

Focus: Sizing up effects of changes in stock prices and oil

Energy prices and equity markets often react to geopolitical events. Changes in these markets over the past week or so probably have been motivated in part by recent developments in the Middle East, but so far these changes have not been large enough to meaningfully impact the economy. In this piece we update tables showing how the different-sized changes in oil prices and equity markets have the potential to impact consumer spending. These provide a framework for gauging the effects of changes in recent days and any upcoming market moves. In addition to influencing the economy by changing household energy costs and wealth, geopolitics can impact sentiment and other parts of the economy, and these latter effects are not discussed here in detail.

We begin by looking at changes in oil prices. As we have discussed [before](#), the prices that consumers pay for gasoline and other energy products tend to move about half as much as changes in WTI oil prices. So as Table 1 shows, a 25% increase in prices should correspond roughly with a 12.5% increase in PCE energy prices. If the November 2019 volume of consumption was kept steady, a price increase of this size would generate an extra “burden” on consumers of around \$43bn, which is equivalent to around 0.3% of annualized consumer spending and 0.2% of overall GDP (using 3Q19 data). These shares represent the economic drags from an increase in oil prices if other types of consumer spending were reduced one-to-one in order to make up for the increased cost associated with higher energy prices. In reality, consumers could also dip into savings to pay for some (or all) of the price increase, so the actual economic effects of reduced consumption likely would be smaller than the figures shown in Table 1.

Table 1: Scenarios for oil price increases

WTI (%ch)	Gasoline and oth. energy PCE price index (%ch)	Consumer “burden” (\$bn, ar)	Equivalent share of annualized consumption (%)	Equivalent share of annualized GDP (%)
1	0.5	2	0.0	0.0
5	2.5	9	0.1	0.0
10	5.0	17	0.1	0.1
25	12.5	43	0.3	0.2
30	15.0	52	0.4	0.2
50	25.0	87	0.6	0.4

Source: J.P. Morgan

While higher oil prices act as a burden for consumers, they also should incentivize business capex related to energy extraction. This lift to capex could help boost GDP and provide some offset to any drag on consumer spending coming from

higher energy prices, but we leave the related details for separate research.

Switching to equity markets, Table 2 shows how household wealth can be affected by changes in equity prices. For example, a 10% decline in equity prices reduces household wealth by around \$3tr (relative to 3Q19 holdings). It is likely that only a small portion of this wealth change would translate into reduced consumer spending, and [our research](#) has documented that spending (and saving) has barely responded to changes in household wealth in recent years. If every dollar change in wealth impacts consumer spending by only 1 cent (“Low wealth effect” in Table 2), then a \$3tr decline in wealth would reduce annualized consumer spending by about 0.2% and annualized GDP by only around 0.1%. If wealth effects returned to the figures [estimated](#) over data before the current expansion (“High wealth effect” in Table 2), the economic effects of changes in household wealth could be almost four times as large. Of course, wealth effects can continue to change over time, and outcomes besides those shown in the table also are possible.

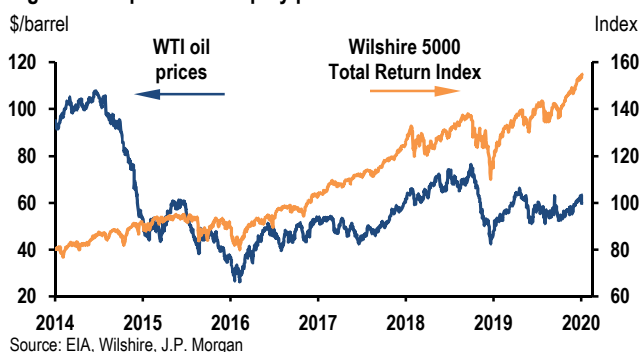
Table 2: Estimated impact of declines in equity prices

Equity price change (%)	Net worth change (\$bn)	High wealth effect (3.8 cents)		Low wealth effect (1 cent)	
		Cons. impact (%)	GDP impact (%)	Cons. impact (%)	GDP impact (%)
-1	-303	-0.1	-0.1	0.0	0.0
-5	-1513	-0.4	-0.3	-0.1	-0.1
-10	-3027	-0.8	-0.5	-0.2	-0.1
-30	-9080	-2.4	-1.6	-0.6	-0.4
-50	-15133	-3.9	-2.7	-1.0	-0.7

Source: J.P. Morgan

While it looks very likely that recent events in the Middle East have influenced oil prices and equity markets, the changes reported lately don’t look especially noteworthy and are not much different than other short-lived changes in prices that are caused by factors that generate far fewer headlines (Figure 1).

Figure 1: Oil prices and equity prices



Source: EIA, Wilshire, J.P. Morgan

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