

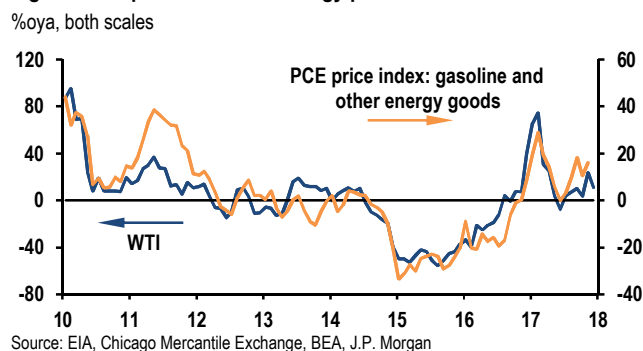
Focus: How heavy is the burden from higher oil prices?

Oil prices have been trending higher since the middle of last year. The price of West Texas Intermediate crude oil (WTI) rose from about \$46/barrel at the end of 2Q17 to around \$64/barrel during the past week (Figure 1). If sustained over a year, we think that this approximately 40% increase could depress GDP growth by a couple of tenths by weighing on consumer spending, and this piece focuses primarily on this channel of impact. But the drag from consumption will likely be partially offset by increased capex in the energy sector, and the net impact of higher oil prices on GDP will probably be minor. (For details on the issues related to capex, see some of our [earlier research](#).)

Figure 1: WTI crude oil price



Figure 2: Oil prices and PCE energy prices



The logic for why higher oil prices weigh on consumer spending is clear—when faced with higher prices, consumers can either cut back on their aggregate volume of spending, decrease saving, or increase debt. We should keep in mind, however, that most consumers do not purchase crude oil, and that the prices facing consumers for related products tend to be less volatile than prices for WTI. As Figure 2 shows, the PCE price index for gasoline and other energy goods tends to move about half as much as WTI pricing (a result supported by separate regression analysis). So the 40% increase in WTI

should translate into roughly a 20% increase in consumer energy goods prices if this historic relationship holds.

Table 1 shows our estimates for how different magnitudes of oil price changes potentially influence the economy. Given the \$336bn annualized rate of spending on gasoline and other energy goods reported for November, a 20% increase in these prices (related to a 40% increase in WTI prices) would generate an added cost of about \$67bn in order to maintain a constant volume of consumption. If none of this extra spending actually occurred, this would account for a 0.5% reduction in real consumer spending and a 0.3% cut in real GDP. But these estimates are likely the top of the range of possible effects because consumers will probably increase spending to cover at least part of the added cost.

Table 1: Scenarios for oil price changes

WTI (%ch)	Gasoline and oth. energy PCE price index (%ch)	Added cost (\$bn, ar)	Equivalent share of annualized consumption (%)	Equivalent share of annualized GDP (%)
1.0	0.5	1.7	0.01	0.01
5.0	2.5	8.4	0.06	0.04
10.0	5.0	16.8	0.13	0.09
25.0	12.5	42.0	0.31	0.22
40.0	20.0	67.2	0.50	0.34
50.0	25.0	84.0	0.63	0.43

Source: J.P. Morgan

While we cannot know exactly how consumers will respond to higher energy prices, our analysis suggests that the increase in prices from the past half year will not weigh dramatically on consumer spending or GDP, even before accounting for the likely increase in capex also tied to the price changes. And while higher prices will be a headwind to consumer spending, recent increases in equity markets and [reduced taxes](#) early in 2018 should be tailwinds. We estimate that the household sector should get a windfall of about \$140bn from reduced taxes this year, an amount that will likely more than offset any negative impacts of the recent increase in oil prices reported to date.

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