In our Sept. 14 Global Insights, “Europe's Energy Crisis,” we argued that the continent’s overreliance on a handful of exporters left it vulnerable to supply shocks. Amid the threat of a potential economic crisis, Iran’s oil reserves offer Europe a way to diversify its energy exposure away from its current natural gas suppliers. However, the reimposition of US secondary sanctions following US withdrawal from the Joint Comprehensive Plan of Action (JCPOA) make Iran an unreliable source of oil and natural gas—despite having the world’s fourth biggest oil reserves and second largest natural gas reserves.

Hopes that diplomats can revive the JCPOA—also known as the nuclear deal—are fading. However, if secondary sanctions on Iran were lifted, Iranian oil and natural gas could enter the market and help European businesses and households cope with rising energy costs.

This edition of Global Insights explores the Iran nuclear deal.
Hopes of reviving the Joint Comprehensive Plan of Action are fading fast. Commonly known as the Iran nuclear deal, the JCPOA previously went into effect Jan. 16, 2016. The deal had two key components. First, Iran agreed to limit its civilian nuclear enrichment program. Second, it allowed the International Atomic Energy Agency (IAEA) to monitor and inspect its nuclear facilities. In return, Iran would receive relief from economic and financial sanctions.

For Iranian lawmakers, the stakes are high. According to the Council on Foreign Relations, economic and financial sanctions cost Iran’s economy $100 billion in the two-year period ending in 2014. Unsurprisingly, policymakers’ failure to achieve a steady state has weighed on the nation. In fact, according to The Review of Economics and Statistics, there is evidence that a 1-standard deviation uptick in policy volatility reduces long-term economic growth by approximately 0.74%.

The current US-Iran impasse comes at an inopportune time for diplomats and investors. What’s more, President Biden can ill afford a major foreign policy mistake ahead of the midterm elections. Already, geopolitical concerns weigh on the global economy. Rising concerns over US-China tensions, Russia’s invasion of Ukraine, the downstream effects of China’s zero-COVID policies, Europe’s energy crisis and high global prices have increased political uncertainty (see Exhibit 1) and exacerbated risk-off behavior among market participants.

From a Western perspective, preventing Iran from developing nuclear weapons is key to bringing stability to the region. Therefore, the outcome of ongoing nuclear deal negotiations is critical. If the deal fails and Iran’s nuclear program continues to advance, it will likely boost Iran’s influence in the region—pressuring the US and its allies to respond. In fact, during speeches at last week’s UN General Assembly, President Biden and Iranian President Ebrahim Raisi both decried the other’s commitment to seeing a deal get done. Importantly, Iran’s president questioned whether the US’ commitment to any eventual accord could be trusted, given President Trump’s 2018 decision to pull out of the Iran nuclear deal two years after its implementation.

The leaders’ inflammatory rhetoric is worrisome, and we think that prospects for reviving the nuclear deal have worsened against the current backdrop. In fact, political risk research firm Eurasia Group thinks the odds of reviving the deal are 30%. Although the consensus view is that talks will fail, fears that soaring energy prices could trigger a deeper crisis in the European Union provide Iran an important bargaining chip.

When Germany and the five permanent members of the UN Security Council brokered the 2016 agreement, negotiators sought to limit Iran’s nuclear ambitions. Iran agreed to the deal because it provided relief from certain sanctions. Indeed, by 2017, Iran’s crude oil production rose to nearly 4.5 million barrels per day, and oil exports rose to nearly 2.5 million barrels. Additionally, Iran started to see major investments in its energy sector (see Exhibit 2). While the deal was abandoned by President Trump in 2018, President Biden indicated his intention to rejoin the JCPOA when he took office in 2020.

Please refer to important information, disclosures and qualifications at the end of this material.
Negotiators have struggled to find common ground. Among US voters, only one-third want a binding agreement. The appetite for a deal has also waned among Iranians. According to a new poll by the Center for International and Security Studies at Maryland (CISSM) and IranPol, only 47% of Iran’s citizens approve of the nuclear deal, compared to 76% when it was originally introduced (see Exhibit 3).

Exhibit 3: JCPOA Support Has Fallen Among Iranians Since Its 2015 Implementation

Source: Center for International and Security Studies at Maryland, IranPol, Morgan Stanley Wealth Management Global Investment Office as of July 2022

Against this backdrop, investors are rightly pessimistic given that, for many lawmakers, Iran’s demands are untenable. First, Iran wants the US to provide a guarantee against future revocation of the deal. Unfortunately, President Biden cannot credibly guarantee that the next administration will honor the deal because it is not a formal treaty, and it therefore can be reversed by executive action. Second, Iran wants to limit the IAEA’s access to nuclear sites. In fact, Iran has already informed the IAEA that it has removed monitoring equipment. As it stands, an agreement would require significant concessions from at least one side.

Although an agreement seems out of reach, lifting US secondary sanctions could free up more than 1 million barrels of oil per day (see Exhibit 4), which would be especially timely given that Russian supply appears to be indefinitely impaired. This may be sufficient to keep Europe at the negotiating table.

Still, foreign investors were eager to tap into Iran’s vast energy reserves; as a result, Iran’s economy continued to benefit from modest levels of foreign direct investment (FDI). In fact, by 2002, FDI as a share of GDP approached 3% (see Exhibit 5), which compares to 3.6% for China the same year. Currently, according to the US Energy Information Administration (EIA), Iran accounts for 25% of oil reserves in the Middle East and 12% in the world. Moreover, according to the same report, Iran is the fifth-largest crude oil producer in OPEC and the third-largest natural gas producer.

Exhibit 4: The Promise of Iranian Oil Exports Could Keep Europe at the Negotiating Table

Source: Piper Sandler, Morgan Stanley Wealth Management Global Investment Office as of Dec. 31, 2021

Exhibit 5: Iran Foreign Direct Investment Accelerated When Sanctions Were Removed in 2015

Investment Implications

With an energy crisis brewing in Europe, access to Iran’s vast energy reserves could provide some relief to energy markets. As a result, Iran has more leverage in negotiations than in 2015. However, its long and complex history with economic sanctions hampers its potential as a reliable energy alternative.

If an Iran nuclear deal were reached, it could be positive for global equities. First, with tensions already high, a deal would allow the US to better focus on China. Second, a deal would be viewed favorably by Europe, which is currently in the throes of an energy crisis.

If a deal is not reached and Iran walks away from the negotiating table, the downside risk is considerable. First, even as Iran has tried to diversify away from its reliance on energy-related revenue, the impact on Iran’s economy would be considerable. According to the Congressional Research Service, over the five-year period ending 2015, sanctions contributed to a 50% decline in Iran’s oil exports and stunted major investments in its energy sector. Second, regional powers in the Mideast worry that a nuclear-capable Iran could foster a regional arms race and greater uncertainty.
Charts You Can't Miss

Exhibit 6: Economic Sanctions Are Driving Higher Prices

Source: Central Bank of Iran, Bloomberg, Morgan Stanley Wealth Management Global Investment Office as of May 31, 2022

Exhibit 7: Iran Needs Oil Prices Near $400 Per Barrel to Avoid Budget Deficits

Note: Bars indicate the oil price at which the respective nation would be able to balance its budget.

Exhibit 8: Iran Oil Exports Go Almost Exclusively to China

Source: IMF, Morgan Stanley Wealth Management Global Investment Office as of October 2021

Exhibit 9: Iran Nuclear Deal Negotiations Introduce Volatility to Oil Markets

Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Office as of Aug. 31, 2022
Current Readings From Our Quantitative Framework

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>Consumer Staples</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>Energy</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>Communication Services</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>Energy</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>Materials</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>Utilities</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Consumer Discretionary</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Real Estate</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>EM</td>
<td>Consumer Staples</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>Real Estate</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

Levels | Changes
--- | ---
Unfavorable | Deteriorating
Neutral | Unchanged
Favorable | Improving


Ongoing Development Spotlight

In 2021, Iran and China—seeking to strengthen their relationship—agreed to a 25-year cooperation agreement whereby China would buy Iranian oil at a substantial discount in exchange for a $400 billion investment in Iran’s economy. This built on exports of Iranian crude already being directed primarily to China since the resumption of US sanctions in 2019. Part of China’s economic strategy has been to buy goods from sanctioned countries at a discount, as has also been the case with their purchases of Venezuelan oil. Western sanctions have shrunk Venezuelan crude exports, compelling the country to rely on sales to China for most of its oil exports and resulting in its use of the yuan, instead of the US dollar, as its oil-pricing currency (see exhibit 10). As economic deterrents continue to be a geopolitical focus, investors should expect to see China continue to build partnerships that foster a more multipolar global economy. – Brad Fulton

Exhibit 10: China Is the Biggest Buyer of Venezuelan Oil

GLOBAL INSIGHTS

Disclosure Section

Index Definitions

For other index, indicator and survey definitions referenced in this report please visit the following: https://www.morganstanley.com/wealthinvestmentsolutions/wmir-definitions

Glossary

Important note regarding economic sanctions

This report may involve the discussion of country/ies which are generally the subject of comprehensive sanctions programs administered or enforced by the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), the European Union and/or by other countries or multinational bodies. The content of this presentation is for informational purposes and does not represent Morgan Stanley's view as to whether or not any of the Persons, instruments or investments discussed are or may become subject to sanctions. Any references in this presentation to entities or instruments that may be covered by such sanctions should not be read as recommending or advising on any investment activities involving such entities or instruments. You are solely responsible for ensuring that your investment activities in relation to any sanctioned country/ies are carried out in compliance with applicable sanctions.

Risk Considerations

Investing in foreign markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks. Investing in currency involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets and frontier markets, since these countries may have relatively unstable governments and less established markets and economies. Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Treasury Inflation Protection Securities (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a lower return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention. Because of their narrow focus, sector investments tend to be more volatile than investments that diversify across many sectors and companies. Technology stocks may be especially volatile. Risks applicable to companies in the energy and natural resources sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk. Health care sector stocks are subject to government regulation, as well as government approval of products and services, which can significantly impact price and availability, and which can also be significantly affected by rapid obsolescence and patent expirations.

The returns on a portfolio consisting primarily of environmental, social, and governance-aware investments (ESG) may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. The companies identified and investment examples are for illustrative purposes only and should not be deemed a recommendation to purchase, hold or sell any securities or investment products. They are intended to demonstrate the approaches taken by managers who focus on ESG criteria in their investment strategy. There can be no guarantee that a client's account will be managed as described herein.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy. The indices are unmanaged. An investor cannot invest
directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

The indices selected by Morgan Stanley Wealth Management to measure performance are representative of broad asset classes. Morgan Stanley Wealth Management retains the right to change representative indices at any time.

Disclosures

Morgan Stanley Wealth Management is the trade name of Morgan Stanley Smith Barney LLC, a registered broker-dealer in the United States. This material has been prepared for informational purposes only and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Past performance is not necessarily a guide to future performance. The author(s) (if any authors are noted) principally responsible for the preparation of this material receive compensation based upon various factors, including quality and accuracy of their work, firm revenues (including trading and capital markets revenues), client feedback and competitive factors. Morgan Stanley Wealth Management is involved in many businesses that may relate to companies, securities or instruments mentioned in this material.

This material has been prepared for informational purposes only and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security/instrument, or to participate in any trading strategy. Any such offer would be made only after a prospective investor had completed its own independent investigation of the securities, instruments or transactions, and received all information it required to make its own investment decision, including, where applicable, a review of any offering circular or memorandum describing such security or instrument. That information would contain material information not contained herein and to which prospective participants are referred. This material is based on public information as of the specified date, and may be stale thereafter. We have no obligation to tell you when information herein may change. We make no representation or warranty with respect to the accuracy or completeness of this material. Morgan Stanley Wealth Management has no obligation to provide updated information on the securities/instruments mentioned herein.

The securities/instruments discussed in this material may not be appropriate for all investors. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. Morgan Stanley Wealth Management recommends that investors independently evaluate specific investments and strategies, and encourages investors to seek the advice of a financial advisor. The value of and income from investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies and other issuers or other factors. Estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes only to simplify the presentation and/or calculation of any projections or estimates, and Morgan Stanley Wealth Management does not represent that any such assumptions will reflect actual future events. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein.

This material should not be viewed as advice or recommendations with respect to asset allocation or any particular investment. This information is not intended to, and should not, form a primary basis for any investment decisions that you may make. Morgan Stanley Wealth Management is not acting as a fiduciary under either the Employee Retirement Income Security Act of 1974, as amended or under section 4975 of the Internal Revenue Code of 1986 as amended in providing this material except as otherwise provided in writing by Morgan Stanley and/or as described at www.morganstanley.com/disclosures/dol.

Morgan Stanley Smith Barney LLC, its affiliates and Morgan Stanley Financial Advisors do not provide legal or tax advice. Each client should always consult his/her personal tax and/or legal advisor for information concerning his/her individual situation and to learn about any potential tax or other implications that may result from acting on a particular recommendation.

This material is disseminated in Australia to "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813). Morgan Stanley Wealth Management is not incorporated under the People's Republic of China ("PRC") law and the material in relation to this report is conducted outside the PRC. This report will be distributed only upon request of a specific recipient. This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors must have the relevant qualifications to invest in such securities and must be responsible for obtaining all relevant approvals, licenses, verifications and or registrations from PRC's relevant governmental authorities.

If your financial adviser is based in Australia, Switzerland or the United Kingdom, then please be aware that this report is being distributed by the Morgan Stanley entity where your financial adviser is located, as follows: Australia: Morgan Stanley Wealth Management Australia Pty Ltd (ABN 19 009 145 555, AFSL No. 240813), Switzerland: Morgan Stanley (Switzerland) AG regulated by the Swiss Financial Market Supervisory Authority; or United Kingdom: Morgan Stanley Private Wealth Management Ltd, authorized and regulated by the Financial Conduct Authority, approves for the purposes of section 21 of the Financial Services and Markets Act 2000 this material for distribution in the United Kingdom. Morgan Stanley Wealth Management is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.

This material is disseminated in the United States of America by Morgan Stanley Wealth Management. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data.

This material, or any portion thereof, may not be reprinted, sold or redistributed without the written consent of Morgan Stanley Smith Barney LLC.

© 2022 Morgan Stanley Smith Barney LLC. Member SIPC.

RS1664403218518 09/2022