

# Macro update

## Oil shock and the economy

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FLASH NOTE

### SUMMARY

- Almost all post-WWII recessions in the US have been preceded by, or accompanied by, a sharp rise in oil prices (and monetary tightening). We expect the recent rise in oil prices, if sustained, will lower GDP growth and raise headline inflation. However, the impact of higher oil should be much more contained than in the 1970s/80s as the US economy is less energy dependent and inflation expectations remain remarkably well anchored.
- In the US, a 10% rise in the oil price is typically estimated to subtract 0.15% from GDP growth via lower consumption, offset only slightly by higher corporate capex. In the euro area, depending on the model used, the impact on real GDP is slightly larger—0.16-0.24% of GDP after three years, with some differences across countries.
- US headline inflation should rise by 30-40bps in the next six months given a sustained 10% increase in oil prices. However, we do not expect higher energy prices to raise core inflation materially and thus derail the recent disinflation trend. In the euro area, a 10% rise in oil prices is estimated to increase the price level by 0.16% directly and by around 0.20% indirectly over a period of up to three years.
- Given the laundry list of risks already looming for the US economy, the negative growth impact of an oil shock should reinforce the Federal Reserve's prudent stance towards further tightening and we expect the FOMC to refrain from more rate hikes. But given above-target inflation, risks of a stronger pass-through to core inflation and of un-anchoring inflation expectations suggest the Fed will continue to guide towards holding rates elevated for quite some time.

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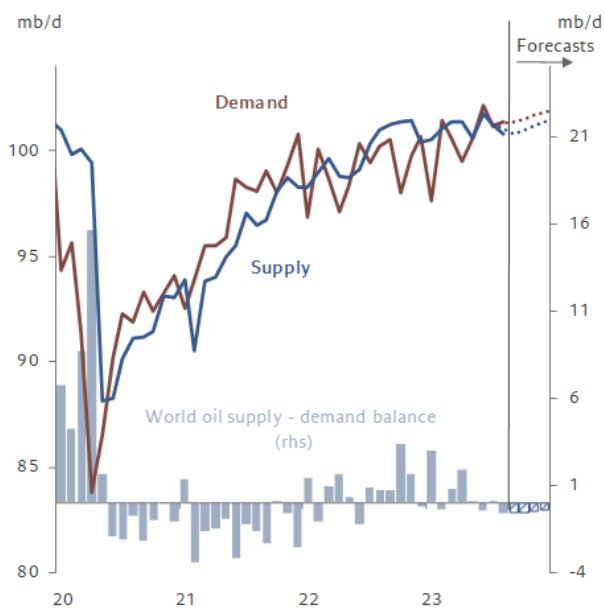
## BRENT PRICE EXPECTED TO FLUCTUATE AROUND CURRENT LEVEL

Global oil demand still appears resilient thanks to relatively stable consumption in advanced economies and strong momentum in emerging economies outside Asia. At the same time, China’s faltering recovery has filtered down into oil demand and is weighing on oil consumption in the rest of emerging Asia. However, economic data out of China has become more encouraging lately and could help put a floor under Asian oil consumption in the months to come. Oil consumption in emerging economies elsewhere has compensated for the recent weakness in Asia, while in advanced economies consumption has generally moved sideways. While weakening growth in advanced economies in addition to a strong US dollar could dampen oil consumption well into 2024, we expect global oil demand expanding by around 1.5 million barrels per day (mbd) next year.

On the supply side, with US production likely to lose momentum (due to declining shale oil productivity), OPEC should remain in the driving seat. Saudi Arabia is likely to continue to support prices by voluntarily scaling back production as it sees fit.

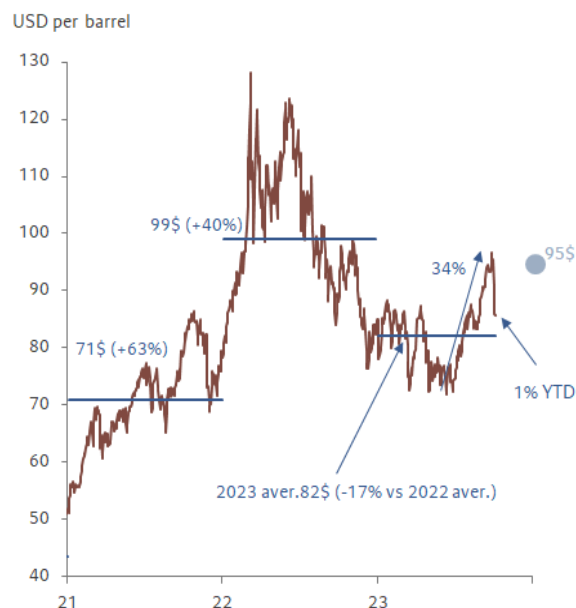
In this context, the oil market has flipped into deficit since June (-0.6mbd in August) and is likely to remain so in the months to come (Chart 1). Moreover, oil inventories are uncomfortably low, increasing the risk of higher price volatility. The situation in the US is particularly critical as commercial and strategic crude oil inventories combined are at their lowest level since the 1980s.

Chart 1: Global oil supply-demand balance



Source: PWM, US Energy Information Administration, as of 05.10.2023

Chart 2: Brent oil price per barrel forecast



Source: PWM, Bloomberg Finance L.P., as of 05.10.2023

Resilient demand, constrained supply and low inventories have combined to produce a significant oil price rally until the end of September (Chart 2). These levels typically tend to dent demand. However, recent weakness should prove to be

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temporary. We expect oil prices fluctuating in the USD85-USD100 range in the months to come. Furthermore, some important oil projects in the non-OPEC+ world are expected to gain momentum by the end of next year. As a result, the global market is expected to be less undersupplied.

## US: STAGFLATION-ISH SHOCK BUT MUCH MORE CONTAINED THAN IN THE 1970S/80S

**Almost all post-WWII recessions in the US have been preceded by, or accompanied by, a sharp rise in oil prices (and monetary tightening).** Higher oil prices lead to an increase in production costs and inflation, reducing real purchasing power as consumers and producers with inelastic short-term demand have to pay more for energy products.

Gas prices in the US have risen to almost USD4/gallon, matching the highest level of the past 20 years outside the pandemic (when prices surged to USD5/gallon last summer). **And the government will be less effective in mitigating price increases** as oil reserves dwindled to their lowest level since 1983.

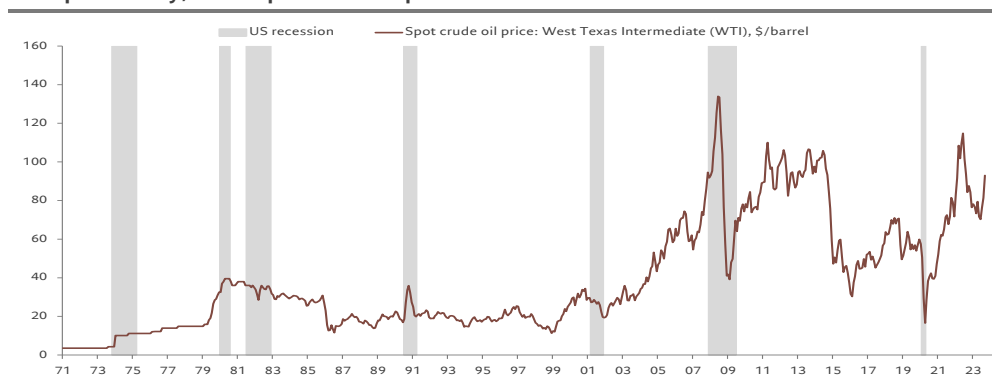
Higher gas prices will likely lead to lower household consumption, offset only partially by higher energy capex. For households, an increase in gas prices is similar to a tax hike, and would force consumers to reduce their spending on discretionary goods and services in response to higher bills at the pump.

**But the drag on consumption should be less severe than in the past.** For one, spending on energy accounts for a much smaller share of income than in the 1980s and the 2000s. Additionally, the recent increase in oil prices is still limited.

Higher gas prices would also lead to **higher capex in the energy sector**, offsetting the negative impact on the overall economy stemming from the hit to personal consumption. **The offset is likely to be small** as energy capex as a share of US GDP has fallen significantly since the shale boom and bust, and companies in the industry have become much more disciplined and cautious when it comes to new investment projects.

A recent Fed study estimates a 10% rise in oil price subtracts 0.15 percentage points from GDP growth via lower consumption, offset only slightly by higher capex.

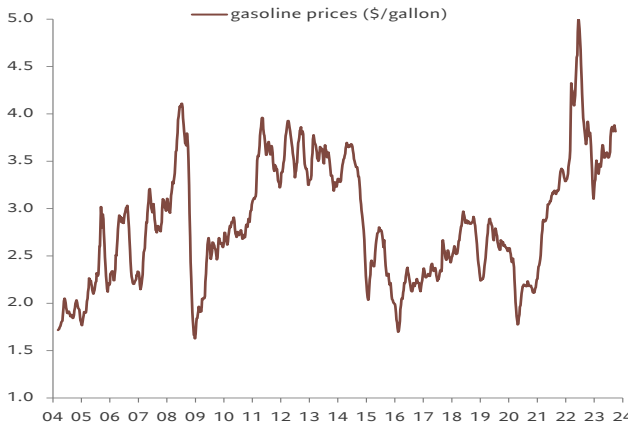
**Chart 3: Almost all post-WWII recessions in the US have been preceded by, or accompanied by, a sharp rise in oil prices**



Source: Pictet Wealth Management, BEA, NBER, EIA, as of 05.10.2023

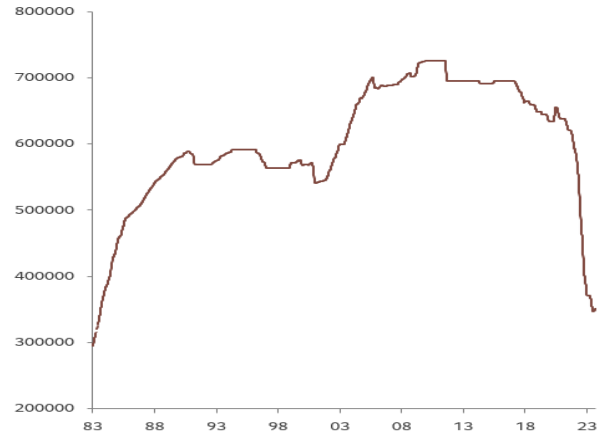
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**Chart 4: Gas prices have risen to previous (ex-pandemic) highs**



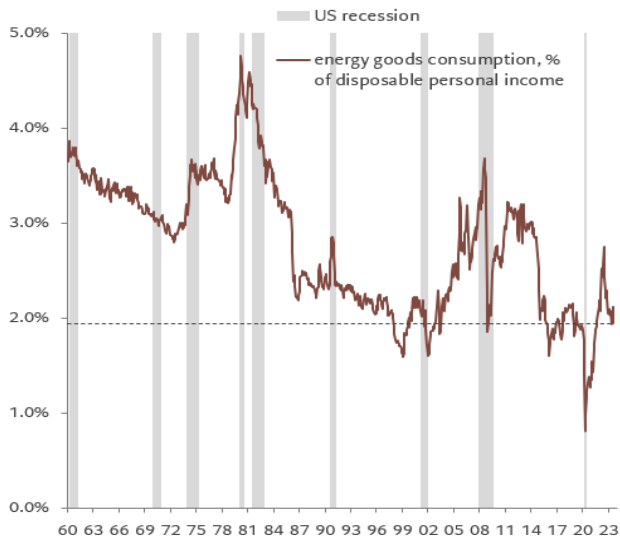
Source: Pictet Wealth Management, AAA, as of 05.10.2023

**Chart 5: ... against a backdrop of a sharp decline in the US's strategic oil reserves**



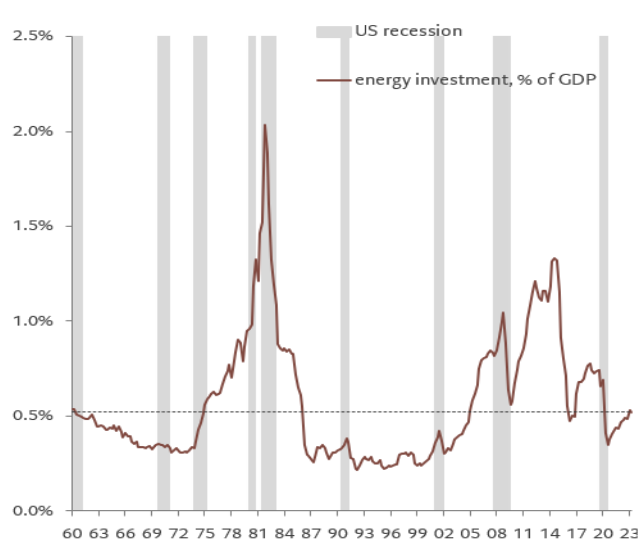
Source: Pictet Wealth Management, EIA, as of 05.10.2023

**Chart 6: Oil consumption is a much lower share of US spending than in the past**



Source: Pictet Wealth Management, BEA, as of 05.10.2023

**Chart 7: Oil capex has fallen significantly since the shale oil boom and bust**



Source: Pictet Wealth Management, BEA, as of 05.10.2023

**Higher gasoline prices will have a direct impact on headline inflation**, as energy goods make up 2.5% of headline personal consumer expenditures (PCE) and 3.7% of the headline consumer price index (CPI) in the US. A 10% increase in gas prices would translate to an increase of roughly 30-40bps in headline inflation in the next six months.

Higher energy costs could raise core inflation—directly through higher airfares (part of services inflation) and indirectly (if firms decide to pass on higher energy costs to consumers). The degree of the pass-through hinges critically on how inflation expectations respond to higher fuel prices. **We do not expect higher energy prices to raise core inflation (headline ex food and energy) materially and thus derail the**

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**recent trend toward disinflation.** We continue to expect core PCE inflation to slow from 3.9% to 2.7% next year.

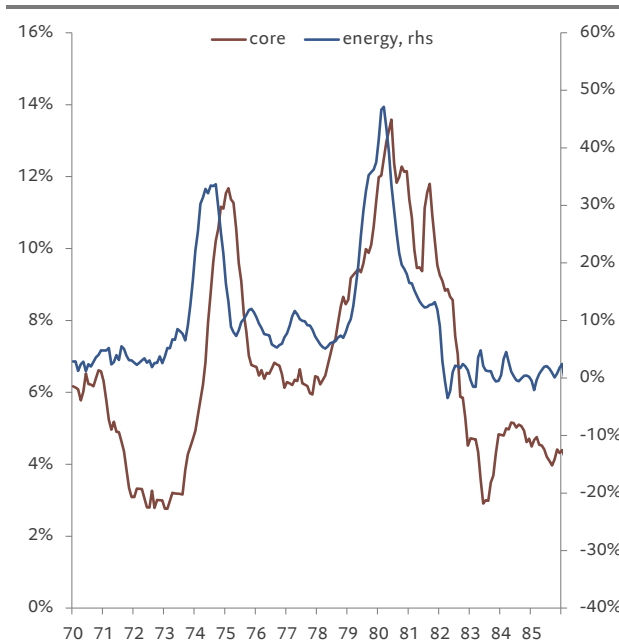
In fact, **the pass-through from oil to core inflation has fallen significantly in recent decades.** Unlike in the 1970s, long-term inflation expectations in the US have remained remarkably well anchored in the face of fluctuating commodity prices (short-run inflation expectations are more volatile and do respond to price shocks).

However, during the pandemic, the increase in oil prices coincided with a sharp increase in core inflation, as goods demand rose strongly, and supply chain issues disrupted inventories. This raises the risk that the pass-through could be stronger in an environment of sustained inflationary pressures.

The standard monetary policy response to a supply-driven oil price increase is to look through what could be a “transitory” shock and assess its impact on inflation expectations. Given the laundry list of risks already looming over the US economy (including the auto sector strike, the resumption of student loan repayments, a potential government shutdown, and now sharply rising interest rates), we expect **the negative impact on growth to reinforce the Fed’s prudence regarding further rate hikes.** In short, we continue to expect the Fed is done with hikes this cycle.

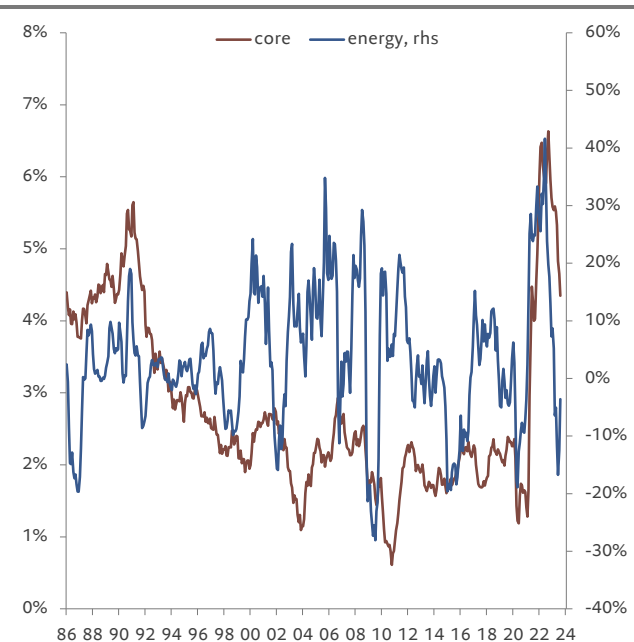
But given inflation is still above target, risks of a stronger pass-through to core inflation and of un-anchoring inflation expectations suggest **the Fed will continue to guide towards holding rates elevated for quite some time.**

**Chart 8: 1970-1985 saw a close correlation between core CPI and energy prices...**



Source: Pictet Wealth Management, BLS, as of 05.10.2023

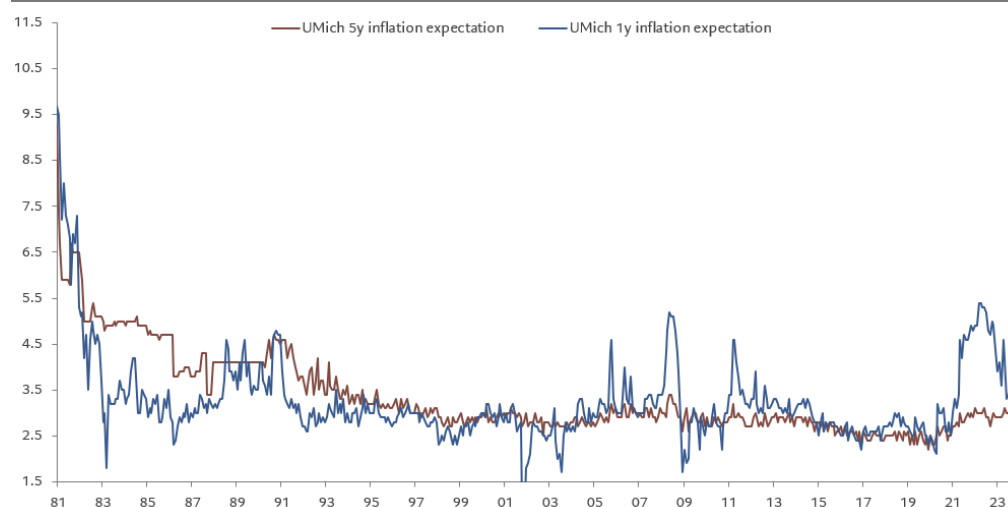
**Chart 9: ...but outside the pandemic the correlation has been looser since**



Source: Pictet Wealth Management, BLS, as of 05.10.2023

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**Chart 10: Long-run inflation expectations have remained remarkably well anchored in the face of extreme changes in commodity prices**



Source: Pictet Wealth Management, University of Michigan, EIA, as of 05.10.2023

## EURO AREA: A FURTHER HEADWIND

Recent business surveys continue to point to lacklustre momentum in the euro area, with tentative signs of bottoming in the manufacturing sector matched by deterioration in services. Employment growth is also showing signs of slowing. We continue to believe that stagnation in H2 is more likely than a recession across the euro area as a whole, and we are sticking with our GDP growth forecast of 0.5% for 2023. However, the recent rise in oil prices has increased downside risks. The pass-through of higher oil prices is difficult to estimate and a lot depends on whether the price rise is temporary as well as the degree of the price shock.

Consumer demand for energy products tends to be more inelastic and therefore more difficult to substitute than other products. An [ECB paper](#) estimates that “a 10% increase in oil prices reduces real GDP in the euro area by about 0.24% after three years, assuming no monetary or fiscal reaction”. Across euro area countries, “the impact of a 10% increase in oil prices ranges from close to zero to -0.4% of real GDP”. The divergence is due to several structural factors such as consumption patterns, the degree of a country’s dependence on oil imports and the energy intensity of production. A more recent study undertaken by the [Fed estimates](#) that the impact of a 10% oil price increase would be a 0.16% hit to real GDP in the euro area.

An increase in oil prices will also have some impact on inflation and we need to distinguish between direct, indirect and second round effects. Direct effects refer to the impact of a change in oil prices on headline consumer price indexes (with liquid fuels typically accounting for half of the energy component). Albeit more difficult to determine, there are also some indirect effects stemming from higher energy input costs for a range of goods and services. ‘Second-round’ effects relate to the impact of oil prices on wages and inflation expectations.

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According to ECB models, the direct effect on the price level of a 10% oil price increase after three years is estimated at 0.16%<sup>1</sup> and “the cumulative indirect first and second-round effects on the price level of a 10% oil price increase after three years is estimated at 0.20%”. The ECB models also suggest that “indirect first- and second-round effects have declined since the mid-1980s owing to changes in wage and price-setting behaviour and changes in the structural features of economic activity”.

Recent oil price increases will probably keep the ECB hawkish. The ECB’s recent staff projections were based on technical assumptions of an average oil price of USD81.8 per barrel in 2024 and USD77.9 in 2025. Oil prices higher than these assumptions could push the ECB’s headline inflation forecasts up and potentially delay achievement of its 2% target. However, at this stage, we continue to expect the ECB to stay on hold for some time.

<sup>1</sup> In its paper, the ECB has estimated the impact of a 10% increase in crude oil prices using different models. We have quoted only the numbers related to the structural VARs models with a sample period between 1980 and 2009.

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