

United States' Shale Oil Revolution and the Impact on the U.S. Dollar

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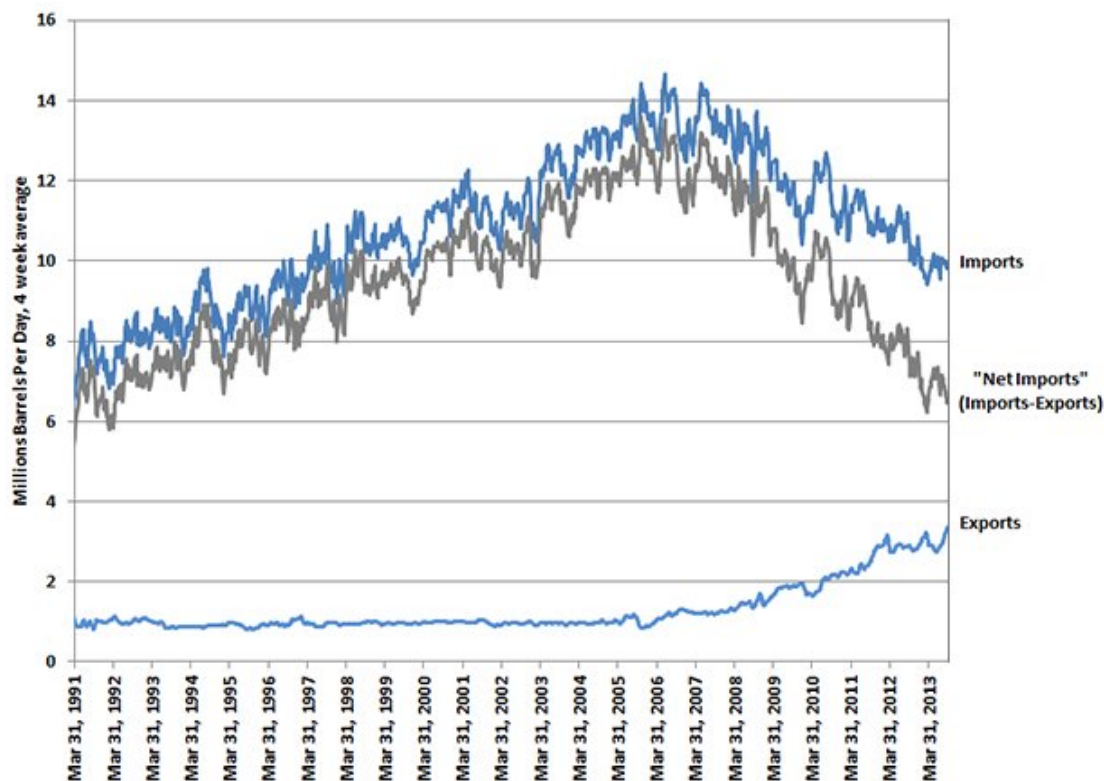
A major shift in energy production has taken place, and the United States is grabbing headlines for becoming the world's leading producer of oil and natural gas in 2013—overtaking Russia.¹ The energy production surge in the United States is impacting trade flows and lowering imports of energy. Over the long term, the change in the import/export mix of energy-related products could have an impact on the U.S. dollar—with decreasing imports of oil lowering the supply of dollars that have to be sold by foreign countries, and increased exports of refined products creating more demand for U.S. dollars when the goods are paid for. Drilling techniques called hydraulic fracturing, or fracking, have resulted in a higher output of crude in the past years, and this is projected to continue in the years ahead.² Consider this:

- Average oil production in October was over 7.8 million barrels per day, which is 19% higher than a year ago.³
- Rising crude supplies from fields including North Dakota's Bakken shale and the Eagle Ford shale in Texas have helped the U.S. become the world's largest exporter of refined fuels (including gasoline and diesel).⁴
- According to the EIA, Texas pumped 2.575 million barrels a day in June—if Texas were its own country, it would rank 15th in the world in terms of oil production.
- The U.S. met 87% of its energy needs in the first five months of 2013 and is on target to hit the highest annual rate since 1986.⁵

While the United States is still far from being energy independent, it is making great strides. Below is a graph of the U.S. imports and exports of crude oil and petroleum products going back to 1991 that can be found on the U.S. Energy Information Administration website. There has been a clearly visible sustained increase in exports over the last few years and a substantial drop in imports.

- **Export surge:** In 2006, the U.S. exported fewer than 1 million barrels per day. Recent statistics show the U.S. exporting over 3 million barrels per day.
- **Imports down:** Imports of crude oil and petroleum have dropped from a high of 14 million barrels per day in 2007 to under 10 million barrels per day in recent data.
- But some of these imports of oil are being used to create refined products such as gasoline, which are then exported. When one looks at net imports (imports minus exports) there is even a sharper collapse.
- **Net imports cut in half:** Net imports of oil have dropped from a high of over 13 million barrels per day to just above 6 million barrels per day. This is creating a dramatic change in terms of oil-related trade.

U.S. Oil: Imports and Exports (3/31/1991–9/30/2013)



Source: U.S. Energy Information Administration Period chosen based on data availability for desired statistics.
Past performance is not indicative of future results.

U.S. Dollar Implications of the Shale Oil Revolution The United States runs a current account deficit that stands at about 2.5% of gross domestic product (GDP). This deficit remains fairly large but has recently shown improvement: five years ago, the current account deficit stood at approximately 5% of GDP.⁵ A sustained improvement in the current account deficit picture could be supportive for a stronger U.S. dollar. Further, the nation's non-oil current account deficit stood at 1% in the first quarter of 2013 vs. its total current account deficit of 2.4%. The oil balance stood at 1.4% in the first quarter of 2013, a material improvement from the peak of 3% in September of 2008.⁶ Moreover, the abundant supply of cheap natural gas is becoming a competitive advantage to bring back manufacturing to the United States and making the U.S. more competitive with foreign countries that have cheaper labor pools. This positive feedback loop that starts with the energy boom but feeds into other industries can reinforce this improvement in the import/export mix and trade flows of the U.S. dollar. In the short term, politics, monetary policy and economic growth certainly trump these more long-term economic forces. But the point of this blog post is to question whether the dollar's long-term decline during the 2000s is about to reverse.

Consider Currency-Hedged Investment Strategies When considering the investment implications of the shale revolution, one often goes to oil-related companies. But I believe one should also think about the consequences for the U.S. dollar and how this impacts any investment denominated in foreign currencies—such as foreign equities. Given potential for higher growth out of the U.S. due to spillover effects from the shale oil revolution, higher world growth momentum, and improving sentiment from sustained improvements in the current account, this could inevitably be supportive for the U.S. dollar in the years ahead. I believe this is further reason that investors should consider [currency-hedged](#) investment

strategies when they look at their international equity allocations. If there is a currency most at risk from shifting energy trade dynamics, it may be Japan's. Japan's trade balance of oil and gas has been worsening, especially as the yen has started weakening and Japan shut down its nuclear energy production. In a future post, we will compare Japan's energy trade balance with the U.S. and what it could mean for the yen versus the U.S. dollar. 1Source: Wall Street Journal, "U.S. Is Overtaking Russia as Largest Oil-and-Gas Producer," October 2, 2013. 2According to the U.S. Energy Information Administration (EIA). 3According to the U.S. Energy Information Administration (EIA). 4Source: Bloomberg, "Fracking Moves U.S. Crude Output to Highest Level Since 1989", September 11, 2013. 5Source: EIA. 6Source: Bloomberg, October 2013 7Source: Bloomberg, October 2013

Important Risks Related to this Article

Investments in currency involve additional special risks, such as credit risk and interest rate fluctuations.