

## ARE MARKETS PRICING IN AN INCREASE IN STAGFLATION RISK?

The war in Ukraine has caused a jump in commodity prices that will trigger a further increase in inflation and will weigh on GDP growth. Unsurprisingly, the narrative that stagflation is in for a comeback is gaining ground, as shown by the increasing number of media references to this topic. Stagflation is a multi-year phenomenon of high inflation and a high rate of unemployment. Although inflation is high, the other conditions are clearly not met today. Monitoring financial markets developments is useful in gauging whether stagflation risk is on the rise. This can be done by comparing the developments in breakeven inflation and the high yield corporate bond spread. In the US, both have increased recently but it seems premature to interpret this as a sign that markets have already started to price an increase in stagflation risk. After all, these developments are of a very recent nature and the high yield spread is still low.

The war in Ukraine has caused a jump in the price of oil, gas, wheat and other commodities, reflecting concerns about major supply disruption. This negative supply shock, which comes on top of the energy price shock experienced last year, will cause already high inflation to rise further, thereby weighing on real GDP growth. Unsurprisingly, the narrative that stagflation is in for a comeback is gaining ground, as shown by the increasing number of media references to this topic (chart 1).

Stagflation is associated with high inflation and stagnating economic activity, which causes a significant increase in the unemployment rate. In 1980, a report prepared for the Joint Economic Committee of the US Congress defined stagflation as *"the simultaneous presence of excessive unemployment and excessively high rates of inflation"*<sup>1</sup>. The sum of both variables is called the discomfort index or misery index. The co-existence, over a multi-year period, of high inflation and slow growth/high unemployment is indeed disconcerting. It creates a dilemma for central banks, weighs on the purchasing power of households in an environment of mounting income uncertainty and puts pressure on corporate profits. Governments may welcome the decline of the real value of outstanding debt due to high inflation but rising unemployment and slow growth have a detrimental impact on the government budget deficit. Stagflation is also challenging for financial markets. When rising inflation is caused by robust demand growth, investors will tend to prefer equities to bonds because the former should benefit from an improved profits outlook whereas the value of the latter will suffer from rising inflation expectations. In case of stagflation, both asset classes may perform poorly. For the various stakeholders, gauging stagflation risks is very important in order to be better prepared. In addition to monitoring the forecasts for the key variables (inflation, growth, unemployment), dissecting the information provided by financial markets can, given their forward-looking nature, also provide useful insights. Stagflation refers to stagnation and inflation. Expectations about the latter can be assessed based on break-even inflation – the difference between the yield on a nominal bond and the yield of an inflation-protected security of the same maturity. Historically, there is a high positive correlation between the oil price and US breakeven inflation: an increase in the former leads to rising market-based inflation expectations (chart 2a) but since the end of last year and until recently, this relationship has fluctuated a lot. Despite a higher oil price, breakeven inflation declined, reflecting a view that several rate hikes by the Federal Reserve would eventually bring inflation under control. Since the start of the war in Ukraine however, the usual positive correlation has been re-established, which

is a manifestation of rising concern about the future evolution of energy prices.

The stagnation part of stagflation can be analysed based on the spread of high yield bonds versus government bonds<sup>2</sup>. This spread consists of two parts: investors' expectations of future corporate defaults and the attitude of investors toward corporate bond risk<sup>3</sup>. A spread widening thus reflects expectations of rising corporate defaults and/or a worsening of the credit sentiment. Both are linked to the growth outlook. In the US, energy represents 13.5% of the index<sup>4</sup> and this helps to explain the negative correlation between the high yield spread and the price of oil<sup>5</sup> (chart 3a). However, since the invasion of Ukraine and despite the huge increase in the price of oil, the high yield spread has widened, reflecting investor concern about rising credit risk (chart 3b). What are the implications for the correlation between breakeven inflation and the high yield spread? Historically, it has been mostly negative, reflecting the dominant role of fluctuations in demand in

STAGFLATION WORD COUNT (7-DAY MOVING AVERAGE)

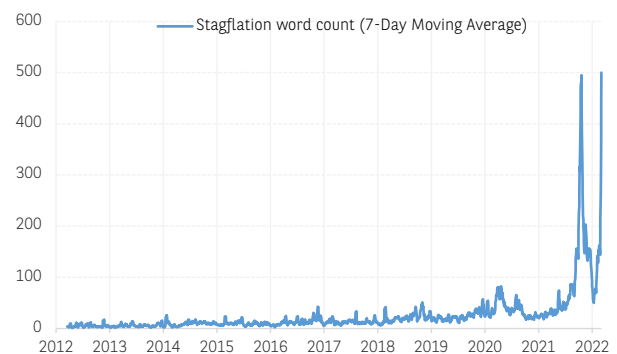


CHART 1

SOURCE: BLOOMBERG, BNP PARIBAS

1. Source: "Stagflation: the causes, effects and solutions," volume 4 of the Special Study on Economic Change prepared for the Joint Economic Committee Congress of the United States, 17 December 1980.

2. High yield bonds are preferred as a metric to investment grade because of their higher sensitivity to the business cycle.  
 3. The former represents the premium for expected defaults whereas the latter reflects the sentiment of investors toward the asset class. This sentiment is highly sensitive to changing expectations about the economic outlook. Source: *Recession risk and the excess bond premium*, Giovanni Favara, Simon Gilchrist, Kurt F. Lewis and Egon Zakrajsek, FEDS Notes, 8 April 2016.  
 4. It concerns the ICE BofA US High Yield Index.  
 5. A higher oil price improves the profitability and reduces the riskiness of bond issuers from the energy sector. Another explanation for the negative correlation is that stronger growth reduces the riskiness of all index constituents and may also lead to an increase in the price of oil. The opposite happens in case of a recession.



explaining growth (chart 4a). Slower growth causes a decline in market-based inflation expectations and an increase in the corporate bond spread. Very recently, this correlation has become positive following the negative supply shock and the jump in geopolitical uncertainty (chart 4b). It seems premature to interpret this as a sign that markets have already started to price an increase in stagflation risk. After all,

these developments are of a very recent nature and the high yield spread is still low. Nevertheless, it will be useful to closely monitor the correlation between breakeven inflation and corporate spreads going forward.

**William De Vijlder**

**US BREAKEVEN INFLATION AND OIL PRICE**

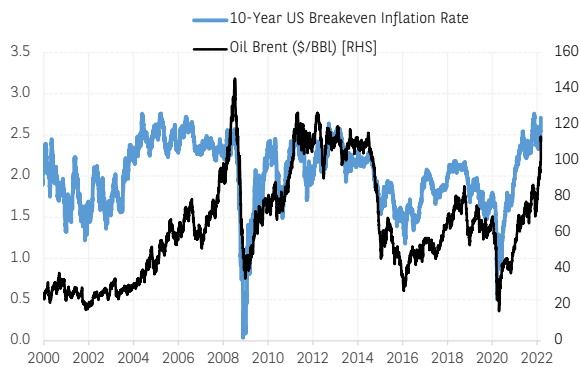
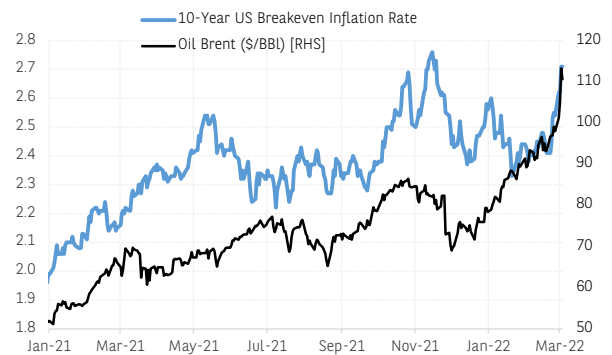


CHART 2



SOURCE: REFINITIV, BNP PARIBAS

**US HIGH YIELD SPREAD AND OIL PRICE**

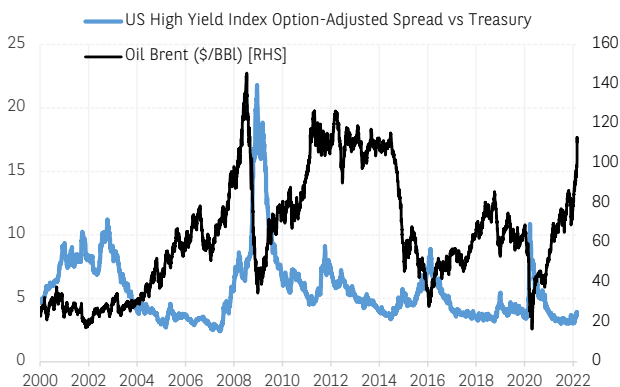
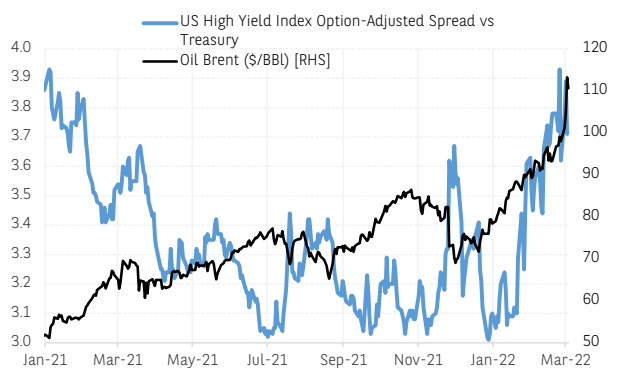


CHART 3



SOURCE: REFINITIV, BNP PARIBAS

**US BREAKEVEN INFLATION AND HIGH YIELD SPREAD**

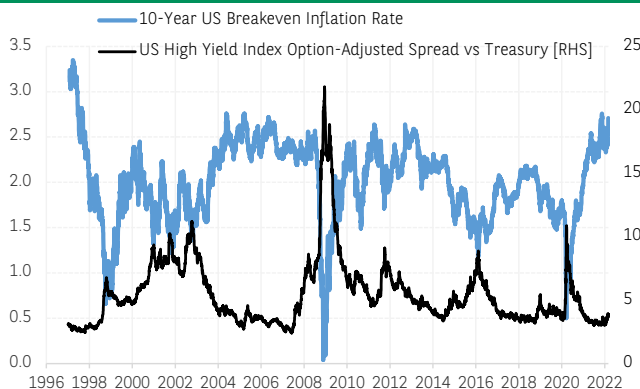
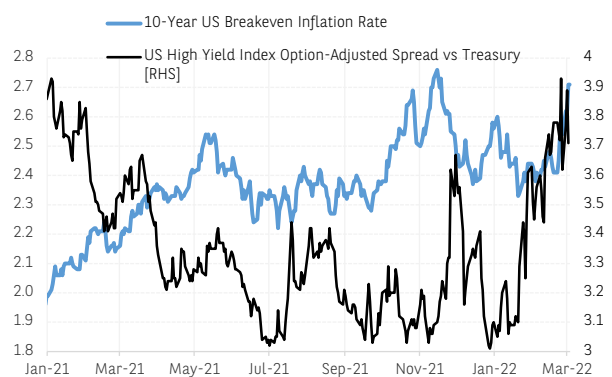


CHART 4



SOURCE: REFINITIV, ICE VIA FEDERAL RESERVE BANK OF ST. LOUIS, BNP PARIBAS

