The Decrease in Oil Consumption and Its Impact on the Economy

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I wanted to set the scene by talking about what I think is the biggest surprise in the last year in the global economy, and that is the nearly 50 percent decline in the price of oil since last summer. This is a big net plus for the U.S. economy. In general, forecasters have raised their estimates of GDP growth in the United States by about a half a point to reflect this decline in the price of oil. They have also raised estimates for growth for a number of our key trading partners, who have also had troubles, and still do have challenges, like Europe and China.

The reason it has this effect on the economy is that it acts as a tax cut. And it’s a tax cut of about $700 per household. That’s money in your pocket, money you’re able to spend. I do not think we have seen the full economic benefits of the fall in the price of oil yet, because I think they are still working their way through the system, and it is a process that could take about a year from when the prices started falling to when they fully work their way through the system. To date, a lot of what we have seen is households have saved the windfall that they have gotten from spending less on gasoline. We have seen a rise in the personal savings rate over the last three months that is at the 95th percentile of previous increases in the savings rate over that period, so it is quite an unusual increase, and it is one that when I look at the amount of deleveraging consumers have gotten through the amount of confidence they have, I think is just indicative of future potential for consumption.

Of course there is the other part of the equation that we have seen, the rig count falling. We have seen this weigh on the total growth of investment in our economy as a whole, but all of that I believe is outweighed by the consumer side, because as important as the oil sector is to our economy, it is still less than 2 percent of our GDP and less than 1 percent of our employment.

A number of factors have contributed to this dramatic decline in oil prices. Some of them are related to cyclical demand and slowing growth in China and other emerging market economies. A part of the story that has frequently been told, and appropriately so as it is an important part of the story, is the increase in supply in the United States. We have risen from 5 million barrels per day (bpd) of production in 2008 to 8.7 million bpd last year, making the United States the world’s largest oil producer, and making the increment in oil that we have added enough to make the United States the second largest oil producer in OPEC—it would be enough to make us the second largest producer. The supply side story is frequently told, especially in contrast to what has happened on the demand side with the consumption of oil in the United States. The demand side is a story that has been told much less, but it is a story that I think is much more important for understanding the dynamics that we have seen in oil markets.
Stunningly, we are in a situation where in the year 2014, Americans consumed less petroleum than they did in the year 1997, despite the fact that the economy was 46 percent larger than it was in 1997. You had a half century in which oil consumption generally rose and rose, and then you had it level off, and actually decline. This is something that no one was expecting. If you look at the Energy Information Administration (EIA) forecasts in 2003—and I say this not to pick on EIA, I say this because I think they are the best forecasts around and are similar to what others were forecasting—and you compare where they thought we would be in the year 2014 in terms of petroleum consumption, to where we actually were in the year 2014, we were 6.4 million barrels lower on consumption than they expected. That consumption surprise, the unexpected reduction in consumption, was about twice the magnitude of the unexpected increase in supply.

Importantly, that decline in consumption was not just a passing phenomenon, or is not just projected to be a passing phenomenon. If you look at EIA’s forecasts for the year 2025, instead of projecting steady increases for the consumption of petroleum as they had, they have basically a line that is flat. Importantly, this is also very much so American story. If you look at the International Energy Agency, you see for other OECD countries, oil consumption comes in a little below forecasts, but nowhere near as dramatically below as for the United States. That little difference in other OECD economies is largely explained by the fact that their GDP has not been as high as what was expected, whereas for the United States, a really important part of the story is a decline in the amount of oil we use per unit of GDP.

If you look at that reduction in oil consumption, the majority is in the transportation sector, but you also see it in industrial, residential, and commercial sectors as well. To date, about three quarters of that decline is due to a reduction in vehicle miles travelled (VMT) due to factors like higher gas prices, the fact that GDP was not as high as we expected, demography, and other unexplained issues. But to date, a quarter of it is because of improved fuel economy, including the steps that were taken to raise the fuel standards for light vehicles, and then in this Administration to raise the standards for cars and heavy trucks as well. Going forward, by 2025, the projected reduction in consumption is nearly half accounted for by these types of fuel efficiency. Coming on top of the fewer miles traveled and the greater fuel efficiency is a substitution for alternative fuels like ethanol, which is further reducing the consumption of petroleum.

Why does all this matter? It matters first of all because this increase in production and even larger decline relative to expectations in consumption is contributing to the lower oil prices, and that is good for the U.S. economy. But oil prices are going to go up and down, and I do not have a prediction for what they are in the future, except that in the future they will probably both at various times go up and at various times go down. The fact that the United States is on net consuming about 6.5 million bpd less than projected, producing about 3.5 million bpd more than projected, means on net we have improved our position by 10 million bpd, a nearly 50 percent reduction in our imports, relative to what we projected. That means whatever happens to oil, whether it goes up or down or some combination of both, it is not going to affect our economy as much as it would have otherwise. We are considerably less vulnerable to oil shocks than in the past. From a global perspective, that 10 million bpd is more than a tenth of global production—it is a really big difference in the world as a whole.
In addition to these economic effects that Administrator McCarthy was also talking about at the end of her remarks, I want to bring myself over to her turf now, and say that this really proves that you can have an energy strategy that is compatible with a climate strategy as well. This reduction in petroleum consumption, combined with an increase in natural gas, shift away from coal, expansion of renewables, and overall improvement in energy efficiency, is how we have cut our greenhouse gas emissions by nearly 10 percent relative to the 2005 level. It is also how we are in a position to put in place policies in the power sector and in the auto sector—methane, renewables, a range of other areas within the Administrative power that the President has—to hit the goal that we are going to Paris with of reducing emissions by 26 to 28 percent by 2025.

Overall, you can see that one of the biggest economic surprises in the past year has also been compatible with one of the biggest turnarounds in our progress on climate change in a very long time. We want to build on that progress both economically and in addressing our environmental challenges as we move forward.