

# Geopolitics of Energy

Mind the Gap

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## RBC Capital Markets, LLC

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This report is priced as of market close October 5, 2018, unless otherwise noted.  
All values in U.S. dollars unless otherwise noted.

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## OPEC Watch List

### Where does each OPEC producer stand amid the “Spectrum of Pain”?

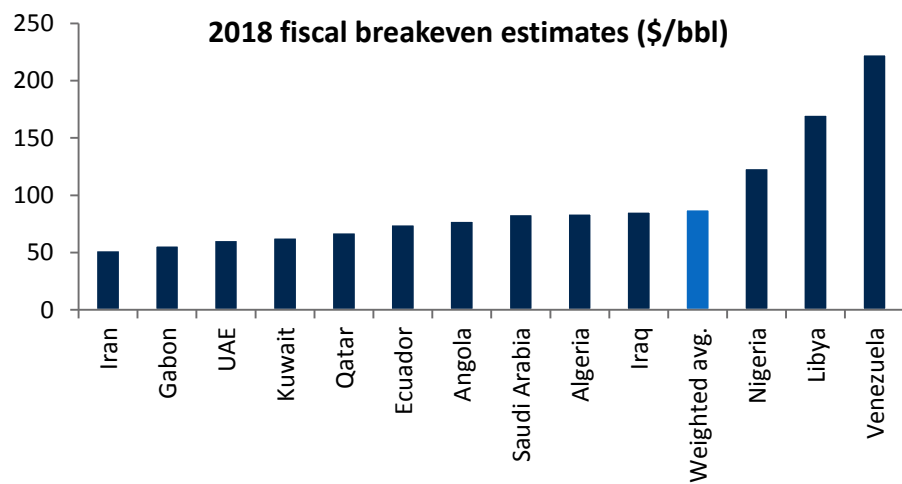
- We continue to contend that given 2018’s tightening oil market, any geopolitically driven supply disruptions would have an outsized impact versus recent years when the market was awash in crude. This necessitates classifying the risks and stacking up potential outages.

Country	Oil production (mb/d)		Geopolitical risk		Comment
	2017 avg	Last month	Past year	This year	
Saudi Arabia	9.97	10.53	6	8	Ambitious reforms, disruptive foreign policy, regional risk rising
Iraq	4.44	4.66	9	8	Security, economic and political challenges still persist
Iran	3.79	3.36	6	10	Economic gains imperiled, risk of regional confrontation rising
UAE	2.91	3.04	2	2	Best in class in OPEC but high foreign policy expenditures
Kuwait	2.71	2.80	3	3	Financially flush but the population does not want austerity
Venezuela	1.94	1.26	10	10	With few economic options left, oil production is plummeting
Nigeria	1.71	1.80	10	8	The oil region remains restive and 2019 elections pose a key risk
Angola	1.66	1.53	6	6	Angola continues to face strong economic headwinds
Algeria	1.04	1.05	8	7	Algeria is seeking to boost investment but faces challenges
Libya	0.83	1.05	9	8	The country remains at risk for an unfavorable reversal of fortune
Qatar	0.61	0.61	2	6	Qatar has proven more resilient than expected, blockade still bites
Ecuador	0.53	0.54	5	5	Courting new investment but lies in the middle of our risk spectrum
Gabon	0.20	0.17	6	6	Low production amid increased political turmoil
Scale:			High -> Low	High -> Low	

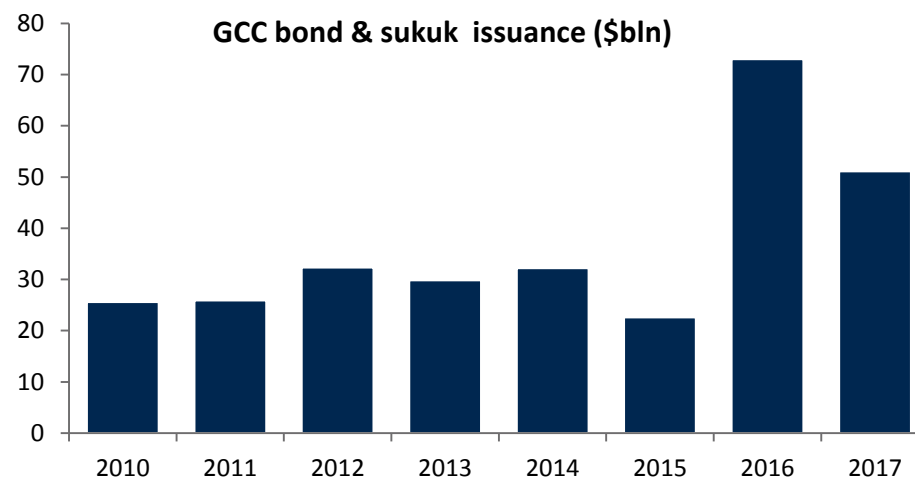
Note: Risk Ranking scale is from 1 (lowest) to 10 (highest). Source: Bloomberg (production data), RBC Capital Markets

# Mind The Gap Because Reality Bites For OPEC

## Current price levels are still challenging for some members of OPEC



## Many grappled with low oil prices through debt issuance



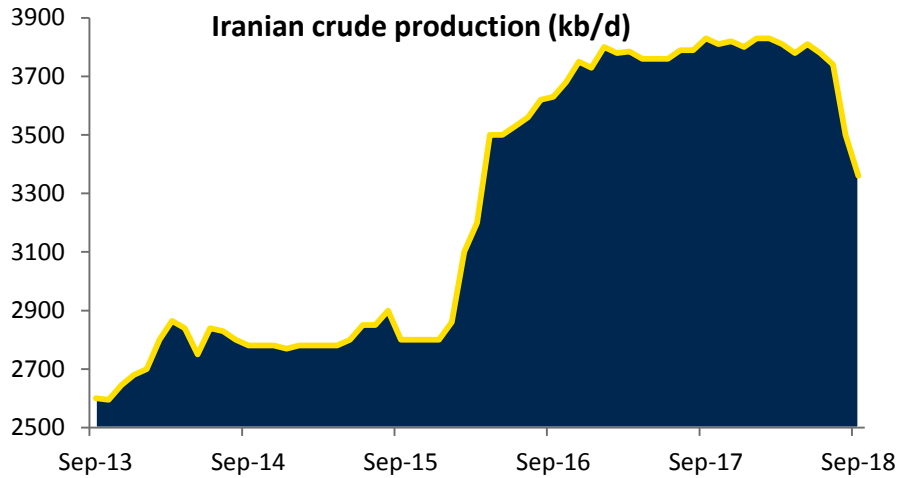
## Risks by country and volume

Country	Additional volumes at risk	Drivers
Iran	Losses will likely exceed the Obama admin's, at least 1.2 mb/d in Q1-19	With the US out of the Iranian nuclear deal (Joint Comprehensive Plan of Action) and extraterritorial sanctions snapping back, barrels are ready to roll
Venezuela	Losses likely to reach ~1 mb/d	Economic decline, inflation, debt servicing, existing production declines, infrastructure breakdown, worker absenteeism, sanctions risk, general instability
Libya	Reasonable risk of 250-300 kb/d, episodically 450-850 kb/d	Political fault lines, security challenges, multiple governments, armed militants, terror threats, elections, infrastructure risks, institutional challenges
Nigeria	Reasonable risk of ~250 kb/d episodically	Militants in the Niger Delta are once again threatening disruptions, crude theft and pipeline vandalism is increasing, raising the specter of more sophisticated attacks
Iraq	Reasonably 120 kb/d, tensions in the South could materially raise volumes	Protests and tensions in the South, the relationship between Baghdad and Erbil, disagreements over issues pertinent to oil production and transport, and election fallout

Geopolitics have staged a comeback in the oil market this year, with supply outages proliferating in distressed states, infrastructure constraints limiting the ability of US shale producers to fill the void in full, global demand remaining relatively robust, and the inventory overhang eliminated by OPEC action. We started the year warning that the economic and political crisis in Venezuela could cause its production to plunge by close to 1 mb/d in 2018; we now anticipate that the snapback of US sanctions could take similar volumes of Iranian exports off the market as the year comes to a close.

# Iran: Winter Is Coming

## Iranian crude production is already coming off

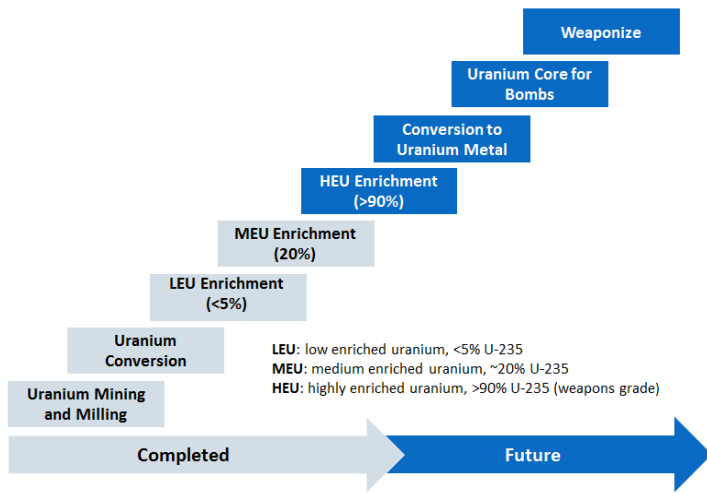


## Some sanctions snapped back in August, oil sanctions return in November

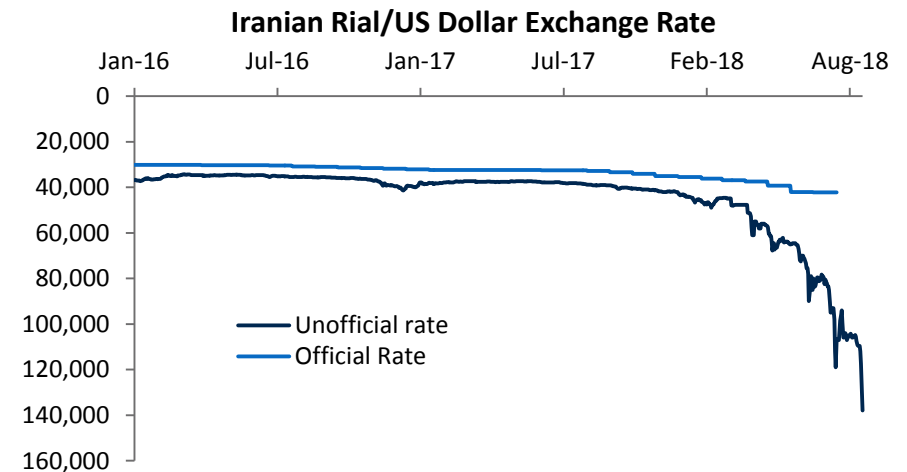
- Iran Sanctions Act (ISA):** Covers investment in Iran's energy sector. Requires 5 out of 12 sanctions from sanction menu.
- Iran Freedom and Counter Proliferation Act (IFCA):** Covers a wide range of Iranian economic sectors, human rights, etc.
- Oil Export Sanctions:** Seeks to reduce Iran's oil exports by sanctioning the mechanisms importers use to pay.

Top Oil Buyers from Iran and Reductions (kb/d)			
Country/Bloc	Pre-sanctions (2011 avg.)	Sanctions (Jan. 2014)	JCOA (Jan. 2016)
European Union	600	Negligible	near 2011
China	550	410	near 2011
Japan	325	190	near 2011
India	320	190	near 2011
South Korea	230	130	near 2011
Turkey	200	120	near 2011
South Africa	80	Negligible	unclear
Malaysia	55	Negligible	unclear
Sri Lanka	35	Negligible	unclear
Taiwan	35	10	small increase
Signapore	20	Negligible	unclear
Other	55	Negligible	small increase
<b>Total</b>	<b>2.5 mb/d</b>	<b>1.1 mb/d</b>	<b>2.4 mb/d</b>

## Iran's path to a nuclear weapon



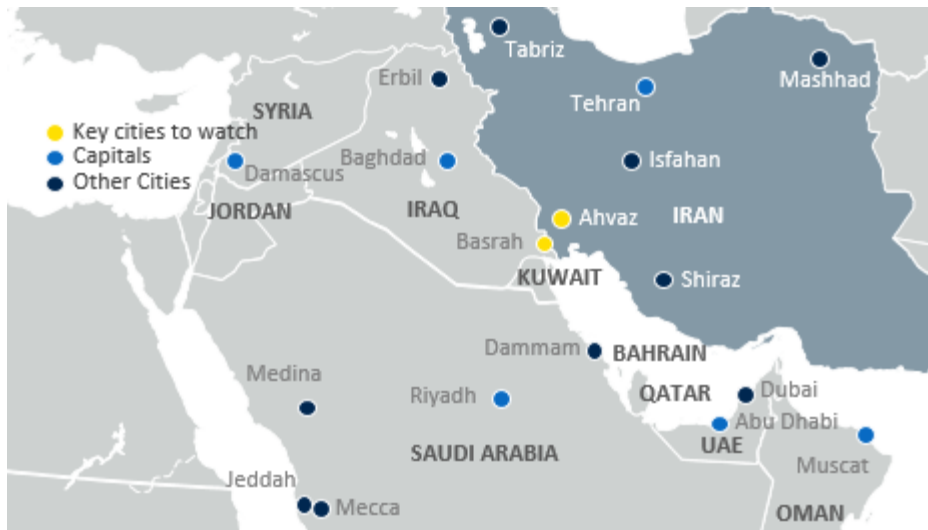
## The fall of the Rial (official and unofficial)



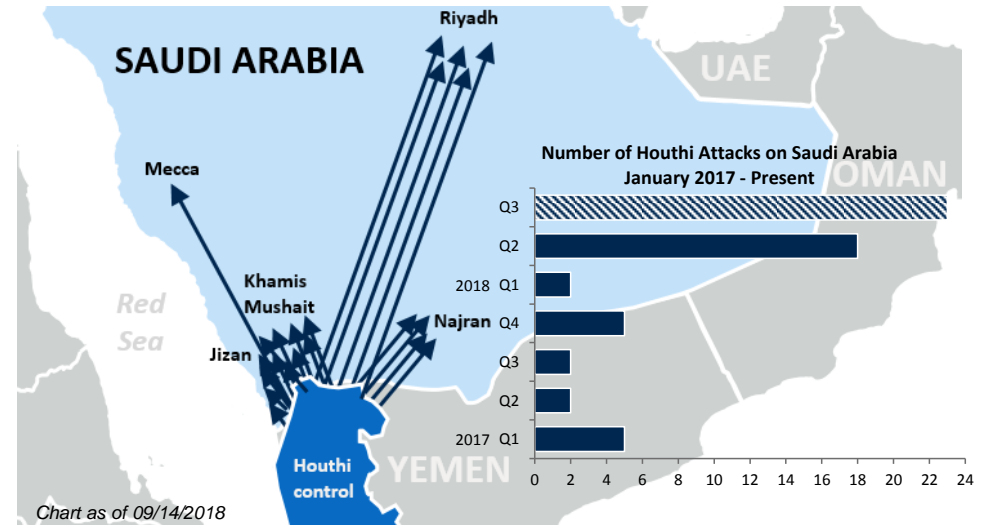
Source: Congressional Research Service, Petro-Logistics SA, Bloomberg, government sources, RBC Capital Markets

# Contagion Risk Abounds In The Middle East

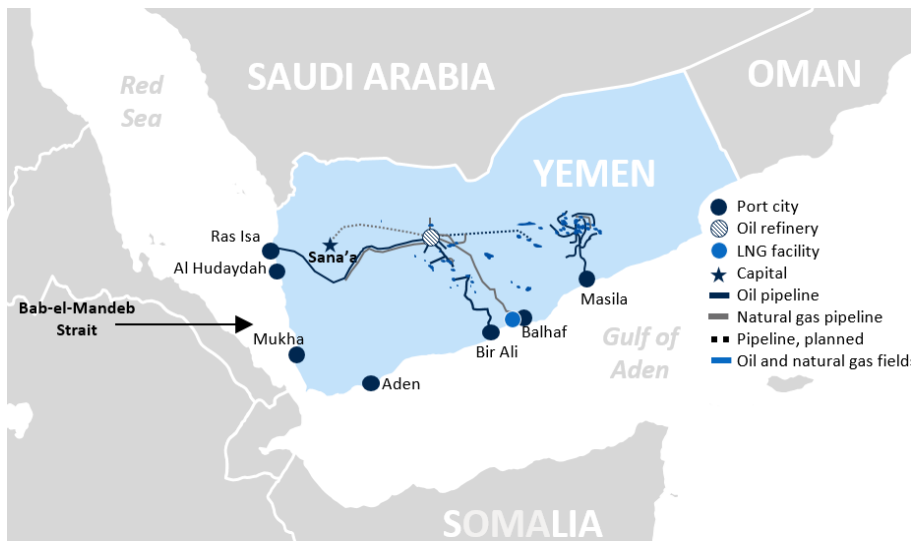
## Iraq and Iran have seen unrest and violence recently



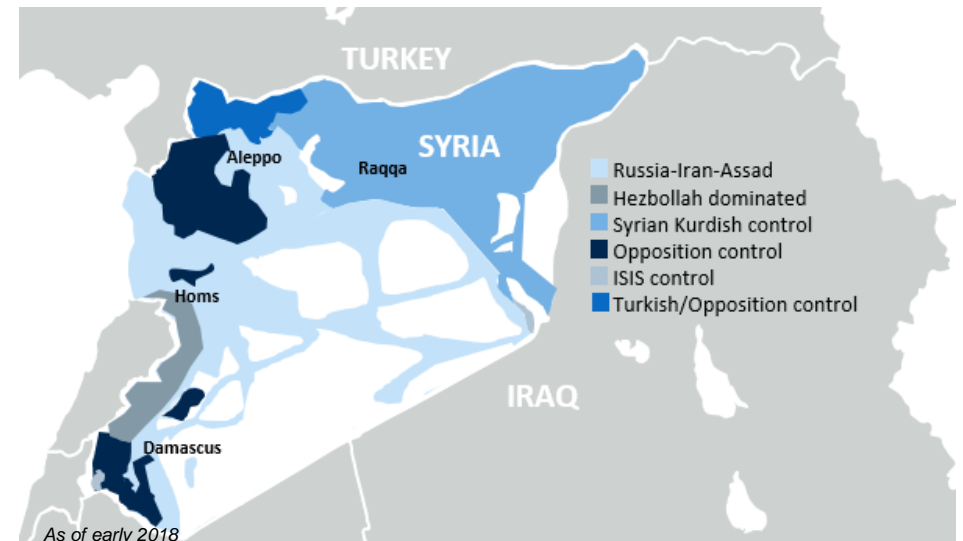
## Yemen represents an increasingly dangerous conflict in the region



## Yemen map with infrastructure



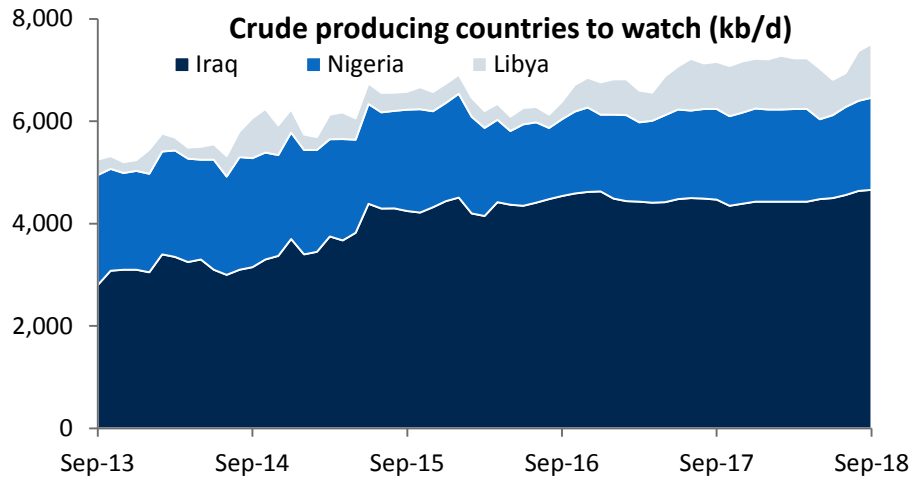
## Syria control map



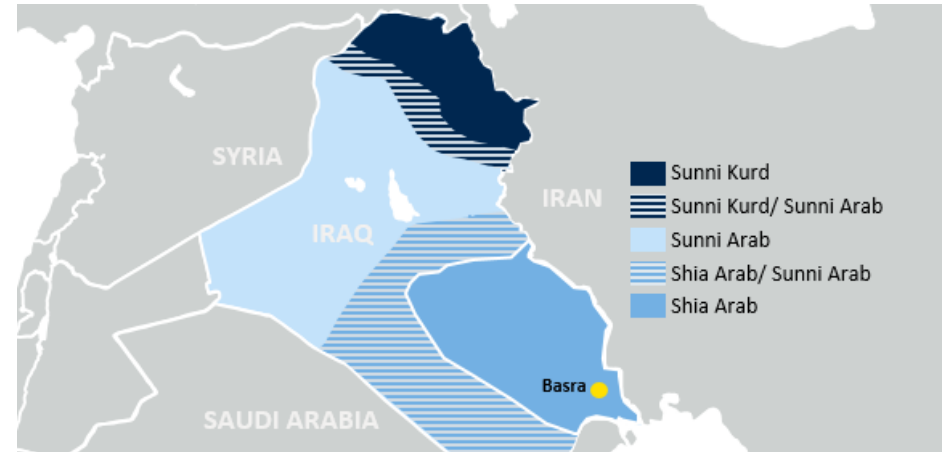
Source: Al Jazeera, ISW, EIA, other news and government sources, RBC Capital Markets

# Iraq, Libya and Nigeria: Risky Business

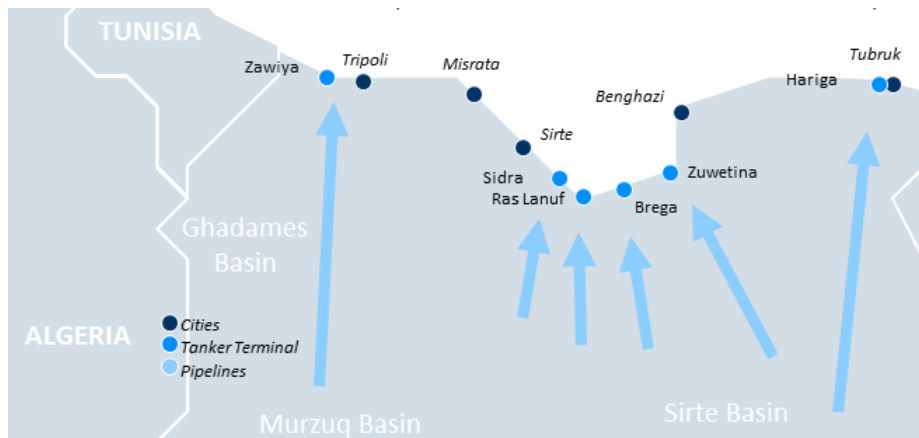
Production has been volatile in numerous areas and remains at risk



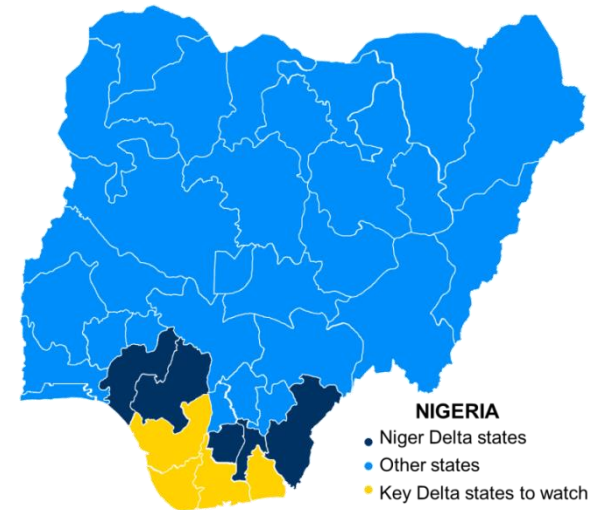
There remain many divisions in Iraq and unrest has emerged



Map of Libyan oil infrastructure



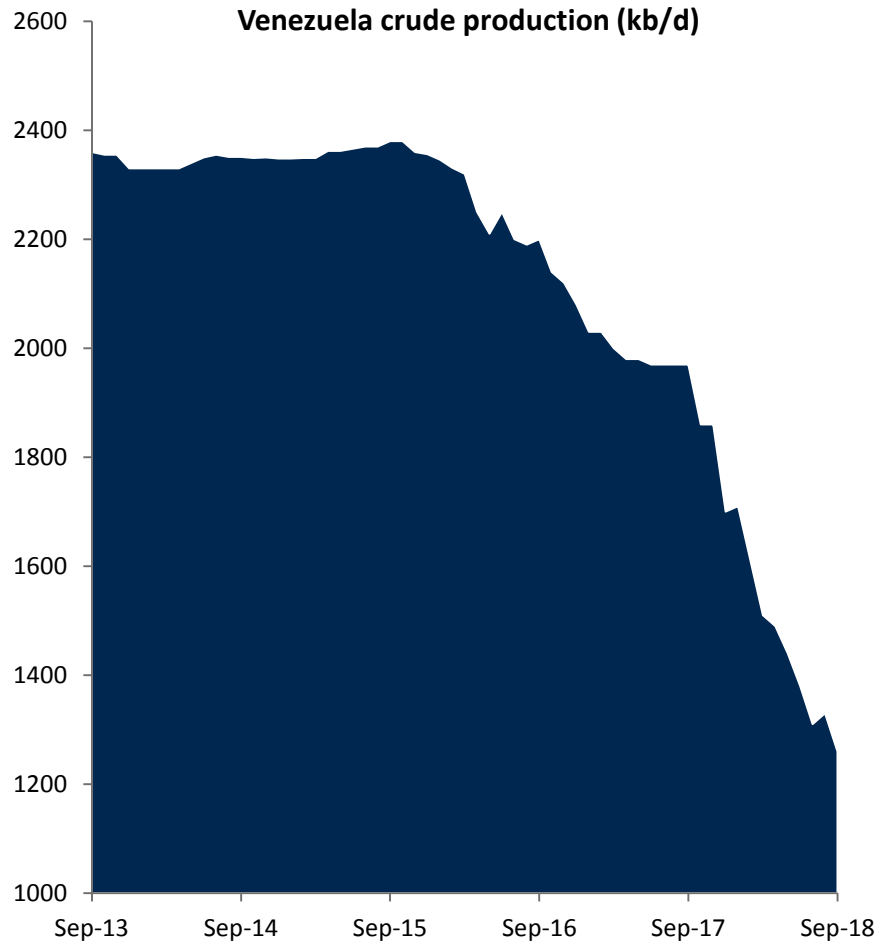
The latest instability is another chapter in a long story in the Niger Delta



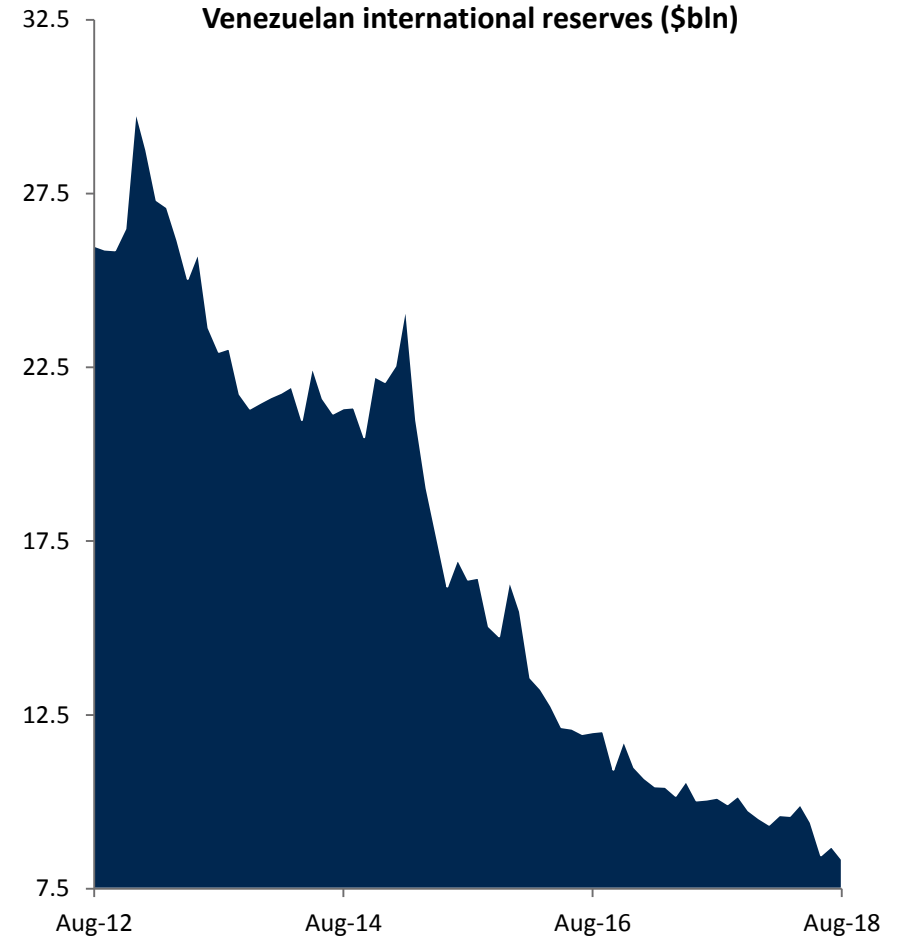
Source: EIA, ISW, Bloomberg, CFR, local Nigerian news sources, rferl.org, country and government news sources, RBC Capital Markets

# Venezuela: One Direction

Oil production continues to falter and losses continue to mount



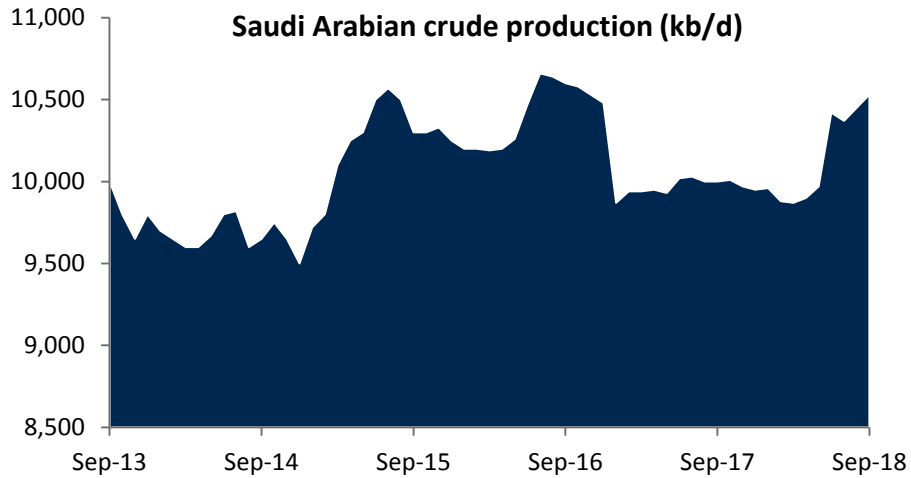
The country's reserves are very low and continue to dwindle



Source: Thomson Reuters Eikon, Bloomberg, RBC Capital Markets

# Saudi Arabia: Crown Prince Mohammad bin Salman Continues His Quest to Remake the Kingdom

## Saudi Arabian crude production is already elevated



## Proposed reforms are ambitious but not necessarily unprecedented



## There has been an unprecedented consolidation of power under MBS

**Mohammad bin Salman (top)**  
Crown Prince



**Khalid Al-Falih (right)**  
Minister of Energy, Industry and Mineral Resources

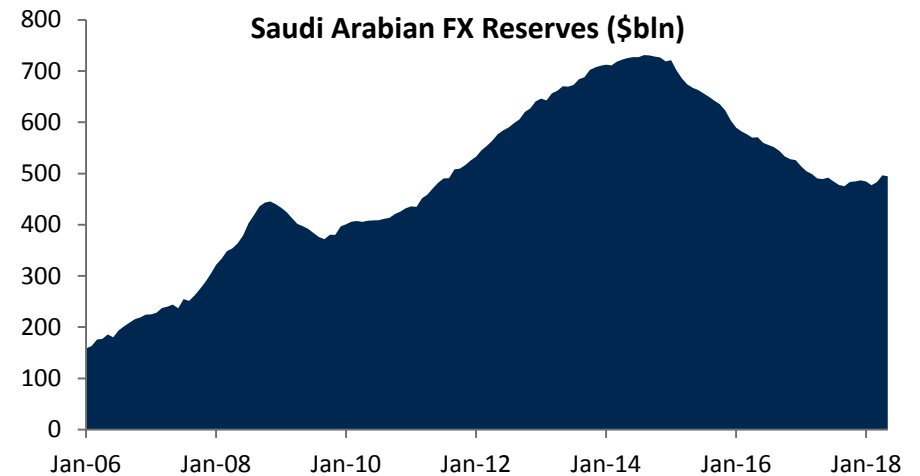


**King Salman (left)**  
King of Saudi Arabia



**Muhammad bin Nayef (bottom)**  
Former Crown Prince (until June 2017)

## Foreign Exchange Reserves



Source: Wikimedia Commons (pictures), Bloomberg, country and government sources, RBC Capital Markets



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