What We Need to Know About Oil

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Six Facts That We Need to Know About Oil

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With the price of oil plunging, let's look at the past, the present, and maybe get some insight about the future.

Six Facts About Our Oil Supply

1. Between 1965 and 2017 the U.S., the Russian Federation (or the U.S.S.R.), and Saudi Arabia were pretty consistently the top three oil producers.

The shale revolution took the U.S. to the top spot. But do take a look at the ups and downs of the top three as well as other countries like Venezuela and Norway. It is a fascinating 45 seconds:

2. In 2018, at 18%, the U.S. was by far, the world's top oil producing country.

The 2018 data are the most recent numbers from the eia (U.S. Energy Information Administration) about the world's 10 largest producers. Their definition of oil covers "crude oil, all other petroleum liquids, and biofuels:"

| Country | Million barrels per day | Share of world total 18% | |
|----------------------|-------------------------|-----------------------------|--|
| United States | 17.94 | | |
| Saudi Arabia | 12.42 | 12% | |
| Russia | 11.40 | 11% | |
| Canada | 5.38 | 5% | |
| China | 4.81 | 5% 5% | |
| Iraq | 4.62 | | |
| Iran | 4.46 | 4% | |
| United Arab Emirates | 3.79 | 4% | |
| Brazil | 3.43 | 3% | |
| Kuwait | 2.91 | 3% | |
| Total top 10 | 71.15 | 71% | |
| World total | 100.89 | | |

eia

3. Also, the U.S. was the world's biggest oil consuming country in 2017.

With China in the #2 spot, you can see why its recent decrease in demand would reverberate throughout the world's oil prices:

| Country | Million barrels per day | Share of world total | |
|---------------|-------------------------|----------------------|--|
| United States | 19.96 | 20% | |
| China | 13.57 | 14% | |
| India | 4.34 | 4% | |
| Japan | 3.92 | 4% | |
| Russia | 3.69 | 4% | |
| Saudi Arabia | 3.33 | 3% 3% | |
| Brazil | 3.03 | | |
| South Korea | 2.63 | 3% | |
| Germany | 2.45 | 2% | |
| Canada | 2.42 | 2% | |
| Total top 10 | 59.33 | 60% | |
| World total | 98.76 | -A.I | |

4. Since 1865, the price of oil has fluctuated massively.

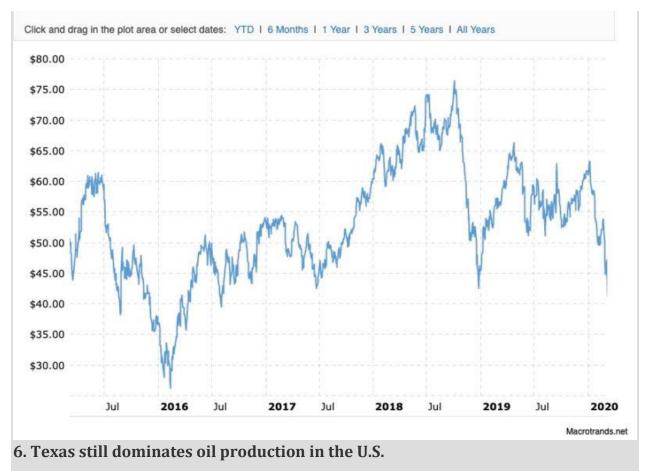
Using 2014 prices, a team for Goldman Sachs graphed the vagaries of oil prices from 1865 to 2016. You can see that prices dropped because of recessions in 1890-92, 1931, and 2008 and because of oversupply in 2015. Meanwhile, price peaks relate to cuts in production for reasons that range from an embargo (1973-74) to wars (2011) and also to spurts in demand (1920):

eia

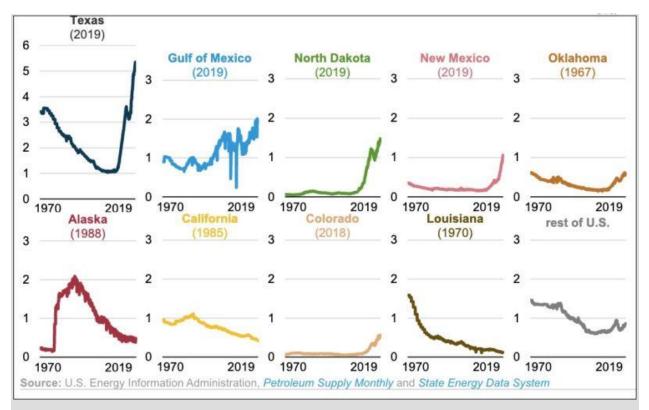


5. The price of oil has swung back to its lows during 2016.

As recently as 2011, the per barrel price touched \$120. On March 6, 2020, the WTI price (West Texas Intermediate–a domestic yardstick) was \$41.28. But then last night, it plunged to the vicinity of \$30 (\$27.20 in 2014 prices):

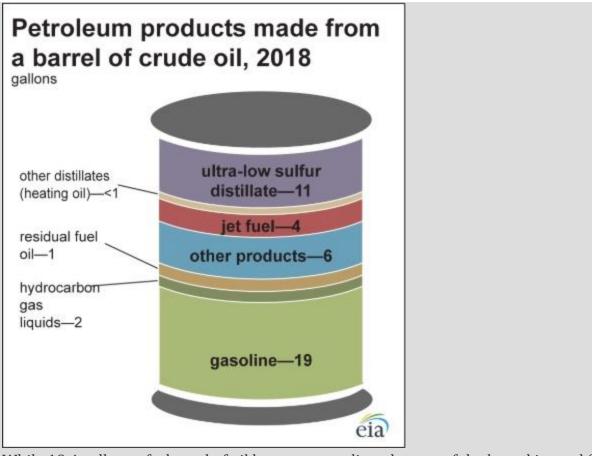


Now that the price is plunging, producers will have the incentive to cut back:



Our Bottom Line: Supply

From one 42 gallon barrel of oil, we wind up with 45 gallons of petroleum products. Sort of like popcorn, the oil total increases during refining. It winds up in thousands of products that are a part of the supply side of the U.S. economy:



While 19.4 gallons of a barrel of oil becomes gasoline, the rest of the barrel is used for items that include the following list:

| Solvents | Diesel fuel | Motor Oil | Bearing Grease |
|-------------------|--------------------|------------------|--------------------|
| nk | Floor Wax | Ballpoint Pens | Football Cleats |
| Jpholstery | Sweaters | Boats | Insecticides |
| Bicycle Tires | Sports Car Bodies | Nail Polish | Fishing lures |
| Dresses | Tires | Golf Bags | Perfumes |
| Cassettes | Dishwasher parts | Tool Boxes | Shoe Polish |
| Motorcycle Helmet | Caulking | Petroleum Jelly | Transparent Tape |
| CD Player | Faucet Washers | Antiseptics | Clothesline |
| Curtains | Food Preservatives | Basketballs | Soap |
| /itamin Capsules | Antihistamines | Purses | Shoes |
| Dashboards | Cortisone | Deodorant | Shoelace Aglets |
| Putty | Dyes | Panty Hose | Refrigerant |
| Percolators | Life Jackets | Rubbing Alcohol | Linings |
| Skis | TV Cabinets | Shag Rugs | Electrician's Tape |
| Fool Racks | Car Battery Cases | Epoxy | Paint |
| Mops | Slacks | Insect Repellent | Oil Filters |
| Jmbrellas | Yarn | Fertilizers | Hair Coloring |

So, whether it's because of less Chinese demand or a Russia/Saudi dispute, when the price of oil plunges, the supply side of the U.S. economy will feel the fall.

My sources and more: The eia, <u>here</u> and <u>here</u> is always ideal for oil <u>industry</u> stats. As for oil prices, <u>WEF</u> had the best history. Also please note that most of my data did not distinguish between WTI and Brent but still, you can get the basic picture.



Ideal for the classroom, <u>econlife</u> reflects Elaine Schwartz's work as a teacher and a writer. As a teacher at the Kent Place School in Summit, NJ, she's been an Endowed Chair in Economics and chaired the history department. She's developed curricula, was a featured teacher in the Annenberg/CPB video project "The

Economics Classroom," and has written several books including Econ 101 1/2 (Avon Books/Harper Collins). You can get <u>econlife</u> every day!

Discussion Questions

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Fact Questions

Article Source

- 1. Use the econlife animated bar chart to name the three countries that have been the top oil producers.
- 2. Using the econlife animated bar chart, for Venezuela, name three different positions and their years.
- 3. Using the econlife animated bar chart, for Canada, name three different positions and their years.
- 4. As one of the world's largest oil producers, what share of the world total came from the U.S. in 2018?
- 5. What share of world oil in 2018 came from the top three producers?
- 6. As one of the world's largest oil consumers, what share of the world total did the U.S. consume in 2017?
- 7. As one of the world's largest oil consumers, what share of the world total did China consume in 2017?
- 8. Referring to the price of oil in fact #4, name a high and low during the past 20 years.
- 9. Referring to the price of WTI oil in fact #5, name a high and low and during the past four years.
- 10. In the U.S. which states are the top three oil producers?