

# Research Global

## 'Stagflation' risks on the rise

- The combination of a) clear global slowdown signals and b) widespread bottlenecks/labour shortages has raised fears of a 'stagflation' scenario for the global economy.
- In this paper we look at how critical the situation is and which determinants will be important for whether we end up in a prolonged 'stagflation' scenario or whether it is simply a short term issue that will prove transitory. It is a supplement to our forecast for the global economy, which we outlined in *Big Picture – Delayed delta recovery*, 6 September 2021. Here we highlighted a downside risk scenario of stagflation with 30% probability.
- While our baseline scenario is that inflation will fall back in 2022 due to lower commodity price inflation, and a soft landing in the global economy, we see a rising risk that labour shortages continue for longer and that potential output has been reduced. Challenges with the delta variant over the winter could prolong freight challenges and hamper labour supply further. A result could be rising wage pressures to levels not seen for a long time and a further increase in inflation expectations.
- Economic stagnation and persistent inflation pressures would be a 'stagflationary' scenario that would require central banks to tighten policy despite weaker economies. The Fed would likely be patient in making a verdict on the persistence of higher inflation but would eventually tighten faster from 6M-24M if inflation expectations was to be de-anchored. We also expect the ECB to allow inflation to increase for some time but action could be taken in H2 2022 if inflation pressures stay elevated during H1 and inflation expectations increases further. In a follow-up piece we will look closer at the market implications of such a scenario.

### 'Stagflation' revisited

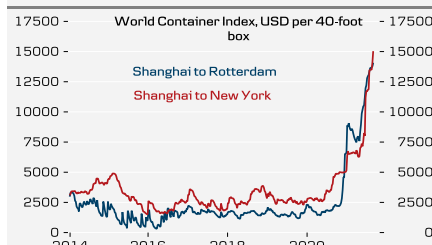
Recent economic data have highlighted the risk of a stagflationary scenario in which growth weakens more than expected but high inflation pressures continue. Being a combination of 'stagnation' and 'inflation' the best word to describe it in our view is stagflation, although

### Inflation expectations key for whether stagflation becomes sticky



Source: Macrobond Financial, Danske Bank. Note: Past or current performance is no guarantee of future performance.

### Freight rates record high on record high demand and COVID disruptions



Source: Macrobond Financial, Danske Bank

#### Chief Analyst

Allan von Mehren  
alvo@danskebank.dk

#### Chief Analyst

Mikael Olai Milhøj  
milh@danskebank.dk

#### Senior Analyst

Aila Mihr  
amihr@danskebank.dk

#### Senior Analyst

Björn Tangaa Sillemann  
bjsi@danskebank.dk

#### Analyst

Antti Oskari Ilvonen  
antti.ilvonen@danskebank.dk

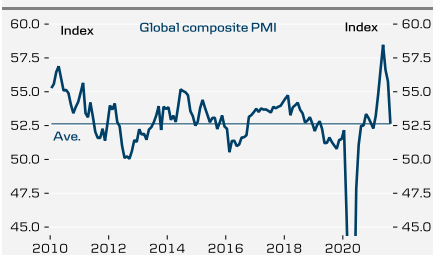
#### Chief Analyst

Jakob Ekholdt Christensen  
jakc@danskebank.dk

#### Chief Analyst

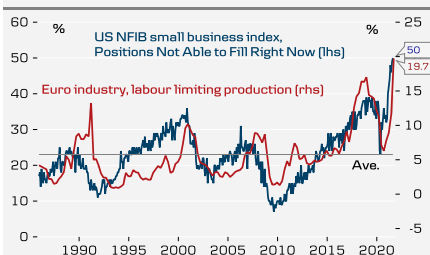
Minna Kuusisto  
minna.kuusisto@danskebank.dk

### Clear signs of stagnation in global economy...



Source: Macrobond Financial, Markit

### ... amid labour shortages in both US and Euro area



Source: Macrobond Financial, Danske Bank

this case of stagflation would be very different from the stagflation seen in the 1970's where the label was first used (see box 1 at the end of the paper). A stagflation scenario is triggered by a negative supply shock, which reduces the potential output of the economy and thus pushes up inflation if demand is not 'allowed' to decline by policy makers through a tightening of policy. If economic policy even aims to lift demand with accommodative policy (as in the 1970's) the inflation outcome is even worse (see box 2 for an explanation of the stagflation dynamics in a demand-supply diagram).

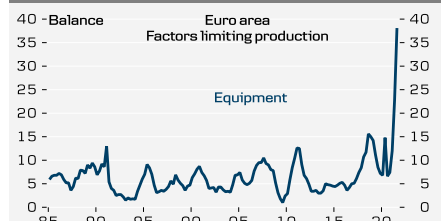
### How did we get here? Higher demand and lower supply

In our paper *Global Manufacturing heading for a hot (inflation) summer*, 12 May 2021, we highlighted the outlook for an overheating of the manufacturing sector, which continues to cause havoc in freight markets and bottle necks throughout the global manufacturing system. Here's a quick recap of the main factors driving this:

**First, US and Europe have seen a huge boost to demand in 2021.** This is particularly the case in the goods sector, where the pandemic led to more consumer demand for goods instead of services. In the US this factor was boosted significantly by the US stimulus checks in March 2021. Over the summer European consumers have also spent more money on goods as shopping malls and stores reopened. Finally, companies have boosted investments. At first due to the need for equipment for people working from home but later also supported by very strong earnings growth among manufacturing companies. The composition of demand with high focus on electronics has led to a shortage in components such as microchips. Demand for services also picked up with the reopening of economies adding to the demand for labour.

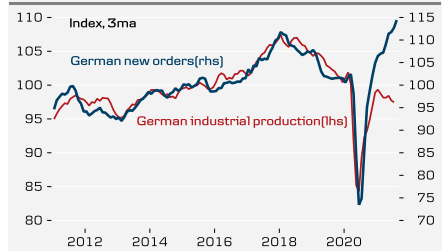
**Second, while demand was boosted, supply was reduced in many areas due to COVID-related disruptions.** Not least the supply of global freight has been hampered by lower capacity due to occasional shutdowns over the summer of some of China's biggest ports and due to occasional COVID-related restrictions in US ports. It increases the turn times of ships and delays delivery of consumer goods and components for production, which drives delays further down the supply chain. The auto sector has seen the biggest hit, which led to a sharp rise in used car prices in the US and significant reduction in car production globally. In addition many people have not returned to the labour market leading to significant labour shortages despite GDP not being above the pre-COVID trend line of GDP.

### Euro businesses struggling to get equipment



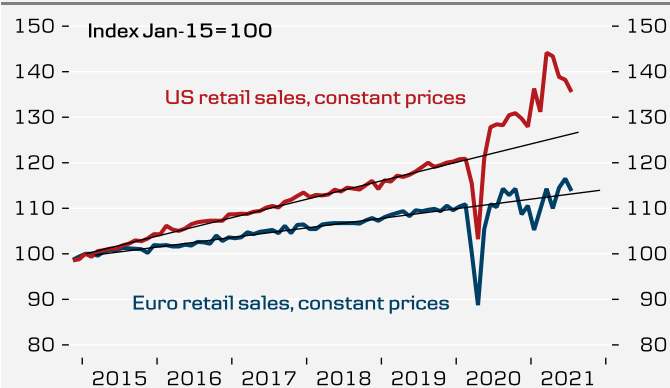
Source: Macrobond Financial, EU Commission

### Germany hard hit due to big auto sector - production far below orders



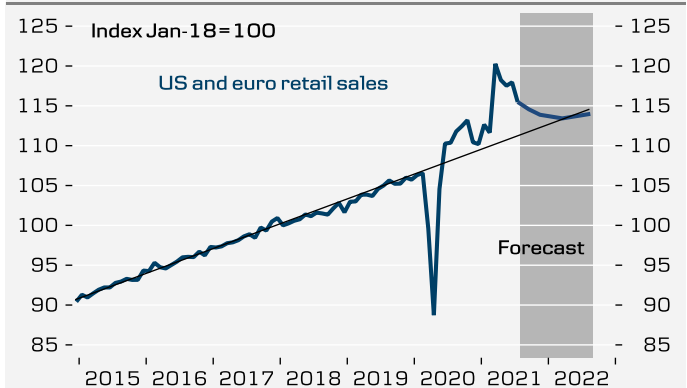
Source: Macrobond Financial, Bundesbank

### US consumption of goods reached extraordinary levels after stimulus in March 2021 - euro closer to trend



Source: Macrobond Financial, BEA

### We look for US goods demand to normalize and drive down US and euro average sales back to trend



Source: Macrobond Financial, BEA, Eurostat, Danske Bank

**A combination of a boost to demand while supply declined has caused a perfect storm in some markets with significant excess demand and shortages of both equipment, materials and labour. Wage growth has picked up in the US and freight rates have increased to record high levels (see chart on page 1).** However, on a positive note some commodity prices started to move sideways – more on this below.

**Outlook: What will happen to demand and supply?**

The path ahead will clearly depend on what happens to both demand and supply from here. We believe the current perfect storm will ease but also see risks that it could drag out raising the risk of a stagflationary scenario – especially in the US.

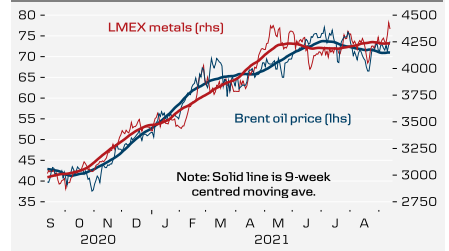
**Demand**

**On the demand side we look for things to gradually ease up but it will take a while.** Consumption of goods has come down and while it may partly be related to low retail inventories, we also believe it is the start of a normalisation process as the effect from the stimulus checks in Q1 is fading and a reopening of the economies is shifting more demand from goods to services (see bottom charts on page 2). We look for the level of demand to stay above the trend line for some time, and this will likely keep pressure on supply chains for the rest of 2021 as will the need to rebuild retail inventories and catch up with the backlog of orders. However, during 2022 we expect the high goods demand to normalize further. The lift to euro area retail sales we witnessed over the summer was likely a one-off and we expect demand here to follow the trend line going forward. The bottom line is we expect goods demand pressures to be intact for the rest of 2021 but then gradually normalize during 2022. A risk to this scenario is that new waves of COVID over the winter keeps service consumption low and thus goods consumption high for longer.

**In growth terms, we could see negative numbers as demand declines.** This will entail a continued drop in global PMI manufacturing, which measures *growth* rather than the *level* of activity. This would paint an image of ‘stagnation’.

**The negative growth should reduce demand for industrial commodities, which is in line with the stabilisation, we currently see in metal and oil prices (top chart).** Since commodity prices tend to be one of the key drivers of inflation, we expect this to drive a decline in inflation in 2022.

Commodity prices stabilizing...



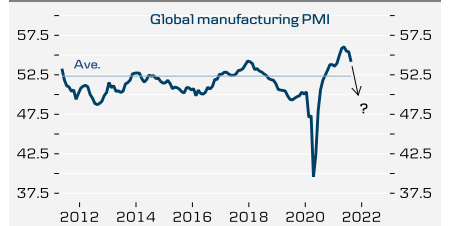
Source: Macrobond Financial

Lower commodity inflation to pull down headline inflation



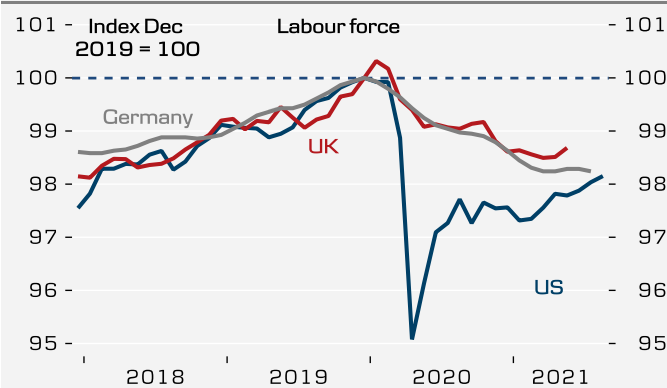
Source: Macrobond Financial

Will global manufacturing PMI drop more sharply than expected adding to image of stagnation?



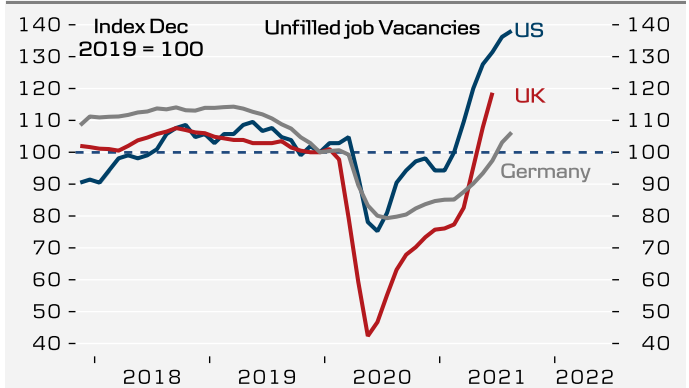
Source: Macrobond Financial

Will people that left the labour force return? And how fast?



Source: Macrobond Financial

Labour shortages seen in both US and Europe



Source: Macrobond Financial

## Supply

**What is going to happen to the supply side is more tricky to forecast** as we have many kinds of bottlenecks currently and with the risk being that they last for longer than expected (we have put most emphasis on the US in the analysis below as this is where the risk of stagflation seems highest):

**1) Lockdown effects.** Part of the bottleneck issues is due to regular lockdowns in Chinese ports, which increase turn times for ships leading to continuous clogging of the freight system. Tighter COVID restrictions in Asian factories and transport systems have added to bottlenecks over the summer. For example, in a recent survey, 83% of German companies in Vietnam reported bottlenecks due to transport problems and 58% said suppliers production stopped, see [article](#). With vaccination rates low in this region we expect the supply disruptions to be with us in the coming quarters. Possible new COVID waves over the winter in the US could also delay transport due to an already big shortage of truck drivers.

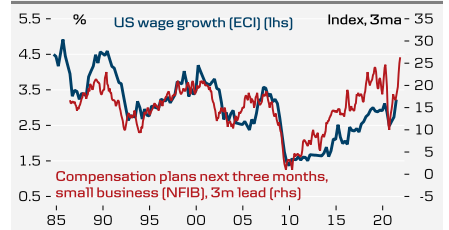
**2) Labour force: When and how fast and to what extent will people return to the labour market?** This is a key question for how long time labour shortages will be with us and thus how sustained the wage pressures will be. Unfortunately the news have not been too encouraging on this front.

**First, the shortage of labour and reduction in labour force is seen across many countries** suggesting the problem is more structural than due to special factors in a specific country (see bottom charts on page 3).

**Second, looking closer at the US, four million people had left the labour force in early 2021 compared to pre-COVID levels. Since then only one million has returned.** And in August the number of people outside the labour force who said they want a job declined by 800,000 to 5.7 million. That level is below the average for the past 15 years suggesting that there is not a higher than normal pool of workers outside the labour force who wants a job. The drop in August may be related to the new wave of COVID but with winter coming and possible new waves, this problem may not go away soon, see also *US Labour Market Monitor – Weak jobs report – noise or a signal of something else?*, 13 September 2021.

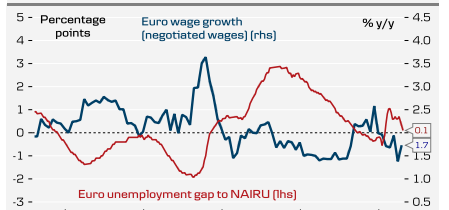
Looking at the labour force development across gender and age groups, a few points can be made: **Of the one million people returning this year, only 200,000 were women. The number of female workers that has not returned is still 1.7 million.** It could be due to

Wage pressures building in the US



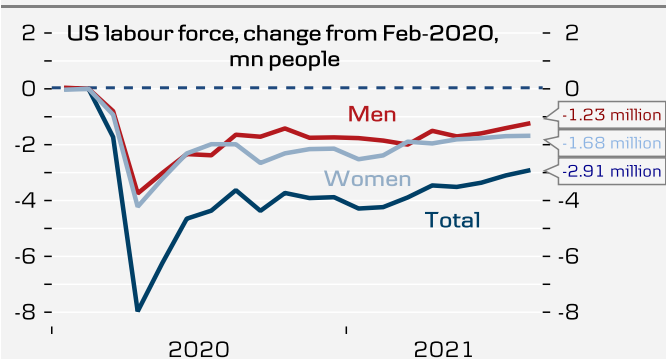
Source: Macrobond Financial, NFIB, BLS

Still little sign of wage growth in euro area



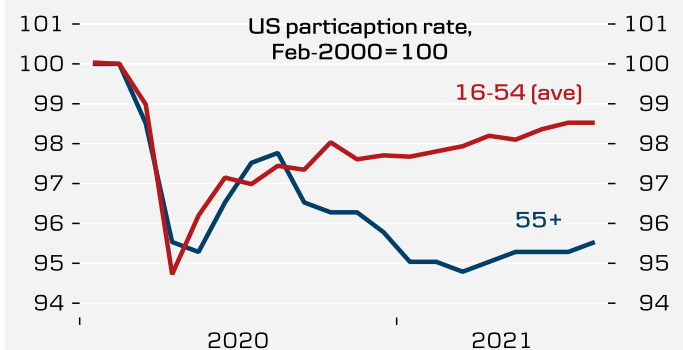
Source: Macrobond Financial, Eurostat

Few women have returned to the labour force in 2021



Source: Macrobond Financial, BLS

Early retirement and fear of COVID keep older workers away from jobs



Source: Macrobond Financial, BLS

child care issues (with schools closed and kids staying home) and that some have found they don't need to work. The high savings during the pandemic has probably also allowed more women to stay home for some time. Among men, 800,000 have returned but still 1.2 million are missing compared to the beginning of 2021. Looking at age groups in the US **around 1/3 of the three million still out of the labour force are above 54 years**. Some have retired earlier while others may be afraid of contracting COVID in a workplace, not least unvaccinated workers.

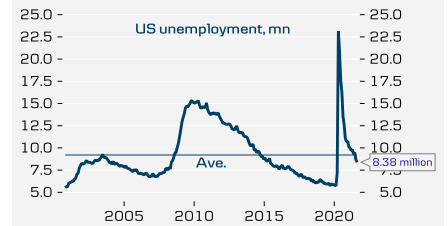
**When it comes to unemployed (in the labour force but without a job) we expect that more people will take a job** as the enhanced unemployment benefits have expired in all states (from 6 September). But there is uncertainty around how big the effect will be and a mis-match in skills between unemployed workers and vacant jobs may limit this effect.

**The bottom line is that there is substantial uncertainty when it comes to the outlook for the supply side.** We do expect more workers to gradually return to the labour market but the risk is skewed to a slower return and that labour shortages and bottle necks are with us for a more extended period of time. This would keep upward pressure on wages in place into 2022 even in a scenario where GDP growth is slowing. The risk is most pronounced in the US, where wage growth has already picked up and excess demand is stronger.

**Conclusion: Stagflation risk is rising**

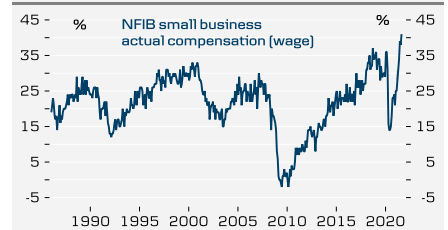
**The combination of goods demand staying high for some time and a supply side that continues to be challenged by bottle necks and reduced labour supply points to a rising risk of a stagflationary scenario. We do expect easing demand growth to reduce inflation pressures from commodities and pull inflation lower going into 2022. But continued wage pressures and bottle necks may lead to a slower decline in inflation than anticipated. If inflation stays high for longer, there is a risk that inflation expectations move higher and become de-anchored.** This could trigger a more sustained rise in wages growth and inflation while growth would be hampered by supply constraints. The risk is in our view highest in the US compared to the euro area. The vaccination rate is lower, goods demand is higher relative to trend, inflation is already very high and wage growth has increased more. A factor that could help put a lid on inflation expectations is that these tend to be adaptive in nature, hence reflect past inflation. As commodity prices starts to pull headline inflation lower, this would work to put a lid on inflation expectations.

**US unemployment expected to decline as more people take jobs after enhanced benefits have expired**



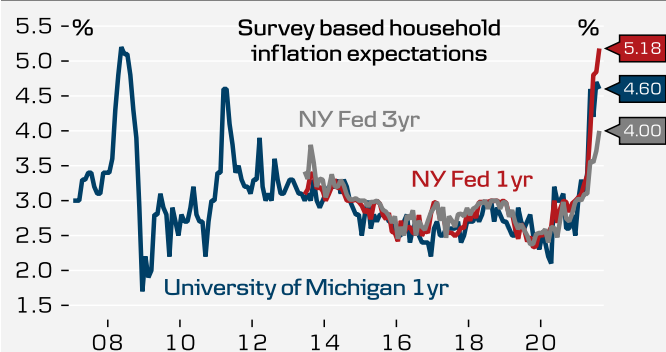
Source: Macrobond Financial BLS

**Small business wage compensation index highest on record in August**



Source: Macrobond Financial NFIB

**Inflation expectations among US households very high currently**



Source: Macrobond Financial

**Euro consumer inflation expectations not as high as in the US - and very adaptive in nature**



Source: Macrobond Financial, EU Commission, Eurostat

A key determinant for whether a stagflationary scenario would be more sustained and how long it lasts is the policy response by the central banks, which we turn to next.

## How would ECB and the Fed respond if inflation is sustained amid an economic slowdown?

### The Fed

It is much easier for central banks to deal with demand shocks than supply shocks. If the economy is hit by a negative demand shock, it would be appropriate to ease monetary policy looking at both inflation and employment. It is much more difficult when the economy is hit by supply shocks, which create a trade-off. A negative supply shock means higher inflation and wage pressure but also weaker jobs and GDP growth.

At his speech at Jackson Hole, Fed Chair Jerome Powell made it clear that the Fed is mostly looking at employment right now, as the Fed expects inflation pressure to ease next year. One reason is that inflation expectations suggest that inflation is not spinning out of control yet, although expectations may send a false signal if we are indeed in the middle of some sort of regime shift. Powell made it clear that the Fed should not overreact to temporary swings in inflation so near-term the Fed is unlikely to shift gears. He also said, however, that the Fed would react if inflation turns out to be more persistent than in the Fed's base case. As the Fed would have to wait for more data to confirm this scenario, it does not change the Fed's monetary policy strategy near-term (in 3-6M). To be more specific **tapering is still most likely concluded next summer (with the possibility of a faster stop if needed). Looking further out, the stagflation scenario would force the Fed to hike the Fed funds rate a lot faster in 6-24M. This in turn would eventually quell push inflation again but also slow growth significantly.**

### ECB

As euro area inflation has accelerated throughout the course of this year, ECB policy makers have been at pains to stress the transitory nature of the observed inflation surge. Although we share the ECB's view in that respect, we also acknowledge that the combination of prolonged supply bottlenecks, rising inflation expectations and building wage pressures could lead to a more durable uptrend in core inflation, especially goods price inflation in 2022.

A combination of slowing economic growth and rising underlying inflation pressures would create a 'perfect storm' for ECB at the start of 2022. Hawks in the Governing Council would naturally build a narrative of ending QE quickly in light of rising inflationary risks, while doves would stress the downside risks to the economic outlook and financing conditions from slowing monetary stimulus. On balance we would expect the dovish camp to maintain the upper hand in H1 22, not least as the new ECB monetary strategy raises the bar in terms of tolerating inflation overshoots. Monetary and fiscal policy interlinkages would probably also play into the discussions, as an abrupt end to ECB bond purchases would create new problems with respect to debt servicing costs and fiscal sustainability concerns. That said, **should inflation pressures remain elevated well into H1 22, with ECB forecasts predicating it staying around the 2% target for the coming years, we would expect ECB to start scaling down its QE purchases as a first step.**

**Box 1: Situation today compared to 1970's stagflation**

The phrase stagflation (combining stagnation and inflation) is mostly associated with the 1970's. The period was characterized by persistently high inflation amid rising unemployment in most of Europe. While we use the phrase stagflation in this paper, there are some important differences to the 1970, which we list below:

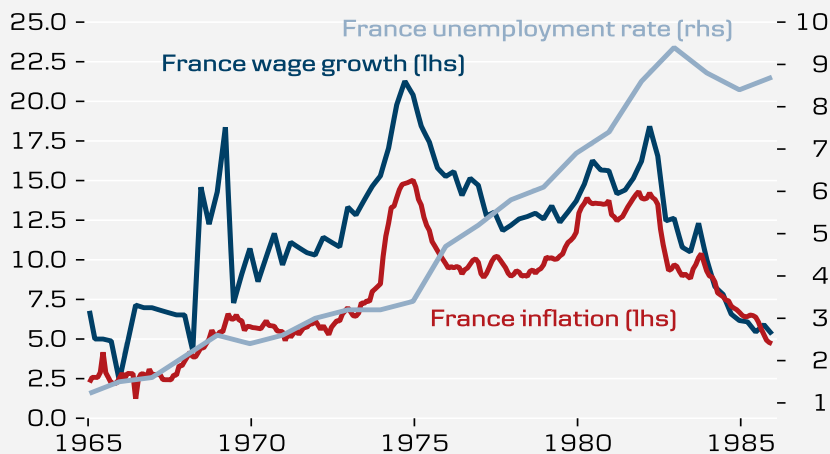
1. The negative supply shock(s) were related to commodities (the two oil crises in 1973 and 1979). Today the negative supply shock is a reduction in the labour input to GDP. Both reduces potential GDP but in different ways. An oil price shock initially pushes up the price of oil, whereas a labour supply shock initially pushes up the price of labour (wages).
2. Policy response likely to be different. A key reason the stagflation in the 1970's was so persistent was, that central banks did not meet higher inflation with tighter policy. Central banks were not independent and had no inflation targets. Hence, there was no mechanism to rein in inflation expectations. Frequent devaluations also added to inflation. Central banks are independent today and would likely react much sooner to any sign that inflation expectations become de-anchored from the 2% inflation targets.
3. Wage indexation was widespread in Europe in the 1970's and contributed to price-wage spirals where higher prices automatically triggered higher wages.
4. Finally, inflation expectations were less anchored going into the 1970's as inflation was already moving higher in the late 1960's and no inflation targets were in place.

While we talk about stagflation in this paper to describe a possible situation with stagnation and continued inflation pressures, it is thus of a very different nature than the 1970's stagflation, where it characterized a period that lasted for more than 10 years. In general we also find it useful to distinguish between what we call 'soft stagflation' and 'hard stagflation':

'Soft' stagflation: Growth slows amid high inflation pressures (what we talk about in this paper)

'Hard' stagflation: Growth falls below trend leading to rising unemployment amid high inflation pressures

**Chart: France, as many other countries, experienced stagflation in late 1970s**

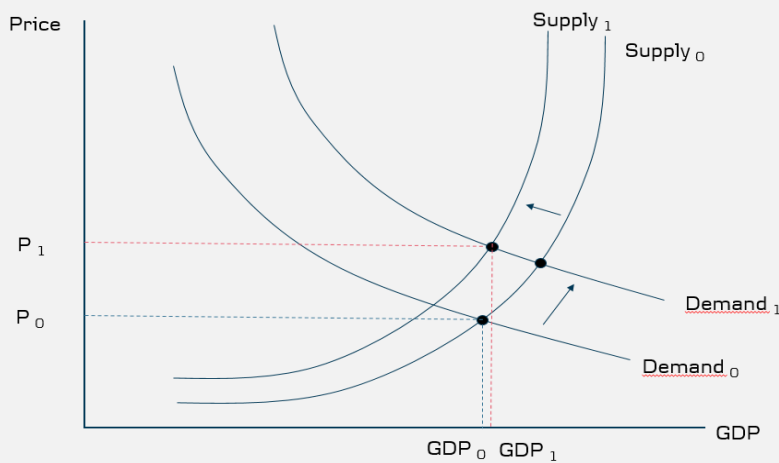


Source: Macrobond Financial, French Ministry of Labour, BIS, European Commission

**Box:2: How a negative supply shock causes stagflation**

Stagflation is caused by a negative supply shock hitting the economy, which pushes prices up while demand is reduced. In the current situation it has happened alongside a positive goods demand shock from the US stimulus and pandemic, which led to a shift from service consumption to more goods consumption. We have tried to illustrate this below. The positive shock to demand shifts the curve from Demand<sub>0</sub> to Demand<sub>1</sub>. At the same time the supply is shifting inwards from Supply<sub>0</sub> to Supply<sub>1</sub>. As can be seen from the chart the net result of this is an only small increase in GDP but a big increase in the price level. If demand was to increase further (demand curve shift outward) it would have little impact on GDP but a big impact on prices because we are close to the vertical part, which is the maximum output you can produce with available resources. A further rise in demand at this stage cannot increase GDP but will push up prices.

If the higher inflation implied by this leads to higher inflation expectations and wage increases, it would create a persistent increase in inflation. To the extent inflation expectations rise from levels below the inflation target this may be a welcome development for a central bank (such as the ECB which has struggled to get inflation towards its 2% target). But if inflation expectations keep rising above the central bank targets, it would create the risk of a de-anchoring and a central bank would have to respond by tightening policy to retain credibility.



Source: Danske Bank



## Disclosures

This research report has been prepared by Danske Bank A/S ('Danske Bank'). The authors of this research report is Allan von Mehren, Chief Analyst, Mikael Olai Milhøj, Chief Analyst, Aila Mihr, Senior Analyst, Jakob Ekholdt Christensen, Chief Analyst, Minna Kuusisto, Chief Analyst, Bjørn Tangaa Sillemann, Senior Analyst and Antti Oskari Ilvonen, Analyst.

### Analyst certification

Each research analyst responsible for the content of this research report certifies that the views expressed in the research report accurately reflect the research analyst's personal view about the financial instruments and issues covered by the research report. Each responsible research analyst further certifies that no part of the compensation of the research analyst was, is or will be, directly or indirectly, related to the specific recommendations expressed in the research report.

### Regulation

Authorised and regulated by the Danish Financial Services Authority (Finanstilsynet). Deemed authorised by the Prudential Regulation Authority. Subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details of the Temporary Permissions Regime, which allows EEA-based firms to operate in the UK for a limited period while seeking full authorisation, are available on the Financial Conduct Authority's website.

Danske Bank's research reports are prepared in accordance with the recommendations of the Danish Securities Dealers Association.

### Conflicts of interest

Danske Bank has established procedures to prevent conflicts of interest and to ensure the provision of high-quality research based on research objectivity and independence. These procedures are documented in Danske Bank's research policies. Employees within Danske Bank's Research Departments have been instructed that any request that might impair the objectivity and independence of research shall be referred to Research Management and the Compliance Department. Danske Bank's Research Departments are organised independently from, and do not report to, other business areas within Danske Bank.

Research analysts are remunerated in part based on the overall profitability of Danske Bank, which includes investment banking revenues, but do not receive bonuses or other remuneration linked to specific corporate finance or debt capital transactions.

### Financial models and/or methodology used in this research report

Calculations and presentations in this research report are based on standard econometric tools and methodology as well as publicly available statistics for each individual security, issuer and/or country. Documentation can be obtained from the authors on request.

### Risk warning

Major risks connected with recommendations or opinions in this research report, including as sensitivity analysis of relevant assumptions, are stated throughout the text.

### Date of first publication

See the front page of this research report for the date of first publication.

## General disclaimer

This research has been prepared by Danske Bank A/S. It is provided for informational purposes only and should not be considered investment, legal or tax advice. It does not constitute or form part of, and shall under no circumstances be considered as, an offer to sell or a solicitation of an offer to purchase or sell any relevant financial instruments (i.e. financial instruments mentioned herein or other financial instruments of any issuer mentioned herein and/or options, warrants, rights or other interests with respect to any such financial instruments) ('Relevant Financial Instruments').

This research report has been prepared independently and solely on the basis of publicly available information that Danske Bank A/S considers to be reliable but Danske Bank A/S has not independently verified the contents hereof. While reasonable care has been taken to ensure that its contents are not untrue or misleading, no representation or warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or reasonableness of the information, opinions and projections contained in this research report and Danske Bank A/S, its affiliates and subsidiaries accept no liability whatsoever for any direct or consequential loss, including without limitation any loss of profits, arising from reliance on this research report.

The opinions expressed herein are the opinions of the research analysts and reflect their opinion as of the date hereof. These opinions are subject to change and Danske Bank A/S does not undertake to notify any recipient of this research report of any such change nor of any other changes related to the information provided in this research report.

This research report is not intended for, and may not be redistributed to, retail customers in the United Kingdom (see separate disclaimer below) and retail customers in the European Economic Area as defined by Directive 2014/65/EU.

This research report is protected by copyright and is intended solely for the designated addressee. It may not be reproduced or distributed, in whole or in part, by any recipient for any purpose without Danske Bank A/S's prior written consent.

## Disclaimer related to distribution in the United States

This research report was created by Danske Bank A/S and is distributed in the United States by Danske Markets Inc., a U.S. registered broker-dealer and subsidiary of Danske Bank A/S, pursuant to SEC Rule 15a-6 and related interpretations issued by the U.S. Securities and Exchange Commission. The research report is intended for distribution in the United States solely to 'U.S. institutional investors' as defined in SEC Rule 15a-6. Danske Markets Inc. accepts responsibility for this research report in connection with distribution in the United States solely to 'U.S. institutional investors'.

Danske Bank A/S is not subject to U.S. rules with regard to the preparation of research reports and the independence of research analysts. In addition, the research analysts of Danske Bank A/S who have prepared this research report are not registered or qualified as research analysts with the New York Stock Exchange or Financial Industry Regulatory Authority but satisfy the applicable requirements of a non-U.S. jurisdiction.

Any U.S. investor recipient of this research report who wishes to purchase or sell any Relevant Financial Instrument may do so only by contacting Danske Markets Inc. directly and should be aware that investing in non-U.S. financial instruments may entail certain risks. Financial instruments of non-U.S. issuers may not be registered with the U.S. Securities and Exchange Commission and may not be subject to the reporting and auditing standards of the U.S. Securities and Exchange Commission.

## Disclaimer related to distribution in the United Kingdom

In the United Kingdom, this document is for distribution only to (I) persons who have professional experience in matters relating to investments falling within article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the 'Order'); (II) high net worth entities falling within article 49(2)(a) to (d) of the Order; or (III) persons who are an elective professional client or a per se professional client under Chapter 3 of the FCA Conduct of Business Sourcebook (all such persons together being referred to as 'Relevant Persons'). In the United Kingdom, this document is directed only at Relevant Persons, and other persons should not act or rely on this document or any of its contents.

## Disclaimer related to distribution in the European Economic Area

This document is being distributed to and is directed only at persons in member states of the European Economic Area ('EEA') who are 'Qualified Investors' within the meaning of Article 2(e) of the Prospectus Regulation (Regulation (EU) 2017/1129) ('Qualified Investors'). Any person in the EEA who receives this document will be deemed to have represented and agreed that it is a Qualified Investor. Any such recipient will also be deemed to have represented and agreed that it has not received this document on behalf of persons in the EEA other than Qualified Investors or persons in the UK and member states (where equivalent legislation exists) for whom the investor has authority to make decisions on a wholly discretionary basis. Danske Bank A/S will rely on the truth and accuracy of the foregoing representations and agreements. Any person in the EEA who is not a Qualified Investor should not act or rely on this document or any of its contents.

**Report completed:** 14 September 2021, 16:11 CET

**Report first disseminated:** 15 September 2021, 06:30 CEST