GERMANY
2022-2023 SCENARIO

FROM ONE CRISIS TO ANOTHER?

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Philippe Vilas Boas

WORKING EVERY DAY IN YOUR INTEREST AND FOR SOCIETY

GROUP ECONOMIC RESEARCH

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SUMMARY

FROM ONE CRISIS TO ANOTHER?

German growth fell again in the fourth quarter, down 0.3% quarter-on-quarter after +1.7% in the third quarter as the resurgence of the epidemic and health measures led to a substantial contraction in consumption. Restrictions were eased at the start of the year but came hand in hand with **significantly higher inflation, which is likely to undermine private consumption on a more lasting basis**. **The consequences of the war in Ukraine are also darkening our growth outlook** through various channels. Uncertainties over the duration, outcome and consequences of the conflict are undermining the confidence of economic agents. The risk of product shortages is increasing and higher inflationary pressures could become a permanent feature. In this new context, we believe that **German growth will stagnate in the first quarter,** pulled downwards by lacklustre consumption. Industrial activity has rebounded sharply on stronger orders despite heightening supply issues with intermediate products, but production costs are reducing corporate margins. Investment is expected to grow only slightly in the short term, driven solely by construction, while productive investment will initially remain down. Net exports are expected to weigh slightly on Q1 growth as exports slow and the pace of imports remains brisk. **We have revised our growth estimate for 2022 to 2.5%** from 4.2% previously **to take into account the lower impact of Q4 2021 and significantly higher inflation** (6.3% vs. 4.4%), **resulting in lower consumption.** Economic activity will return to normal as inflationary pressures ease mid-year and consumption fully catches up. Accordingly, **growth will slow to 2.3% in 2023. At this stage, our scenario does not include an exogenous shock resulting from an escalation of the Russia-Ukraine war such as an embargo on Russian oil or gas.** But it does set out the country's vulnerabilities and challenges.

Private consumption will continue to weigh on growth in Q1 before recovering in Q2 and recovering more significantly in Q3. Catch-up potential remains high and the surplus savings accumulated since the health crisis should prove a powerful driver. Support measures for households and businesses to lessen the effects of energy inflation will also help to restore purchasing power and cushion the price shock. Business investment will remain modest in the first half of the year despite a high capacity utilisation rate, with uncertainties over the outlook limiting new projects. However, developments in Ukraine could precipitate the implementation of energy optimisation and transition projects by the summer to address potential disruptions in the supply of gas, particularly for manufacturers. But it will be a while before productive investment returns to pre-crisis levels. Investment in construction is expected to continue at a brisk pace as demand continues to exceed supply.

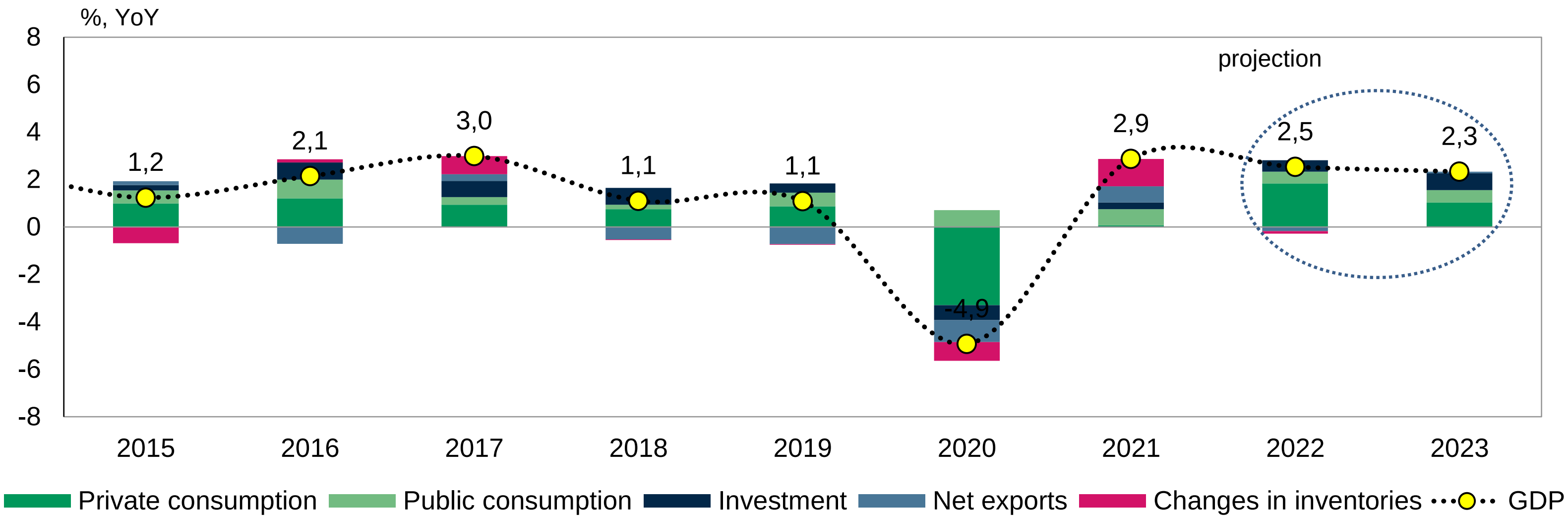
The trade balance is expected to weigh on growth throughout the year. Additional imports to meet stronger domestic demand are expected to take 0.2 points off GDP, while exports are expected to slow further on weaker demand from the US and China. Trade has already started to return to pre-crisis levels, so additional pick-up remains limited this year and next. In addition, as the war in Ukraine affects the European continent in particular, it is limiting intra-zone demand, which is vital to German exports.

The German government will stick to its expansionary approach, with an expected deficit of 3.4% of GDP in 2022 and 2.6% in 2023. We expect the public debt ratio to be a modest 70% of GDP over our forecast horizon. But the need for additional support cannot be ruled out if inflationary pressures intensify this year. Similarly, Germany's need to upgrade its military arsenal and quickly overcome its energy dependence on Russia could increase public debt.

SUMMARY

FROM ONE CRISIS TO ANOTHER?

Contributions to annual growth



	Yearly average (YoY, %)				Quaterly growth (QoQ, %)											
Germany	2020	2021	2022	2023	2021				2022				2023			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GDP	**-4,9**	**2,9**	**2,5**	**2,3**	**-1,7**	**2,2**	**1,7**	**-0,3**	**0,0**	**0,9**	**1,2**	**0,5**	**0,4**	**0,4**	**0,4**	**0,4**
private consumption	-6,1	0,1	3,5	2,0	-5,2	3,7	6,0	-1,8	-0,2	0,7	1,2	0,4	0,4	0,4	0,4	0,4
investment	-3,0	1,3	2,3	3,4	-0,5	1,3	-2,9	0,5	0,4	2,1	1,5	1,1	0,5	0,5	0,5	0,5
change in inventories *	-0,8	1,2	-0,1	0,0	2,3	-0,6	-0,2	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
net exports *	-0,9	0,7	-0,2	0,1	-0,9	-0,5	0,1	0,1	-0,1	-0,1	0,0	0,0	0,0	0,0	0,0	0,0
unemployment rate	3,9	3,6	3,3	3,1	3,9	3,6	3,4	3,4	3,4	3,2	3,2	3,2	3,1	3,1	3,1	3,1
Inflation	0,4	3,2	6,9	3,6	1,7	2,2	3,5	5,4	6,1	7,4	7,3	6,8	4,5	3,4	3,5	2,9
Government net lending	-4,3	-6,2	-3,4	-2,6												

** Contributions to GDP growth*

Sources : Crédit Agricole SA / ECO, forecasts

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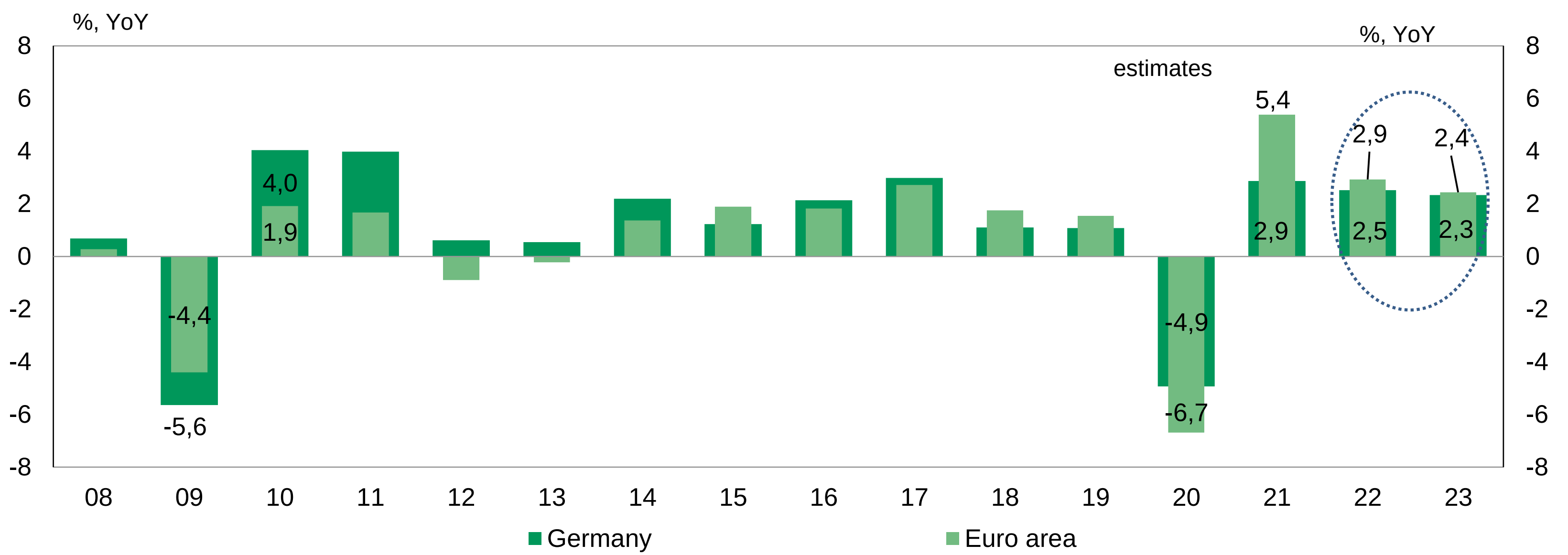
RECENT ECONOMIC TRENDS

RECOVERY HAMPERED ONCE AGAIN

Inflation weighs more heavily on consumption



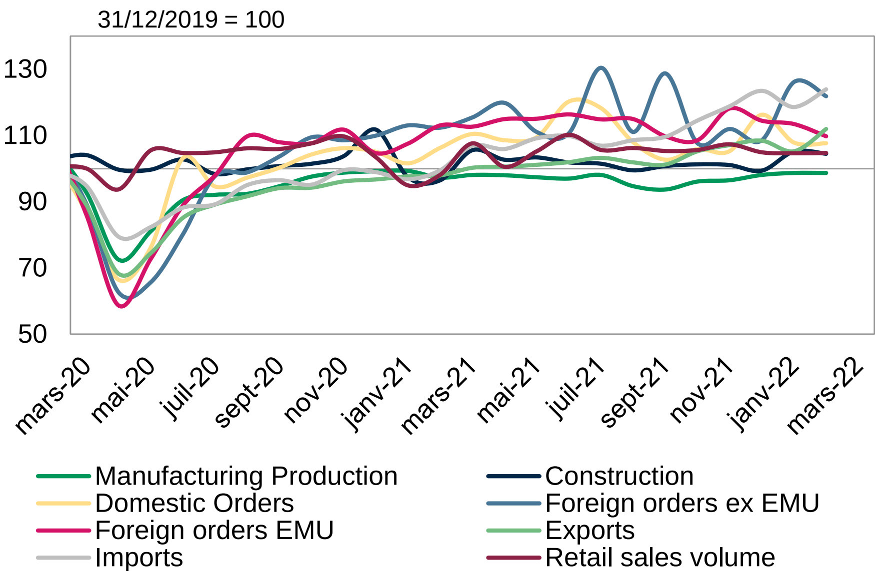
Sources : Eurostat, Crédit Agricole SA / ECO

German growth was negatively impacted in Q4 2021 by health restrictions, putting the brakes on the recovery initiated mid-year. Significantly lower than that of the Eurozone as a whole, at 2.9% vs 5.4%, the country's growth was hindered by the slowdown in services and shortages of intermediate products in manufacturing. In Q4, GDP remained 1.1% lower than before the crisis in Germany whereas it had exceeded its pre-crisis level in France and almost done so in Italy. The war in Ukraine is fuelling inflationary pressures, particularly on energy, obliging us to revise all our forecasts downward to take this new context into account. We now expect growth of 2.9% in the Eurozone this year and just 2.5% in Germany as a result of the health environment, which hampered performance for most of the quarter, and the increase in prices, which is eroding household purchasing power. Barring a deterioration in external conditions linked to the war, we believe that the German economy still has significant consumption upside in services, which could underpin stronger growth starting in Q3 2022. With inflation expected to be lower next year, the German economy could grow 2.3% in 2023 if tensions between Europe and Russia do not deteriorate.

RECENT ECONOMIC TRENDS

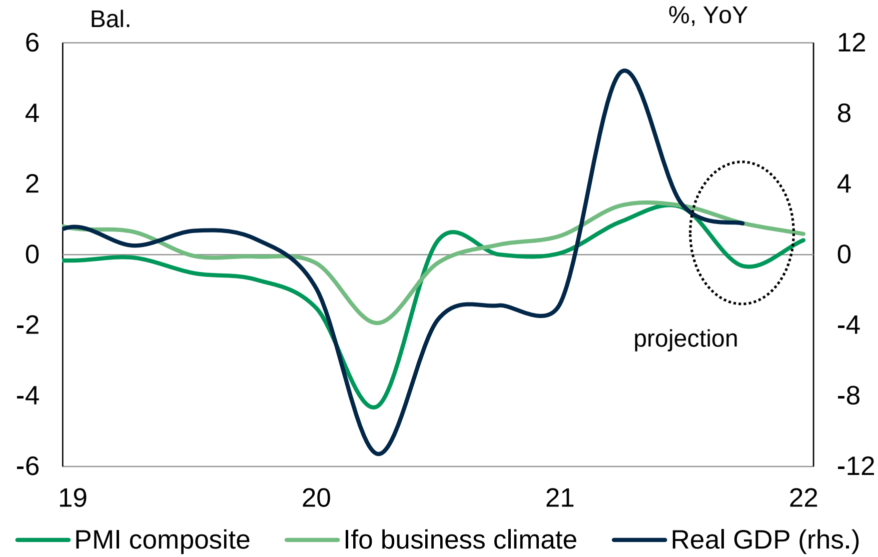
RECOVERY UNDERMINED ON A MORE LASTING BASIS BY INFLATION AND SHORTAGES

Trends in the main indicators



Sources : FSO, DB, Crédit Agricole SA / ECO

Business surveys and real growth



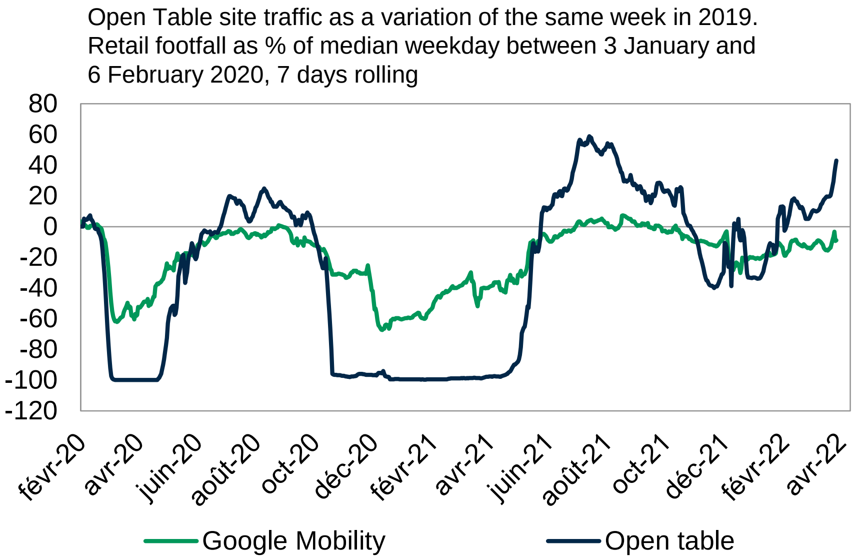
Sources : IFO, Crédit Agricole SA / ECO

According to the latest activity data for February, industrial production is still 1.3% lower than before the crisis despite robust orders from third countries, while European orders are clearly on a downward trend. Undermined by the extension of health restrictions, the retail sector is struggling to recover. The construction sector, relatively spared thus far by the crisis, is slowing due to rising raw material costs. Exports picked up much faster than at the end of the year but imports picked up more, so net exports will likely deliver a negative contribution to Q1 growth.

The composite PMI shows a sharp rebound in economic activity in Q1 after a contraction in Q4. Manufacturing is more exposed to value chains in eastern countries, including Ukraine, while services, after a tough fourth quarter, rebounded significantly and are supporting the overall index. In contrast, the ifo Business Climate Index has deteriorated and is now pointing to a marked slowdown in activity in March as a result of worsening shortages of intermediate products in manufacturing. The growth prospects of the latter have deteriorated considerably since the start of the war in Ukraine, exacerbating the inflationary pressures already in place to the benefit of more conservative demand.

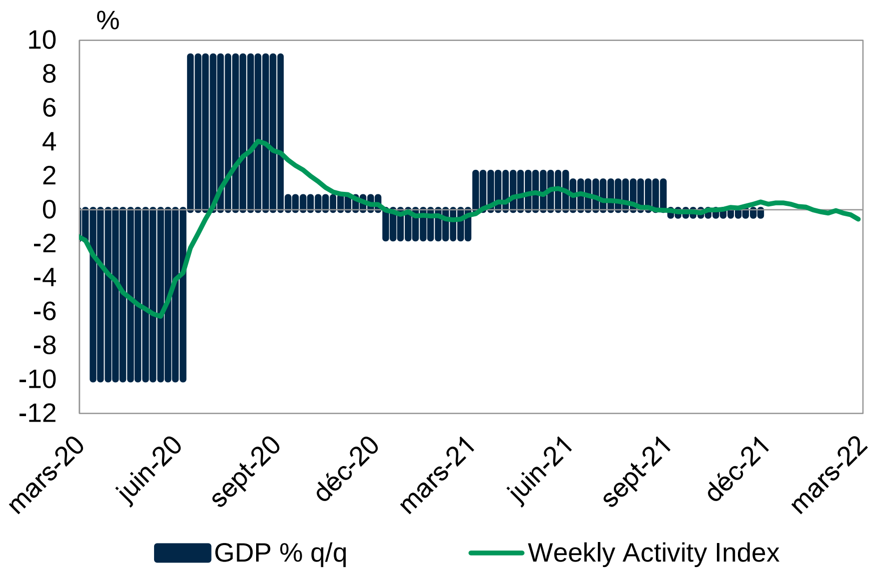
HIGH-FREQUENCY INDICATORS (CONSUMPTION AND ACTIVITY)

An upturn in activity expected in services



Sources : Opentable, Google-Mobility, Crédit Agricole SA / ECO

Weekly activity index and GDP growth



Sources : Apple mobility, Crédit Agricole SA / ECO

After slowing on tighter health restrictions in late 2021, services consumption appears to have rallied in Q1 2022, particularly in restaurants and leisure. This trend could continue for several months. However, timid store footfall suggests more prudent behaviour in retail sales. The road traffic index, usually a good indicator of industrial activity, is also picking up at the start of the year. In a negative development, the impact of the war in Ukraine on production chains through serious supply problems and substantial price increases will dampen activity as early as March. The Bundesbank's weekly activity index confirms this deterioration, with an implicit GDP growth rate of -0.8% in mid-April over the last three months. We believe that Q1 GDP growth could be zero due to high inflation and supply problems that are significantly disrupting industrial activity. This is particularly true for auto and steel, the most sensitive sectors to the supply shocks caused by the war.

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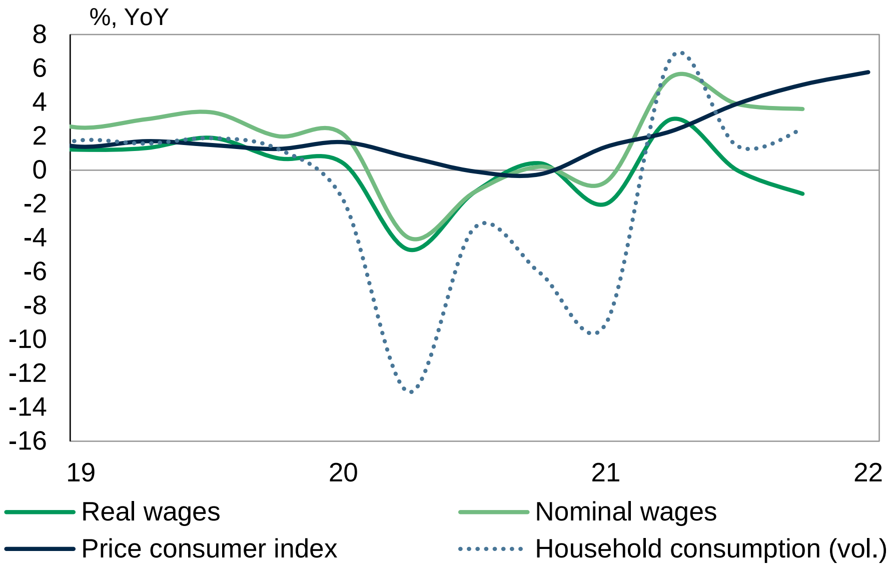
OUTLINE OF OUR SCENARIO

JOBS, WAGES AND CONSUMPTION

Wages, inflation and consumption



Sources : FSO, Crédit Agricole SA / ECO

Number employed and unemployed

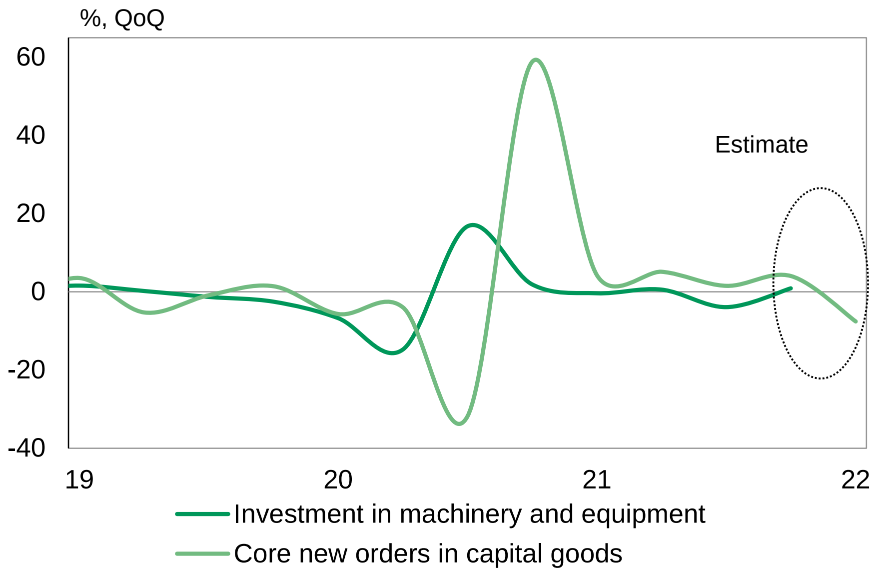
Sources : Agentur für Arbeit, Crédit Agricole SA / ECO

Nominal wages rose 3.6% year-on-year in Q4 2021 but the consumer price index rose more rapidly, to 5%, at the same time, thereby reducing household purchasing power. The wage outlook resulting from union negotiations remains modest, with an expected 1.5% increase in overall wages in 2022, supplemented by more generous one-off bonuses. Overall, all wages are expected to increase 3.1% this year, excluding the increase in the minimum wage. The expected effect of an initial increase in July to €10.45 and a second in October to €12 could represent an additional +0.8 point impact on total payroll. Labour market momentum remains strong, with employment and the unemployment rate back to pre-crisis levels. Employees on short-time work decreased to 620,000 from 740,000 at the end of December. The surplus household savings accumulated during the health crisis totalled nearly €200 billion in Q4, representing significant potential support for consumption. But we expect this to decline slightly in Q1 owing to meagre store footfall resulting from the COVID resurgence and escalating inflationary pressures over the period. However, consumption is expected to recover starting in Q2 and especially from Q3 on expected catch-up in services, the use of savings and a slowdown in prices.

OUTLINE OF OUR SCENARIO

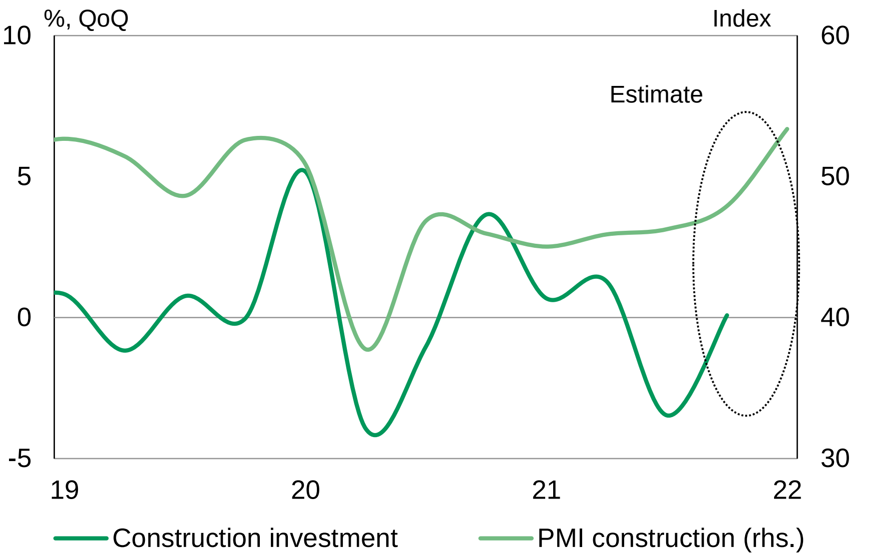
INVESTMENT: SHORT-TERM OUTLOOK

Productive investment



Sources : FSO, Crédit Agricole SA / ECO

Trend in construction



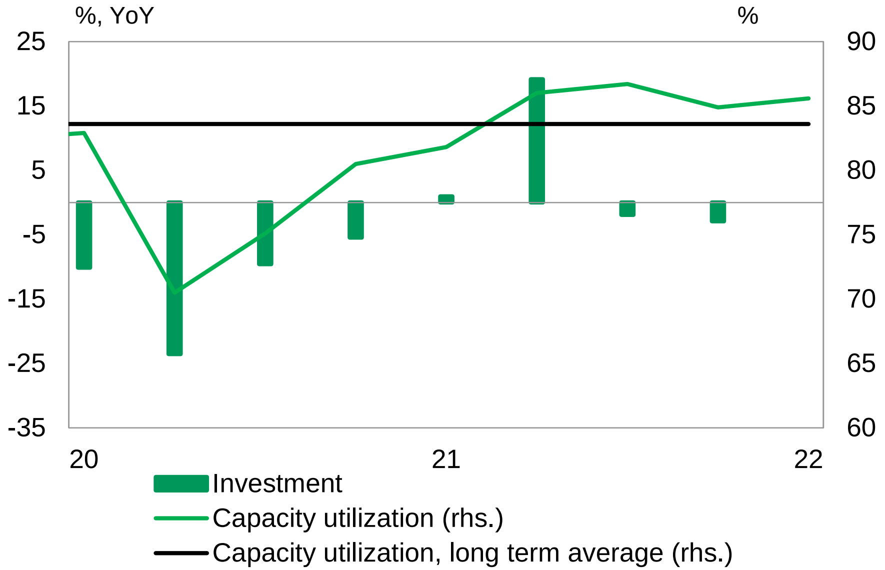
Sources : FSO, Markit, Crédit Agricole SA / ECO

Business investment picked up slightly in Q4 2021 (+0.9% qoq) after a substantial decline in Q3 (-3.9%), remaining much lower than before the crisis (-8.2%). A contraction in domestic orders for capital goods suggests a sharp short-term decline in productive investment. But total industrial orders remain robust despite a recent slowdown, though uncertainty over the ability to source intermediate products without generating a considerable increase in production costs prompts a cautious stance on investment. Investment in construction in Q4 2021 was already higher than before the crisis (+0.6%) and has so far proved resilient to health measures. The PMI for the sector shows strong demand, which could underpin overall investment in Q1. The rebound in investment is expected to accelerate, especially starting in Q2, with catch-up in productive investments accelerating to adapt to potentially longer-term shortages. As manufacturing adapts to the new environment, productive investment is expected to revive if demand remains strong.

OUTLINE OF OUR SCENARIO

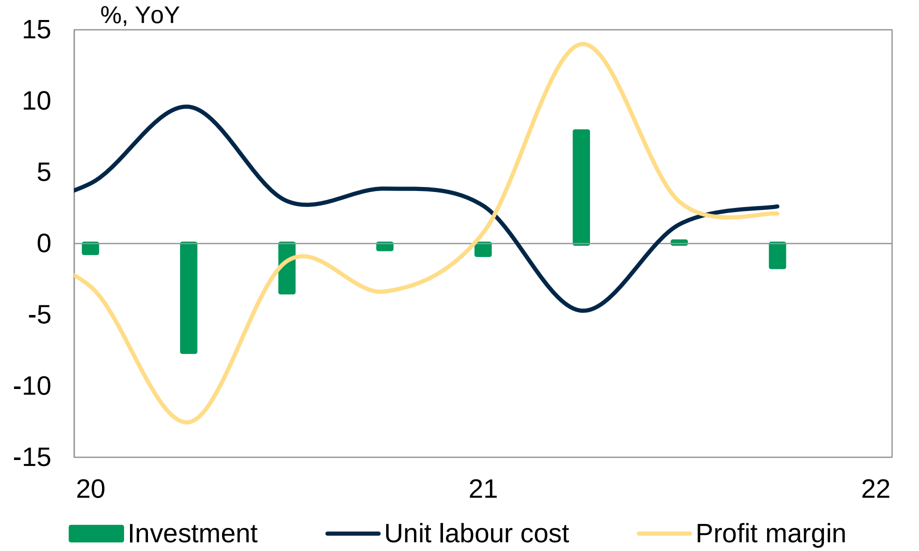
INVESTMENT: UNDERLYING TRENDS

Productive capacity utilisation rate



Sources : Destatis, Crédit Agricole SA / ECO

Margins, unit wage costs and investment



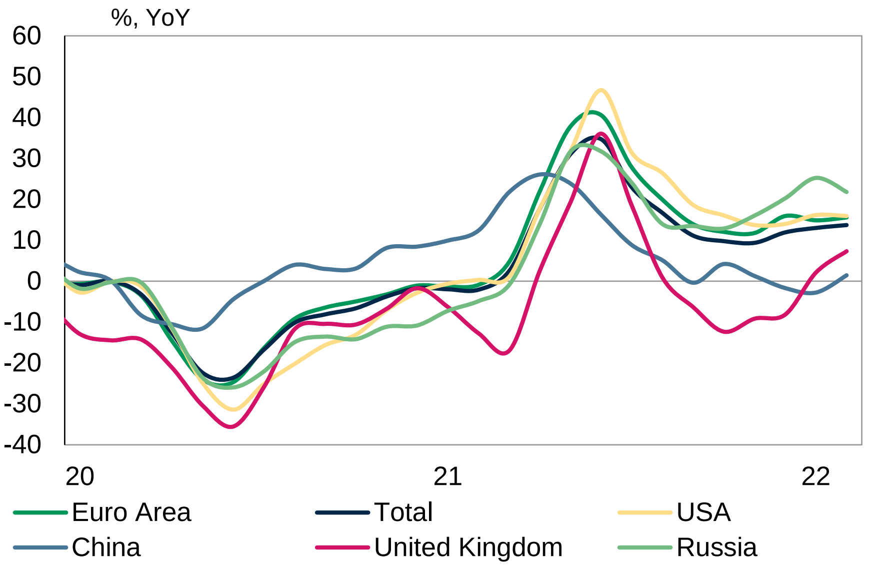
Sources : Destatis, Crédit Agricole SA / ECO

The productive capacity utilisation rate continued to rise in Q4, coming out far above its long-term average. This momentum reflects increased economic activity resulting from strong demand and with limited supply owing to sourcing issues and the capacity to hire more employees to deliver unfulfilled orders. Margins increased in services and retail but slowed in construction and declined in industry on higher production costs resulting from the prices of imported goods. We expect global investment to increase 2.3% in 2022 as a result of robust demand and the potential for catch-up relative to pre-crisis levels (which were already high) which could materialise in the second half of the year as price pressures fall. Investment could even accelerate to 3.4% in 2023 as Germany spends more on the ecological transformation, modernisation and alternatives to industrial dependency on Russian gas.

OUTLINE OF OUR SCENARIO

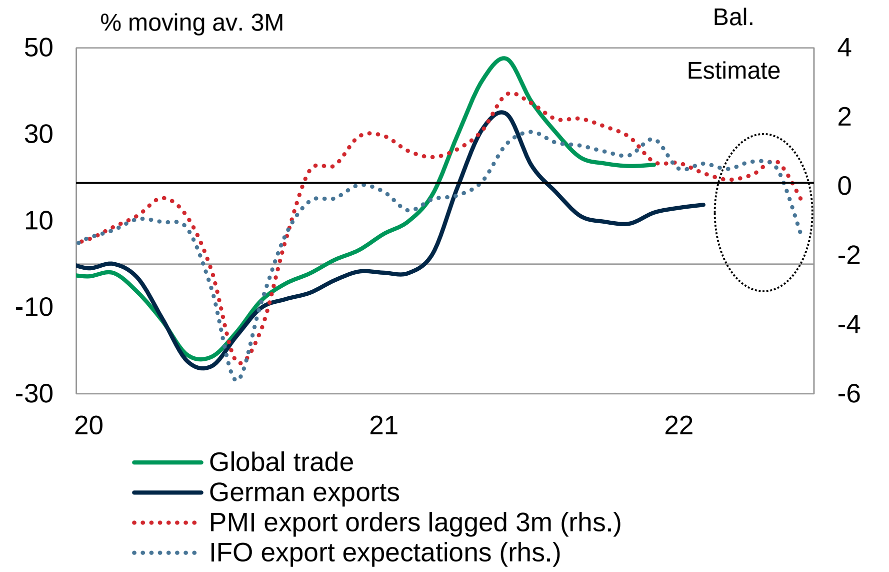
FOREIGN TRADE

Exports by main partners



Sources : Bundesbank, Crédit Agricole SA / ECO

Export outlook



Sources : Destatis, Crédit Agricole SA / ECO

German exports generally improved at the beginning of the year, supported by trade with the UK and, above all, China. Eurozone exposure remained stable while US exposure slowed somewhat but remained high. Exports to Russia recorded before the war in Ukraine began to decline significantly in February. Port congestion remained high in China in April due to the resurgence of the epidemic, while the proportion of goods blocked pending maritime transport remains high, at over 11% of shipped products.

The PMI on export orders and the ifo's export forecasts confirm a downward trend in trade in the coming months. The catch-up effects linked to the health crisis appear to be over, but domestic demand is picking up, while exports are suffering from lower Chinese demand and higher commodity prices and energy costs. In our scenario, trade will make a slightly negative contribution to growth in 2022 of -0.2 points, improving gradually and in a limited manner to +0.1 point in 2023.

OUTLINE OF OUR SCENARIO

RISKS TO OUR SCENARIO

Risk matrix associated with our scenario

		Probability	Impact
↓	Russian gas supply cut-off	High	High
	Persistent inflation	High	Medium
	Epidemic outbreak	High	Medium
↑	Decline in savings rate supporting consumption	High	High
	Additional measures to support households and businesses	Medium	Medium

Source : Crédit Agricole SA / ECO

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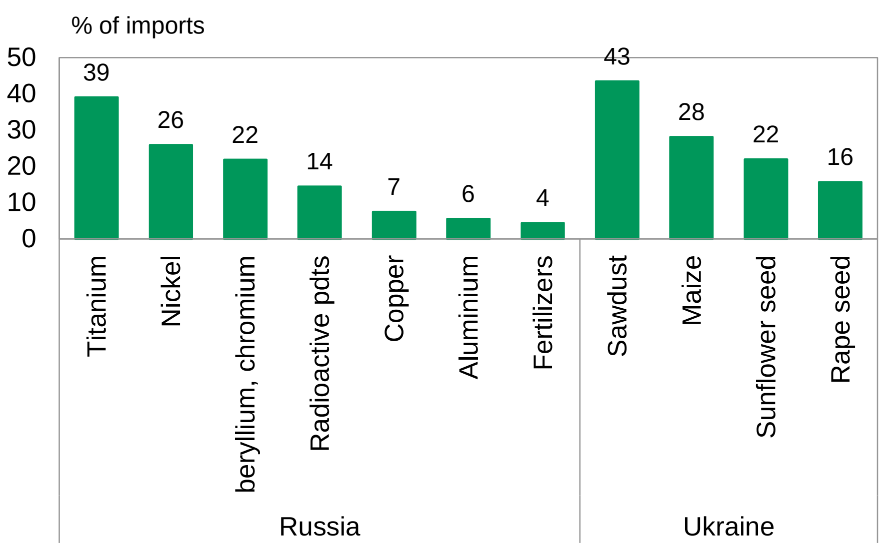
FOCUS 1: COMMERCIAL AND ENERGY DEPENDENCIES

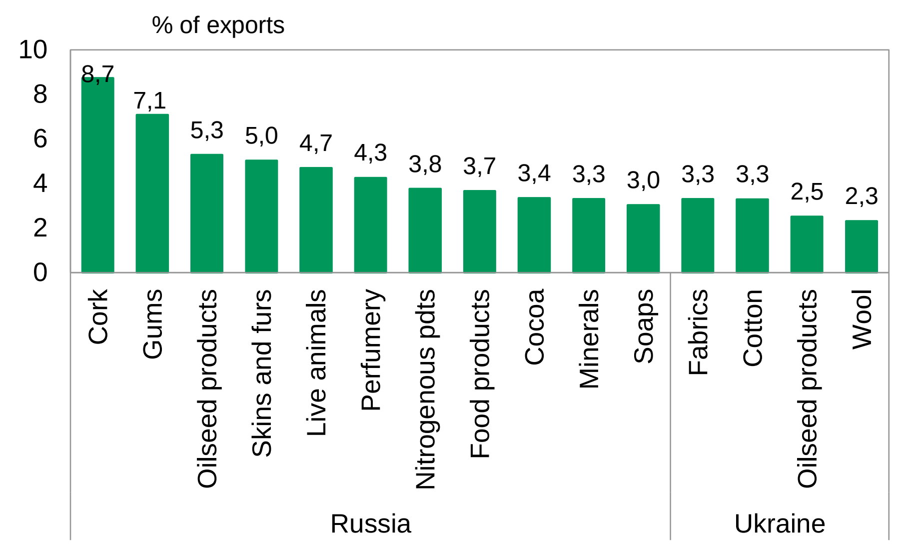
MAIN TRADE EXPOSURES

Share of imports from...



Sources : Uncomtrade, Crédit Agricole S.A.

Share of exports to...

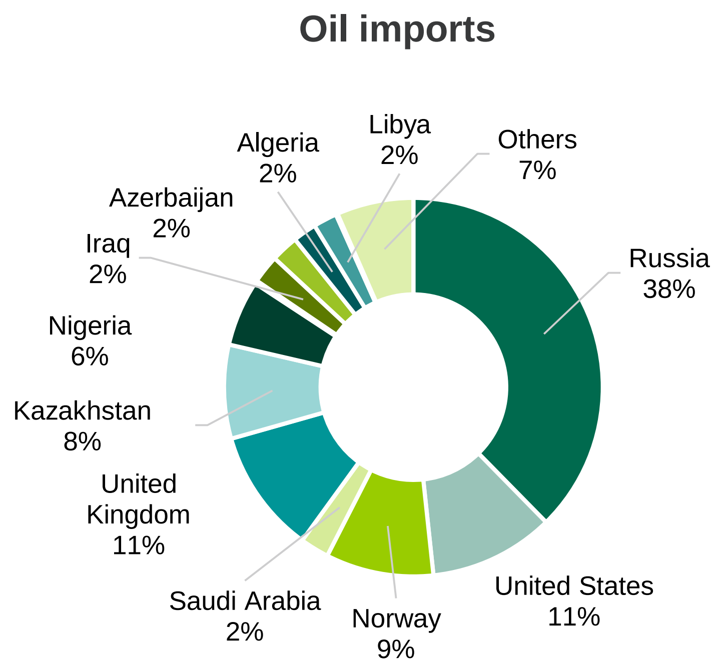


Sources : Uncomtrade, Crédit Agricole S.A.

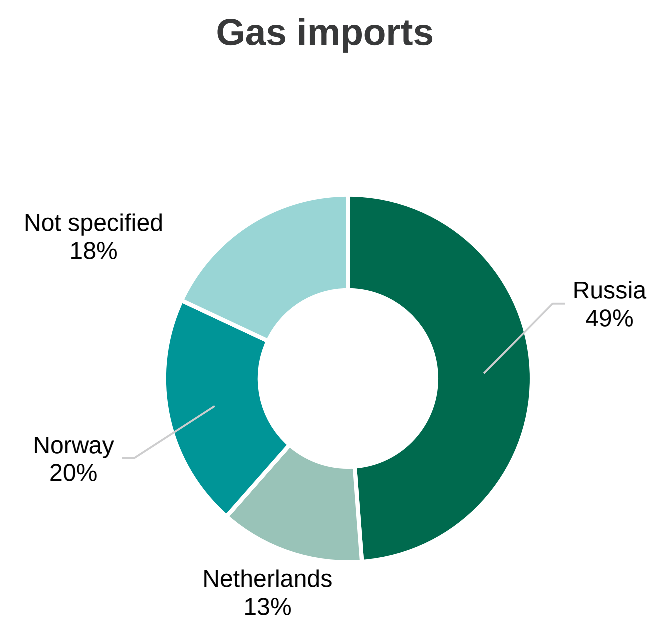
Germany's exposure to goods imported from Russia remains fairly limited overall. Russian imports account for just 2.1% of total imports. However, the lion's share of these imports, in addition to energy products, concerns metals such as titanium, nickel, copper and aluminium that are highly sought after in the auto and aviation sectors. Substituting the supply of these metals would necessarily come at a high cost given the dearth of suppliers in these segments. Exports to Russia are more diversified and focused on food and hygiene products. Russia accounts for 2% of total German exports. Trade with Ukraine is even more modest, accounting for 0.3% of German imports and 0.4% of German exports. Major imports from Ukraine include corn, seeds and oilseeds, which are vital resources but can be replaced. German exports to Ukraine include a modest share of textiles.

FOCUS 1: COMMERCIAL AND ENERGY DEPENDENCIES

WHAT ENERGY DEPENDENCY?



Sources : Eurostat, Crédit Agricole S.A

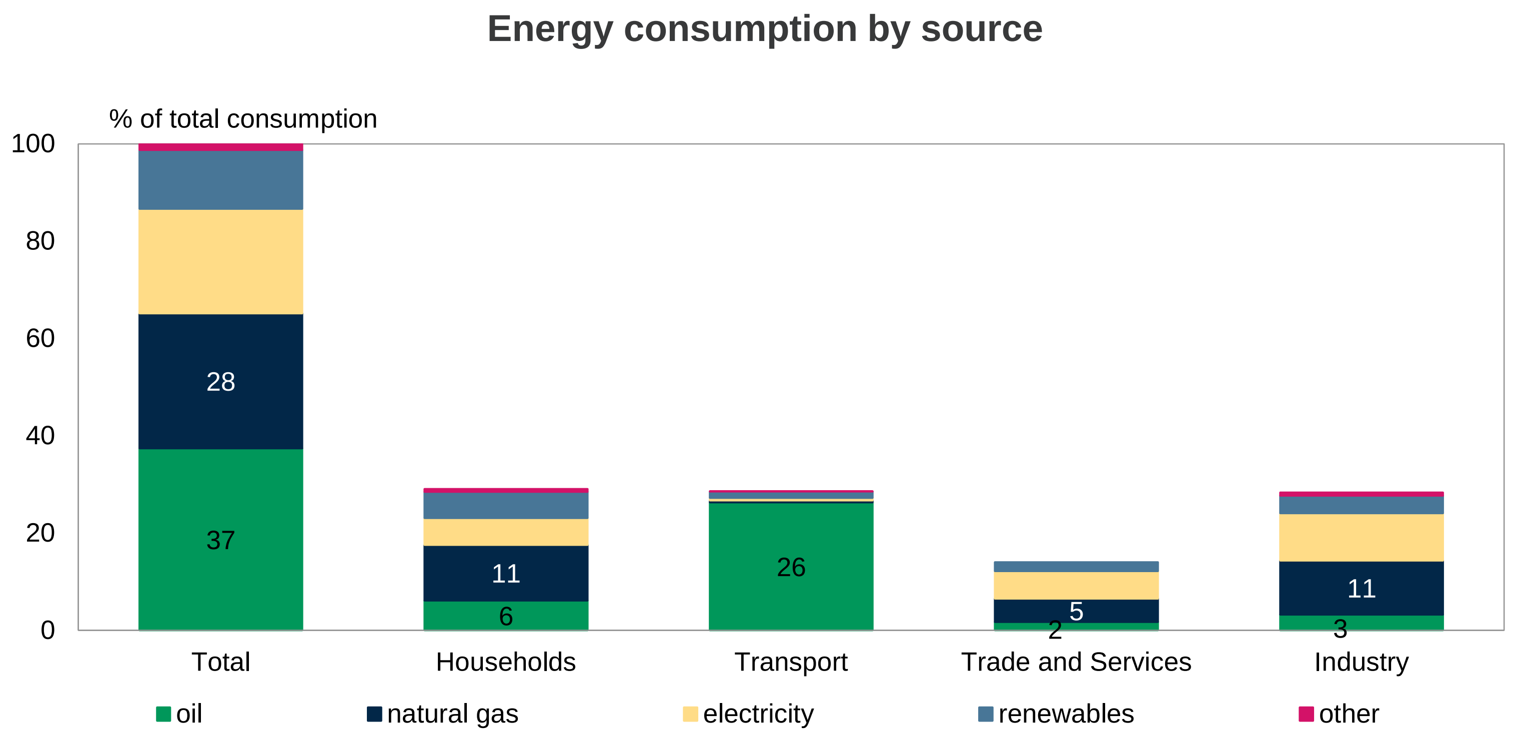


Sources : Eurostat, Crédit Agricole S.A

Germany's energy dependency is a core concern. Russia alone accounts for 38% of oil imports. The United States, the United Kingdom, Norway and Kazakhstan together account for 39% of oil imports. Which makes it difficult for Germany to handle a potential disruption in the oil supply, production increases by other partners being insufficient to make up the difference. Germany's gas dependence is even more substantial. The country currently has few suppliers other than Russia, which accounts for 49% of external supply. Norway and the Netherlands together account for just 33% of imports. Also, Germany will not have any gas terminals before 2024 and has decided not to extend the use of its nuclear power plants beyond this year. Because gas is hard to replace in some heating and manufacturing processes, the country is particularly vulnerable to a cut in Russian gas supply.

FOCUS 1: COMMERCIAL AND ENERGY DEPENDENCIES

NATURAL GAS IS ESSENTIAL FOR HOUSEHOLDS AND INDUSTRY

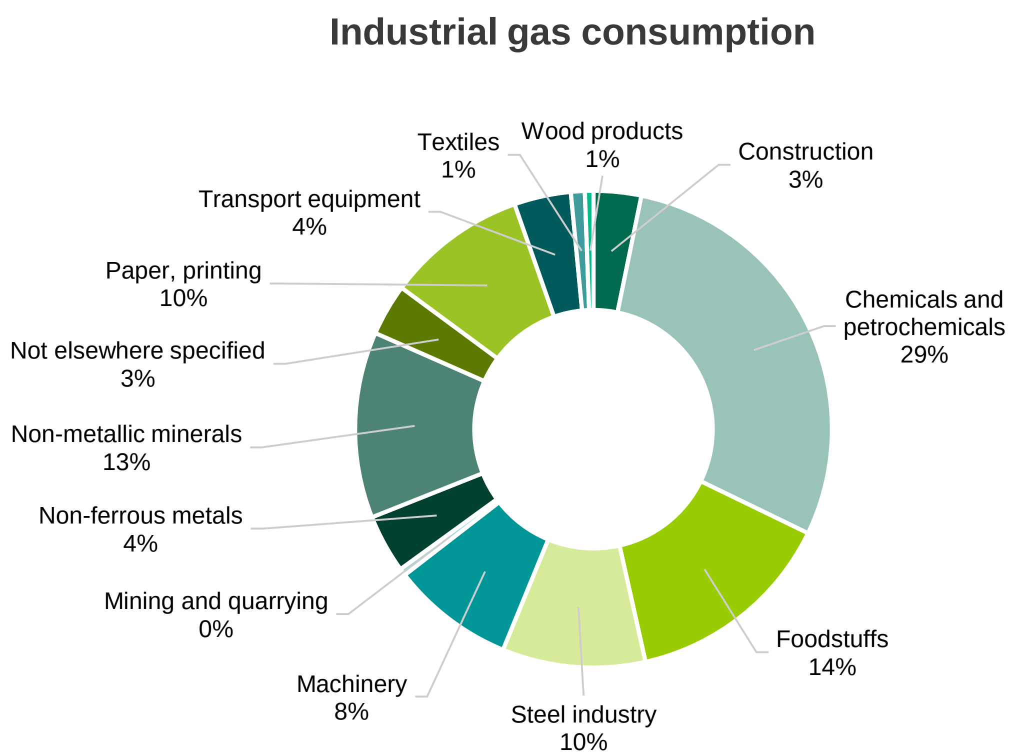


Sources : Eurostat, Crédit Agricole S.A.

Copious Russian gas imports aside, Germany's energy dependency lies in the share of gas in the energy mix, at 28%. Gas is used extensively by households (11% of total consumption), particularly for heating, and also in manufacturing (11%), largely for heating and cooling purposes. Gas use is virtually non-existent in transport and only in a small proportion (5%) in shops and services. For these reasons, the country is classified in our vulnerability indicator (see Eurozone – Russian gas supply vulnerability: what strategies?) as being highly sensitive in the event of a supply shock from Russia.

FOCUS 1: COMMERCIAL AND ENERGY DEPENDENCIES

INDUSTRIAL GAS EXPOSURES



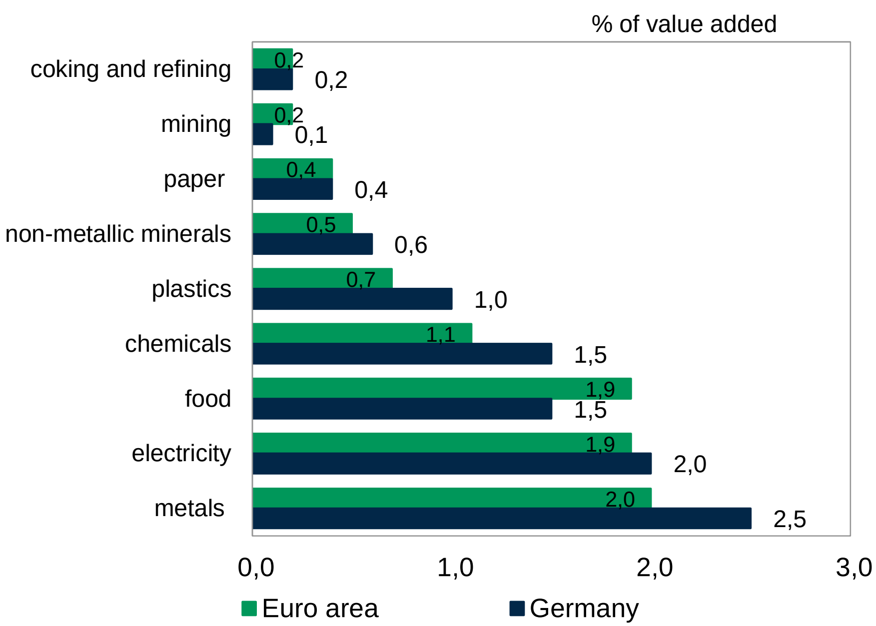
Sources : Eurostat, Crédit Agricole S.A.

The German industrial sector is particularly gas-intensive. The chemicals and petrochemicals industry, accounting for 29% of total industrial gas consumption, is the main sector impacted in the event of a Russian gas supply stoppage. The latter also has a substantial impact on the food industry (14%) and the non-metallic minerals sector (glass, earthenware and ceramics). The exposures of the steel and machinery manufacturing industry are 10% and 8%, respectively. Any rationing would hit these industries particularly hard and likely require them to shut down production lines temporarily or long-term.

FOCUS 1: COMMERCIAL AND ENERGY DEPENDENCIES

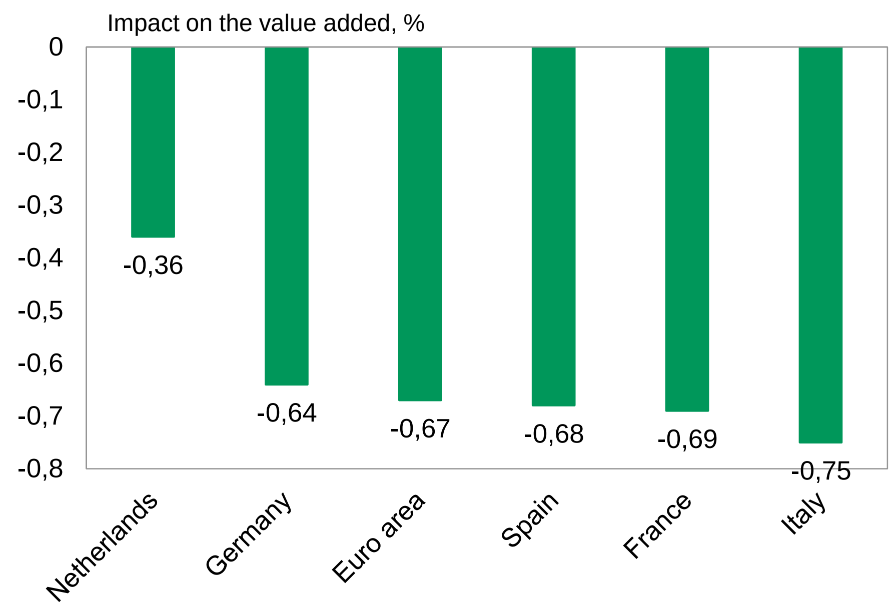
ESTIMATES OF THE IMPACT OF A SUPPLY SHOCK ON GAS

Weight of gas intensive sectors



Sources : Eurostat, Crédit Agricole S.A.

Impact of a 10% drop in gas supply on GDP



Sources : Eurostat, Crédit Agricole S.A

The added value of gas-intensive sectors accounts for 9.8% of the country's total added value, compared with 8.9% for the Eurozone as a whole, for a relatively high sector exposure. However, our estimate of a 10% gas supply shock results in an impact of less than 0.6 points of GDP for Germany, and largely equivalent impacts on most other Eurozone countries. Italy would be slightly more exposed, while the Netherlands would be half less exposed. A joint study by the University of Bonn and Cologne on quantifying the impacts of a gas cut on the German economy shows that a complete suspension of Russian gas supply would lead to rationing of around 30% after the implementation of potentially achievable substitutes to a real supply shock. Under this assumption, the impact of a Russian gas embargo would reduce German growth by at least 2 points.

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FOCUS 2: SUPPORT AND SECURITY MEASURES

SUPPORT TO CUSHION THE INFLATIONARY SHOCK

The different measures

Policies to limit price increases

- Early cancellation of the EEG surcharge.
- Reduction in fuel taxes (decrease of 30 cents per litre for petrol and 14 cents per litre for diesel).

Aid to support purchasing power

- Basic tax allowance of €363.
- 38 cent increase in mileage allowances.
- Heating cheque of €270 for housing allowance beneficiaries and €230 for students.
- Unlimited public transport pass capped at €9 per month.

Aid for businesses

- Short-time work
- Extension of State-guaranteed loans, compensation for extended losses

Sources : Ministère de l'Economie, Crédit Agricole S.A

The German government has introduced an aid package of €29 billion (0.7 points of GDP) to reduce the inflationary effects posing a serious threat to growth. The package comprises three main policies to ease the price constraints of economic agents. The policy on limiting increases in energy prices is centred on the early suspension of the surcharge on renewable energies (EEG) and reductions on fuel taxes. The policy on supporting household purchasing power takes the form of additional tax benefits, heating cheques for the lowest incomes and a flat-rate subsidy for the use of public transport. The policy on business aid is focused on the measures already introduced during the health crisis. These have been extended on an exceptional basis to help the most energy-intensive companies to offset the additional costs generated by energy price inflation. These policies appear modest for now, but further measures may be introduced if tensions persist to avoid a collapse in consumption, the latter being key to the recovery expected mid-year.

FOCUS 2: SUPPORT AND SECURITY MEASURES

EMERGENCY AND GAS SECURITY PLAN

Three warning levels

Early warning level : serious and reliable evidence of a deterioration in gas supply	• Creation of a special crisis team • Gas distributors are required to escalate the assessment of the situation (supply flows, storage and network distribution)
Alert: supply disruptions or exceptionally high demand	• Market interventions suffice to offset the supply-demand mismatch • Purchases of replacement quantities, use of stocks and moderation of consumption
Emergency level : significant network disruptions or exceptionally high demand	• Despite market interventions, gas supply is insufficient to meet demand • Measures must be taken to ensure the supply of “protected customers”, including households, hospitals, firefighters and the police • Government intervention to increase supply and/or replace it with other fuels • Rationing of end users including industrial customers

Sources : Ministère de l’Economie, Crédit Agricole S.A

Germany’s gas emergency plan, inspired by European directives, provides for three warning levels, the first of which was already triggered in early April. The latter introduces close monitoring of the supply, storage and distribution flows of distributors, who must regularly report the country's gas situation to the Ministry of the Economy. The system integrates market interventions from gas players to the emergency level where government intervention is triggered to ensure greater security of supply. “Priority” customers, i.e. households, hospitals, firefighters and the police, are favoured in gas distribution, but the industrial sector would likely be subject to rationing fairly quickly. In other developments, the government took control of Gazprom Germania on 4 April (until 30 September) to secure its supply following the company’s threat to sell its assets to two other Russian companies, potentially jeopardising the storage and redistribution of gas across the country.

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VILAS BOAS Philippe
+33 1 43 23 03 16
philippe.vilasboas@credit-agricole-sa.fr

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