

**Topical Letter**

**Number II – 2011**

 **BORDIER & CIE**  
BANQUIERS PRIVÉS DEPUIS 1844

## What if stagflation were on the horizon?

1. Stagflation: definition and measurement
2. Causes and effects of stagflation
3. How central banks should respond to stagflation
4. Do oil shocks necessarily lead to stagflation?
5. Current fears of imminent stagflation
6. Recommended assets in a stagflationary environment

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### 1. Stagflation: definition and measurement

Stagflation refers to a set of economic conditions under which economic growth is stagnating (hence “stag”) or even negative and inflation is high (hence “flation”). This kind of situation was inconceivable to traditional economists during the post-war years. According to the majority opinion at the time, when a central bank decided to stimulate growth by way of a soft monetary policy, the unemployment rate fell, but at the cost to citizens of a rise in inflation. There was therefore a trade-off between inflation and unemployment: this is the famous Phillips curve.

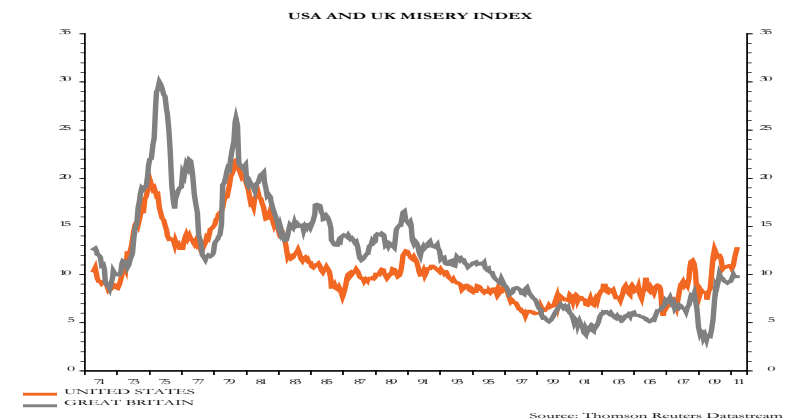
It is therefore no surprise that it should have been a politician – namely British MP Ian Macleod – who coined the neologism “stagflation” in a speech to Parliament in 1965.

The first observed period of stagflation came at a very high economic cost. The global economy had been growing at a rate of 5.1% a year during the period from 1960 to 1973; between 1973 and 1989, growth slowed to 3.2% a year. When the oil shock hit in 1973, central banks adopted a policy of strong monetary expansion to restore growth; instead of renewed growth, the result was high inflation.

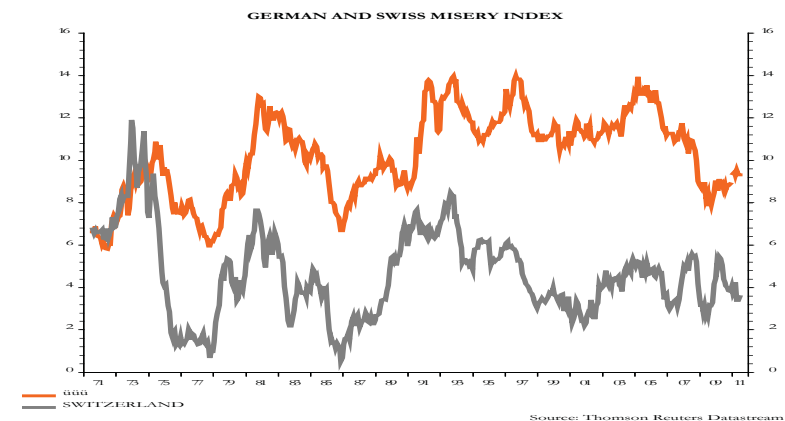
This period from 1973 to 1989 also had significant consequences at an ideological level. In 1972, the Club of Rome published a manifesto

entitled “Limits to Growth”, in which it predicted that the global economy would overshoot the earth’s natural resources and thus eventually collapse.

The economic indicator that is usually used to measure stagflation is the “misery index”, which is derived by simply adding together the inflation and unemployment rates.



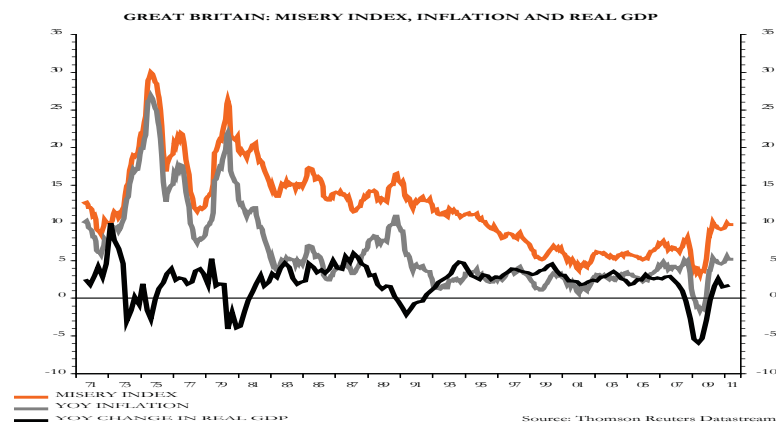
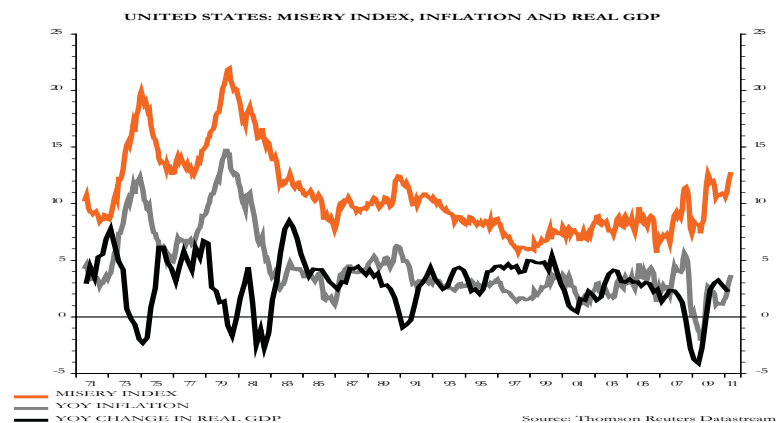
As we can see, in the 1970s, the misery index peaked at 20% and then 22% in the United States and at 30% and then 27% in Great Britain.



The situation was less catastrophic in Germany and, in particular, Switzerland, where it can be noted that the index twice fell below 1%.

This divergence can be explained by two factors:

- A less expansive monetary policy in Germany and Switzerland.
- The falling dollar and pound sterling, which led to high imported inflation in the United States and Great Britain.



The “Misery index, inflation and real GDP” graphs are intended to show not only that a high misery index is associated with high inflation – which is logical, since inflation is a component of the index – but also, and above all, that the index is a useful instrument in predicting a recession.

For more information, see “Stagflation is back. Here’s how to beat it” by Jeffrey D. Sachs, CNN Money, 27 May 2008.

## 2. Causes and effects of stagflation

Economists put forward two main explanations for what causes stagflation. Firstly, stagflation arises when an economy’s production capacity is reduced following an unfavourable shock to supply, such as a sharp increase in oil prices in a country that is an importer of oil. This shock gradually affects many products and leads to widespread price increases, causing a slowdown in production, which becomes more expensive and less profitable. Secondly, stagflation can occur as a result of inappropriate macroeconomic policies. Examples might include central banks tolerating excessive growth in the money supply or governments creating new taxes, raising existing taxation rates or regulating the goods or labour markets too strictly. For the record, other causes include protectionist policies, supervised or planned economies and war economies.

Stagflation is often caused by a cocktail of the three factors described above:

- Excess liquidity triggers an increase in inflation, causing household spending to increase as consumers anticipate further price rises, giving rise to a snowball effect.
- Oil prices rise, with the result that many companies become less profitable and begin to cut their workforces.
- Rising unemployment reduces overall spending power and hinders economic growth.

The main effects of stagflation are as follows:

- Tax receipts fall and, to make matters worse, the government has to increase spending to stimulate growth, for example by spending more on infrastructure or aid for companies.
- This results in large public deficits, leading to high interest rates and a shortening of the supply of bank lending for private investment.
- Banks with a high proportion of fixed-rate mortgage lending on their balance sheets experience difficulties.
- Production capacity is underutilised, and widespread de-industrialisation may even occur.
- Investors' expectations of corporate earnings are low, and financial asset valuations have to be revised down.
- Companies with plenty of short-term assets and a good credit rating with their banks are able to make acquisitions within their sectors; as a result, many sectors become oligopolies.

### 3. How central banks should respond to stagflation

In a situation of stagflation, central banks are caught in an impasse: they cannot both stimulate the economy by lowering interest rates and fight inflation; raising interest rates to reduce inflation would mean worsening the economic slowdown. Many economists paint a picture of central banks being in the same situation as a driver who has one foot on the brake and the other on the accelerator.

In the early 1980s, Federal Reserve Chairman Paul Volcker clearly chose to favour anti-inflationary measures. The Fed Funds rate increased drastically between 1979 and 1983 in what was referred to as “a deflationary scenario”.

The United States “prime rate” topped the 10% threshold – something which had never happened before. While Paul Volcker might be congratulated for having put an end to inflation, it was not until 1983

that the American economy really recovered, thanks to a fiscal stimulus and growth in the money supply. During the period of desinflation, the unemployment rate rose for six years.

### 4. Do oil shocks necessarily lead to stagflation?

The concept of an oil shock refers to the consequences for the global economy of a sudden change in oil supply conditions that combines price rises with a fall in production.

Economists agree that there have been three oil shocks: in 1973, 1979 and 2008.

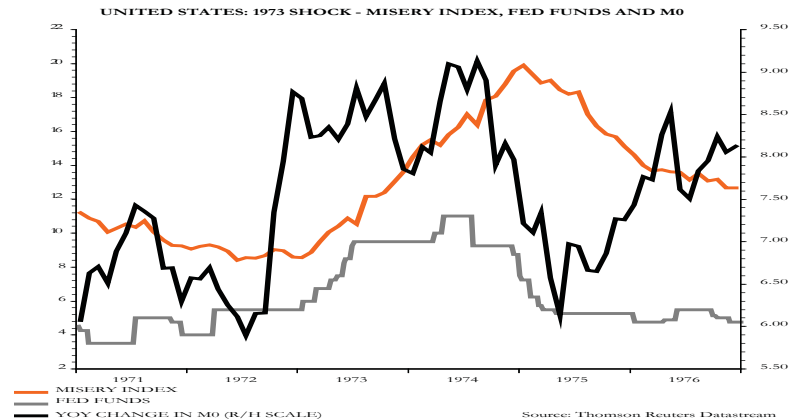
The 1973 oil shock was caused by the end of the Bretton Woods monetary system on the one hand and the Yom Kippur War on the other.

On 15 August 1971, the United States suspended the dollar's convertibility into gold, allowing the dollar to float. The fixed exchange rate system collapsed completely in March 1973 with the adoption of the floating exchange rate system. The main result was a depreciation in the value of the dollar; since oil prices were quoted in dollars, this had the effect of reducing the real income of oil-producing countries. The OPEC countries decided to price a barrel of oil against gold. From 1947 to 1967, the price of oil in dollars had risen by less than 2% a year.

On 16 and 17 October 1973, during the Yom Kippur War, OPEC's Arab member countries announced an embargo on the delivery of oil to countries that supported Israel. Furthermore, the Persian Gulf states unilaterally raised the posted price of crude oil by 70% without the agreement of the oil companies. The price of a barrel of oil on the open market rose from \$3 to \$18 in the space of a few weeks. However, by the end of December, OPEC had “reunified” the price of a barrel of oil at \$11.65.

The first oil shock had the following consequences:

- The price of crude oil quadrupled.
- In the United States, inflation reached 15.2% in 1974 and the number of people unemployed rose from 450,000 to 900,000 between 1974 and 1975.

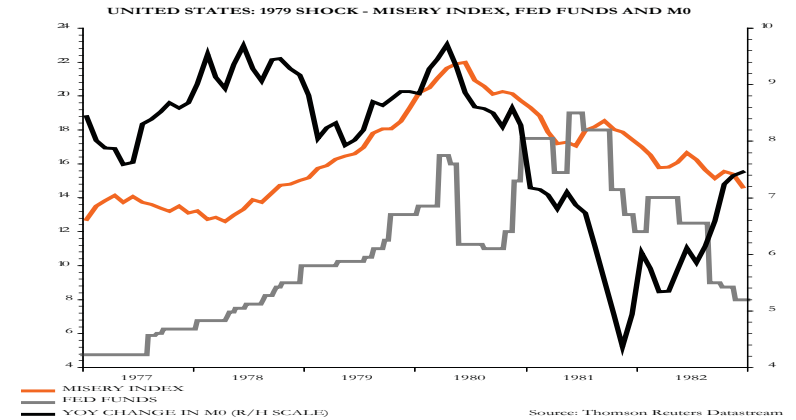


As we can see, the Federal Reserve's initial reaction was to let the money supply continue to grow – a move that could only feed inflation. Furthermore, the Fed Funds rate remained virtually unchanged in 1974.

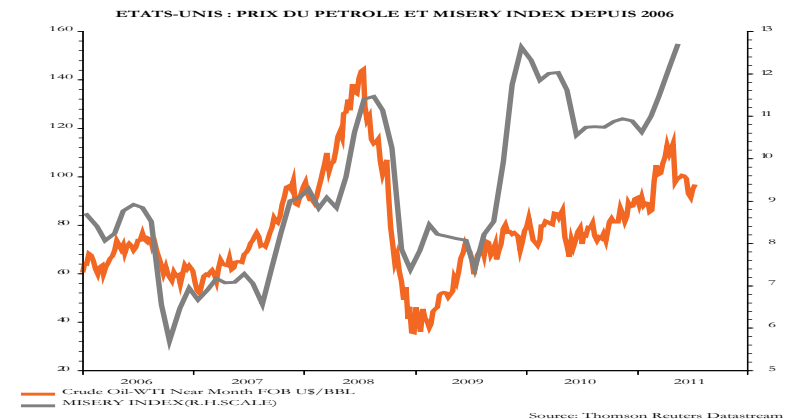
The second oil shock occurred in 1979 under the combined effect of the Iranian Revolution, the Iran-Iraq War and an increase in global demand for oil following the end of the first oil shock.

Riots erupted and were violently repressed in Tehran on 8 September 1978, marking the beginning of the Iranian Revolution that resulted in the Shah fleeing the country on 16 January 1979.

The Iran-Iraq War began on 22 September 1980, severely disrupting the supply of oil. The price of Arab Light Crude rose from less than \$13 a barrel in September 1978 to \$35 a barrel in May 1979.

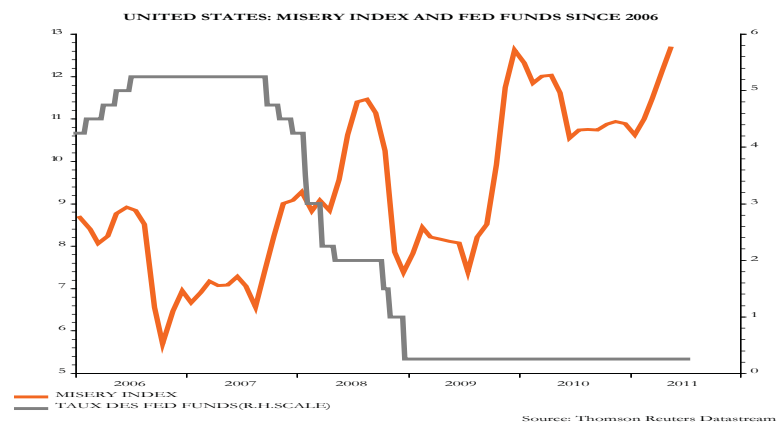
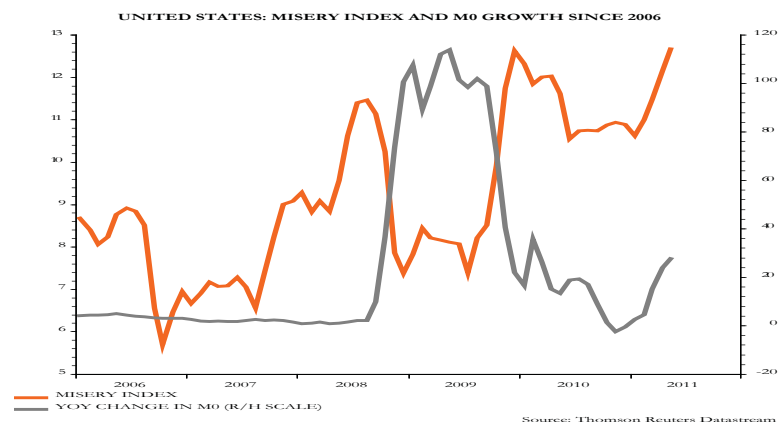


The misery index climbed from 15% to 22% during the second oil shock. This time, the Federal Reserve changed its policy. While M0 growth remained constant, the Fed Funds rate tracked the misery index, hitting 16% when the latter reached its peak.



The third oil shock, in 2008, undoubtedly does not deserve to be called a shock. Admittedly, the price of a barrel of oil rose from \$60 at the beginning of 2006 to \$144 in New York on 2 July 2008, but by the end of 2008 it had rapidly come back down to \$35. In the meantime,

the misery index, after falling from 11.5% to 7.5% in the space of six months, rocketed to 12.5% at the end of 2009 under the impact of the subprime crisis.



Note that the Federal Reserve kept growth in the M0 money supply at zero throughout the period when oil prices were rising, before panicking in response to the subprime crisis. Meanwhile, the Fed Funds rate continued to fall throughout 2008, settling in a range of between zero and 0.25% by the end of the year.

To conclude on the 2008 “shock”, we might add the following:

- The rise in prices in 2008 was caused not by a shortening in supply but by an unexpected increase in demand on the part of emerging countries, and particularly Asian countries.
- Without the subprime crisis, rising oil prices would undoubtedly not have triggered a recession in either the United States or Europe.

## 5. Current fears of imminent stagflation

In May, the official US unemployment rate was 9.1% and consumer prices (as measured by the CPI index) had risen by 3.6% year on year, propelling the misery index to 12.7%. This last figure paints an overly optimistic picture of the real situation in the United States.

The unemployment rate is artificially low as a result of millions of Americans having given up looking for work.

The CPI benefits from the heavy weighting given to housing when the index is calculated; looking at producer price indices for May, finished goods were up 7.3% year on year, while intermediate goods and crude goods were up 10.3% and 21.5% respectively.

Commodity prices are likely to continue to rise over the next few years, particularly as a result of demand from emerging countries (not only for oil and food, but also for industrial metals such as copper and aluminium).

The oil market is going to have to cope with demand-side pressure to meet the electricity needs of countries that no longer want the pollution associated with coal-fired power stations and/or are abandoning nuclear power, as well as increasing demand from the majority of emerging countries, at the same time as coping with supply-side

pressure resulting from increased political risk in the Gulf states. The development of natural gas could, it is true, relieve demand for oil.

Over and above the population growth factor, the price of foodstuffs will be affected by global warming and the increasing frequency of natural disasters (drought, flood, fire, etc.), not to mention the development of biofuels.

Another danger is the monetary policy pursued by the Federal Reserve for more than two years, which consists of keeping short-term interest rates as close to zero as possible and influencing long rates downwards by buying huge volumes of Treasury Bonds (known as “quantitative easing”). This has resulted in hot money leaving the New York financial markets to be invested instead in emerging markets, and in particular Asia and Latin America, which offer higher natural interest rates.

These capital flows have led to a continued fall in the value of the dollar and a year-on-year increase of more than 5% in consumer prices in countries like China, Brazil and Indonesia, with inflation stoked by dollar-denominated commodities rising 40% in a year. Finally, note that the Fed’s money creation activities have not increased the supply of credit to households or companies, and in particular SMEs; they have mainly served to increase commercial banks’ surplus reserves.

In conclusion, if stagflation were to occur, the Federal Reserve would be utterly powerless with base rates already at zero and excessive amounts of liquidity injected into the banking system. This is undoubtedly why the FOMC ruled out any stagflation in 2012 and 2013 in the press release that followed its meeting on 21 and 22 June and the economic forecasts that were appended to it.

However, Angel Gurría, Secretary-General of the OECD, had this to say on 25 May 2011: “There is also some concern that if downside risks [to the global economy] reinforce each other, their cumulative impact could weaken the recovery significantly, possibly triggering stagflation in some advanced economies”.

For more information, see the article “The Return of Stagflation” by Stanford University Professor Ronald McKinnon, published on wsj.com on 24 May 2011.

## 6. Recommended assets in a stagflationary environment

First, a somewhat discouraging warning: the only way to beat stagflation is by taking risks.

**Liquidity** should be avoided at the onset of stagflation. The famous slogan “cash is king” is true in a deflationary environment; liquidity only becomes attractive when a central bank has raised its base rate above the level of inflation.

**Bonds** are strongly discouraged; in the 1970s, brokers and financial analysts christened them “certificates of confiscation”. Inflation-indexed bonds (TIPSs) did not yet exist at the time; they are undoubtedly the least dangerous type of bond. There are, however, dangers to be taken into consideration: the official consumer prices index that is used to adjust coupons underestimates real inflation, and the borrowing government is no longer protected from being downgraded by rating agencies.

In the event of stagflation, **equity** markets are bearish; the basic rule is to focus on shares in companies with strong pricing power offering high dividends. Investors should favour sectors that produce goods or provide services that households cannot do without, such as energy, water, healthcare and food; conversely, since consumers are hit by both unemployment and falling spending power, anything related to so-called discretionary consumption should be avoided, as should retail not focusing on food.

Investing directly in **commodities and gold** appears to be an obvious play. However, commodity prices have already risen significantly in anticipation of accelerating inflation, and the price of any given

commodity can be influenced by speculation, for example by hedge funds; this is why investors should primarily buy into broad indices covering major commodities.

In **currencies**, the emphasis should be placed on commodity currencies, and in particular the Australian and Canadian dollars and the Norwegian krone. Where a central bank clearly appears to have decided to aggressively raise interest rates, investors should buy the currency that will benefit from the increase.

Finally, **property** is, in theory, promising in an inflationary environment. However, when stagflation occurs, households stop buying property as an investment and buy it instead for long-term reasons. In the event of a recession, spending power falls and there is a high risk of being unable to meet mortgage repayments. We should also add that the subprime crisis will be in everyone's memories for a few years to come, and that US house prices are unlikely to shoot up during a period of stagflation.

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