

Iraq Macro View

Taking stock of an oil boom

- In this note, we take stock of Iraq's oil story, where we stand with respect to efforts to ramp up production, our expectations for the future, and the impact this all has on public finances.
- Iraq has already made significant progress in raising its oil production levels since the government started awarding contracts to IOCs in 2009, lifting maximum production by 900kbpd, and average production by well over 500kbpd in aggregate.
- A field-by-field analysis of targeted output for 2013 suggests production could rise by close to 1mbpd by end of next year, although we prefer to be more conservative in our own projections. While we are bullish on the oil outlook for the medium- to long-term, we stress significant challenges that we believe will make the government's current ambitious production targets difficult to achieve.
- We note that Kurdish production is a wild-card factor that represents significant upside risks to projected oil production. In particular, the completion of up to 1mbpd in new Kurdish export capacity by 2014 could be an opportunity for Iraq to significantly increase output, although the political hurdles to this materializing are considerable.
- Based on conservative production and price projections, Iraq's public finances are likely to remain robust in the next five years. Although a modest funding requirement is likely to arise during this time frame, we note Iraq's reserves at the DFI stand at over US\$20bn as of June, more than sufficient cover for these requirements. We also believe that Iraq has scope to raise further debt, should it deem this necessary or desirable.
- Finally, we caution that while public finances are likely to remain manageable under most scenarios in the coming five years, the government budget remains more vulnerable to a negative oil price shock than its regional peers in our view.

Farouk Soussa

+971-4-509-9750

farouk.soussa@citi.com

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Taking stock of an oil boom

The headlines coming out of Iraq are dominated by the domestic political turmoil and violence, and the ebb and flow of the state of Erbil-Baghdad relations. In the background, however, Iraq's oil story, a cornerstone of the country's economic development plan, remains quietly but strongly on track. In this month's note, we take stock of Iraq's oil production and exports, and their near- to medium-term prospects. We also consider what this means for Iraq's public finances.

Progress since 2009 has been good

In the course of 2009 and 2010, the government of Iraq held two main licensing rounds (one for the management and re-haul of existing production facilities, and one for the development of new facilities). The result was the awarding of 11 contracts that, taken together, would ramp up total Iraqi oil production from around 2.5 million barrels per day (mbpd) at the time, to over 12mbpd within a 7 year period. These contracts were supplemented by a number of independent deals signed between international oil companies (IOCs) and contractors with the Iraqi government.

Table 1, overleaf, summarises the progress made so far in Iraq's main contracts with IOCs, and the progress we expect over the next 12 months or so. The list of projects is not exhaustive, as it does not include fields in the south being managed by local oil companies, the giant Kirkuk field, or fields being developed in the KRG (which has signed around 50 contracts of its own with IOCs). It does, however, capture all major contracts signed between IOCs and the Iraqi central government in the 2009-2010 period, which represent the core of Iraq's ambitious strategy to ramp up oil production.

From the time of signing, the level of production in the 12 fields included in the table has increased from under 1.5mbpd to almost 2.4mbpd, a rise of just shy of 900kbpd. Aggregate production has increased by less than this, approximately 500kbpd, due to the fact that not all fields operate at maximum capacity simultaneously.

Most of this rise has occurred in the past 18 months, and the vast majority of it is due to increased production from existing facilities. BP, Exxon and ENI, leaders on the Rumaila, West Qurna Phase I and Zubair fields respectively, have all achieved their initial 10% improved production targets, while CNPC has already achieved its peak production target in Ahdab, 6 years ahead of schedule.

Progress on new developments has been slower. Since signing, these have only contributed an additional 135kbpd to Iraqi oil output, with CNPC announcing it had begun production of 100kbpd in June of this year, and a further 35kbpd scheduled to come online this month at Gharaf oil field (managed by Petronas).

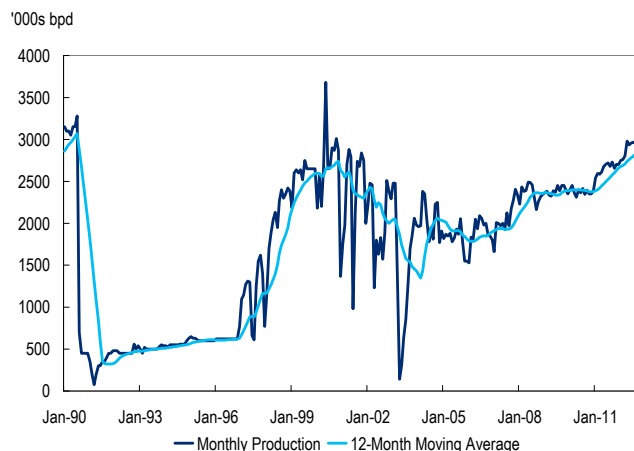
Figure 1. Existing facilities driving production growth for now, but that will change going forward

	Operators	Previous Production (kbpd)	Current Production (kbpd)	Likely production by end-2013 (kbpd)	Planned Peak Production (kbpd)	Progress Status
Existing Facilities						
Rumaila	BP, CNPC	960	1300	1500	2850	Plans to continue ramp up under question after conflicting reports of well decline
West Qurna-I	ExxonMobil, Shell	244	450	600	2325	After Exxon's venture into Kurdistan, questions hanging over continued involvement in this project. Possible disruption to investment if Exxon/Baghdad enter conflict.
Zubair	ENI, Occidental, KOGAS	180	270	500	1200	Last year, ENI announced plans to drill 68 new wells to up production to 700kbpd in 2013
Missan	CNOOC, TPAO	90	95	95	450	Complex of three fields being developed - Fakka, Buzurgan, and Abu Gharb. Production not yet increased, progress to date slow, with first well reportedly dug in June this year.
Ahdab	CNPC	0	120	130	130	Production from field ceased post 2003 invasion. CNPC contract dating from 1997 renegotiated from Production Sharing to Technical Service in 2010. CNPC has already reached its 120-130 kbpd peak target, 6 years in advance of schedule.
Total		1474	2235	2825	6955	
New Developments						
Majnoon	Shell, Petronas	0	0	125	1800	Shut for repairs since June, Shell has said it may miss the target for first commercial production of 125kbpd by year end, but will have reached this by March 2013 latest
West Qurna-II	Lukoil	0	0	150	1800	Earlier this year, Lukoil announced a major well-digging programme that would lead to production of 150kbpd by 2013. Original parent in consortium (Statoil) sold its stake in the project, and efforts are reportedly underway by Lukoil to get new partner.
Halfaya	CNPC, Petronas, Total	0	100	130	535	Halfaya came online this June, with 100kbpd, and the plan is to ramp up to plateau production rate by 2017
Gharaf	Petronas, Japex	0	35	60	230	Petronas has announced that it plans to produce 50kbpd by the end of 2012, rising to 60kbpd in 2013, 100kbpd in 2014
Badra	Gazprom, KOGAS, Petronas, TPAO	0	0	0	170	Exploratory Phase ongoing, slow progress to date, not factoring in much from this field.
Qaiyarah & Najmah	Sonangol	0	0	0	120 + 110	Sonangol was the target of terrorist attacks earlier this year, and suffered equipment loss. Their development program is delayed and is reportedly under review.
Total		0	135	465	4765	
Grand Total		1474	2370	3290	11720	
Increase			896	920	8430	

Source: Iraq Oil Report, Iraq Energy Forum, Various Press Reports, Citi Research

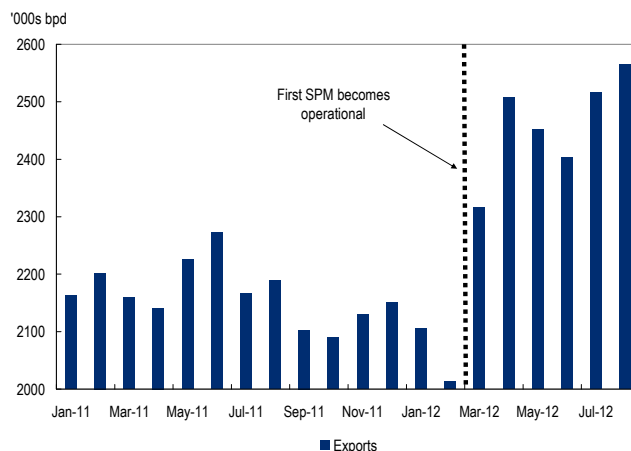
The contribution of these projects to total Iraqi production and exports is evident. Figure 2 shows that Iraq's production levels, currently estimated to be in excess of 3.1mbpd, are the highest they have been since the pre-2003 invasion peak, and are trending upwards consistently. Exports hit a 3-decade high of almost 2.6mbpd in August, and appear to have experienced a step change since March, when new export facilities were installed in the South (see below).

Figure 2. Average production back up to pre-2003 peak



Source: Bloomberg, Citi Research

Figure 3. Exports step up since March coincides with new facility



Source: State Oil Marketing Company (SOMO), Citi Research

Our near term expectations are likewise positive...

The contribution to additional production from new facilities is expected to increase in the near term. We expect Shell to achieve its target for first commercial production at the Majnoon oil field by March of next year, which should amount to an additional 125kbpd output. In addition, Lukoil has begun an extensive well-digging programme at West Qurna II that should yield production of 150kbpd in the course of 2013. Modest production rises are also expected out of Halfaya and Gharaf. We do not count on any production coming out of Gazprom's Badra field, where progress has been slow to date, nor out of the two fields operated by Sonangol after an attack at the Angolan oil company's headquarters damaged equipment and led to a review by the company of its activities in Iraq. Altogether, new facilities could add a further 330kbpd to Iraqi oil output in 2013, approximately 10% of current production.

Existing facilities, mainly Rumaila, West Qurna Phase I and Zubair, could add twice that to existing production, potentially raising output by a total of 920kbpd in the course of 2013. This means a rise in production of 30% from current levels, and underpins our production forecasts going forward (see below).

...but we see significant challenges to raising production and exports to government target levels long-term

At the time of signing of the contracts with the IOCs, the government was talking about a peak production capacity plateau level of around 13mbpd. Ever since, industry experts and insiders have questioned the feasibility of these targets, a point conceded by the government in April when Deputy Prime Minister for Energy Al-Shahristani said that Iraq would reduce its peak production target to 10 million bpd starting in 2017. Mr Shahristani targeted production of 5-6 million bpd by 2016.

We remain of the view that even the revised, lower government targets (which have not been officially confirmed) are highly ambitious and subject to considerable uncertainties, as follows.

Export capacity bottlenecks

In March of this year, Iraq loaded its first crude shipment from a new Single Point Mooring (SPM) platform 50 km off the south coast, near the Al Basrah Oil Terminal (ABOT). This marked the completion of phase I of the Iraq Crude Oil Export Expansion (ICOEE), which saw the addition of two SPMs with a nameplate capacity of 900kbpd each (these are currently working at half capacity – see below). Another 3 SPMs will be operational by 2014, when Phase II of the ICOEE is complete, although one of these is intended to remain as spare capacity. All in all, the five new SPM should, in theory, add 4.5mbpd of extra export capacity out of Iraq's southern marine terminals.

In reality, however, we do not believe this capacity will be entirely cumulative, if at all. Indeed, the existing infrastructure at ABOT and its sister facility the Khor Al Amaya Oil Terminal (KAAOT) is so dilapidated and unreliable that its continued use is, in our view, highly doubtful. The export facilities were built in the early 1970s with an intended shelf-life of 20 years. The last inspection of the pipelines was done in 1989, and found severe internal corrosion, leading to a reduction in the maximum throughput from 3mbpd to 1.8mbpd in order to reduce pressure and the risk of rupture. No major rehabilitation of the system has taken place since, and the state of the pipelines is highly precarious. We believe that in the medium- to long-term, the facilities will have to be decommissioned, or else undergo a costly refurbishment. Either way, we do not believe they should be factored into the government's current export capacity plans, meaning that the cumulative increase in export capacity from the ICOEE will be 2.3mbpd, bringing total export capacity out of the south to 4.5mbpd (figure 4).

Figure 4. Ongoing export capacity expansion is likely to be partially offset by decommissioning of existing dilapidated facilities

000s bbl/day	Previous	2012	Planned
<i>Marine Terminals</i>			
Basrah Oil Terminal	1800	1800	0
Basrah Oil Terminal Phase I	0	900	1800
Basrah Oil Terminal Phase II	0	0	2700
Khor al-Amaya	400	400	0
Total Marine	2200	3100	4500
<i>Pipeline</i>			
Kirkuk-Ceyhan	500	500	500
Total Pipeline	500	500	500
<i>Road Tanker Routes</i>			
Iraq-Jordan	30	30	30
Kurdistan-Jordan	40	40	40
Total Road tanker	70	70	70
<i>All Routes</i>			
Total	2770	3670	5070

Source: Iraq Energy Forum, Citi Research

Away from the marine terminals of the south, there are currently no concrete plans to expand pipeline export capacity through the Mediterranean channels. The Kirkuk Ceyhan pipeline has a nameplate capacity of 1.6mbpd, but is in a significant state of

disrepair following ceaseless attack and sabotage on both sides of the border and is capable of shifting only about a third of that. In 2010, a new pipeline between Kirkuk and the port of Baniyas in Syria was announced, with a total capacity of around 2.75mbpd. However, events in Syria have forced these plans on hold. In September, a memorandum of understanding was signed between Iraq and Jordan to build a pipeline between the two countries, but this is still highly uncertain and is unlikely to be a major new export route, rather replacing the trucking operations currently taking place.

All said, current plans therefore suggest a total maximum export capacity of just over 5mbpd. Given operational risks (eg sabotage, infrastructure failure etc.), the actual operational export capacity is likely to be somewhat lower than that. A production target of 6mbpd, implying exports well in excess of 5mbpd, therefore appears likely to come up against an export capacity constraint. The constraint is clearly even more binding in relation to the long-term target of 10mbpd. Achieving these targets will therefore require greater investment in export capacity than is currently being planned, in our view.

Other infrastructure constraints

In addition to export capacity issues, we believe exports and production are likely to remain volatile, reflecting wider infrastructure issues, such as the inadequacy of power to pump oil out of storage (while adding to storage is mostly gravity fed), and the inadequate capability to deal with port delays from storms and other factors. There is also still inadequate pipeline capacity to connect new field production to the new SPMs and this is likely to obstruct any major increase in production and exports in the near term (Shell has complained that the delay in providing adequate pipelines is impeding it from raising capacity at Majnoon). Moreover, there is not as yet sufficient pumping to bring adequate incremental supplies to the new SPMs: unreliable pumping will result in volatile swings in export capacity from day to day, in our view, and it is not clear whether there will be enough production or pumping capacity to match the nameplate capacity of the SPMs for some time. These are currently running at half their nameplate capacity.

Another serious constraint is that field production growth is uncertain, and will require progress on the water injection project in order to lift output beyond a certain point. Where exactly that point lies is unclear, and will differ from field to field. BP's experience of volatile productivity in the Rumaila field could suggest that raising production there on a sustainable basis may require water injection sooner rather than later, although there have been no official explanations as to the causes behind the output fluctuations. The water injection project is making little progress, so far as we can tell, with its leader, Exxon Mobil, having been removed in February due to its signing of contracts with the KRG in defiance of Baghdad's wishes.

Political constraints

The KRG contracts set-to

The ongoing conflict between Erbil and Baghdad has wide-ranging consequences on the country's oil outlook. Aside from uncertainty regarding Kurdish exports (see below), the recent move by several IOCs to sign deals with the KRG in defiance of Baghdad casts a pall of uncertainty over their operations in the South. After Exxon signed contracts to develop Kurdish assets last year, Total and Gazprom have followed suit in recent months. Total is a junior partner in developing the Halfaya field. Gazprom is the lead operator of the Badra field, but has seen no progress to date and, in any case, is targeting a peak production plateau of just 170kbpd. The major concern is therefore Exxon, senior partner on the giant West Qurna I field,

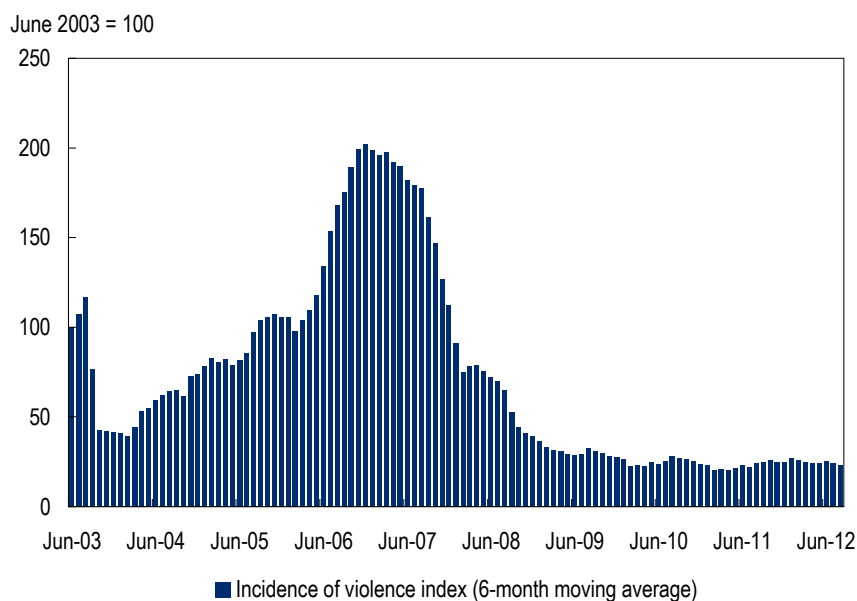
with targeted production of 1.8mbpd. As already mentioned, Exxon was taken off the water injection project in February as a sanction for its actions in the north, and was also barred from bidding in Iraq's fourth round of oil and gas auctions. The government has repeatedly said that any move by Exxon to carry out work in the north under its contracts will result in further sanctions. What this means is unclear, but we believe the risk of Exxon's contract being annulled is non-negligible. This could potentially delay development of the West Qurna II development, although the impact is hard to quantify.

We also consider the risk of yet more IOCs signing with the KRG as relatively high, given the attractive terms on offer in the North. Any more such defections could add further pressure on Baghdad to act against Exxon and defecting companies, potentially affecting several of the contracts signed in 2009-2010.

Security

Security in Iraq remains an ongoing concern. Since the withdrawal of US troops in December of last year, Sunni-Shia divisions in government have come to a head, erupting in a political crisis that has threatened the continuity of the fragile coalition government. Combined with the conflict in neighbouring Syria, the political crisis has heightened perceptions that violence in Iraq has risen sharply in recent months. We believe this perception has little basis in fact. The average incidence of fatal violence is shown in figure 5 – this has been high but stable over the past couple of years. Iraq, sadly, was an equally dangerous place before troop pull-out.

Figure 5. Violence in Iraq has remained relatively constant since the 2006-2007 peak



Source: Iraq Body Count, Citi Research

That said, the risk of sabotage/attack on pipelines and production facilities, as well as threats to the security of workers and staff in the oil and related industries, poses a non-trivial challenge to government targets to boost production, in our view.

OPEC

Iraq's rising oil production may put the country on a path to conflict with its fellow OPEC countries, including its close ally Iran. This summer, Iraq leapfrogged Iran as

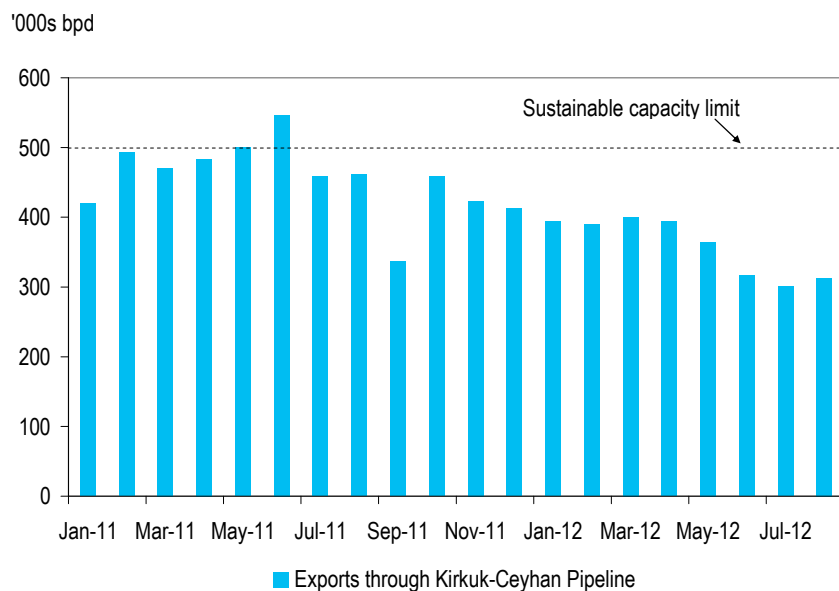
OPEC's second largest producer, thanks in large part to a fall in Iranian production to under 3mbpd, reflecting the impact of international sanctions. For the time being, Iraq and Iran's oil policy is aligned, calling on Saudi Arabia to cut production. However, as Iraq's own production continues to rise, it is likely that Iran will begin to apply greater pressure for it to reduce output. This pressure will increase still if oil prices begin to soften. Indeed, a scenario in which oil prices retreat while Iraqi production continues to rise (our base case – see below) is likely to invite significant political pressure on Iraq from all quarters to reduce output.

We think this issue will not formally come to a head until Iraq is readmitted into the OPEC quota system, from which it has been exempt since Saddam Hussein's invasion of Kuwait in 1990. At the time, Iraq's quota was on par with Iran's and thus the question of reapplying quotas on Iraqi production is likely to come up again in the coming years as production approaches Iran's notional cap, currently 4.11mbpd. Iraq will seek the maximum quota possible, and is hoping that its strategy to expand production capacity and proven reserves aggressively in the coming years will allow it to argue for a quota closer to Saudi Arabia's (around 10mbpd) than Iran's. This is likely to be strongly resisted by both Iran and Saudi, in our view.

Kurdish exports provide up-side potential

Under a deal ratified by the Iraqi cabinet this month, the KRG will immediately resume exports through the Kirkuk-Ceyhan pipeline on a permanent basis, ramping up output to 200,000 bpd by the end of the year. This comes after the KRG halted all exports through the pipeline in April over a payments dispute with Baghdad. In return, the Iraqi government will make an immediate payment towards past cost of production for the oil companies, and will commit to timely payment of production costs for the oil companies going forward.

Figure 6. KRG can ramp up exports through Kirkuk-Ceyhan pipeline to a maximum of 200kbpd



Source: State Oil Marketing Company (SOMO), Citi Research

We have reservations regarding the longer-term success of the deal. In essence, it is almost identical in nature to previous such deals between the KRG and Baghdad which have failed. In our view, it is a stop-gap measure designed to facilitate exports

and revenues, much as the previous deals have been, and does not address any of the fundamental underlying causes of friction between Erbil and Baghdad. In particular, the deal does not (i) settle the question of the legal status of the 49 contracts signed by the KRG with IOCs since 2007, (ii) address the fate of contracts for those IOCs operating in the south which have signed with the KRG (eg Exxon), (iii) clarify the status of claims made by Baghdad of money owed to them by the KRG for unauthorised oil exports, (iv) clarify the exact extent of the upfront payment to be made by Baghdad in the coming days, and (v) address any of the deeper issues afflicting the relationship, such as the status of the disputed territories.

Even if the deal holds, we believe the ceiling on the ramp up in Kurdish exports is fairly firmly fixed at 200kbpd unless other export infrastructure is put in place for Kurdish oil. This is because the usable capacity of the Kirkuk-Ceyhan pipeline is around 500kbpd, and exports through it had dipped to a low of 300kbpd in July (the output from the Kirkuk field), leaving only 200kbpd growth room for Kurdish exports (figure 6). Any further KRG exports will require another route.

A widely reported planned Kurdish pipeline to Turkey could provide significantly greater export capacity for Iraq as a whole, in our view. In May, KRG oil minister Ashti Hawrami, sharing a stage with his Turkish counterpart Taner Yildiz, announced plans to build a pipeline with capacity of 1mbpd that would stretch all the way to the Turkish border. Contrary to certain press reports, there are no current explicit plans for the pipeline to cross the border into Turkey. The pipeline will run from the Khormala dome (at the start of the Kirkuk-Ceyhan pipeline) to Feyshkhabour, 4km from the Turkish border and a feeder facility to the final metering point on the Iraqi side of the Kirkuk-Ceyhan pipeline. The controversy over the pipeline exists because of the ease with which a separate connection to Ceyhan can be built, by-passing Baghdad control altogether, as well as comments made by Mr Hawrami and others asserting the KRG's right to sell oil independently (contrary to Baghdad's insistence otherwise).

We believe a move to export oil independently of Baghdad would be interpreted as a *causus belli* by Baghdad, and could start a military conflict between the KRG and the Iraqi Security Forces. We also believe it is highly unlikely to happen (See April MEMO for an in-depth discussion of these issues). The alternative, therefore, would be that the new pipeline, due for completion in the coming 18 months, will be integrated into Iraq's export capacity with Baghdad's consent, and the output marketed by SOMO. But for this to happen, a new export agreement, akin to the one reached this month, would have to be negotiated. This would be a tricky affair, in our view, as it would most likely have to address the costs of oil companies whose contracts Baghdad does not recognize as legitimate (the current export agreement applies only to Genel and DNO, whose contracts were signed pre-2007 and which Baghdad recognizes).

In short, we see strong potential for a significant ramp-up in Iraqi exports through Kurdistan. However, there are significant political hurdles to be overcome before this can become a reality, and it remains an up-side risk for us, one not to be factored in our base case scenarios when projecting Iraq's future oil exports.

The bottom line for Iraq's finances

So what are our projections for Iraqi oil production, and what does this mean for Iraq's public finances?

Figure 7 summarises our view. We are basing our fiscal projections on the basis of an average annual rise in production of just 230kbpd, with total production reaching 3.9mbpd by 2016. This is clearly much lower than the government's own target of 6mbpd, which implies an average annual increase of 750kbpd. Our production projections are also lower than the IEA's, which is projecting a ramp up to 4.1mbpd

by 2016. We therefore believe that our projections are conservative, and that risks are skewed to the upside.

Figure 7. Our production projections are conservative, public finances remain solid regardless

IQD bn	2011	2012E	2013E	2014E	2015E	2016E
General Government revenues	104,200	114,701	118,062	121,533	119,637	119,142
% of GDP	76.8%	77.5%	78.8%	78.1%	72.9%	65.5%
% change	45.2%	10.1%	2.9%	2.9%	-1.6%	-0.4%
Oil Revenues	97200	107701	111062	114533	112637	111142
% of GDP	71.6%	72.8%	74.1%	73.6%	68.7%	61.1%
Nonoil Revenues	7000	7000	7000	7000	7000	8000
% of GDP	5.2%	4.7%	4.7%	4.5%	4.3%	4.4%
General Government expenditure	94,253	106,500	115,400	121,170	127,229	133,590
% of GDP	69.5%	72.0%	84.5%	77.6%	77.3%	73.2%
% change	17.3%	13.0%	8.4%	5.0%	5.0%	5.0%
Current Expenditure	65000	71500	78650	82583	86712	91047
% of GDP	47.9%	48.3%	57.6%	52.9%	52.7%	49.9%
Capital Expenditure	25000	35000	36750	38588	40517	42543
% of GDP	18.4%	23.7%	26.9%	24.7%	24.6%	23.3%
General Government Balance	9,947	8,201	2,662	363	-7,591	-14,448
% of GDP	7.3%	5.5%	1.8%	0.2%	-4.6%	-7.9%
Memo						
Oil Price (US\$ per bbl)	111	111	99	93	88	85
Oil Production (kbpd)	2,760	2,950	3,350	3,650	3,800	3,900
Oil Exports (kbpd)	2,166	2,400	2,773	3,044	3,163	3,231

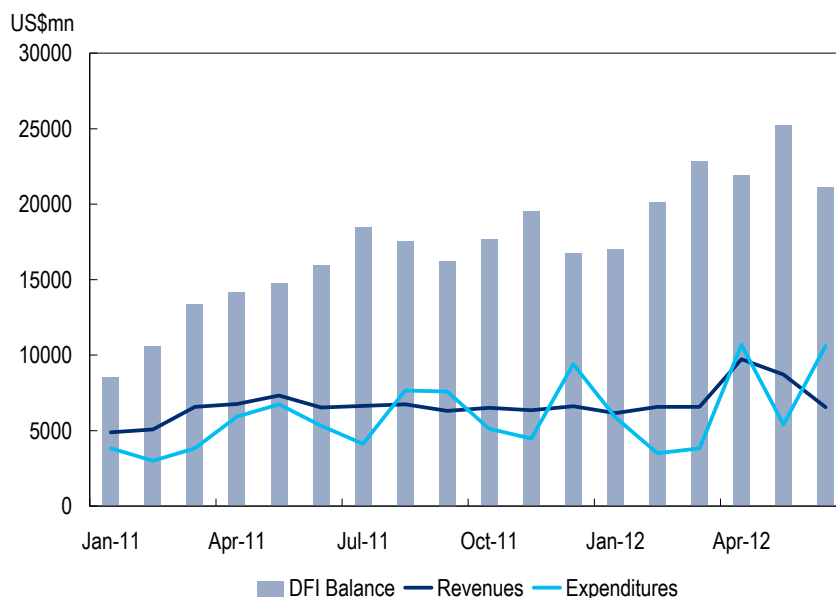
Source: Haver Analytics, Citi Research

As far as oil prices are concerned, we are expecting little change in the average oil price for 2012 versus last year, but are expecting a drop next year to US\$99 per barrel, and a steady decline to US\$85 per barrel in 2016. All prices are for Brent.

Despite our conservative production and price assumptions, public finances are expected to remain robust over the forecast period. Iraq is likely to maintain a surplus in the coming two years, despite massive and rising government expenditures driven largely by the need to rehabilitate the country's dilapidated and war-torn infrastructure.

We do expect the budget to come under pressure in the outer years, with modest deficits building up in 2015 and beyond. This does not, in our view, represent a major fiscal challenge given the flexibility that Iraq has in its expenditures, and also in its financing options. To begin with, excess oil revenues over the past couple of years have meant that balances at the Development Fund for Iraq (DFI), the country's *de facto* sovereign wealth fund, have increased to over US\$20bn (as of June 2012). This is sufficient to cover the projected deficit during the forecast period, affording Iraq plenty of buffer room. The government is also deleveraging, with domestic debt on the decline and foreign debt remaining static. The only outstanding foreign commercial debt is the US\$2.7bn bond due in 2028.

Figure 8. DFI Balances have built to over US\$20bn over the past 18 months



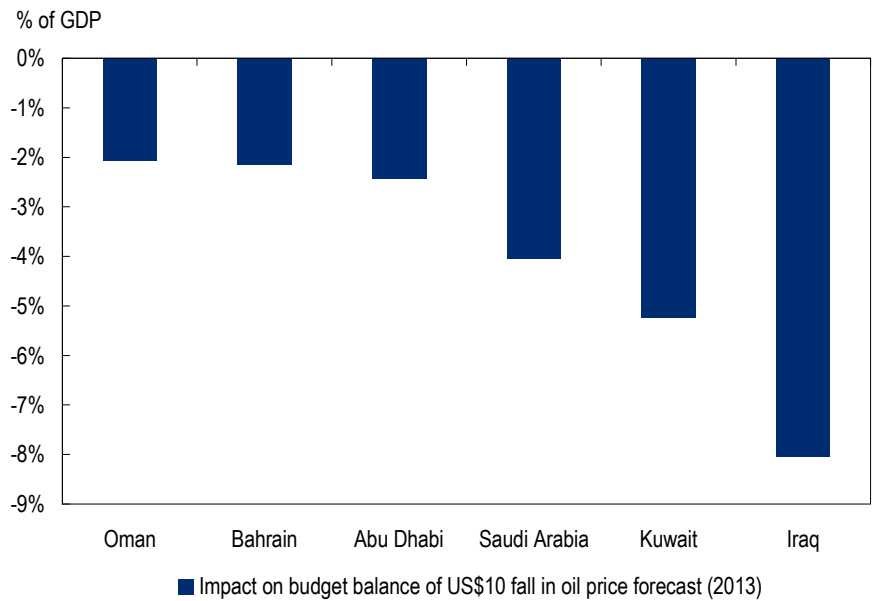
Source: Committee of Financial Experts (COFE), Iraq, Citi Research

Despite intermittent speculation to the contrary, we are not aware of any plans to raise further international commercial debt at present. Given the surpluses the government is running, combined with the near-dogmatic opposition in certain quarters of the government to raising foreign debt (strongly associated with the economic failings of the Saddam-era), we do not expect this in the near term. However, we believe this may change after 2014. Not only will the government then be facing funding needs, according to our projections, but parliamentary elections are due that year. There is therefore the possibility that a new government will take a more accommodating view of debt financing as a means of accelerating the country's development.

But Iraq is highly vulnerable to a downswing in oil prices

A final word of caution: while our projections are conservative and Iraq's public finances are expected to remain manageable, Iraq is also exceptionally vulnerable to down-side scenarios in the oil price. Figure 8 shows the relative sensitivity of the budget balance in some of the region's main oil exporters to a US\$10 fall in the oil price, expressed in term of GDP. On average, a US\$10 fall in oil prices is likely to shave 3%-4% of GDP off the budget balance in other countries, but in Iraq the budget balance would deteriorate by close to 9% of GDP on our estimates. This means that if oil prices were to average US\$89 next year, rather than the US\$99 projected, we believe Iraq would be looking at fiscal deficit of 7%-8% of GDP, rather than a surplus of nearly 2%. Such vulnerability is unusual, even among regional oil exporters, and underlines the fragility of Iraq's public finances at this stage of the country's economic development, in our view.

Figure 9. Iraq is the most vulnerable ME oil exporter to downswings in the oil price



Source: Haver Analytics, Citi Research

Appendix A-1

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