MOODY'S
INVESTORS SERVICE

SECTOR IN-DEPTH
29 March 2023

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Contacts

Petter Bryman +33.1.5330.3394
VP-Senior Analyst
petter.bryman@moodys.com

Dietmar Hornung +49.69.70730.790
Associate Managing Director
dietmar.hornung@moodys.com

Yamina Ben-Naoum +44.20.3314.2470
Associate Analyst
yamina.ben-naoum@moodys.com

Marco Santaniello +44.20.3314.2032
Associate Analyst
marco.santaniello@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Sovereign – Europe

Energy crisis will continue to weaken credit resilience despite moderate initial effects

Summary

The economic and fiscal impact of Europe's energy crisis so far has been less severe than initially feared, easing immediate credit pressures on EU (Aaa stable) sovereigns. However, higher energy prices and supply fears will persist in the region for years, which could erode the competitiveness of European industry, intensify socio-political pressures and keep fiscal deficits elevated. These risks, coupled with debt burdens well above pre-pandemic levels, the war in Ukraine (Ca stable) and recent bank stress will weaken the resilience of European sovereigns to future shocks. The risks are most elevated for Central and Eastern European (CEE) sovereigns, where the exposure to such risks is generally greatest.

» **The immediate impact has been less severe than most feared.** Energy prices have come down from record highs in 2022 because of a fall in demand, supply diversification and mild weather. Industrial activity has remained steadier than we had initially expected, and the crisis has not set back Europe's green energy transition. Moreover, despite the fiscal costs of support to households or corporates, inflation has helped keep government debt burdens broadly stable.

» **Higher-for-longer prices will continue to pose economic and social challenges.** The most energy-intensive industries like chemicals and basic metals that struggled last year could lose some competitiveness to lower-cost destinations, weakening the economic resilience of sovereigns mainly in CEE that generate a lot of activity from such industries. At the same time, cost-of-living challenges will remain high on political agendas across Europe, as it could take years for real incomes to return to their pre-crisis levels, let alone growth paths, particularly for sovereigns in CEE and the Baltics.

» **Fiscal pressure will slow post-pandemic consolidation and improvements in shock-absorption capacity.** The pressure to continue support to businesses and households will coincide with spending pressure from defence and growing interest payments. This environment, together with moderating inflation, will continue to slow fiscal consolidation for some following the pandemic-driven rise in deficit and debt levels. Overall, a number of governments in CEE as well as Western Europe will carry higher debt burdens for the foreseeable future, at a time when debt affordability is deteriorating, weakening their resilience to future shocks.

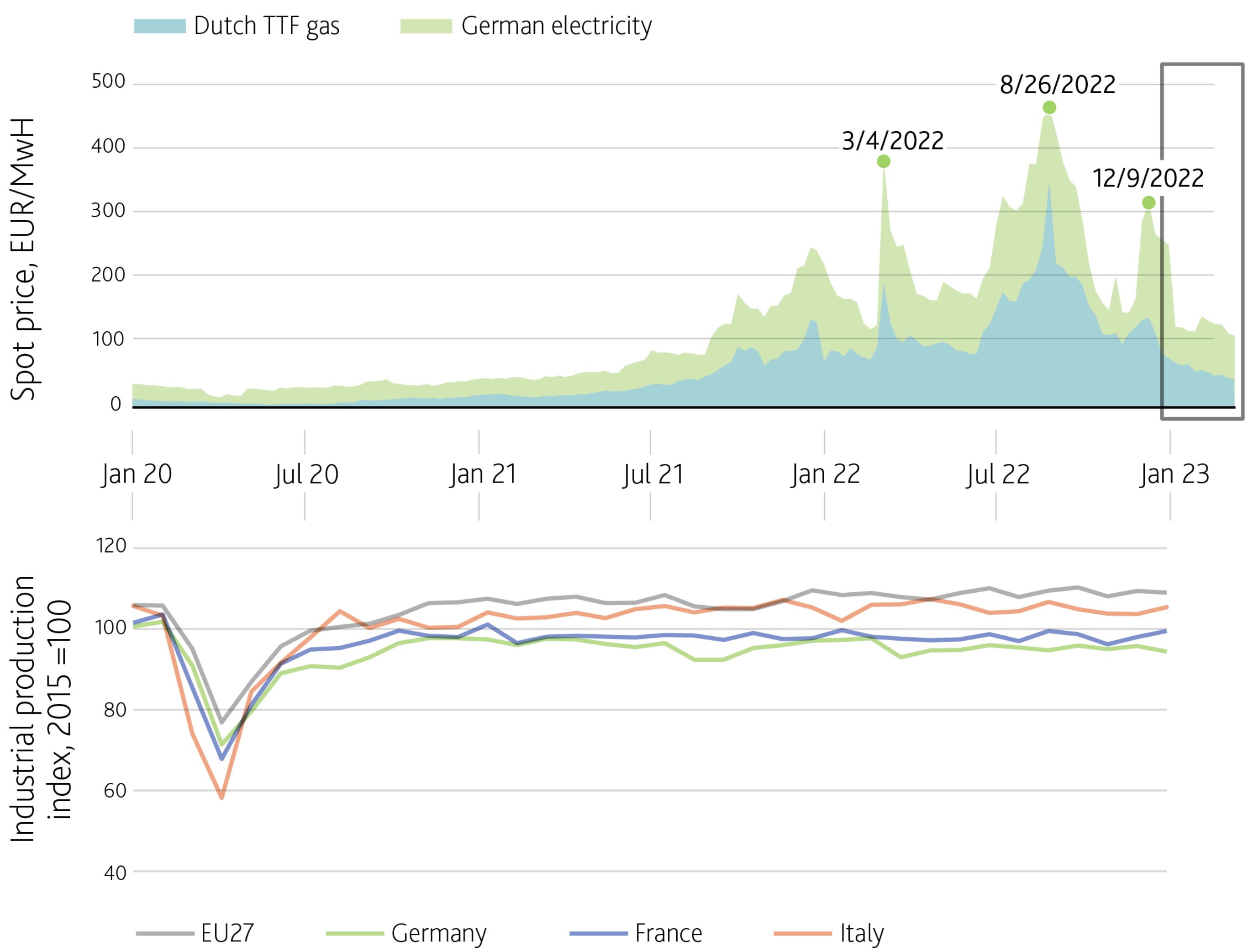
This report was republished on 30 March 2023 with a correction to exhibit 7.

The impact of the energy crisis on European sovereigns has been less severe than feared

As we highlighted in recent research, efforts to source alternatives to Russian gas, business adjustments and relatively mild weather helped avoid energy rationing, and bring gas and electricity prices down from the extremely high levels recorded in the summer and autumn of 2022 (see Exhibit 1). Together with an easing in supply-chain disruptions, this meant industrial activity held up much better across Europe than we had expected last year. As a result, we have revised our forecasts for euro area growth upwards from -0.6% to +0.5% for 2023 despite the impact of still-high inflation and rising interest rates on consumption. Corporate credit quality too has held up much better than we had expected.[1]

Exhibit 1

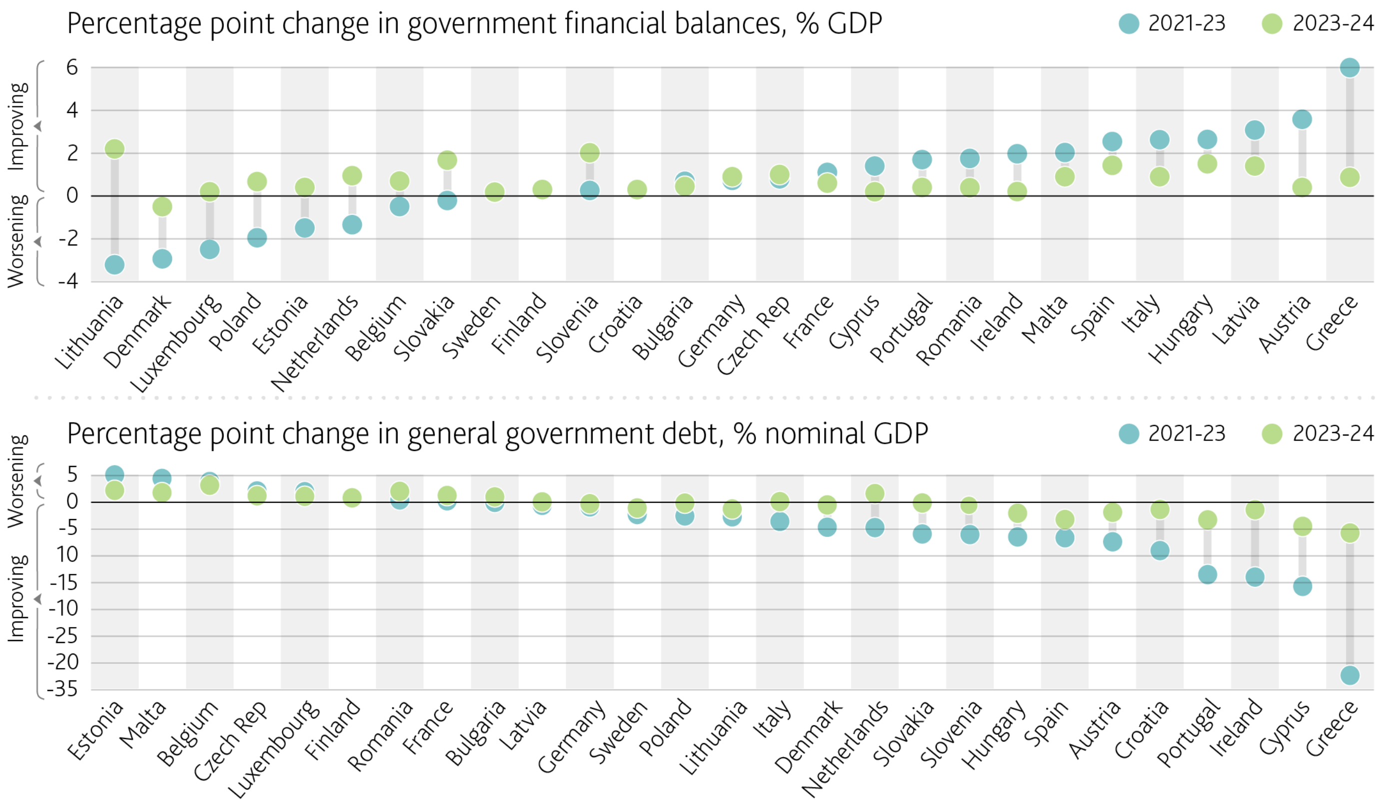
Gas and electricity prices have come down from last year's peaks and headline industrial production figures have remained resilient



Source: FactSet, Eurostat and Moody's Investors Service

We expect the energy crisis and broader fall-out from the Russia-Ukraine war will keep fiscal pressures more elevated for years (see below). However, despite the roll-out of significant government support programmes to buffer the effects of high energy prices on households and industry, high inflation[2] has so far muted the impact of the energy crisis on key fiscal metrics such as the government's fiscal balance and debt-to-GDP ratio. We expect most EU governments to record lower deficits in 2023 than in 2021, while only a handful will record an increase in their debt-to-GDP ratios over the same period (see Exhibit 2).

Exhibit 2
The energy crisis has not led to a marked deterioration in fiscal metrics



Sources: Moody's Investors Service and Eurostat

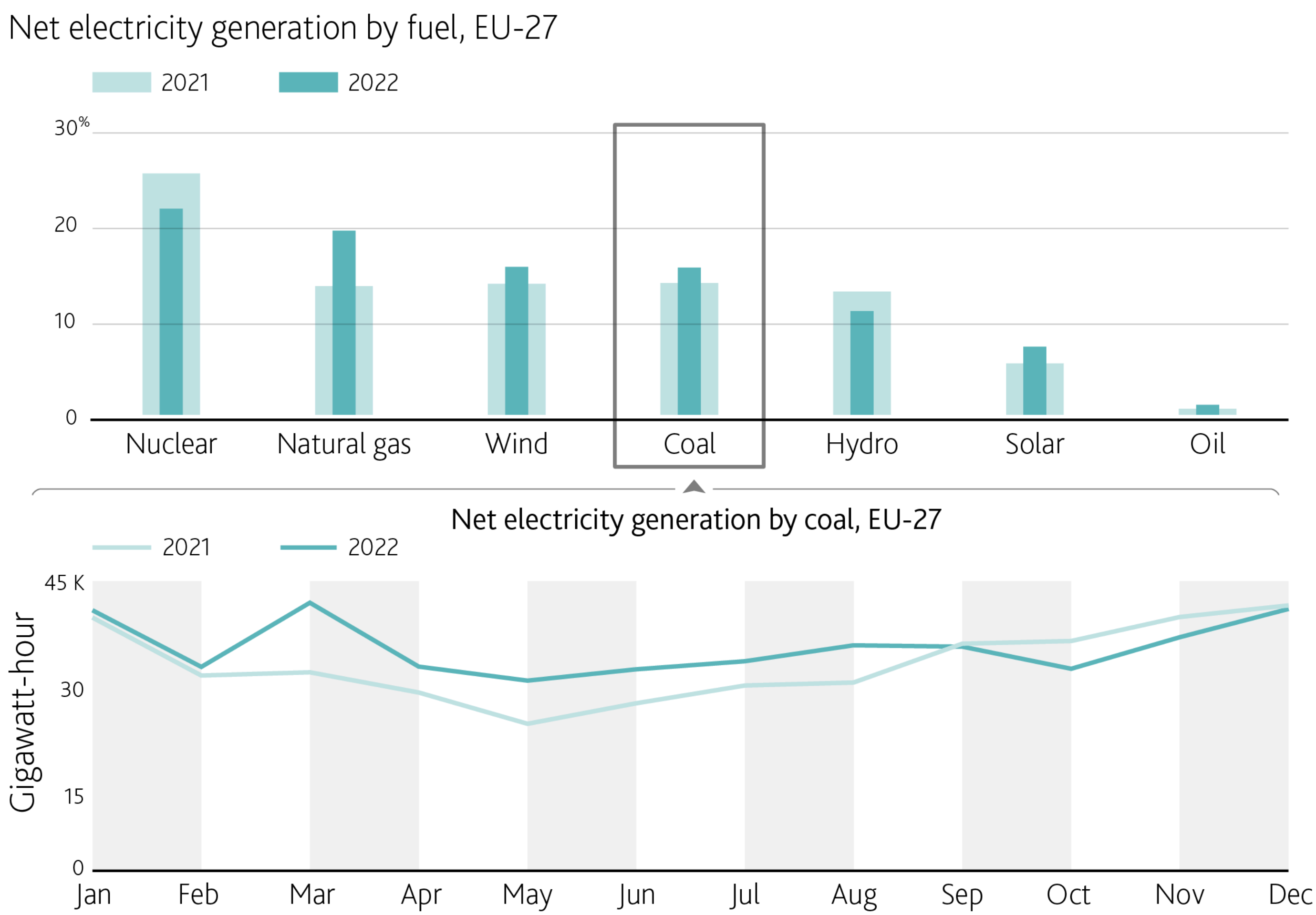
The median level of fiscal support committed to buffer the impact of the energy crisis is 3.5% of GDP for EU sovereigns. However, such headline figures often overstate the actual cost to the public finances, as gross expenditure on such programmes will in many cases fall with energy prices, and most governments have, to varying degrees, managed to fund their special support measures through windfall taxes on energy utilities.

An EU-wide agreement on such windfall taxes was expected to raise around €140 billion in revenue, just over 20% of the total funds committed by EU governments to shield consumers from high energy costs to date, although lower market prices for energy mean the sums collected are unlikely to reach this level. Some countries such as Bulgaria (Baa1 stable) and Romania (Baa3 stable) operate separate national windfall levy schemes, which largely fund their generous consumer price support schemes. Lower-than-expected energy prices also mean that many government support measures become less costly than initial estimates suggested they could be. Most notably, Germany's (Aaa stable) €200 billion (5.2% of GDP) Economic Defence Shield represents a maximum fiscal commitment by the government, the final cost of which will, among other things, depend on the price of energy.

Neither has the energy crisis to date derailed Europe's green energy transition. The share of coal in EU electricity generation did increase to 15.7% in January-November 2022 from 14.2% in the same period in 2021 to make up for the shortfall primarily related to falling European nuclear and hydropower production. However, the surge in coal-powered electricity occurred in the first half of 2022 and coal had returned to 2021 levels by the end of the year (see Exhibit 3). Moreover, the increase in the share of both wind- and solar-powered electricity generation was greater than that of coal, which helped the region balance the decline in nuclear and hydropower generation last year. Many member states have also chosen to accelerate the shift towards renewable energy production both as part of national policy initiatives and under the EU's REPowerEU scheme, which also provides grant and loan funding for related investments.

Exhibit 3

Wind and solar increased more than coal in 2022, but the fall in nuclear and hydro output presented other challenges



Source: Moody's Investors Service and Eurostat

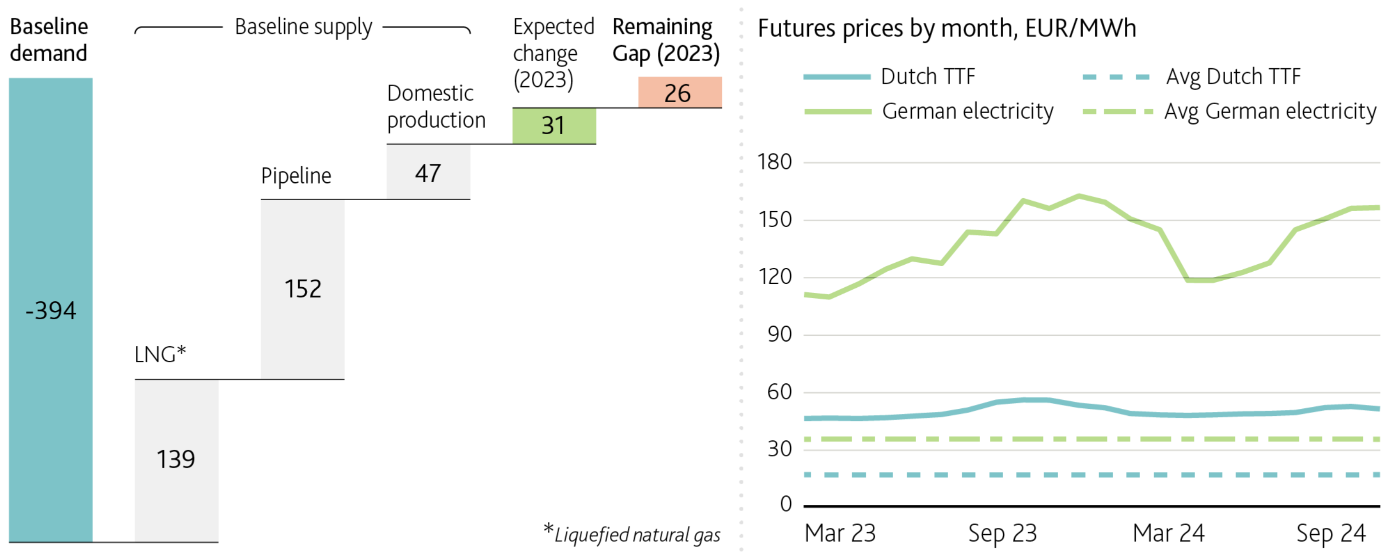
But the energy crisis will continue to pose economic and social risks

Despite changes introduced in 2022 and increasing nuclear, hydro and renewable supplies coming on stream in 2023, the International Energy Agency (IEA) still estimates the EU will see a gas supply shortage worth around 7% of estimated demand in 2023 (see Exhibit 4).[3] Meanwhile, the Bruegel think tank estimates that EU demand needs to be reduced by 13% compared to the five-year average to fill gas storage levels to 90% by October and cope with normal winter temperatures in 2023-24. A failure to do so is likely to put renewed upward pressure on energy prices (see highlight box). In the absence of further boosts to supply (which are complicated by the slow increase in global LNG supplies and rising global demand, above all from China [A1 stable]) or a reduction in demand, we expect supply shortages to persist also beyond this year. These dynamics are reflected in the futures prices for European gas and electricity, which are still markedly above their historical average until 2025 (see Exhibit 4).

Exhibit 4

The EU still faces a substantial supply-demand gap for natural gas, which has kept energy prices well above long-term averages

Natural gas balance of the EU in 2023, billion cubic metres



"Expected changes" include increases in solar, wind, nuclear and hydropower production, fuel switching, improvements in building efficiency, usage of heat pumps, biomethane in 2023.
Source: IEA, FactSet, Moody's Investors Service

Historically high energy prices still pose risks to sovereigns with energy-intensive industrial economies

Energy prices, which remain very high both by historical standards and relative to global competitors, will continue to pose challenges for the competitiveness of energy-intensive industries, posing policy challenges for governments and raising risks to some sovereigns' economic strength. The strong headline industrial production figures and strong performance by sectors that have benefitted from the easing of global supply chains, such as Europe's automotive sector, obscure weak performances in some energy-intensive sectors such as chemicals, basic metals and paper (see Exhibit 5).

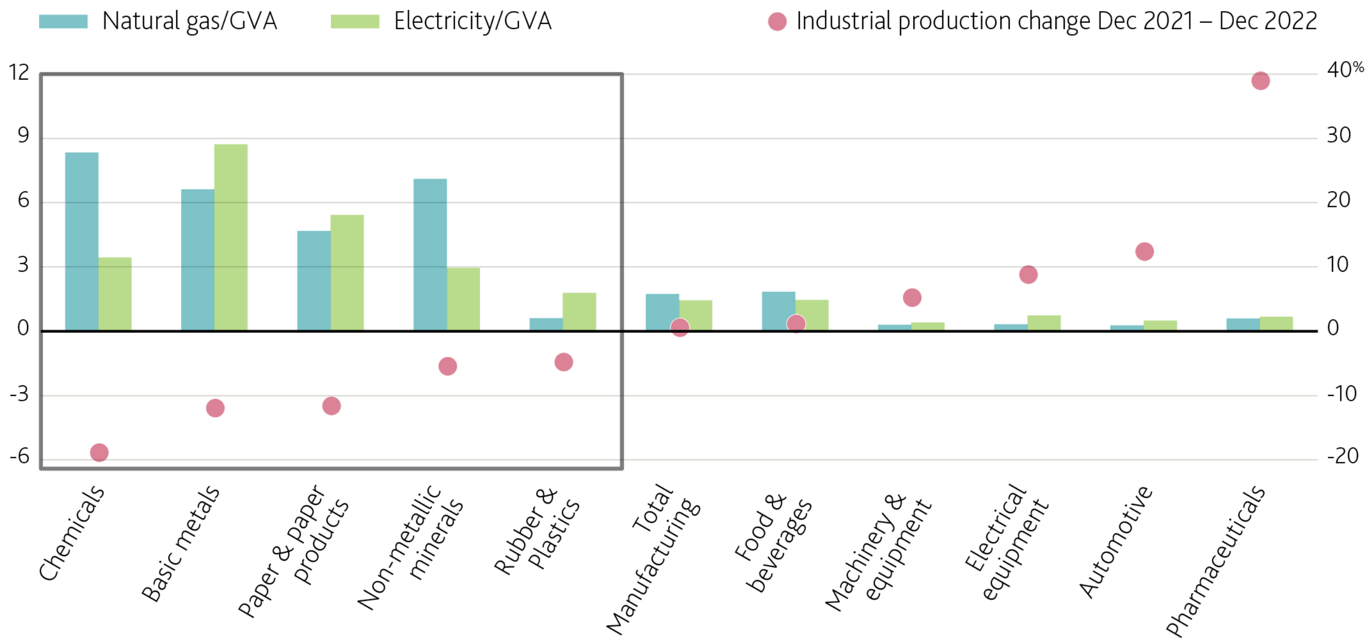
Slovakia (A2 negative), which we had identified as particularly vulnerable to the energy crisis last year, recorded an 11% decline in industrial production over the course of 2022. While this was the worst performance of the industrial sector in Europe, Slovakia's GDP still grew by 1.7% in 2022. Although the Czech Republic's (Aa3 negative) overall industrial production grew in 2022, chemicals, rubber and plastics, and basic metals (which together account for 3.4% of gross value added [GVA]) all declined by double-digit percentages. Similarly, while headline manufacturing figures were broadly stable in Austria (Aa1 stable) and Germany, both recorded significant declines in some of the most energy-intensive sub-sectors.

It is too early to assess whether this is the beginning of a more structural decline for these sectors or merely a temporary blip as prices come down from record highs and the worst fears about the energy crisis abate. Relatively higher energy prices could also add to Europe's competitive disadvantage relative to the United States (Aaa stable), spurred by the incentives for investment in clean energy technology, manufacturing and R&D provided by the US Inflation Reduction Act (IRA).

Exhibit 5

Very energy-intensive sectors performed much worse than manufacturing overall in 2022

Natural gas and electricity consumption, terajoule per million euro GVA



Source: Eurostat, Moody's Investors Service

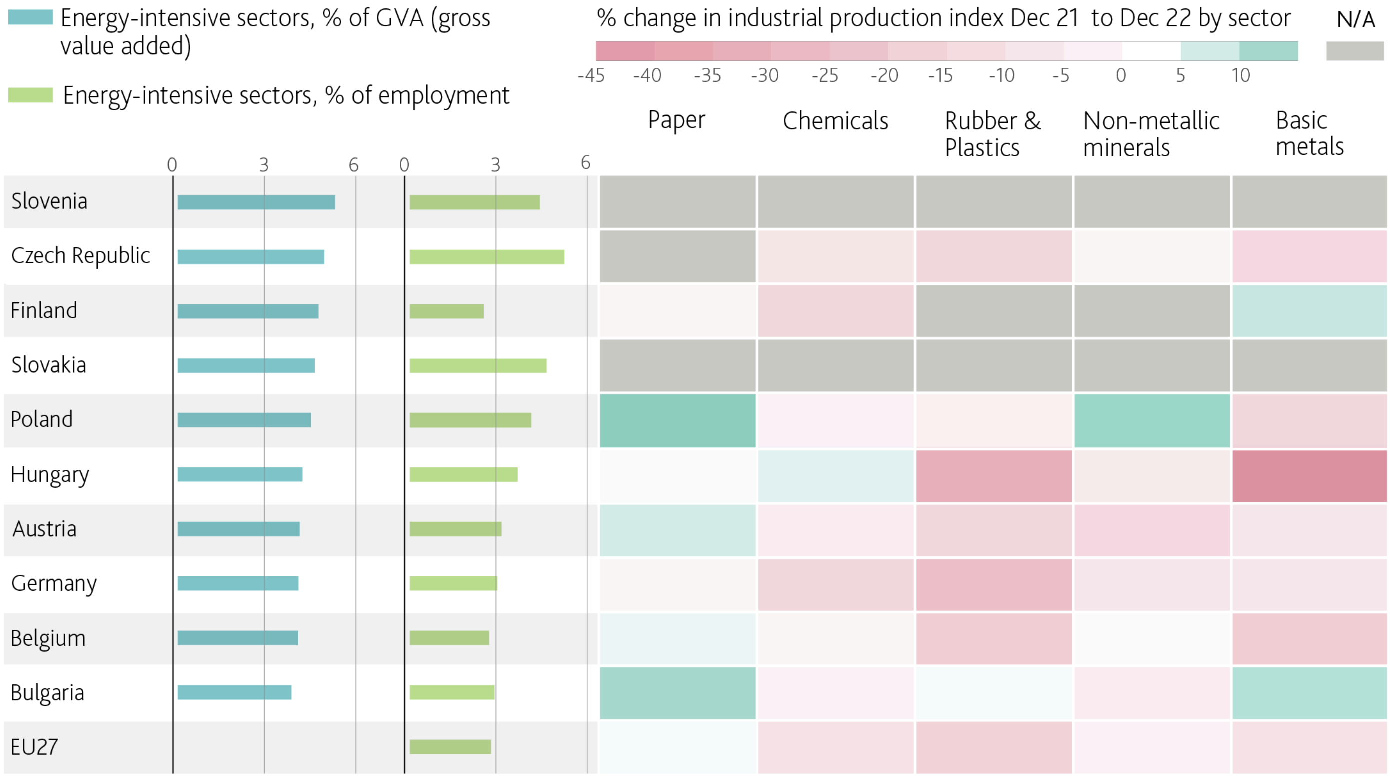
We estimate a permanent and across-the-board decline of 20% for these sectors combined would reduce GVA between 0.6% and 1.0%. Although a decline of this magnitude would on its own be unlikely to produce significant credit pressure, such pressure could lead to a weakening of our assessment of the economic strength of the most exposed sovereigns, thus weakening the long-term economic outlook and lowering the overall strength of the credit profile. For instance, we recently lowered our score for Germany's economic strength by one notch to "aa3" in part because of the long-term challenges posed by the energy crisis, while affirming Germany's Aaa rating and maintaining the stable outlook. We recently also affirmed Austria's Aa1 rating and maintained the stable outlook, without changing the score for economic strength as, the broader Austrian economy has continued perform strongly and is expected to be less affected by the energy crisis in coming years.

Slovenia (A3 stable), the Czech Republic, Slovakia, Poland (A2 stable) and Hungary (Baa2 stable), but also Austria, Germany and Belgium (Aa3 stable) appear most vulnerable given the importance of the five most energy-intensive manufacturing sectors to their GVA (see Exhibit 6). Energy-intensive sectors also tend to be capital intensive. As such, a marked and widespread tightening in credit conditions as a result of current banking sector stress would magnify pressure on these sectors.

Exhibit 6

Energy-intensive sectors are important for CEE economies

Percentage change in industrial production index for December 2022-December 2021 by sector; 2019 GVA data by sector



Some data on Slovenia, Czech Republic, Slovakia and EU-27 averages is unavailable.

Source: Eurostat and Moody's Investors Service

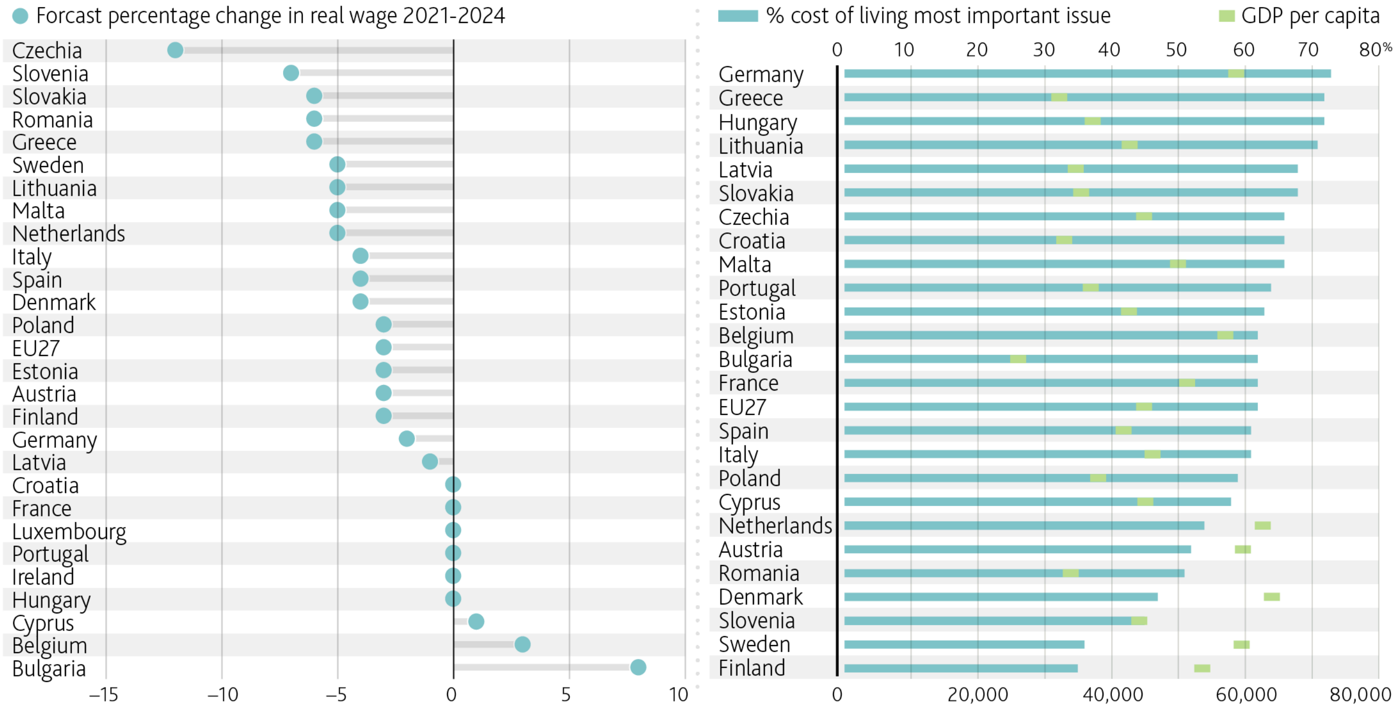
Cost-of-living concerns will continue to dominate political agendas, adding to fiscal and political pressures

The lingering impact on real incomes from higher prices for energy and other goods and services will keep real incomes lower than their pre-crisis levels, thus raising social and potentially political risks. We expect the rate of inflation to slow markedly but remain high throughout Europe in 2023, before returning to levels closer to the historical trend over the course of 2024. However, even as the rate of price increases slows, prices will remain significantly higher and real incomes could take years to catch up with their pre-crisis levels in many countries (see Exhibit 7). According to a Eurobarometer survey published in February 2023, concerns over the increasing cost of living are widespread across Europe (but are particularly high in the EU's poorer southern and eastern member states as well as Germany) and are likely to remain top of the political agendas for years as real incomes remain below pre-crisis levels in many countries.

Exhibit 7

Real wages in 2024 will be lower than 2021 in most countries, while concerns about cost of living are near-universal in the EU

Real compensation per employee, % change 2021-24F; GDP per capita in $ PPP



Source: AMECO, Eurobarometer, Moody's Investors Service

Energy, cost-of-living and other crises will further slow post-pandemic fiscal consolidation

Although the cost of public support measures for energy bills will likely fall with market prices, governments will come under pressure to support struggling industries or to counter the impact of US clean-energy subsidies on Europe's long-term industrial competitiveness. Similarly, the political prominence of cost-of-living issues will make it difficult for governments to fully scale back the support they have provided to households so far during the crisis. They could also face demands for other forms of transfers or tax cuts to ease pressures on real incomes.

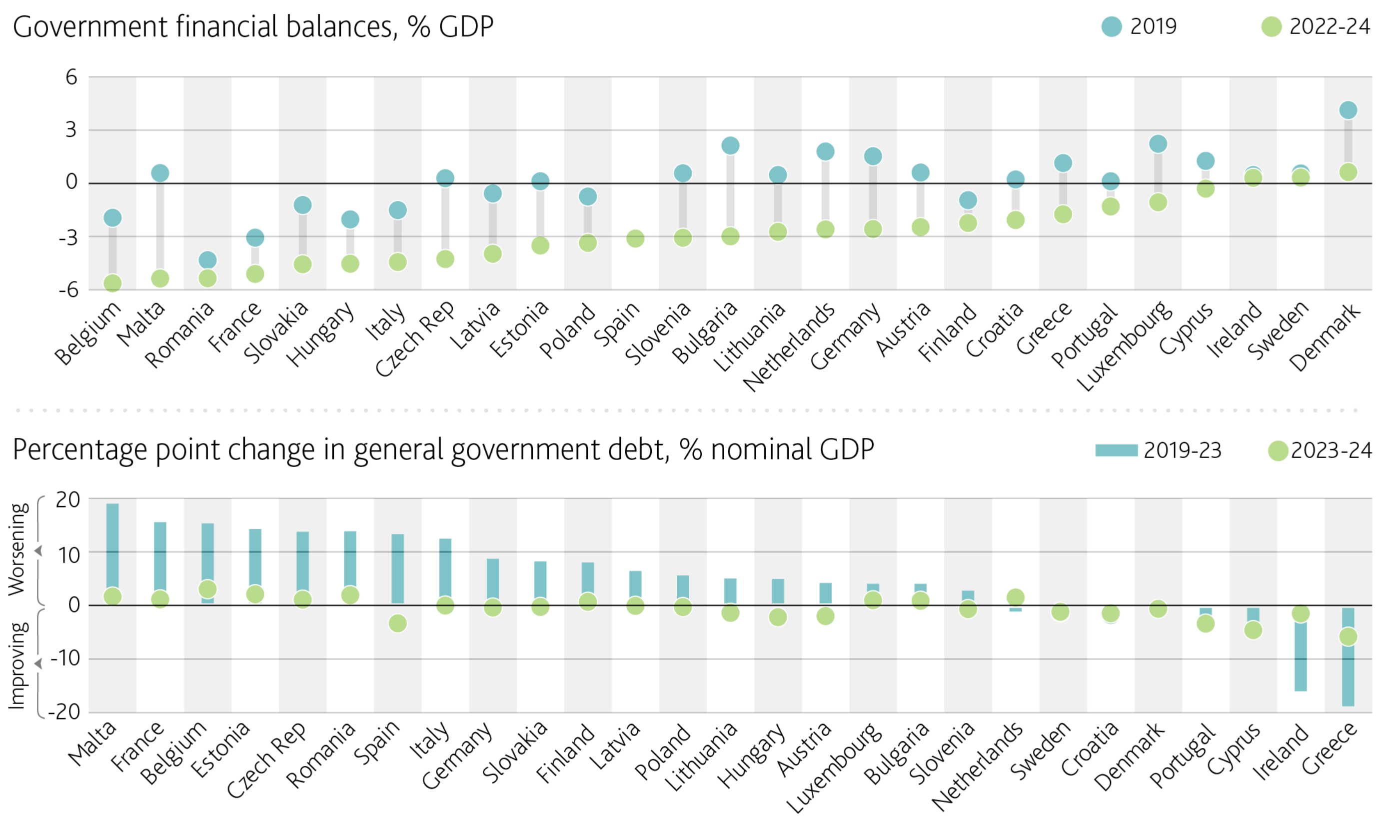
This environment will also make it more difficult for governments to push through reforms to social safety nets or pensions, which, for instance, could be perceived to further weaken living standards. Dissatisfaction with perceived shortcomings in managing the crisis could increase political instability in Europe, particularly in countries with more fragile coalition governments.

Governments will also need to cope with fiscal pressures from other areas like defence in the wake of the war in Ukraine, and a gradual but steady rise in interest spending as borrowing costs remain higher than in previous years. Slowing rates of inflation will also offer less help in flattering government deficit and debt metrics in coming years.

Collectively, this will slow the pace of post-pandemic fiscal consolidation in 2023 and 2024. Most countries will record deficits this year more than two percentage points higher than 2019 levels and any further improvements in 2024 are likely to be marginal (see Exhibit 8). Moreover, debt burdens will remain substantially higher than their pre-pandemic levels for sovereigns such as Estonia (A1 stable), Malta (A2 stable), the Czech Republic, France (Aa2 stable), Romania, Belgium, Italy (Baa3 negative), Slovakia and Spain (Baa1 stable). Weaker balance sheets will reduce the resilience of sovereign credit profiles to further shocks, particularly as debt-affordability indicators will also gradually deteriorate in coming years on the back of the stark shift in the global interest rate environment.

Exhibit 8

The energy crisis will slow the pace at which governments reduce pandemic-related debt



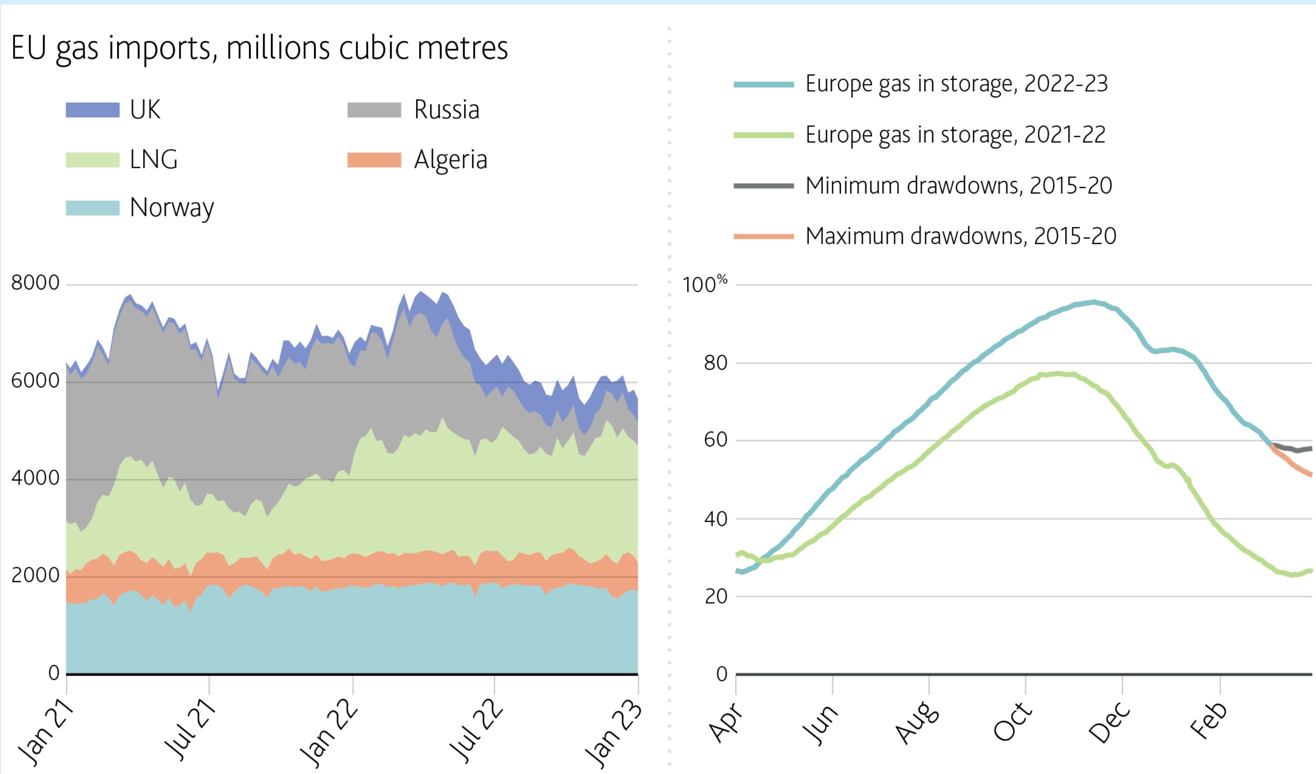
Source: Eurostat and Moody's Investors Service

Box 1: Filling up gas storage for next winter will require additional efforts to curb demand

Russian gas deliveries to Europe have declined by almost 85% between February 2022 and 2023, but increased deliveries of above all LNG have kept the overall decline in EU gas imports to 18% (see Exhibit 9). Coupled with demand reduction measures and the warm winter weather, this has left EU gas storage levels at unseasonably high levels of around 60% as the 2022-23 heating season draws to a close. EU regulations require gas storage to be filled back up to 90% by 1 October 2023. The Bruegel think tank has estimated that with Russian and other sources of gas flowing at current levels, EU demand needs to be reduced by 13% to cope with normal winter temperatures in 2023-24, whereas a complete halt to Russian flows would take that figure to 20%.

While improved interconnections within Europe has reduced the vulnerability of individual countries to gas shortages, countries such as Slovakia, Hungary, and Austria, which are still importing Russian gas, would be the most exposed in the event of a complete cut-off of Russian gas. Nevertheless, a complete halt to Russian supplies or an inability to fill storage to adequate levels ahead of next winter would risk putting upward pressure on gas and electricity prices again, affecting all European sovereigns through Europe's common energy market.

Exhibit 9
Total gas imports are almost 20% lower than a year earlier, but gas storage remains unusually high



Source: Bruegel and Moody's Investors Service

Endnotes

1 We had initially expected that about 45% of the companies we rate in EMEA were at risk of credit quality erosion in our downside scenario. Ultimately we took negative rating actions on about 20% of companies.

2 The current inflationary environment flatters government fiscal metrics as revenues track the rate of inflation more closely and more automatically than most forms of government expenditure. Inflation also fuels high rates of nominal economic growth which mute the impact of a high deficit on debt-to-GDP figures.

3 The IEA's estimate of the gap in supply and demand for gas in 2023 cited above is based on the 2022 level of demand with upward revisions on the expectation of warmer average temperatures, and the need to avoid industry demand destruction and to provide gas exports to Moldova and Ukraine. On the supply side, the IEA assumes a complete halt to Russian gas supplies, a further 5% increase in LNG supplies, flat non-Russian pipeline deliveries and a 5% decline in domestic EU gas production, mainly stemming from a continued fall in Dutch production although an increase in Romanian and Danish production could offset some of the shortfall.

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