ Agreement pursues among others the goal of forming public opinion (opinion maker) because the ability to control expectations of market players is no less important than the direct influence on the market that results from cutting production.

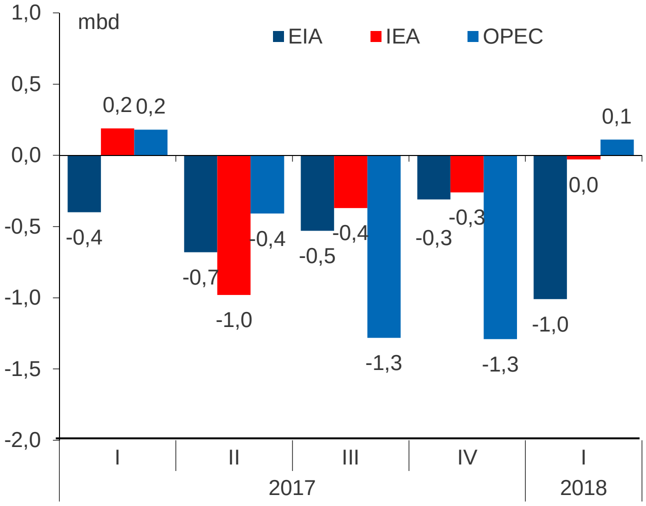
Barriers and risks to the OPEC+ Agreement. Ways to overcome them.

In the previous section we noted that one of the main goals of the OPEC+ Agreement is to smooth out fluctuations in demand and supply on the global oil market so as to maintain stability.

However, achieving this goal is complicated by the fact that participants in the Agreement act in an environment that lacks timely and complete information regarding the current state of the market. As a result, it is difficult to determine with certainty at what point the global oil market cycle is positioned, and whether it is pointing to a surplus or shortage. The situation is also complicated by considerable differences in expert estimates that are continuously revised. Thus, producing a relatively reliable forecast for a balance between demand and supply in the global market is almost an impossible task.

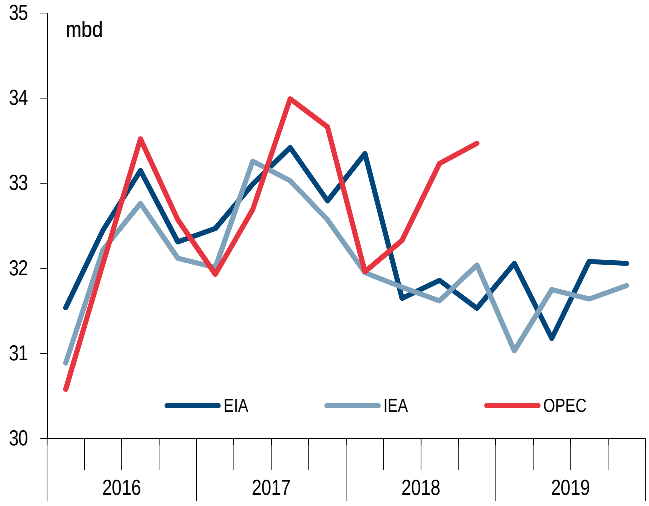
For instance, reviews published by the leading energy agencies in June 2018 differ on the state of the global market in the first quarter of 2018: from -1.0 mb/d (a shortage of supply) to 0.1 mb/d (a surplus) (Figure 7).

Figure 7. Estimates of a surplus/shortage of the global liquid supply



Source: IEF based on EIA, IEA, and OPEC data

Figure 8. Call on OPEC crude



Source: IEF based on data supplied by experts

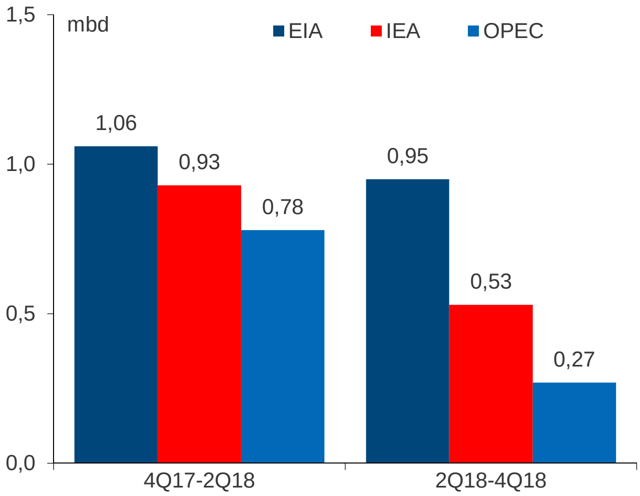
The key indicator that determines the target production level for OPEC countries is “Call on OPEC crude”. Estimates of these indicators can differ significantly (Figure 8). Moreover, monthly revisions of these estimates can also differ.

OECD commercial stocks level can be considered a relatively reliable indicator of the state of the market. This data, though supplied by different energy agencies almost always coincides and revisions are usually insignificant (Figure 5).

However, reserves dynamics can introduce yet another weak point: a time lag (about 6 months) in relation to changes in supply-demand gap on the oil market. This complicates their use for assessing the current state of the market. For example, despite a reduction in oil stocks, the market may actually be already entering a stage of surplus for crude oil.

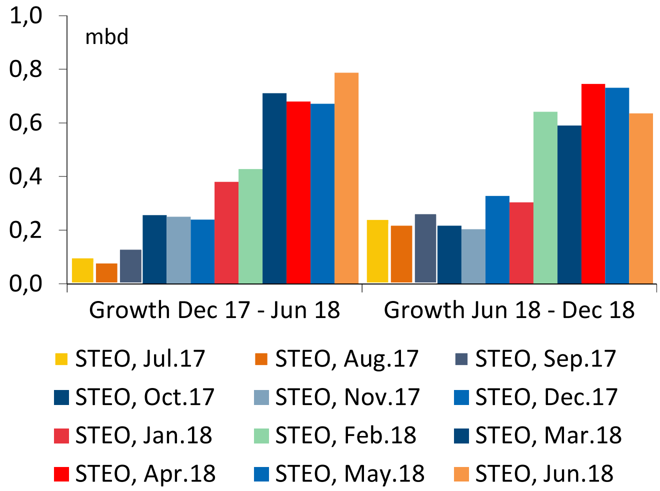
Many experts point out that the effect of the OPEC+ Agreement may be negated by the growth in the US liquids production which will take place as oil prices increase. However, estimates made by the leading energy agencies or estimates made by one agency in different periods differ significantly (Figure 9 and Figure 10).

Figure 9. Forecasts for growth in US liquids production



Source: IEF based on data supplied by experts

Figure 10. Estimates of crude oil production in the US in 2018



Source: IEF based on EIA data

Another important risk is possible disagreement among participants in the Agreement. The modification of the Agreement in June 2018 created a situation, as a result of which countries with considerable spare capacities will be able to increase production using quota participants that have significantly cut their production levels (Venezuela) or will do it in the near future (Iran). This may lead to a loss of consensus among parties to the Agreement.

Also, restrictions on oil production lead to certain discontent on the part of companies in those countries where a substantial portion of the oil business is privately held, for example in Russia. As they limit production, Russian companies worsen their investment attractiveness. While foreign companies increase oil production, capitalizing on higher prices, Russian companies have to freeze it. As for continuous renewal of the Agreement, Russian companies will apparently have to revise the parameters of launching new projects and production growth targets that were declared to investors and shareholders. Saudi Aramco, which plans an IPO in the next few years, may come to face a similar problem.

The effect of different scenarios of OPEC+ Agreement renewal and termination on the global oil market in 2019-2020

Several possible scenarios of the OPEC+ Agreement evolution might be observed in 2019-2020.

The most likely scenario, to our mind, is that the OPEC+ Agreement will remain in effect in 2019-2020 with possible adjustments to the level of production cuts depending on the oil price, the supply-demand gap, and the level of OECD commercial stocks. The main advantage of this approach is its flexibility. The Agreement has proved its effectiveness, which means the participants will not want to give up the progress that has been made in the area of co-operative action. However, constant changes on the global oil market will require flexibility from the participants. The OPEC+ Agreement will gradually assume the format of an adaptive plan.

To evaluate how this scenario will affect the global oil market, let us note that the influence of the OPEC+ Agreement on the market should not be understood one-sidedly. Supposing that parties to the OPEC+ Agreement act in the End State paradigm, the cause and effect relationship between the actions of parties to the Agreement and the dynamics of the global oil market becomes considerably more complex. It is not only the Agreement that affects market indicators; market dynamics in turn determine the way the participants will adjust the Agreement. The participants seek to achieve and keep an End State from which they benefit and which is characterised by a certain level of oil price, demand, supply, and stocks of crude oil and petroleum products that, to our mind, can be characterized as follows:

1. An oil price of $55-70 per barrel. Exceeding this level makes the Agreement organisers concerned because a higher price may cause a significant upswing in US oil production, which negates the effect of the Agreement in the short term.
2. A situation with no significant shortage or surplus of crude oil supply in the global market, i.e. no more than 0.7-1.0 mb/d. Despite differences in estimates, experts currently share the view that the oil market is now in a balanced state. Accordingly, Agreement participants will act in such a way as to preserve it.
3. Keeping a OECD commercial stocks level countries that does not significantly exceed the average figure for 2012-2016. The excess was about 70 million barrels as of June 2018. We believe that the participants consider this figure acceptable and that they will take active measures to cut down crude oil supply if stocks are 120-170 million barrels higher than the average of 2012-2016, (i.e. higher than 2.880-2.930 billion barrels).

Consequently, decisions to extension, modify or terminate the Agreement will be take by the current state of the market, and with the aim of adjusting it as required by the participants.

For example, participants attributed their decision to update the Agreement in June 2018 to key global oil market indicators that showed they had already exceeded their goals. Accordingly, the target state of the market for OPEC countries is a state of lower prices and a balance between supply-demand of liquids, rather than a shortage of supply. If the market begins to demonstrate a surplus, participants in the Agreement should again increase their obligations to cut production.

If the Agreement performs successfully, the participants will adjust it depending on the trends in the global oil market. This means that market dynamics will constantly be shifted towards the values the participants have set as the End State and avoid shock fluctuations.

Another possible scenario is a return to the country-specific quotas for production cuts that existed under the Agreement from January 2017 to June 2018. The decision to switch to an aggregate quota for participants in the Agreement that was made in June 2018 has so far not been supported by a tool to ensure compliance with the quota. The scenario of returning to country-specific quotas seems to us likely if the new system dissatisfies many participants in the Agreement or in the case of significant growth in oil supply from countries that have reduced it. As concerns the degree of influence on the global oil market, this scenario is not significantly different from the above-indicated scenario; it just limits the flexibility of the Agreement organisers and makes it more difficult to implement a fully-fledged adaptive plan.

Finally, there is always a certain probability of complete termination of the OPEC+ Agreement in 2019-2020. This scenario is possible if there is a “split” among the participants that cannot be overcome. To our mind, the Agreement will remain in effect even if the US sees a significant growth in its crude oil production. Termination of the OPEC+ Agreement may lead to a new build-up in production by member countries and increased competition for market share, which would return the industry to the sort of market volatility that occurred in late 2014 and in 2015.

Forecasting the quantitative indicators of the global oil market for each scenario is complicated not only by the fact that there are several Agreement scenarios, but also by the various situations in the global oil market. Time lags and imperfection of statistics also significantly complicates estimations of future prospects. Accordingly, specific quantitative estimates are, to our mind, not very informative.

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Additional information can be provided upon request.