

INTELLIGENCE REPORT

# How Venezuela's Economic and Political Distress Impact the Oil Sector

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## SUMMARY

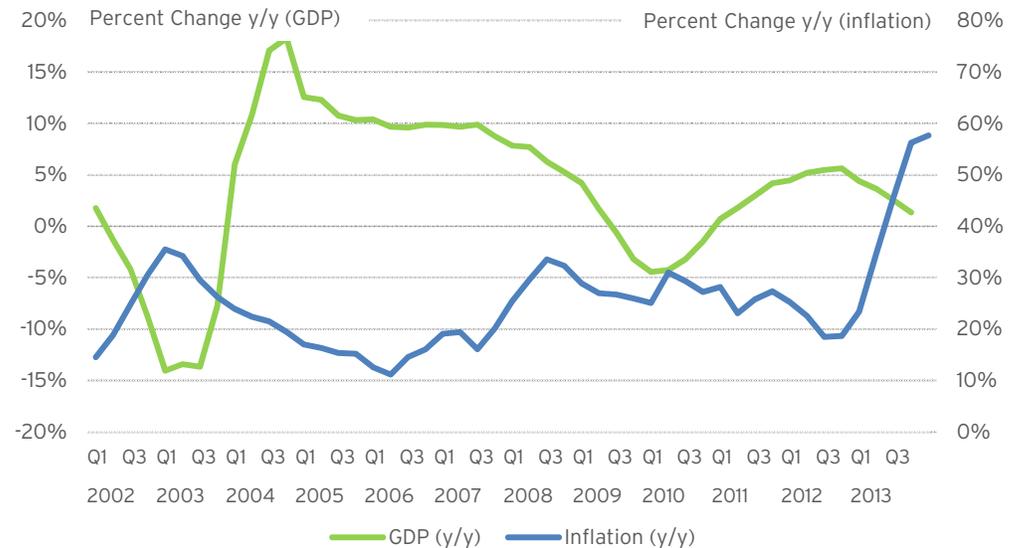
- Venezuela's economic and political deterioration will continue to have important implications for the country's oil industry.
  - As of 2013, U.S. oil imports from Venezuela accounted for 8 percent of total U.S. imports, making Venezuela the fourth-largest U.S. supplier.
  - This report employs three scenarios to examine Venezuela's potential oil production given future economic and political developments. The upside scenario assumes an eventual transition to a more business-friendly government, driving oil production above 2.5 mbd by the end of the decade. The downside scenario postulates continuing policies that would deepen economic restrictions and result in output falling to approximately 2 mbd in 2020.
  - A destabilizing political event that results in a disruption to Venezuelan oil production this year would come at an inopportune time for the global oil market as OPEC spare capacity is "borderline comfortable" (3.4 mbd). None of the major current outages (mostly in the Middle East and Africa) appear likely to resolve in 2014.
  - Streamlining the permitting process of new refinery investment could help make the U.S. refining industry more flexible and less reliant on Venezuelan-owned Citgo for the processing of heavy, sour crude.
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## INTRODUCTION

**Venezuela's oil production fell from roughly 3.5 mbd in 2000 to approximately 2.5 mbd in 2011-2013.**

After impressive growth in the mid-2000s, as high and rising global oil prices fueled the domestic economy, Venezuela now faces low growth and very high inflation, with hard currency shortages curbing production across all sectors and import restrictions fueling scarcity. Inefficiency and mismanagement of the state oil company, *Petróleos de Venezuela, S.A. (PDVSA)*, have reduced its ability to invest and have also deterred investment by national and international oil companies. As a result, Venezuela's oil production fell from roughly 3.5 million barrels per day (mbd) in 2000 to approximately 2.5 mbd in 2011-13.

Figure 1: Growth and Inflation Dynamics



Source: RGE

**Venezuela has failed to capitalize on its abundant oil resources.**

Venezuela’s economic and political deterioration has rendered the country unable to maximize its position as the owner of the world’s largest oil reserves and one of the top five suppliers of crude oil and products to the United States. Economic and political vulnerabilities have worsened since Nicolás Maduro became president in early 2013, feeding back into a cycle of falling oil output and economic difficulties.

Chavismo—the strongly leftist political ideology based on the approach of Hugo Chávez, the country’s late president—is still the dominant governing force, with strongholds on key institutions, including PDVSA. However, the 2013 presidential election showed the population politically split into two halves, with Nicolás Maduro—formerly a minister in the Chávez administration—elected by a narrow margin of victory. For its part, the opposition represents a more market-friendly alternative that would open up the economy to foreign investment. However, the opposition is still a highly fractured group that has had significant difficulty in facing Chavismo, particularly in poorer regions of the country, despite the administration’s blunders over the past several years. Despite escalating tensions, the government’s success in the December 2013 local elections limits the possibility of a shift from Chavismo any time soon and suggests that the macro outlooks, as well as the energy outlook, will worsen.

This SAFE/RGE Intelligence Report presents three possible political scenarios for the future of Venezuela. The baseline is a muddle-through scenario that prevents near-term improvements in oil output. Even under the upside scenario of a regime change (10-15 percent probability), oil output would rise only gradually, to 3 mbd by 2020. In a downside scenario of increasing unrest, output would fall further to below 2 mbd over the same period.

Ample U.S. and Canadian oil production has cushioned the impacts the United States has felt from Venezuelan output losses, but Venezuela still accounts for 8 percent of U.S. oil and product imports. Measures to improve the ability of U.S. refiners to use other heavy crudes (shales) would increase resilience to Venezuelan shocks.

**POLITICAL BACKGROUND: STILL MUDDLING THROUGH DESPITE INCREASED POLITICAL PRESSURE**

Venezuela has been governed by the leftist Chavismo movement since the late 1990s in a very convoluted process involving attempted coup d'états and a highly disputed election in April 2013, following President Hugo Chávez's death just a month earlier. The basis of the political ideology is one of alignment with leftist governments, support for (and from) the Cuban regime, ideological objections to free markets, and an anti-corporate posture that has led to a series of nationalizations of domestic and internationally-owned companies.

The 2013 election was the first major Venezuelan political event without Chávez's direct participation since the 1990s, and the result showed a clear split in the electorate. The election was officially called in Maduro's favor, by 50.6 percent to 49.1 percent, but there were allegations of electoral fraud from the opposition.

The influence of the Partido Socialista Unido de Venezuela (PSUV) government over the country's institutions, including the electoral council, remains a major trait of Chavismo. This influence extends to PDVSA, which in practice functions as an extension of the government, particularly following a company restructuring in the early 2000s that included placing political allies as members of the company's board of directors despite disagreement from other management members.

Currently, the political and social outlook is in disarray and is marred by anti-government protests, which have both reflected and deepened the divide between government supporters and opponents. Although mediated dialogues between the government and the opposition have already begun, there is potential for protests to increase political turmoil before the situation is stabilized.

**ECONOMIC AND ENERGY BACKGROUND**

**The economy is highly dependent on the oil sector, which accounts for roughly 95 percent of exports.**

Venezuela's economic model under Chavismo has been defined by very strong government intervention in the economy, including outright nationalizations that have discouraged private-sector investment. The economy is highly dependent on the oil sector, which accounts for roughly 95 percent of exports, more than 40 percent of government revenue and about 12 percent of GDP. Unlike many oil exporting economies, Venezuela has been unable to build up savings in its central bank or in a sovereign fund, which leaves it exposed to declines in domestic oil production or the global price of oil (Figure 2).

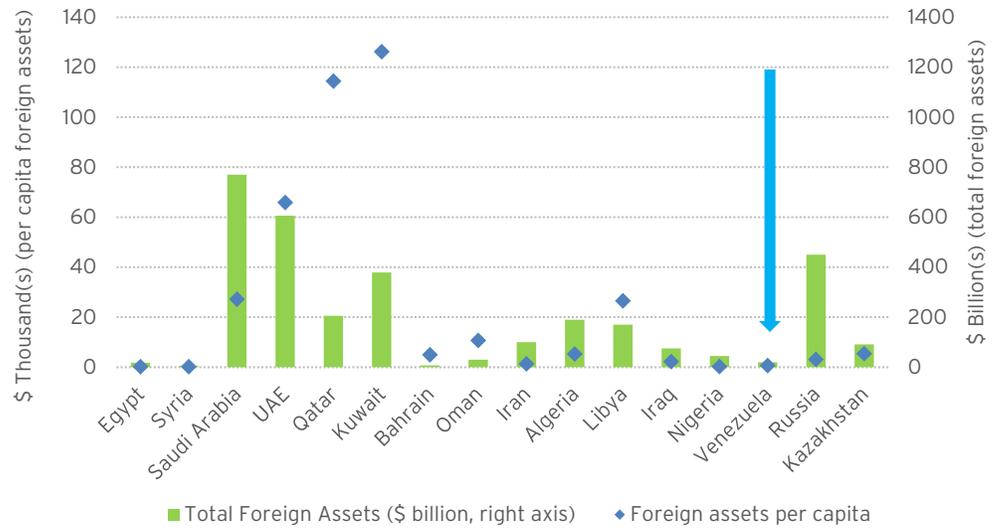
The country's macroeconomic fragilities derive from an economic model that is driven by large fiscal deficits financed by central bank monetary expansion and the growth of external debt. Inflation and currency depreciation pressures are specific outcomes recently reflected in the foreign exchange markets. Venezuela's currency has been overvalued for some time, and another depreciation episode to bring the official and unofficial rates closer together is likely.

**Oil production has declined steadily since 2006 despite Venezuela holding the world's largest oil reserves.**

The use of PDVSA as a cash cow for government social programs has significantly hampered the oil sector, which has correspondingly had fewer resources for investing in new capacity. The EIA estimates that PDVSA has needed to invest more than \$3 billion annually just to maintain production at current declining levels with little investment in heavy oil. For the past decade, Venezuela's oil sector has consistently grown at a slower rate than the non-oil sector. Oil production has declined steadily since 2006 despite Venezuela holding the world's largest oil reserves (297.6 billion barrels of proven reserves, versus 265.9 billion in Saudi Arabia and 173.9 billion in Canada).

The overall macroeconomic and political environments are also not conducive to foreign investment, with net foreign direct investment (FDI) inflows of roughly \$2.5 billion last year. Venezuela's FDI has been underwhelming for the past decade, averaging roughly \$0.5 billion since 2007. Although the country has raised debt financing and received funds from China pre-paying for oil, the lack of equity capital and long-term investment underpins the broader investment picture.

Figure 2: Venezuela Has Failed to Accumulate Foreign Assets



Source: RGE

**Close to 50 percent of PDVSA's yearly oil production is sold below market prices.**

PDVSA management is constrained by government intervention, which led to a hollowing out of its staff, expertise and finances and hindered its ability to invest in new capacity or replace maturing fields. Although it is difficult to pinpoint a precise figure, it is estimated that close to 50 percent of the company's yearly oil production is sold below market prices. The combination of subsidies for the domestic market, loan repayments (in oil) to China, and the politically-driven Petrocaribe initiative (which provides oil at subsidized prices to Caribbean economies) take a major toll on PDVSA's cash flow and its ability to invest in increased production and to fully participate in joint ventures. Moreover, this intervention has kept PDVSA from partnerships that attract the expertise and the new equipment it needs, as all proceeds go toward domestic spending. At the same time, currency controls limit access to needed equipment from countries except China.

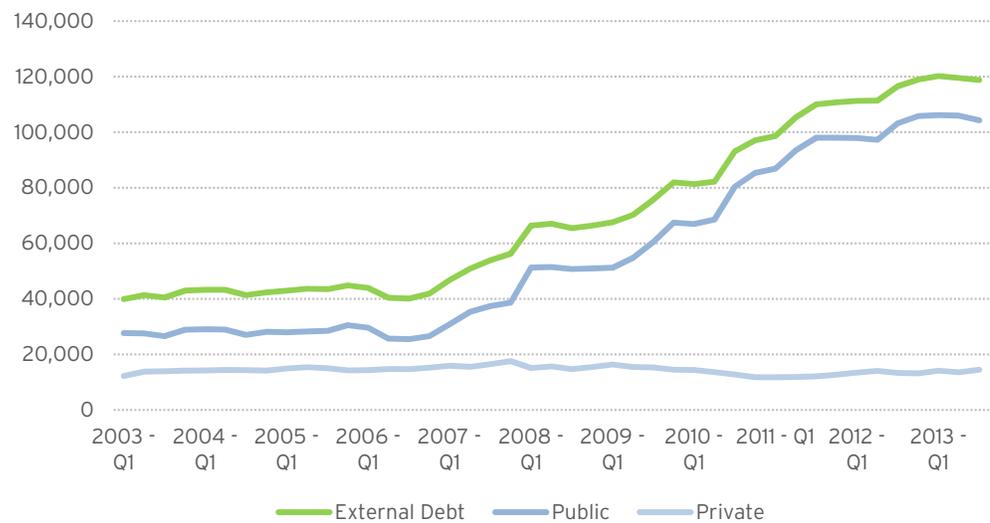
Oil proceeds supply the majority of Venezuela's government revenue, meaning that the country's recent decline in output has widened its fiscal deficit. Given constant output and oil prices, a weaker exchange rate is crucial to support the fiscal accounts as it increases the local-currency value of foreign earnings. Initial estimates suggest that a 10 percent devaluation of the Venezuelan Bolivar (VEF) would lead to an improvement of 1 percentage point of GDP in the fiscal accounts. Therefore, in the absence of a major increase in oil output, oil prices would have to be well above current levels for the government to close its fiscal gap. Assuming revenue is roughly 40 percent of GDP and the fiscal deficit is around 13 percent of GDP (IMF estimates), oil prices would have to rise by more than 25 percent from current levels in order for the budget to be balanced. This would take the Venezuelan oil basket from the current \$96 to more than \$120 (a break-even price corroborated by other estimates).

Investors may be wary of extending credit to Venezuela given its debt burden.

Not only has Venezuela struggled to accumulate foreign currency savings, but its government has an extensive and growing external debt burden. PDVSA itself has a large and growing debt burden that grew to \$43 billion in 2013, up from \$15.5 billion in 2008. The Venezuelan government had more than \$104 billion in external debt as of Q3 2013 (Figure 3). Although Venezuela's external debt is only 25 percent of GDP, it has risen sharply in the last few years, and external debt payments have averaged more than \$8 billion annually.

Additionally, PDVSA inflows (and those of the government) are hurt both by low levels of production and sales below market price. Coupled with sizeable sovereign debt, and given the current political situation in Venezuela, investors may be wary of extending credit to Venezuela to refinance these loans even at their current elevated yields. At present, the government prefers to muddle through and pay its interest to keep rolling over its debt, while its domestic arrears grow. Our baseline suggests that the government will continue to do so in the near future, but this will hinder its ability to invest in the energy sector.

Figure 3: Venezuela Public Sector Leading Rise of External Debt Stock

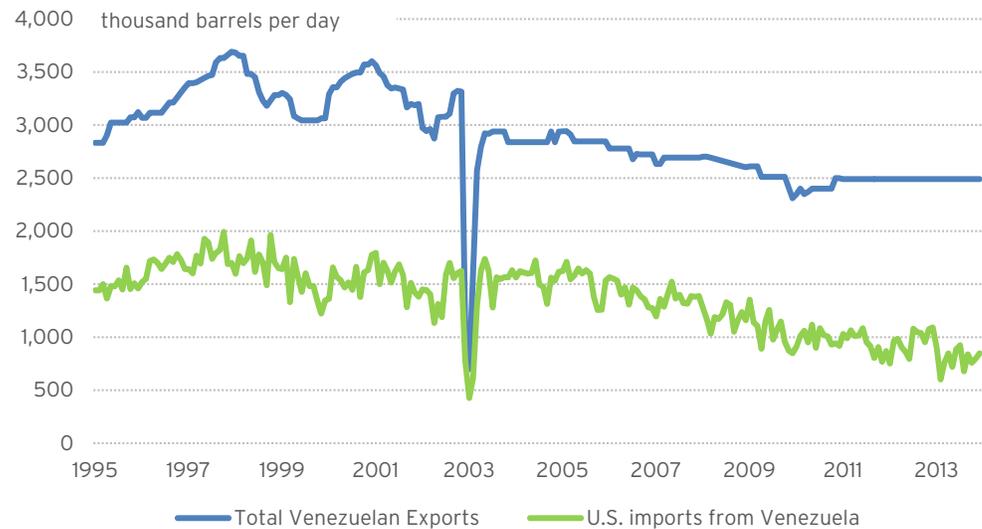


Source: Bloomberg

Venezuela lacks access to the latest state-of-the-art techniques to extract the heavy crude oil that dominates its reserves.

In addition to financial shortages and balance sheet problems, Venezuela lacks access to the latest state-of-the-art techniques to extract the heavy crude oil that dominates its reserves. Although PDVSA received funding from China during the global financial crisis, Chinese companies still lack access to some of the advanced extraction techniques developed in the United States and Canada, which may be capable of unlocking this crude.

Figure 4: Underinvestment and Mismanagement of PDVSA Leading to Falling Production and U.S. Exports



Source: RGE

**POLITICAL SCENARIOS DRIVE OIL PRODUCTION OUTCOMES**

Both the timing of and the political and social circumstances surrounding an eventual transition from the current administration to an opposition government in Venezuela are highly unpredictable. Legally, a referendum could be called in 2016 (mid-way through the current six-year presidential term) to allow for a new presidential election. However, such a transition, if it happens at all, is at best unlikely to be smooth.

As the government and PDVSA loosen some restrictions, there may be better investment opportunities.

The future shape of Venezuelan politics will have an outsized impact on scenarios for oil production. Although the political environment has proven to be very challenging to private investors, the increasing need for a pick-up in oil output and the country’s inability to invest by itself are signs that, as the government and PDVSA loosen some of the restrictions on operations and terms as a way of attracting investment, there may be better investment terms for companies in the future. We present three scenarios, which hinge on the political transition and willingness of the government to implement reforms to attract investment.

**THE BASE-CASE SCENARIO: CONTINUED STAGNATION AND GRADUAL OUTPUT DECLINE (60 PERCENT PROBABILITY)**

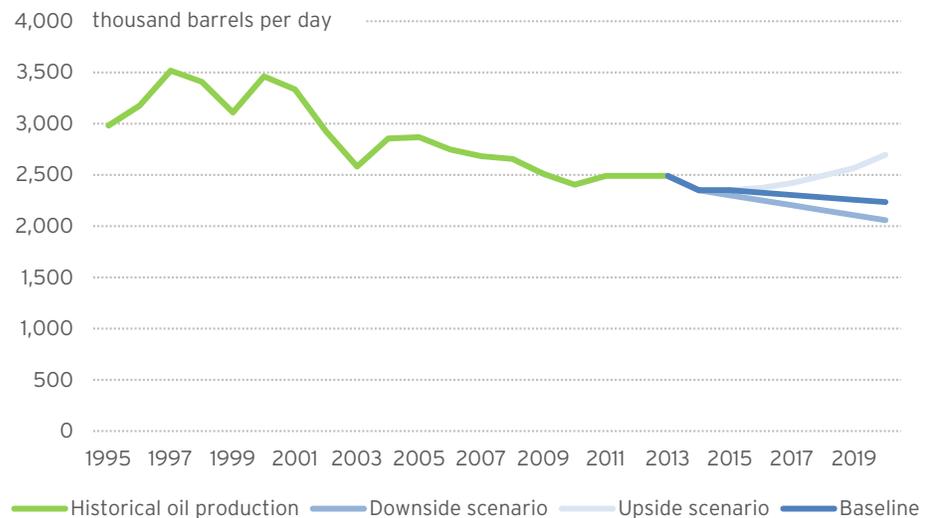
The base-case scenario would imply deterioration from current conditions, as government officials rely on a weaker exchange rate and short-term measures to stabilize growth. These measures could help local producers and result in some reduction of social pressures in the short term, while also avoiding default on foreign debt. This pragmatism would reduce the clashes between opposition and government, and allow some modest opening up of the oil sector to international investors, as PDVSA is unable to carry on with projects under current conditions. These marginal adjustments would not, however, alter the very high inflation and low-growth environment or lead to a meaningful increase in investment. Rather, they would

constitute only a moderate easing of the operating environment and improved access to capital goods imports.

**THE UPSIDE SCENARIO: REGIME CHANGE OPENS THE MARKET (10-15 PERCENT PROBABILITY)**

The upside scenario for Venezuela would include a relatively smooth institutional transition from a Chavismo administration to a more market and business-friendly government in the next few years, be it through a referendum in 2016 or some other event. This new government would recognize the importance of attracting and retaining investment to unlock oil output and generate revenue. The probability of this scenario taking place in the next five years is low, given the current government's stronghold on local institutions and a still-solid support base among poorer segments of society. The economic transition period would be painful as the necessary adjustments come with costs for economic activity. Therefore, we would expect a new, more market-friendly government to prioritize attracting energy investment, given its power in contributing to government revenues and economic growth, with the aim of pushing Venezuelan production back above 2.6 mbd by the end of the decade.

Figure 5: Venezuelan Oil Production in Our Cases



Source: RGE

**THE DOWNSIDE SCENARIO: DEFENSIVE POLICIES PRECIPITATE OUTPUT LOSSES (25-30 PERCENT PROBABILITY)**

Unfortunately, a scenario in which the government responds to slowing growth through further Chavismo and entrenchment appears more likely than the upside scenario. In such a downside scenario, the government would refuse to make adjustments, but rather choose to deepen restrictions on business and investment, further worsening the environment of low economic growth, high inflation, low productivity and social unrest. This in turn would increase the likelihood of a full-blown economic crisis, leading to Venezuela defaulting on its sovereign debt. In this scenario, even some of the Asian national oil companies might choose to withdraw their partnerships, or at least delay planned investments. There are different degrees of this downside scenario, and the government might take marginal steps to relieve social tensions

and to open the energy sector in order to raise funds. However, these marginal adjustments would not alter the very high inflation and low-growth environment unless the government seeks deeper, more structural changes, which could come with a high political cost (and ultimately result in the upside scenario). In this downside scenario, we would expect oil production to decline more precipitously than in the base-case and take longer for any eventual improvements.

#### POLICY IMPLICATIONS

##### The United States faces two main sources of vulnerability relating to refinery supply chains and bottlenecks.

While the United States imports much lower volumes of Venezuelan oil than it did a decade ago (as a result of both rising domestic production and substitution of Venezuelan oil with oil from other countries), Venezuela remains the fourth-largest source of U.S. oil imports, accounting for 8 percent of the total in 2013, slightly behind Mexico. Globally, the share of Venezuelan crude, in terms of total crude, has declined slightly since 2005. Over the long term, the United States faces two main sources of vulnerability relating to refinery supply chains and bottlenecks.

First, the U.S. tight oil boom helped to reduce light-sweet crude imports significantly, leaving heavier-sour crudes, including Venezuela's, as a much larger share of the import basket. Refiners have begun to utilize the sour Saudi and Canadian crudes as alternatives to Venezuelan crude to some extent, but they are not identical replacements.

Second, the majority of this oil goes to refineries owned by Citgo, a wholly-owned subsidiary of PDVSA. Some of these refineries are optimal for processing Venezuelan heavy, sour crude and might struggle to process crude from other sources. Some are already well equipped to utilize Canadian heavy crude and have been benefiting from the price discounts, particularly in the Midwest; however, greater flexibility would add resilience to the U.S. energy system. Policymakers may wish to consider whether opportunities exist to streamline the permitting process of new refinery investments (both greenfield refineries and equipment upgrades at existing refineries) to make the U.S. refining industry more flexible.

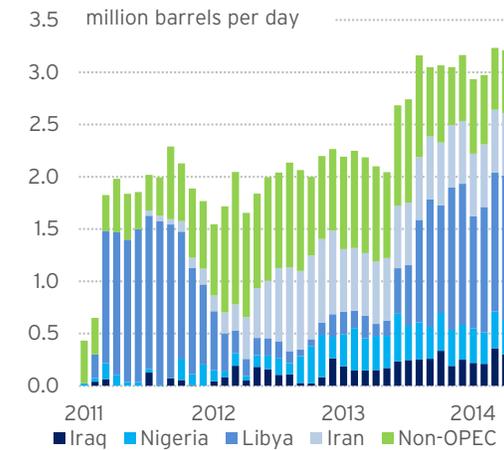
##### There is precedent for supply disruptions in Venezuela.

While our scenario analysis has not indicated a high likelihood of a more dramatic loss of Venezuelan oil production, it should be noted that any sudden loss of crude production from Venezuela would present broader, more significant economic risks to the United States and global economies. There is precedent in Venezuela for an abrupt production decline. In 2002, Venezuela lost 3 mbd of production following a workers' strike. This disruption resulted in increased global oil prices and, according to the Energy Information Agency, impacted the United States more than other countries as the nation struggled to replace the significant amount of oil it imported from Venezuela. Protests this year against the Maduro government have heightened fears of a similar disruption taking place.

While Venezuela's recent gradual output decline has coincided with a period of increased non-OPEC oil supplies, markets may have limited flexibility to absorb a larger, more unexpected loss. For one thing, global oil supply outages have reached unprecedented levels for much of the past year. As of April, total outages exceeded 3 mbd, with the vast majority from within OPEC. While the market has managed to absorb these losses with surprisingly limited volatility, OPEC spare capacity remains on the borderline of comfortable at just more than 3.4 mbd according to the International Energy Agency (IEA). None of the major current outages appear likely to be resolved in 2014, with violence in Libya escalating, smuggling increasing in Nigeria, and negotiations over Iran's nuclear program at a near standstill.

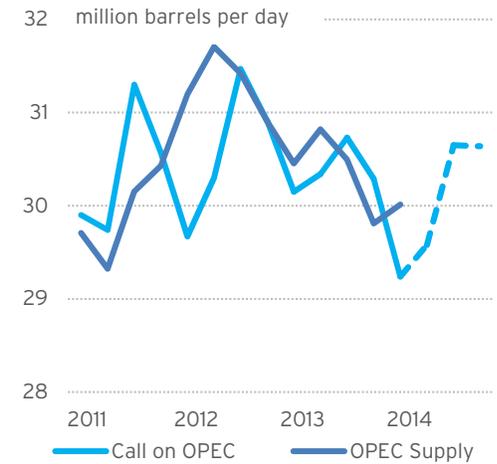
Any further loss of Venezuelan oil supplies in the second half of 2014 would therefore come at an inopportune time for the market. Based on current IEA data, the call on OPEC crude will reach 30.6 mbd in H2 2014, slightly higher than the level in 2013 and a full 1.2 mbd increase from H1 2014. OPEC (Saudi Arabia) certainly has the capacity to meet this requirement currently, but a further loss of capacity in Venezuela would sharply alter that calculus, leading to significant oil price increases. Moreover, it would put significant pressure on Saudi Arabia, which holds the bulk of this spare capacity.

Figure 6: Global Oil Supply Outages



Source: SAFE analysis based on data from DOE, EIA

Figure 7: OPEC Crude-Call versus Supply



Source: SAFE analysis based on data from IEA

**Growing tensions with Russia could also play a role in Venezuela.**

Finally, Venezuela stands out as the only major Latin American economy with a real risk of continued, and potentially more extreme, economic nationalism, with attendant political risk. Growing tensions with Russia could also complicate the United States' response to Venezuela as Russia's new defensive posturing and military spending have extended outreach to Central America and Venezuela. We do not think that this will change the general political and economic course of the region, but it could give Maduro and others more leeway to muddle through and avoid the need to make real improvements.