Problems of Petroleum industry in Iraq

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Abstract. Iraq has been faced a lot of challenges from internal and external conflicts’ security situation is stable and war with terrorism, international transactions are not in favour of Iraq. Impact on investors, oil companies in the oil field.

1. Introduction

Despite security and financial troubles, Iraq’s crude oil production has been grown substantially over the last 5 years. Moving into 2017, what challenges remain for Iraq’s oil sector? Since 2010, Iraq oil production has grown by two million b/d and reached a record high of 4.4 million b/d in the third quarter of 2015.

The growth is in part due to the push by lawmakers to boost oil production to generate badly needed income, as the government continues to struggle financially to contain Islamic State militants in the northern and eastern provinces of Iraq.

Looking ahead to 2016, Iraq’s oil production is contingent on several political risk challenges that Iraqi leaders must address to maintain strong production levels.

Iraqi oil reserves are considered the world’s fifth largest ones, with 140 billion barrels, and Iraq is OPEC’s second largest producer behind Saudi Arabia.

However, a decade of war, domestic political disputes, insufficient investments, and low oil prices has been placed a strain on Iraq’s oil sector.

2. The impact of war on oil imports and exploitation & government policy

Defense spending has been risen significantly since the U.S. invasion in 2003. The takeover of Mosul by Islamic State militants in June 2014 fueled defense spending over the last year and a half, pinching the national budget so much that investments towards oil production are often insufficient to operate at max capacity.

Iraq’s defense spending is likely to continue to place a strain on the national budget in 2016 until ISIS is effectively pushed out of Ramadi and Mosul. While security forces have made recent gains against ISIS in Ramadi, capturing Mosul could take months.

Low oil prices and rising imports have been also placing strain on the Central Bank of Iraq and oil revenues. Foreign currency reserves have reportedly shrunk from $78 billion at the end of 2013 to $59 billion in mid-2015. The Iraqi dinar also has been fallen sharply across markets this year.
The low prices of oil is also undervaluing current exports and inhibiting the government from making larger gains. Figures show that a year ago, the government pulled in about $300 million per day in revenue. Now it’s down to roughly $240 million a day.

Low oil prices are likely to negatively impact Iraq’s oil revenues in 2016, especially as Iran gears up to begin exporting its oil to western nations, further flooding the supply market.

Figure 1. Source: Brookings.

Internal political challenges: Domestic political disputes over oil production between the central government in Baghdad and Kurdish officials in Erbil is further impacting the rate of oil production [1].

As of mid-November, Kurdistan is exporting over 500,000 b/d of oil, every seventh barrel of OPEC’s second largest exporter. The exports, however, are controversial as Baghdad accuses Erbil of bypassing existing legislation on oil exports and failing to transfer agreed volumes of oil to the government.

In December 2014, Kurdistan and Baghdad signed a deal in which Kurdistan is required to transfer some average 550,000 bpd to Iraqi state oil firm SOMO over the course of 2015 while receiving 17% of Iraqi budget or over $1.1 billion a month.

However, the deal quickly unraveled as Kurdish officials say the volume of oil transfer is too high with current «insufficient» funds from the government.

Both Erbil and Baghdad have a need to fund their own security forces to counter the threat of ISIS within Iraq, and revenue from oil plays a key role in supporting security operations.

According the consideration, it is unlikely a deal will be reached between both governments unless Baghdad is able to accept a lower threshold of oil transfers from Kurdistan. Meanwhile, current political challenges could scupper production output by 10%.

3. Humanitarian crisis
In addition to security and political problems, investment for oil is being hindered by the mass exodus of refugees and internally displaced people.

The influx of million of refugees and displaced people have placed a stain on the government, especially with respect to provide adequate aid and security to displaced people.

Likewise, a worsening security situation may cause skilled laborers such as oil field works and technicians that are critical to maintaining Iraqi oil exports to leave Iraq.

Remaining steps forward: In order for Iraq to effectively reach full operating capacity, Iraq must ultimately improve the vastly deteriorating security situation and strengthen counterterrorism efforts to stop the spread of violence and boost investor confidence.

Luckily, Iraq’s largest oil refineries in the southern areas have largely been unaffected by recent violence. The recapture of the Baiji oil field from ISIL militants can also be seen as a strategic success [2].
Additionally, Iraqi lawmakers must place serious commitment and investment towards oil infrastructure modernization. Commercial and technical difficulties continue to plague Iraq oil production, though the recent surge in production output is a positive sign for Iraq’s future production potential.

Low oil prices will be remained a challenge for Iraq’s oil sector, especially as Iran is expected to enter the market in 2016. In the long-run, Iraq must work to diversify its economy and energy exports to soften the blow for future price drops.

4. Iraqi oil & OPEC

Iraq is the one of the major reasons why OPEC was able to increase oil production over the last year, even as oil prices were dropped to six-year lows.

The war-torn country averaged 3.2 million barrels per day (mb/d) of production in 2014. But despite the onslaught from ISIS and the collapse in oil prices, Iraq succeeded in achieving steady gains in output, surpassing 4.1 mbd in September. Along with Saudi Arabia’s increase of around 600,000 barrels per day since 2014, Iraq accounted for a majority of OPEC’s production gains over the last year, allowing the cartel to produce more than 31.5 mb/d - well in excess of its stated production target of 30 mb/d [3].

5. KRG policy and its impact on oil production

However, although Iraq has succeeded in defying gravity thus far, the cracks in the country’s oil success story are started to show.

Genel Energy, a London-based oil exploration company that is concentrated in the Kurdistan region of Iraq, trimmed its production forecast for the year, due to the late payments from the Kurdish Regional Government (KRG). The Iraqi central government in Baghdad and the KRG have been to odds over oil sales. In December 2014, the two sides reached an accord that would see the KRG exporting oil under the purview of the Iraqi state, in exchange for access to its portion of national revenues.

The collapse in oil prices has sapped the state of resources, however. That has held up payments to the KRG, which in turn has halted the transfer of funds to private oil companies operating within Kurdistan.

As a result, oil companies in Iraq are hit with a double whammy - not only are prices for their oil low, but they are not even receiving payments on time. Genel Energy said that the payment delays mean the company will only be able to produce 85 000 to 90 000 barrels per day this year, down from its previous forecast of 90 000 to 100 000 barrels per day. The company’s share price fell by 6.34 percent on October 20 after the announcement.

«Given the payment situation has been irregular, we stopped investing in the drilling of the fields», Genel’s CFO Ben Monaghan told Bloomberg. «Inevitably with conventional oil fields, if you stop investing, the production will begin to decline». Genel cut its capital expenditure guidance to $150-$175 million for the year, down from $150-$200 million.

For the company, there are some reasons for hope. The KRG decided to skirt its agreement with Baghdad over the summer and begin exporting oil on its own terms. That has allowed for partial payments to oil companies, including Genel Energy, but also Gulf Keystone Petroleum and DNO ASA, a Norwegian E&P company.

Genel received a $16.5 million payment from the KRG on October 20 for its oil exports, the second month in a row that it was paid. In its October 20 statement, the company said that «The receipt of predictable export payments...would allow Genel to deliver the investment required to increase production». The second payment offers some cautious optimism, and the company is striking a positive tone.

The KRG also submitted its second consecutive payment to Gulf Keystone, another important producer in Kurdistan. Collectively, companies operating in Kurdistan say they are owed more than $1 billion [4-8].

Kurdistan is dependent on oil for its economy, so the KRG is doing as much as it can to increase oil exports and square up with private companies. Kurdistan exported 620 000 barrels of oil per day in
September through a pipeline that runs to the Turkish port of Ceyhan. That is a significant increase over the 470,000 barrels per day that the semi-autonomous region exported in August.

6. International transactions and their impact on Iraq’s production
For now, this appearance is a short-term problem. But if low oil prices, security concerns, or political instability (or a combination of all three) deter investment today, Iraq could fall short of its production goals over the longer-term.

Actually, Iraq is the oil market's biggest problem. There's a bigger threat to oil prices than Iran.

Last week, Iran struck a nuclear deal with several world powers that, among other things, will end an oil embargo and allow the country to increase production for export.

Analysts have begun to worry that the extra supply - estimated by Goldman Sachs at up to 400,000 barrels a day - could worsen the already flooded market.

Iran's agreement with the P5+1 solidifies the case of increased production in Q1. However, it is arguably additional supplies from Iraq that are pressuring world oil prices more than Iran at this juncture. Iraqi production has been risen consistently over recent quarters, but surged ahead in 2Q 2015 prompting us to conclude that Iraq will likely overtake Saudi Arabia as the biggest contributor to OPEC growth this year [5].

The full potential of Iranian oil exports is not expected within the next year, because the production infrastructure is still needed to be brought back to life. And so Iraq's surging production is a more immediate threat to oil prices, which last week fell for a third straight week.

Iraqi excess production at 920 kb/d above its inferred Iran Agreement quotas is second only to Saudi Arabia at 1,670 kb/d above quota.

Here's JPMorgan's forecast of Iraqi oil production:

![Figure 2. JPMorgan's forecast of Iraqi oil production.](image)

7. The basic requirements are needed to increase production
The introduction of directional drilling technologies has helped Iraq dramatically increase its production, and these technologies had respect for the promise of even greater yields in the future.

As measured by its ever-increasing volume of oil exports, the country’s oil industry has been fully recovered from the damage and mismanagement that it suffered during Saddam Hussein’s reign.

Notwithstanding Iraq’s already-known reserves, it seems likely that recent new exploration efforts by oil companies will lead to an even greater tally of Iraq’s oil wealth.

It’s also important to note that Iraq isn’t just blessed with large reserves, it also happens that the geologic formations holding Iraq’s oil are much more accessible to drilling than they are in most countries, which means the costs of extracting that oil are much lower.

Given the world’s insatiable appetite for oil and gas, Iraq’s dominant supply role is likely to become even stronger going forward. Although it’s difficult to predict the future with certainty, it seems likely that sometime in the near future Iraq will grow into a regional and international energy super-power based on its rich reserves.

It won't be easy to get oil out of Iraq. After a slow start in 2015, Iraq's south is expected to export more oil over the next few months. But there are obstacles standing in the way.
In recent years, it's become apparent that Iraq's crude oil will not age with grace. Consequently, some oil production has been shut down in order to preserve the quality. And in order to get around that, a new blend has been introduced, which «will unlock volumes». However, ultimately, Iraq's southern export infrastructure will determine the potential boost from this new blend.

![Figure 3. Export growth from southern fields – base case.](image)

Generally, 3 links could hamper exports from the south, namely (a) the network of pipelines, (b) the lack of storage facilities and (c) the pumping station that provides a connection between the fields and the main export depot at Fao [peninsula in the southeast of Iraq]. Furthermore, the available pumping and storage capacity at Fao itself, an important link between the fields and the offshore loading facilities, could be an additional blockage.

In any case, there's some potential for more exports, but it may not be executed well.

8. The security situation and its negative impact on the investing companies

Instability threatens Iraq's oil production: oil companies operating in the Basra region could potentially become targets for the region's well-armed militant groups that are increasingly acting with impunity [Reuters].

While for much of 2015 oil traders were fixated on the United States shale oil producers, Chinese energy consumption and the actions of Saudi Arabian oil minister Ali al-Naimi, this summer they are also likely to be keeping a close eye on OPEC's second-largest producer, Iraq, where instability could curtail the nation's oil production and move global crude markets.

Over the past 18 months the south of Iraq has seen a surge in crime, including murders, kidnapping, armed robberies, extortion and drug trafficking.

High-profile incidents included the shooting of an Italian oil worker in August 2015 in Basra, the murder of two oilfield engineers who were working on the Az-Zubair field in November, and the kidnapping of 26 Qatari hunters in Muthanna province in December.

Tribal violence has also increased as state control has receded and tribes have filled the vacuum, playing a greater part in dealing out justice and resolving regional disputes.

Since the beginning of 2015 tribal conflicts have left dozens dead, including women and children. These deaths have sparked mass protests demanding better state-provided security and prompted Iraq's top Shia cleric, Grand Ayatollah Ali al-Sistani, to call for an end to the clashes.

In early 2016 Baghdad moved to try to clamp down on criminal and tribal violence in the south, sending federal forces armed with heavy weapons and tanks into Basra to try to confiscate weapons from militant groups in the region.

On January 15, the government announced that more than 30 people had been detained in the operation and weapons including rocket-propelled grenades and mortars had been seized during raids on houses.
The failure of the central government to disarm renegade militants and soothe tribal tensions at the beginning of the year has underlined the limits of Baghdad's influence in the region.

However, the operation's success was short-lived and what was originally intended as a show of force quickly turned into an embarrassing demonstration of the central government's declining influence in Iraq's south.

Stability in Iraq's south is expected to further deteriorate over 2016 as budget problems in Baghdad limit the government's ability to provide basic necessities to citizens.

In 2015 Baghdad has seen its budget deficit expand rapidly owing to extra spending on the ongoing war against the Islamic State in Iraq and the Levant (ISIL) and the collapse in oil prices, which have fallen by two thirds since June 2014 due to increased production in the US, OPEC's decision not to reduce production, and slowing growth in China.

In October, Iraq's government forecast deficit worth 11.9 percent of gross domestic product for 2016. That figure is now expected to be even higher owing to further declines in the price of oil.

Baghdad's financial crisis has frozen activity on thousands of important infrastructure projects across the country - something that could prove especially significant in the south, which regularly sees disruptive protests during the summer months because of electricity blackouts, high pollution levels, and inadequate supplies of fresh water.

In the past year, almost nothing has been done to improve power and water infrastructure around Basra - and the budget crisis has created new problems, including job losses and delayed salary payments.

Owing to the government's failure to address the grievances of communities in Basra, Iraqi officials are expecting the summer of 2016 to be the most disruptive season of protests on record, and some fear it could potentially affect the region's oil exports.

Over the past three years Iraqi oil exports have shown incredible resilience, hitting new highs despite ISIL taking control of large swaths of the country in June 2014.

One of the key factors behind Iraq's success in increasing oil output amid political turmoil is geographical.

More than three quarters of the country's oil is produced and exported from Basra and neighbouring provinces in the south, which lie more than 500km from the fighting with ISIL.

In January Iraq exported an average of 3.88 million barrels a day, including exports from Iraqi Kurdistan.

This is 660 000 barrels a day more than it was exporting before ISIL's advance across the country in the summer of 2014, which saw the group secure around a third of the country's territory.

Just how long this impressive export growth can be sustained remains to be seen, and 2016 could well prove to be a key test for oil companies active in Basra.

Though the region's oilfields and related facilities are well-fortified and international oil companies can rely on several layers of security, including government-provided oilfield protection forces and private contractors, the environment in which oil companies are operating is almost certainly going to get more difficult.

The failure of the central government to disarm renegade militants and soothe tribal tensions at the beginning of the year has underlined the limits of Baghdad's influence in the region. Additionally, failure to provide adequate power and water infrastructure is likely to fuel public anger and separatist sentiment, which could potentially be channelled by political groups looking to further undermine the central government.

9. Conclusion
All this has ramped up risk for oil companies operating around Basra, which could potentially become targets for the region's well-armed militant groups that are increasingly acting with impunity. As Basra's oil exports are the biggest single source of income for Iraq's government, any kind of sustained period of disruption to operations would be devastating for the country's already fragile economy and would significantly affect its efforts to fight ISIL in the north.
Additionally, an unexpected cut in Iraqi oil production would deliver a shock beyond the country's borders, applying upward pressure to global crude prices and making Iraq a key market to observe for oil traders in 2016 along with the US, Saudi Arabia, and Iran.

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