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The reintegration of Iran into the world economy will impact financial and product markets. The effects will be gradual and fraught with uncertainty, but the experience of other countries emerging from sanctions suggests a rapid and lasting increase in economic activity. Most obviously, this will be immediately visible in energy markets and geopolitical risk perceptions. Yet secondary effects will be significant, with boosts to select trading partners as well as sector-specific exporters who will benefit from greater access to a \$500+ billion economy with heightened consumption and investment catch-up needs.

Iran's Economic Potential Is Equal to a G-20 Economy

Nearly 80 million Iranians are eagerly awaiting the lifting of economic sanctions. Much of the rest of the world is preparing to serve and partner with them in order to exploit the opportunities of a country well-endowed with natural resources and relatively high human capital stock. Under normal circumstances, Iran would be a G-20 economy, but sanctions have constrained its nominal GDP close to \$400 billion in 2014, roughly the size of the UAE or Austria. However, prior to the sanctions, the economy was about 25% larger in nominal terms. Even today, at least in purchasing power parity, the country currently ranks as the 18th largest in the world, just behind Turkey. In other words, if sanctions relief is granted and the exchange rate appreciates and stabilizes, one could expect the economy to exceed \$500 billion by year-end 2017.

Iran is best known for its natural resources. Its hydrocarbon wealth is indeed enormous, while its considerable mineral deposits are less well known. Figure 1, which lists Iran's major reserves, illustrates the potential:

Figure 1: Size and Rank of Iran's Main Natural Resources

Resource	Reserve Size	Global Rank
Crude Oil	158 billion barrels	4th
Natural Gas	34 billion cubic metres	2nd
Zinc	200 million tonnes*	1st
Copper	32 million tonnes	2nd
Iron	2.5 billion tonnes	9th

Source: US Energy Information Administration International Energy Statistics; US Geological Survey Mineral Commodity Surveys; Ghorbani, Mansour, Economic Geology of Iran: Mineral Deposits and Natural Resources; *joint reserve measurement of zinc-lead ore deposits.

Hydrocarbons constitute the bulk of exports (historically about 80%), with petrochemicals and minerals constituting a large share of the remainder. Yet exports understate the diversity of Iran's economy as oil and gas only account for about a third of GDP (pre-sanctions average) with the rest consisting of a sizable industrial base, agricultural sector and services industry that are mainly domestically oriented. In addition, human development levels are fairly advanced, with Iran ranking 75th (out of 187) in the 2014 UN Human Development index and classified as 'high'.¹ All of this makes Iran potentially very attractive to foreign investment across all sectors: a country with ample sources of foreign earnings; a diversified economy; a sophisticated population; and all with great pent-up investment and consumption needs.

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Experience of Other Countries Suggests Impact of Removing Sanctions Will Be Significant

There are plenty of reasons to doubt Iran's ability to attract investment and expand economic relations. First of all, Iran faces a sanctions 'eco-system' that is highly complex and diverse. Moreover, the agreement on its nuclear programme will only lead to the removal of part of the sanctions regime. The economically most damaging sanctions were only imposed in recent years and mainly draw on European sanctions and the tacit cooperation of large Asian countries. During 2011-2012, the EU decided to prohibit insurance and reinsurance of Iranian products or entities; ban Iranian oil, petrochemicals and natural gas imports; and disconnect Iran from the international payment system SWIFT. In addition to the EU import ban, the US convinced Asian allies to lower Iranian oil imports. The payments on the remainder of oil imports from Iran were deposited in a USD escrow account outside of Iran, effectively out of reach for Iran since the second half of 2012. The effects were as expected, with oil income dropping by about half and pushing the country into a two-year recession where real GDP contracted nearly 9% in 2012-2013. While the situation has stabilized, a reversal of the sanctions could deliver average real GDP growth of 5-6% annually in the medium term.

Figure 2 shows the severity and reversibility of the main sanctions. The troubles stemming from EU sanctions are the easiest to be reversed, as are the nuclear-related ones from the UN. However, there will remain uncertainty over US sanctions as these pertain to tensions beyond the nuclear issue.

Figure 2: Main Sanctions and Expected Durability

Originator	Туре	Expected Status 2016
US	Ban on US exports and US investment inside Iran (except commercial aviation)	In place
	Designation of Iranian entities as terrorist organizations and thus prohibiting any third-country business from cooperating with them	In place
	Penalties for non-US companies investing >\$20m in oil sector	Unclear
	Designation of Iranian financial sector as 'money laundering'	Unclear
	Penalties for non-US companies for providing finance for Iranian counterparties in non-oil sector	Unclear
	USD oil revenue placed in escrow account	Reversed
	Ban on third parties conducting business in Iranian rials	Reversed
UN	Allows all states to monitor and prevent financing and transport of nuclear-related activities	Reversed
EU	Ban on insurance/reinsurance of Iranian entities	Reversed
	Ban on Iranian oil, natural gas and petrochemical imports	Reversed
	Ban on finance and insurance of Iranian oil exports	Reversed
	Expulsion from SWIFT payment system	Reversed

Source: Belfer Center, Sanctions Against Iran, April 2015 and State Street Global Advisors (SSGA) analysis. This figure intentionally omits sanctions not deemed economically significant.

Their continued presence will not only prevent meaningful engagement with the world's largest economy, but also have a high deterrent effect on third-country businesses to expand their Iran exposure.

The most obvious concern will be for new investors in Iran's oil industry, given that local partnerships will be necessary. The wide web of para-statal organizations and cross-ownership of Iranian entities means that there will be much ambiguity over what activity may still breach US sanctions. In plain English, the Revolutionary Guards and other organizations classified as terrorist by the US hold large business interests that would deter foreign involvement.

In addition, larger corporations in Europe and Asia will continue to weigh up the reputational risks of entering the Iranian market. And once foreign businesses overcome these concerns, a closer look at domestic political risk and the weak rule of law could further shrink the list of potential investors. All these factors should slow future investment flows and could increase the reliance on intermediaries as entry points into Iran.

Nevertheless, the experience of other countries emerging from sanctions suggests the process will be quicker and greater than widely assumed. While the specific context of each country's isolation was idiosyncratic, we have compared the exit from a sanctions regime and its economic impact on South Africa (1992-1993), Yugoslavia (2001 onwards in today's Serbia and Montenegro), Libya (2004) and Myanmar (2011-2012). In each case, the economic performance was significantly higher than in the prior period, confirming the expectation that sanctions relief delivers a massive economic stimulus.

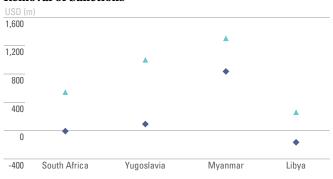
Figure 3: Real GDP Growth in the Three Years Before and After the Removal of Sanctions.



Source: National Central Banks; SSGA analysis. Yugoslavia's prior performance is particularly weak due to the inclusion of 1999 (NATO bombing campaign) which triggered a big recession.

The findings are the same for foreign direct investment (FDI). Figure 3 shows clearly that there is a 'rush' shortly after sanctions relief is granted. This is partially due to projects that are ready to begin but been stalled due to the imposition of sanctions as well as the lead-up time for sanctions relief, i.e. the period from which political signals indicate forthcoming removal of sanctions.

Figure 4: Net FDI in the Three Years Before and After the Removal of Sanctions



◆ Average 3 Years Prior ▲ Average 3 Years After

Source: UNCTAD; World Bank. Myanmar and Libya figures are scaled to USD 10m.

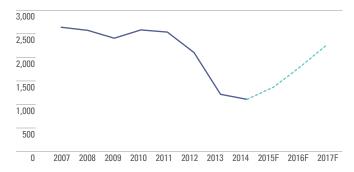
Moreover, in each case listed above (South Africa, Yugoslavia, Libya and Myanmar), the governments made active policy changes to accommodate the demands of the international community, partially with a motivation to attract foreign investment. Consequently, one can conclude that governments follow up with investor-friendly measures in the years after sanctions removal. This would presumably apply to Iran, too. The current government under President Rouhani has repeatedly highlighted the country's need for foreign investment and foreign know-how. The high political cost of the nuclear deal suggests the Rouhani administration could be expected to exert the maximum effort in a post-sanctions environment, albeit constrained by Iran's political system. Although the sample is small, Libya's dramatic turn from a net donor to net recipient of FDI could imply that for energy producers, the effect would be amplified given the front-loaded capital-intensive nature of energy investments.

Post-Nuclear Deal: Step-by-Step

→ Step 1: Oil Out

Even though sanctions relief will not be instant, one can expect two major changes to occur during the first six months, i.e. by early 2016. One of the changes will be Iran's ability to increase oil exports. The gradual sanctions removal and technical degradation of oil fields will mean a U-style (in contrast to a V-style) recovery for oil exports, so pre-sanctions levels may not be reached until 2018 at the earliest. Nonetheless, for oil markets, the return of close to one million barrels per day, over two-to-three years, should exert downward pressure on oil prices.

Figure 5: Iran's Crude Oil Exports, 2007-2017Million Barrels per day



Source: OPEC Annual Statistical Bulletin for historical years. State Street Global Advisors' forecasts for future years. This figure refers exclusively to crude oil, not condensates into which some crude oil was converted in 2013-2014.

In particular, oil prices are likely to experience more volatility as Iranian production is sporadically spiked up for political purposes. The Iranian government would be eager to send signals both to markets and other oil producers that it is 'back in the game'. It would presumably also want to show domestic audiences that the oil industry is under good control, as much as generating the maximum amount of revenue as possible in a short time frame. This could be especially pronounced in the run-up to the parliamentary elections in March 2016.

In parallel, the government could be expected to go to great lengths to lure back international oil companies. It is planning a large conference in late 2015 in London to present new contractual terms, possibly even arrangements similar to production sharing. These are certain to be more enticing than the previous buyback model that limited upside potential for international companies. The most immediate effect of improved contractual terms may actually not be on Iranian oilfields, but on the bargaining power of other oil-producing states seeking international involvement. Furthermore, given that the production costs in new Iranian oilfields could be as low as USD 10 per barrel, this could draw attention away from more complex explorations, e.g. deep water. In this sense, Iran's return to the oil markets is likely not only to affect short-term market pricing, but also longer-term contracting as this will be fundamentally different from the pre-sanctions environment.

Similarly, Iran has very limited success in attracting FDI in its hydrocarbon sector. During the ten-year period before the imposition of sanctions, FDI averaged \$3.2 billion annually, without ever exceeding \$4.3 billion during any single year. Residual political risk will naturally constrain FDI even in the medium term, but a three- or four-fold increase in FDI by 2018 is a conservative assumption.

→ Step 2: Cash In

One of the key US sanctions forced other countries (China, Japan, Turkey, Taiwan, Korea and India) to deposit oil payments for Iran in designated escrow accounts from which Iran could only purchase select humanitarian goods. The result is that an estimated \$100 billion in cash would become available to Iran over a short period in 2016.

Figure 6: Main Sanctions and Expected Durability

Description of Asset	Owner	Accessibility in 2016	Estimated amount (\$ billion)
Foreign reserves in international banks	Central Bank	Full	\$23
Indian oil receipts – residual balance	Government	Full	\$7
Interbank deposits abroad	Banks	Full	\$15
Private deposits in international banks	Household & Corporate	Full	\$10
Sale of floating oil storage (Iranian Government)	Government	Full	\$2.5
Chinese bank accounts: collateral for Chinese financing of Iranian projects	Government	Partial	\$22
Hard currency funds allocated to petroleum sector projects	Central Bank	Partial	\$25
TOTAL (\$ billion)			\$105

Source: Khajehpour, Bijan. "Will Iran Get Its Billions Back?", Al-Monitor, 29 July 2015 and State Street Global Advisors' estimates.

Even quicker, Iran would have the immediate ability to sell the estimated 40 million barrels of oil in floating storage, equivalent to roughly \$2-2.5 billion.³

The question is how this additional money is likely to be allocated. A portion will certainly be segregated to support central bank foreign reserves and perhaps to support recapitalization of the banking sector. The political calendar inside Iran could lead directly to higher government expenditures that should fuel a jump in import demand across multiple sectors, but especially in machinery, light industrials and consumer goods. Once investment in the oil sector proceeds, there should be a sustained rise in imports of capital goods, particularly heavy machinery, in the years after 2017. Until then, basic assumptions would estimate an additional \$70 billion in import growth by year-end 2017, of which roughly half would be input goods for petrochemical, automotive and other industrial sectors.⁴

Import growth would presumably not be symmetrical to Iran's current import profile, but would be more likely to lead to trade reorientation, with the biggest beneficiaries being European exporters, particularly Germany and Italy. For those two countries alone, the Iranian opening could translate into additional exports worth \$10-12 billion in the coming two years. From Germany, demand would rise for machinery, pharmaceuticals, chemical and light industrial products while imports of Italian consumer and automotive goods are likely to grow.

Finally, there is the question of whether the large capital outflows of the sanctions years will return in a post-sanctions era. In the four years before the imposition of harsher sanctions (2006-2010), Iran generated average capital outflows worth \$21.5 billion annually, a figure that jumped to \$35.3 billion in 2010-2014.5 Presumably, these were concentrated flows toward safe-haven assets abroad, including real estate and precious metals in neighbouring countries. A full-fledged normalization process would help attract some of these assets back, but probably over a longer time horizon.

→ Step 3: Geopolitics: Not A Global Problem, But A Regional Nuisance

Iran's role in the international political system exacerbated geopolitical risk on three levels. First, as a revisionist power, Iran stood in direct conflict with the existing superpower, the US. In this regard, the resolution of the nuclear issue removes significant tail risks, namely the chance of military action by the US or Israel against Iran. This can only be regarded as positive.

The second level regards great power competition. Iran is generally supportive of Russian and Chinese efforts to reform the US-led global system. However, nuclear non-proliferation has traditionally been one area of agreement between the US, Russia and China. In other words, Iran's nuclear ambitions limited potential cooperation with other great powers. In the future, there would be no such limits and Russia as well as China could actively seek to draw Iran into their geopolitical orbit. Therefore, the nuclear deal could promote more global tensions as Iran is poised to cooperate more closely with Russia and China, such as joining the Shanghai Cooperation Organization.

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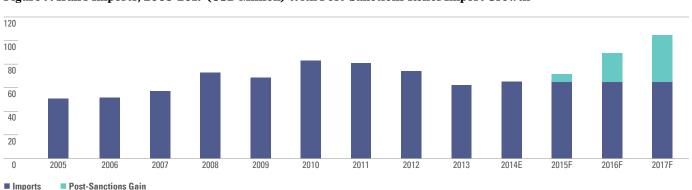


Figure 7: Iran's Imports, 2005-2017 (USD Million) With Post-Sanctions Relief Import Growth

Source: WTO and Central Bank of Iran for historical years. SSGA forecasts for 2014 and future years.

On the other hand, the availability of Iranian oil and gas will generate more competition for Russia in the European and Asian energy market. The removal of sanctions would also lay out a political template for Russian sanctions relief, two reasons to help support a rapprochement between Moscow and the West. In all, the nuclear deal is unlikely to greatly alter geopolitical risk on a global level.

The third and final level of risk relates to Iran's ambition as a regional power in the oil-rich Middle East. The nuclear agreement is unlikely to lessen Iran's contribution to instability there given that its power objectives remain intact. On the contrary, its resources will grow due to sanctions relief so its ability to provoke conflict will grow too. This could be reinforced by tensions inside Iran between hardliners and reformists. Reformers in the Rouhani administration will build on the deal to pursue accommodation with the international community at large, especially with European and Asian trading partners, and will ensure compliance with the specific obligations set out in the nuclear agreement. In exchange, they will permit hardliners and elements from Iran's security apparatus to enhance Iranian influence in strategic areas mainly in Syria, Iraq, Lebanon, Yemen and the Arab-Israeli arena. It is also likely to trigger a response from Iran's regional adversaries. In the short term, this can only be more destabilizing. But in the longer term, if Iran's role could be accommodated in a regional system, a stable equilibrium of power between Sunni states and Iran could emerge.

In closing, the greatest political implication of the nuclear deal is that it is likely to be in force during the next pivotal event in Iran's history: the death and replacement of Ayatollah Khamenei. Iran's political and economic situation at that time will be a function of the nuclear deal today — and Khamenei's successor will have great influence on the trajectory of all three levels outlined above.

Figure 8: Geopolitical - Risk Short-Term Impact Forecast

Geopolitical Risk Type	Short-Term Effect ↑↑	
US/Israel Military Action in Iran		
Russia-West Standoff	^	
US-China Competition	V	
Yemen	V	
Syria	VV	
Iraqi Conflict	$\downarrow \downarrow$	
Palestine/Lebanon/Israel Violence	VV	

Source: SSGA. \uparrow denotes improvement and risk reduction (\uparrow = slight improvement; $\uparrow \uparrow$ = significant improvement). \checkmark denotes worsening (\checkmark = slight worsening; $\checkmark \checkmark$ = significant worsening).

Conclusion: Long-Term Impact Could Be Immense if there is Full Normalization

While the economic impact of the nuclear deal will be noticeable in the short term, the main barrier to Iran's full reintegration in the longer term remains political. If the current deal marks the beginning of a greater strategic realignment between Iran and the West, there could be greater economic and financial implications. The unhindered development of Iran's oil and gas sector would dislocate the global industry as the country could become the world's largest gas producer and the third-largest oil producer within 10-20 years. Iran would not only attract significantly greater capital in the form of direct investment and portfolio flows, but would also become a major source of capital and possibly evolve into the commercial hub of its region.

- ¹ UN Human Development Index 2014.
- ² Central Bank of Iran
- ³ Barclays, Iran Primer: The Long Road Ahead, Barclays Research, 3 July 2015
- ⁴ The assumptions would be trend GDP growth returns above 5% with slightly lower import growth rate compared to historical trend; half of historical import/GDP rate applies to one-time release of unfrozen funds.
- ⁵ Central Bank of Iran, figures reported according to Iranian calendar, i.e. April-March cycles (e.g. 2006= April 2006-March 2007).

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