

Economy

Germany: a model to be revised

Wednesday 27 July 2022

Bruno Cavalier - Chief Economist bruno.cavalier@oddo-bhf.com +33 (0)1 44 51 81 35

Fabien Bossy - Economist fabien.bossy@oddo-bhf.com +33 (0)1 44 51 85 38

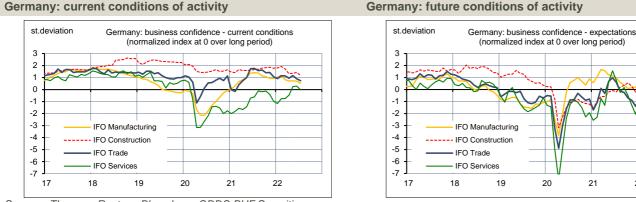
https://www.oddosecurities.com

In the spring, the German economy was just on the verge of recession. Since then, according to various business climate surveys, it has made... a step forward. A contraction of activity seems unavoidable. Its duration and extent will depend on the developments of the energy crisis. Germany is exposed to the risk of a gas shortage, the intensity of which depends mainly on two factors, one geopolitical (the magnitude of Russian gas shutoff), the other technical (the diversification via other gas suppliers and other source of energy). In the longer term, Germany's growth model is being called into question.

Recession, no longer a question of if, but when and how far

As soon as the war in Ukraine began, the business climate in Europe, and especially in Germany¹, began to weaken. At the time, it was difficult to say whether this was just a one-off reaction to a shock of uncertainty - perhaps an overreaction that could be quickly reversed - or the start of a downturn in the economic cycle. Five months later, the scenario of a downturn is now well established.

Unlike the 2020 recession, activity was not brought to a sudden halt by the war in Ukraine, except in the automotive sector which was deprived of essential components. At the same time, the service sectors have benefited from the lifting of health restrictions, more or less compensating for the deterioration in other sectors (chart lhs). The catch-up in services is now behind us. Up to now, the Bundesbank's weekly activity indicator describes an economy that is roughly stagnant, but not yet experiencing a sharp correction. However, the outlook for activity has been revised down to a degree comparable to the shock of the pandemic, judging by the IFO survey (chart rhs). No sector has been spared. The PMI survey sends a similar signal: in July, the composite output index fell into the "recession zone", to its lowest level (excluding the pandemic) since the end of 2012.



Sources: Thomson Reuters, Bloomberg, ODDO BHF Securities

The direct cause of the fall in business confidence is the ongoing energy crisis, which Vladimir Putin seems to be modulating to suit his interests². From the point of view of the Russian authorities, a total cut-off of gas deliveries is not necessarily desirable because it would reduce export revenues and lose leverage in the tussle with the EU. To inflict maximum pain on Europe, reduced and disrupted deliveries are a more effective way of creating uncertainty and stirring up divisions between countries. This can be seen in the rather lukewarm initial reaction to the Commission's proposal to uniformly

20

21

22

Conflict of interests:

Le présent document n'est pas un document contractuel; il est strictement destiné à l'usage privé du destinataire. Les informations qu'il contient se fondent sur des sources que nous estimons fiables, mais dont nous ne pouvons garantir l'exactitude ni l'exhaustivité. Les opinions exprimées dans le document sont le résultat de notre évaluation à la date de la publication. Elles peuvent donc être révisées à une date ultérieure.

1/5

Page

¹ See our Eco Note dated 31 March 2022: "Germany: on the brink of recession"

² The Russian authorities invoke technical constraints to justify adjustments to their gas deliveries to Germany (to 40% of the normal level in mid-June, to zero in mid-July, before a partial resumption of deliveries). They had adopted a similar tack last summer to speed up the approval of NordStream2, unsuccessfully. This time, no sooner has one turbine been repaired than a second one, conveniently enough, urgently requires repair.

ODDO BHF CORPORATES & MARKETS, a division of ODDO BHF SCA, limited sharepartnership - Bank authorised by ACPR. ODDO BHF and/or one of its subsidiaries could be in a conflict of interest situation with one or several of the groups mentioned in this publication. Please refer to the conflict of interests section at the end of this document.

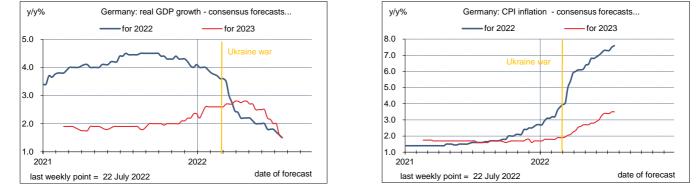


reduce gas demand by 15% in the EU. With some *Schadenfreude*, several countries felt that they did not have to make such an effort to address a problem that primarily affects Germany. This is a short-sighted position, but one that is attributable to the memory of the sovereign debt crises of the past decade. At that time, it was Germany that imposed fiscal austerity measures on southern Europe. A political agreement was eventually reached on this plan. It would be mistaken to think that the rest of the EU will not be affected if the German economy continues to weaken.

Since the start of the war in Ukraine, German economic forecasts have been turned upside down, but given the downside risks relating to the Russian gas crisis, we think that further substantial revisions are still to come. Between mid-February and mid-July, the consensus median forecast for real GDP growth was lowered from 3.5% to 1.5% for 2022, and from 2.7% to 1.5% for 2023 (chart lhs). These averages are consistent with a stagnation over the transition from 2022 to 2023 but not with a contraction in activity. Given the persistent energy crisis, forecasts for activity will likely have to be cut further by at least 1 point, mainly between Q3 2022 and Q1 2023, a period in which the risk of shortages is strongest (Insert 1 on the Russian gas shock, p.3).

At this stage, the downward revisions have primarily concerned household consumption to reflect the impact of the massive inflation shock on real income (chart rhs). Household purchasing power is reduced insofar as wage gains are lagging well behind prices, despite one-off compensations in recent negotiations (Insert 2 on wages).

Germany: real GDP growth forecasts (consensus)



Sources: consensus, Bloomberg, ODDO BHF Securities

Germany: inflation forecasts (consensus)

To make matters worse, it seems as though everything is conspiring to dampen the growth outlook for Germany in the next few months. **Compounding the shock to consumption is the impact of tighter financial conditions**. The ECB's monetary policy tightening³, pre-announced in February, has resulted in a jump in mortgage lending rates. They have risen by 200bp since the start of the year, which, all things considered, slices around 20% off average housing affordability in a market which, in the last few years, has shown signs of overheating (home prices have risen by 22% since early 2020). German banks now expect a decline in mortgage demand in Q3 2022 on a similar scale to that seen in Q1 2009 during the global financial crisis. And then there is Germany's exposure to foreign demand. In addition to the evaporation of exports to Russia, exports have weakened as the Chinese economy came to a halt during the lockdowns.

In 2021, the German economy underperformed its main Eu partners as it depended on external demand, particularly from China and, as a result, was more vulnerable to disruption in global supply chains. In 2022 and 2023, it could again suffer more than other countries because of its energy dependence on Russia. It is a bit too soon to draw definitive conclusions for the medium term, but, at first sight, the growth model that has been the basis of Germany's success for the last two decades and more has been shaken. Its sizeable industrial sector benefited from low and, more importantly, stable energy costs, and from fast-growing foreign demand. For the foreseeable future, the former advantage has vanished and there are as yet no great efforts to boost domestic demand to replace foreign demand.

³ The irony is that the ECB monetary policy tightening reflects a return to the fore of strict monetary orthodoxy of which the Bundesbank is the supposed guardian. Bye, negative rates, welcome to the era of positive rates! See our Eco Note of 20 July 2022: "The ECB and its inconsistencies"



Insert 1: what do the impact studies of a Russian gas supply shutoff tell us?

Energy dependence on Russia poses an economic and an ethical problem. Ethic-wise, it goes without saying that we should halt all Russian imports in order not to give Vladimir Putin's regime any resources to finance his war of aggression against Ukraine and deprive him of any means of exerting geopolitical pressure. In reality, it is a trickier problem to address. In the medium term, Europe/Germany are in a position to do without this gas, but in the short term, transforming the energy mix will involve adjustment costs to find other suppliers, to substitute other sources of energy or to adapt demand to production capacity. There are many complex mechanisms at work. In practice, we need to reckon with contradictory objectives: ultimately, completely removing Russian gas from the equation, but in the meantime, importing it in order to build up the largest possible stocks in preparation for the winter^(a)

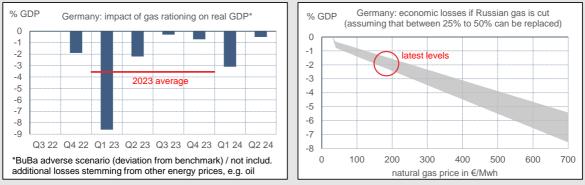
In the last few months, various studies have tried to model this shock and to estimate its cost in terms of the loss of output relative to a base scenario with no restrictions. The main conclusions of the existing literature are summarised in the table below^(b).

Impact	of Russian gas shute	off on German G	DP
Study	Date of publication	Gas loss (%)	GDP loss*
ECB	March 2022	10	0.7
OECD	March 2022	20	0.9
Bachmann & al.	March 2022	30	0.25 to 3
Schnittker & al.	March 2022	9	1.5
		36	3.4
German economic experts	March 2022	30	2
Bundesbank	April 2022	40	5
Bundesbank	June 2022	31	1.5 in 2022
			6.75 in 2023
IMF	July 2022	12	3 with frictions
			0.4 without frictions

A number of comments can be made here. This work, as rigorous as it may from an analytical and technical perspective, seeks to describe a situation that has never occurred. There is no real pertinent reference point from which to calibrate the models effectively (calculation of the elasticities of substitution for gas). It is tempting to draw parallels with the 1970s oil embargo, but this is risky: apart from the fact that energy intensities have shifted immensely since then, the gas market operates differently from that of oil. In an integrated market, a shock primarily affect prices which will rise until the market is balanced. In a fragmented market, the shock may lead to shortages, whatever the price level. The impact on production is not the same in either case.

Logically, the loss of output is greater the more severe the rationing scenario, but this is not the only factor to cause a gap. It is worth noting that the first studies published in March, just after the war in Ukraine began, put the shock of a Russian gas shutoff at a lower level than the more recent ones. These include the direct effects on energy sector production and the indirect effects such as the drop in supply of intermediate goods and services to companies (via input-output sector tables) or heightened economic uncertainty. Some of the assumptions of these studies are quite severe, notably as regards the limited price-elasticity of demand. In fact, since the start of the year, gas demand has fallen considerably in Germany (-14% from January to May compared to 2021, -5% compared to the 2017-2021 average). In their recent studies, the IMF and the European Commission estimate that Germany is likely to reduce its gas consumption by 15% (relative to the 2017-21 average) to absorb the halt to Russian supplies in the event of a normal winter. If the winter is harsh, however, stricter administrative rationing will be needed, with a much greater fallout for industrial sectors. An additional difficulty in terms of analysis relates to estimating the flows of Russian gas re-exports from Germany to other countries. The problem of dependence on Russian gas is not limited solely to the German economy. According to the IMF, the cost of rationing would even be higher in Italy, and much more so in eastern European countries(c)

All told, the studies cover a broad range of possible scenarios, from a fairly minor shock (less than 1 point of GDP) to situations involving severe recessions (up to 5 points of GDP). The Bundesbank model shows that the impact could be significant over the winter quarters and much lower otherwise (chart lhs). According to the German government's council of economic experts, with natural gas prices at around their recent levels (a range of €150-200/MWh), the impact on GDP would be close to the realistic estimates of the IMF and the European Commission at around 2 pts of GDP. The worstcase scenario, in which GDP losses would reach 5 points, sees prices doubling or tripling (chart rhs).



(a) See our Eco Note dated 29 June 2022: "Gas rationing".

(c) For the exact references, see IMF (2022), "The Economic Impacts on Germany of a Potential Russian Gas Shutoff", working paper, July. (c) See IMF (2022), "Natural Gas in Europe - The Potential Impact of Disruptions to Supply", working paper, July

Insert 2: Update on wage negotiations in Germany

In Q1 2022, negotiated wages showed a marked acceleration in Germany with a peak of more than 6% y-o-y. This caused a stir amongst some observers, including the central banks which are above all fearful of triggering a price-wage loop. On closer inspection,, this acceleration is due to the last "corona bonus" payments (special bonuses linked to the pandemic) which were tax-exempt until March. Excluding the bonus, the increase in wages was more or less stable and remains below the average rate of 2.6% per annum observed over the decade before the pandemic (chart lhs, p.4).

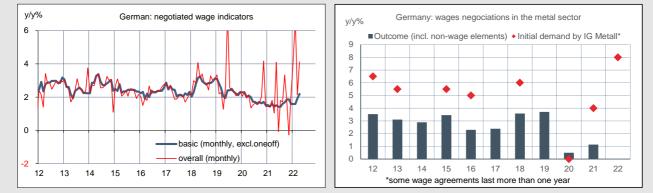
Wage agreements react with a delay to economic developments. In Germany, the average duration of a collective agreement is around 24 months. Only half is renegotiable each year. It is therefore reasonable to wonder whether the relative lull on wages to date is not the prelude to a surge over the coming months and quarters in response to the exceptional rise in inflation (more than 8% y-o-y). Recently, employees in the steel industry obtained an increase of 6.5%. The agreement covered 18 months and there had been no wage review since 2019 due to the health crisis. In the chemicals sector, negotiations have been pushed back from the spring to the autumn. In the metal sector, union demands are for an increase of 8% in the next round of



Economy

Wednesday 27 July 2022

negotiations. In the past, agreement has been reached at around half of the initial demand (chart rhs). This time, the agreement could be more favourable to employees, but overall, we have observed no significant deviation from the behaviour that led to wage moderation in the past (no spiralling unit labor costs). The Bundesbank forecasts a 2.7% increase in negotiated wages in 2022 and 2.8% in 2023^(a), after +2.2% in 2020 and +1.6% in 2021.



Another element that should be taken into account is the one-off adjustment in the minimum wage. It is set to increase by 25% from \in 9.6 per hour in 2021 to \in 12 by this coming October. This increase will only concern a minority of employees and an even smaller share of the total payroll. According to the Bundesbank, this single revaluation of the minimum wage will have an impact of 0.8 points on the total level of compensation. (a) See Bundesbank (2022), "Outlook for the German economy for 2022 to 2024", Monthly report, June.

Page 4/5



Disclaimer:

Disclaimers for Distribution by ODDO BHF SCA to Non-United States Investors:

This publication is produced by ODDO BHF Corporates & Markets, a division of ODDO BHF SCA ("ODDO"), which is licensed by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the Autorité des Marchés Financiers ("AMF").

This document, when distributed outside of the U.S., is intended exclusively for non-U.S. customers of ODDO and cannot be divulged to a third-party without prior written consent of ODDO. This document is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. This document has been developed by our economists. It does not constitute a financial analysis and has not been developed in accordance with legal requirements designed to promote the independence of investment research. Accordingly, there are no prohibitions on personal dealing ahead of its dissemination. "Chinese walls" (information barriers) have been implemented to avert the unauthorized dissemination of confidential information and to prevent and manage situations of conflict of interest.

At the time of publication of this document, ODDO and/or one of its subsidiaries may have a conflict of interest with the issuer(s) mentioned. While all reasonable effort has been made to ensure that the information contained is not untrue or misleading at the time of publication, no representation is made as to its accuracy or completeness and it should not be relied upon as such. Past performances offer no guarantee as to future performances. All opinions expressed in the present document reflect the current context which is subject to change without notice. The statements, assumptions and forecasts contained in this document reflect the judgment of its author(s), unless otherwise specified, and do not reflect the judgment of any other person or of ODDO. This document does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this document is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice.

This document is for institutional investors only. It may not contain information necessary for others to make investment decisions. Consult your financial adviser or an investment professional if you are not an institutional investor.

Disclaimers for Distribution by ODDO BHF New York Corporation to United States Investors:

Please refer to the most recent research reports on the subject companies for complete information and relevant disclosures.

This document is produced by ODDO BHF Corporates & Markets, a division of ODDO BHF SCA ("ODDO"). It is distributed to U.S. investors exclusively by ODDO BHF New York Corporation ("ONY"), MEMBER: FINRA/SIPC, and is intended exclusively for U.S. institutional customers of ONY and cannot be divulged to a thirdparty without prior written consent of ONY. This document is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. This document is being furnished to you for informational purposes only and should not be relied upon as sufficient to form a basis for any investment decision.

At the time of publication of this document, ODDO, and/or one of its subsidiaries may have investment banking and other business relationships with any of the companies in this report. While all reasonable effort has been made to ensure that the information contained is not untrue or misleading at the time of publication, no representation is made as to its accuracy or completeness and it should not be relied upon as such. However, ODDO has no obligation to update or amend any information contained in this publication. Past performance offers no guarantee as to future performance. All opinions expressed in the present document reflect the current context which is subject to change without notice. This document does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of particular clients. Clients should consider whether any advice or recommendation in this document is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice.

This document is not a research report as defined in FINRA Rule 2241(a)(11) because the material in it is limited to one or more of the exclusions of the definition of research report in Rule 2241(a)(11)(A). This document is for institutional investors only. Consult your financial adviser or an investment professional if you are not sure you are an institutional investor.

Disclosures Required by United States Laws and Regulations:

Rule 15a-6 Disclosure: Under Rule 15a-6(a), any transactions conducted by ODDO, and/or one of its subsidiaries with U.S. persons in the securities described in this document must be effected through ONY.

Contact Information of firm distributing investment recommendations to U.S. investors: ODDO BHF New York Corporation, MEMBER: FINRA/SIPC, is a wholly owned subsidiary of ODDO BHF SCA; Louis paul ROGER, President (louis-paul.roger@oddo-bhf.com) 150 East 52nd Street New York, NY 10022 646-286-2137.

Statement of conflict of interests of all companies mentioned in this document may be consulted on Oddo & Cie's research site .