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EMEA MACRO INSIGHTS

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Europe: How Low Gas Storage Threatens a Fragile Recovery

The European gas market faces a tight winter heading into Q4-26, underpinned by a persistent gas storage deficit - Northwest European gas storage levels are trending 10bcm lower year-on-year, currently at 62% capacity. Persistent geopolitical tensions in the Middle East have reduced Qatari LNG exports, whilst Asian LNG demand has remained robust through the summer. Under the base-case scenario, TTF prices are forecast to average €76/MWh this winter, peaking at €80/MWh, while an adverse colder winter scenario could push prices to a €122/MWh average.

This persistent tightness has highly heterogeneous macroeconomic impacts; fossil-fuel-reliant Germany and Italy saw sharp manufacturing declines (falling 7.3% and 5.4% respectively since 2022), whereas France and Spain exhibit structural resilience due to nuclear and renewable expansion. European household gas demand is also impacted, mirroring the marked decline of the 2022 energy shock.

This ongoing geopolitical disruption is an energy-driven supply shock, which pushed euro area headline inflation to 3.3% in August. In 2027, headline inflation is projected to average 2.5% in the baseline, but will persist at 3.0% under the adverse scenario, while core inflation rises to 2.7% in the adverse case versus a 2.6% baseline. VAR modelling confirms that gas shocks are highly persistent, lagging into core inflation and services by two quarters.

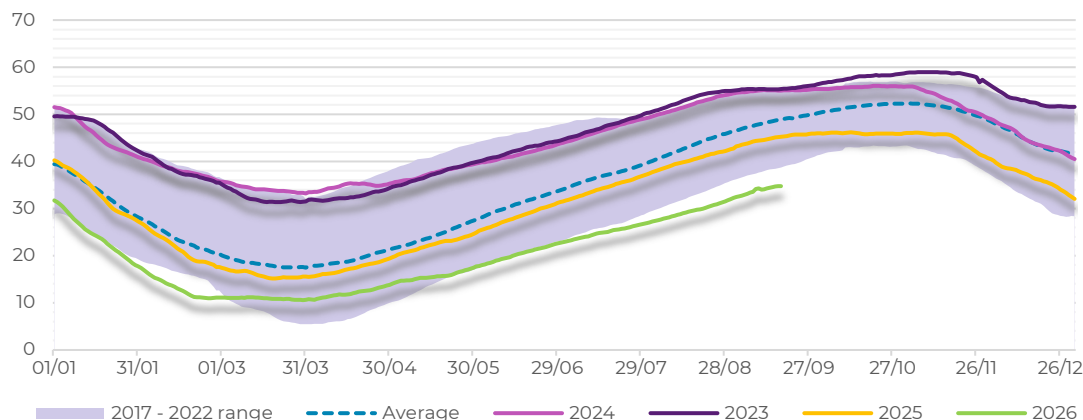
The shock also hits the UK severely, where gas accounts for 35% of energy demand and import dependency stands at 49%. We find that a 10% gas price shock triggers a rapid contraction, shaving roughly 0.3% UK GDP off into 2027. Meanwhile, UK inflation is projected to rise by an additional 0.8pp to 1pp – on top of the 1pp it already stood above pre-conflict expectations. Furthermore, wholesale prices above 200 pence per therm are expected to lift the Ofgem price cap by 20% to 25% in Q1 2027, severely depressing household consumption.

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Low European gas storage level sets Europe up for a tight winter

The European gas market is set to enter the winter withdrawal period with a significantly lower inventory buffer, with European gas storage currently at 72bcm. The problem is more acute in NW Europe, with total stocks at 36bcm (62%), down 10bcm year-on-year and 13bcm below the long-run average (Chart 1).

Chart 1: NW Europe gas storage level, bcm. Inventory levels through 2026 have trended well below average

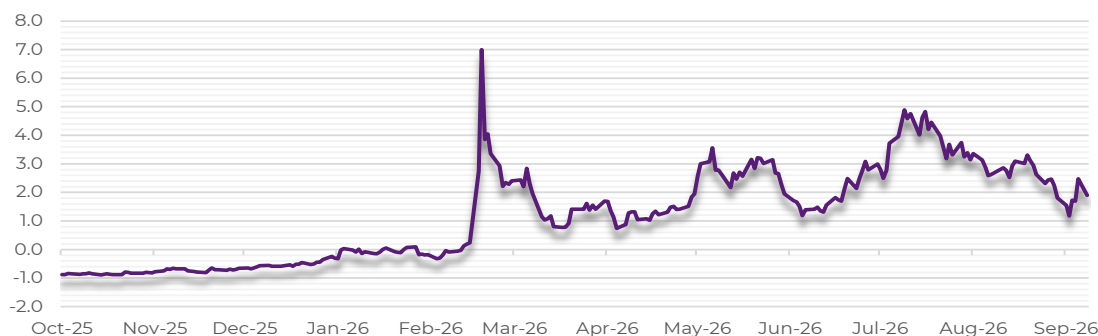


Source: Natixis CIB Research, GIE

Whilst several weeks of the injection season remain, the prospect of firm injections making up the deficit before the start of the withdrawal season is unlikely – fundamentally, Norwegian maintenance and a seasonal uptick in demand following the summer typically result in limited injections. As observed through the injection season, current seasonal spreads do not incentivise market-based injections, whilst Germany remains reluctant to directly intervene (unlike in 2022) to help fill storage (Chart 2).

Europe's storage level is effectively the signal that radiates tightness or looseness into the global gas market. With low start-winter stocks now essentially guaranteed, tightness is largely locked in. The question is, how tight will global gas markets get this winter, and how high could TTF prices rise?

Chart 2: TTF Oct-26 / Q1-27 spread, €/MWh

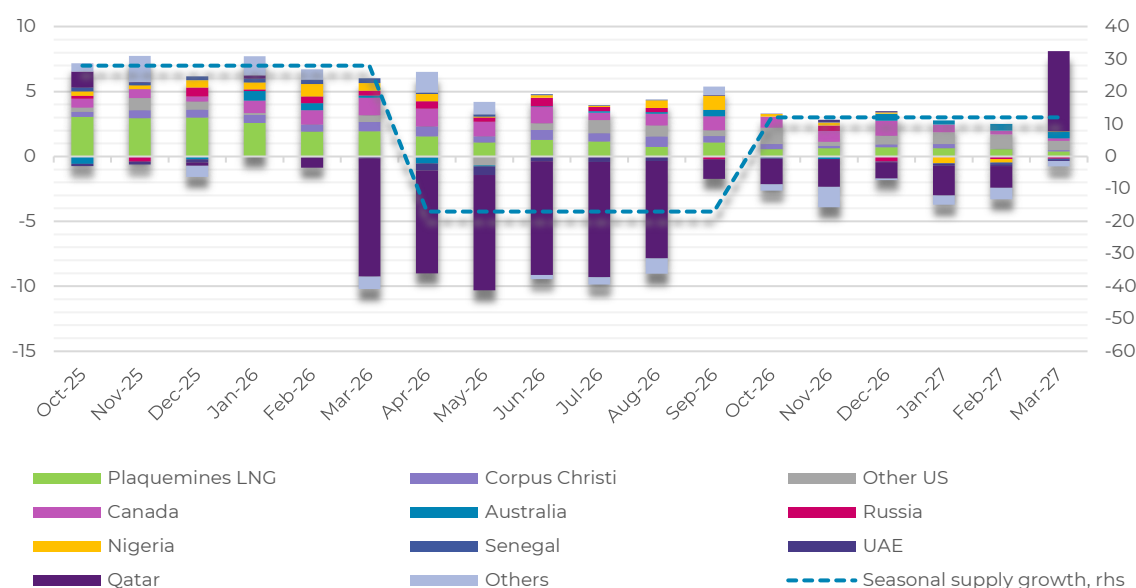


Source: Natixis CIB Research, Bloomberg. A positive summer / winter spread (i.e. curve in backwardation) has disincentivised commercial storage injections, where market players would typically buy cheaper gas in the summer and sell it forward at a higher winter price. Absent a commercial incentive, most injections have been based on regulatory requirements or subsidised, but these policies are not universal.

Europe has exhibited more flexibility than Asia to turn down supply through the crisis so far, but this cannot continue indefinitely

Europe's storage deficit is primarily a function of ongoing conflict in the Middle East, which has significantly impacted regional LNG exports. The global LNG market has lost a cumulative ~26bcm since March, once ex-Qatar supply growth is netted from Middle East supply losses (**Chart 3**). This is equivalent to around half of the total outage – whilst new LNG projects have added volume through the year, it has been insufficient to offset the loss of Middle Eastern supply.

Chart 3: LNG year-on-year supply delta by project / country (lhs) vs total seasonal supply (rhs), bcm

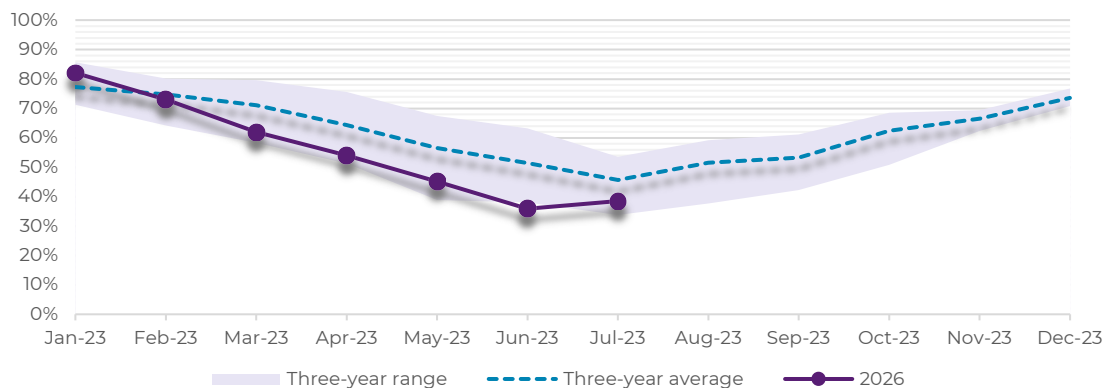


Source: Natixis CIB Research, Bloomberg, Refinitiv

The loss of Qatari LNG has been directly translated into a deficit in European gas storage. In contrast to the loss of Russian pipeline gas in 2022 (when price-sensitive LNG consumers outside of Europe reduced imports meaningfully in response to higher prices), Asian LNG import trends have been robust through the Hormuz crisis, despite growing exposure to spot prices. Indeed, sustained demand above \$20/MMBtu from typically price-sensitive countries has been observed consistently, largely stabilised by state support as governments have focussed on security of supply. Moreover, unlike in the oil market, China has shown limited downwards flex for LNG imports either. This has resulted in Europe taking more of the burden for balancing the outage.

With limited alternative supply flexibility within Europe, most price-sensitive industrial demand already curtailed following several years of elevated energy prices and robust power demand following extended summer heatwaves, Europe's gas market has been unable to offset lost LNG supplies to maintain adequate storage injections.

Chart 4: US LNG export share to Europe, %

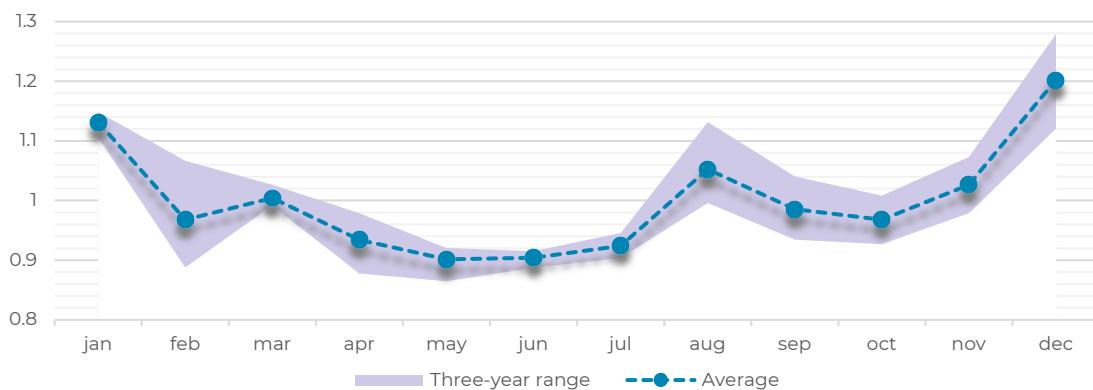


Source: Natixis CIB Research, Bloomberg, Refinitiv

One question consistently posed during client conversations has been *why European buyers have not competed more aggressively for available LNG volumes through the summer*. Reviewing the share of US LNG exports imported by European buyers highlights this - US LNG is destination flexible and subsequently will flow to the market offering the highest netback (**Chart 4**). Asian buyers consistently outcompeted European buyers for flexible LNG through the injection season. This dynamic was able to persist through the summer, given the seasonal profile of natural gas demand - whilst Europe's LNG supply was lower year-on-year, available supply was more than adequate to meet summer consumption with no shortage of gas in the spot market. Importantly, absent universal regulatory requirements or incentives to inject natural gas into storage, winter demand was not pulled forward, either. This cannot continue into the winter, with Europe requiring additional LNG supply to supplement the storage deficit to balance seasonal increases in gas consumption (as heating demand will increase substantially in the coming months). Of course, the colder the winter, the more flexible LNG will be required in Europe to balance demand increases.

Gas consumption in the mature, high-income North Asian LNG markets is also highly seasonal (**Chart 5**), with importers typically requiring out-of-basin supplies to meet peak seasonal demand. These additional imports would typically be met by Qatari LNG, but an extended outage will mean Asian and European buyers competing for the same flexible LNG cargoes.

Chart 5: Typical seasonality of JKT* LNG demand



Source: Natixis CIB Research, Bloomberg. *JKT refers to Japan, Korea, Taiwan.

A more negative assumption on Qatar's supply recovery has resulted in a higher TTF forecast

We have updated our Hormuz recovery scenario to now assume limited recovery in Qatari LNG volume through the remainder of 2026, with supplies beginning to sustainably recover through Q1-27. This removes ~9bcm of LNG from our winter balance and implies a degree of competition for available flexible LNG cargoes, but more limited capacity for Europe to turn down imports implies prices through the peak demand period prices will need to rise to curtail consumption at the margin. We subsequently set our TTF base-case (which assumes 10-year average temperature realisations) at a slight premium to the upper fuel switch level in Europe (between €70-75/MWh), with higher prices over the peak winter months, at €80/MWh. This results in an average winter forecast at €76/MWh.

In a high-case scenario, which assumes no recovery of Qatari LNG through the winter (i.e. no recovery through Q1-27) and a cold winter relative to 10-year normal temperatures, balancing the market becomes difficult – demand savings will be harder to come by in Europe with maximum coal generation already priced in. Liquids switching (gas to gasoil) could trigger some additional savings, although this is a moving target, and represents limited fundamental value – in any situation where Qatari LNG is curtailed through the winter, the gasoil complex will likely be in poor shape. We currently model gasoil parity in Europe at €145/MWh.

As such, demand reductions would likely need to be concentrated in Asia via:

- ▶ Gas-coal switching (i.e. temporary coal boost measures extended) and switching towards liquids in some industrial and transportation applications.
- ▶ Industrial curtailments / extension to current rationing policies.
- ▶ Higher tolerance for LNG inventory drawdowns in South Korea, Japan.
- ▶ Testing the limits of subsidised buying.

All require a price signal to further test affordability and force switching to alternative fuels and natural gas demand curtailments. In this scenario, we constrain our forecast using gasoil parity in Europe to the upside, which we currently place at €140/MWh, with a winter average price at €122/MWh (**Table 1**).

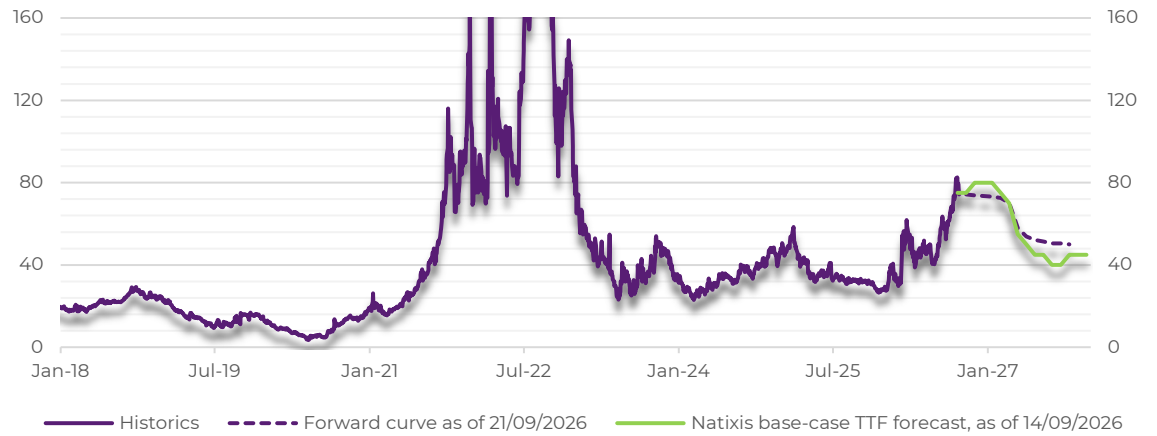
In both scenarios, European gas storage ends the winter period at critically low levels – indeed, there is not a huge delta between the ending stocks between the scenarios, as elevated prices in the high case work to conserve stocks. This will ensure prices remain relatively elevated (€40-50/MWh) over summer 2027 to ensure adequate LNG is imported into Europe to deliver a comfortable end-summer storage level ahead of winter 2027 (**Charts 6 and 7**).

Table 1: Natixis base-case and high-case gas price scenario

TTF	Sept-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sept-27	Oct-27	Nov-27	Dec-27
Old	60	65	65	65	65	65	65	45	45	45	42	42	42	36	36	36
Current Base	75	75	80	80	80	75	70	55	50	45	45	40	40	45	45	45
High Case	80	90	115	130	140	140	120	90	70	55	55	50	50	55	55	55
NBP,p/therm	Sept-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sept-27	Oct-27	Nov-27	Dec-27
Current Base	190.8	190.8	204.3	205.3	205.3	192.8	179.2	137.4	124.8	110.3	110.3	97.7	102.7	115.3	115.3	115.3
High Case	205.8	231	294.9	333.7	358.9	358.9	307.5	228	177.7	137.9	137.9	125.3	130.3	142.9	142.9	142.9

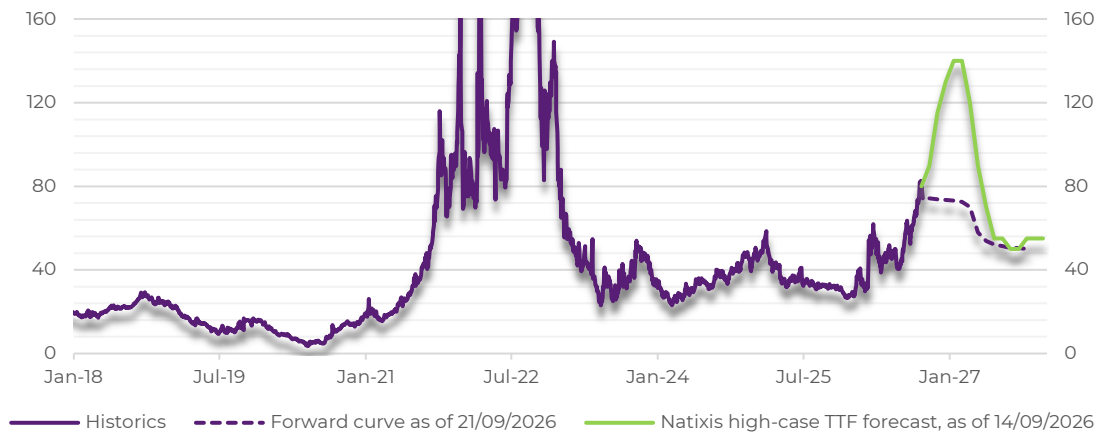
Source: Natixis CIB Research

Chart 6: Natixis base-case TTF forecast vs curve, €/MWh



Source: Natixis CIB Research, Bloomberg.

Chart 7: Natixis high-case TTF forecast vs curve, €/MWh



Source: Natixis CIB Research, Bloomberg.

New gas tensions: Economic impacts in the wake of 2022

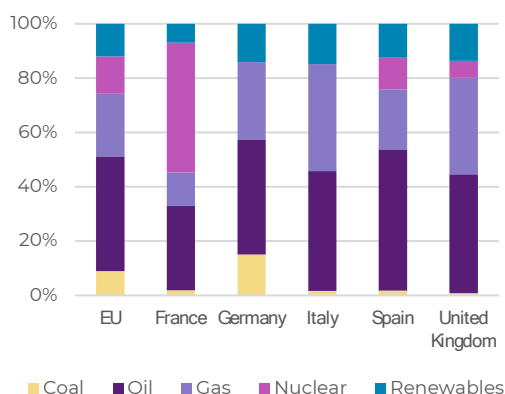
Energy mixes: Uneven impact on European manufacturing

In 2025, gas accounted for 23% of energy consumption in the European Union, and 16.7% of the inputs used for electricity generation. Prior to the outbreak of the Middle East conflict, 87.6% was imported. This was despite a decline in natural gas demand since the invasion of Ukraine, which fell by 13% between 2021 and 2022 and has not returned to previous levels.

Furthermore, the share of gas in European energy mixes is heterogeneous (**Chart 8**), exerting a differentiated impact on their manufacturing output (**Chart 9**).

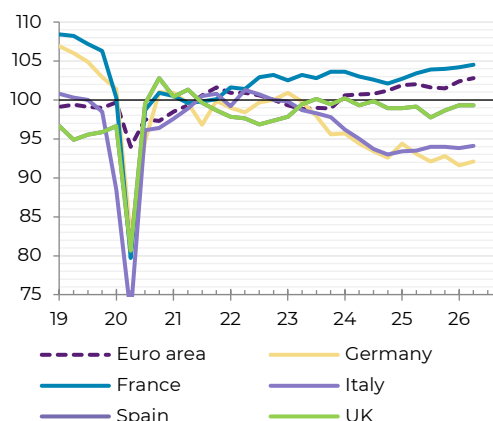
- ▶ Italy and Germany have fossil-fuel-intensive energy mixes, accounting for 85.2% and 85.9% of their respective totals. Gas specifically represents 39.4% of energy consumption in Italy and 28.5% in Germany. Furthermore, their industrial sectors hold significant weight, representing 17.2% of value added in Italy and 20.7% in Germany. This heavy reliance on gas and oil partly explains the significant decline in manufacturing output in both countries since the outbreak of the war in Ukraine in February 2022. Since 2021, manufacturing output has fallen by 7.3% in Germany and 5.4% in Italy. The impact of the energy shock in early 2026 confirmed a trend established since 2022, without significantly altering its course.
- ▶ Conversely, the Spanish and French manufacturing sectors appear more resilient, supported by distinct factors.
 - ♦ France benefits from a lower share of gas (12.4%), and fossil fuels more broadly (45.3%), in its energy mix to support its manufacturing sector. Electricity costs in France are relatively lower than those of its European neighbours, owing to its nuclear fleet. Consequently, French manufacturing output has remained stable, or even grown slightly, following the Covid-19 pandemic (+4.5% since 2021).
 - ♦ Spanish manufacturing activity, despite a high share of gas in its total energy mix (22.1%) and electricity generation (21.6%), has adapted to energy prices, notably due to its exit from the European electricity pricing mechanism in 2023. In parallel, Spain generates a large proportion of its electricity from renewables (55.9%) at a lower cost. Despite an overrepresentation of energy-intensive manufacturing activities (nearly half of the manufacturing sector's value added), Spanish manufacturing activity has remained afloat (+3.5% since 2021).

Chart 8: Energy mix of the main European countries (2025)



Source: Our World In Data, Natixis CIB Research

Chart 9: Evolution of manufacturing output by country (base 100 in 2021)



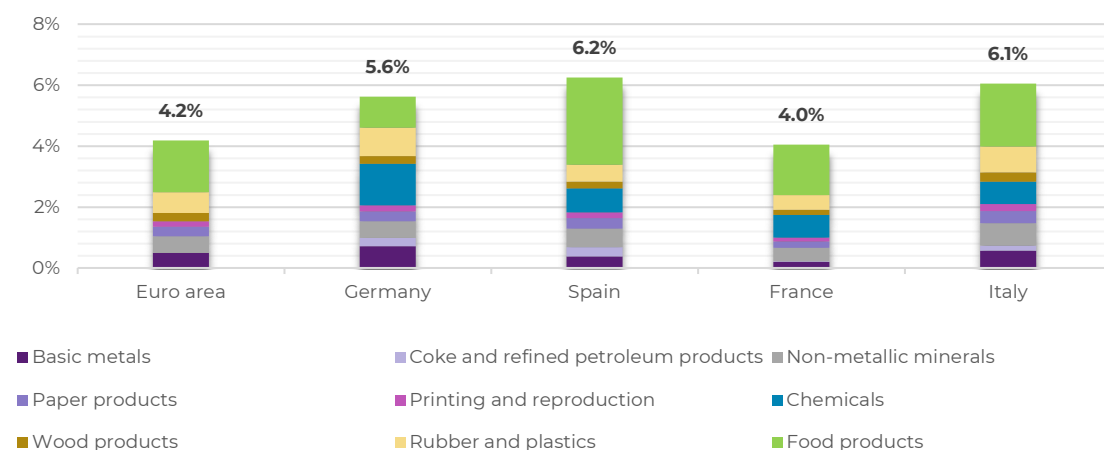
Source: Eurostat, Natixis CIB Research

A sharper decline for energy-intensive sectors

Within the manufacturing sector, a distinction must be made between energy-intensive¹ and non-energy-intensive industries. Nine sectors are identified as energy-intensive: food and beverage, chemicals, non-metallic minerals, rubber and plastics, printing and reproduction, coke and refined petroleum products, wood, paper, and basic metals (**Chart 10**).

Depending on the country, they accounted for between 4% (France) and 6.2% (Spain) of total value added generated in 2023.

Chart 10: Share of value added of energy-intensive manufacturing sectors in total value added in the Euro area (2023)²



Source: Eurostat, Natixis CIB Research

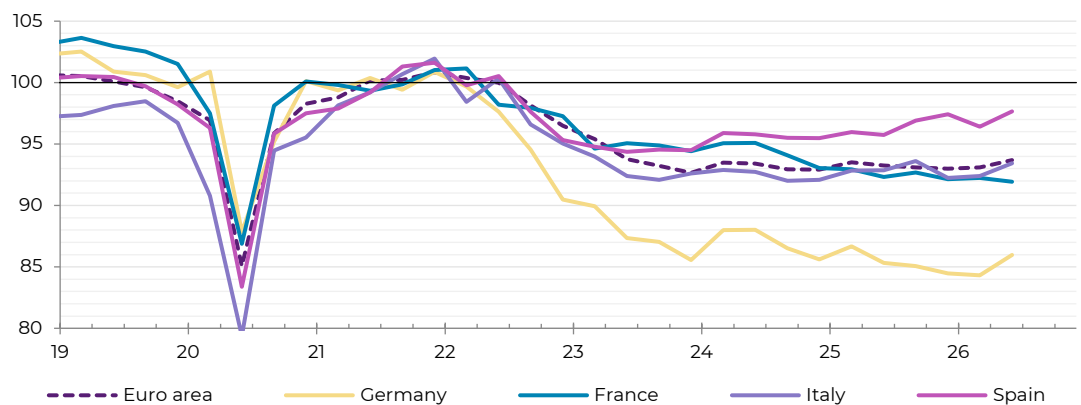
¹ Sectors are classified as energy-intensive if their intermediate consumption of gas and electricity represented at least 5% of their value added in 2018 (Banque de France, 2026).

² For the Euro area, data for the chemical sector as well as the coking and refined petroleum sector are missing.

Within energy-intensive sectors, the impact of the Russian gas and oil shock was felt from 2022 onwards, with a sharp decline lasting until 2023 (averaging -7.3% in the Euro area between Q2 2022 and Q4 2023) which has since continued, albeit at a more moderate pace (**Chart 11**).

- ▶ Germany experienced the sharpest decline in energy-intensive manufacturing output, falling by 15.4% between the outbreak of the conflict in Ukraine and Q1 2026. Despite a minor rebound in the first quarter, Germany suffered heavily from the severe restriction of Russian gas imports into Europe, Chinese competition, and US tariffs.
- ▶ In Italy, France, and the Euro area average, the decline was notable but less severe, with falls of 8.9% in France between Q1 2022 and Q1 2026, 6.1% in Italy, and an average of 7.2% across the Euro area.
- ▶ Spain has proven particularly resilient to both shocks. Its energy-intensive sector has not fully recovered to pre-war levels but is approaching them closely (-3.4% between Q1 2022 and Q1 2026). This is partly explained by Spain's exit from the European electricity pricing system in 2023, alongside the massive expansion of renewable energy generation infrastructure. These factors enabled Spain to avoid suffering as severely as its neighbours from the two gas shocks by generating lower-cost electricity. Beyond energy costs, Spain also possesses a competitive advantage in labour costs, which likely further supports its industrial sector.

Chart 11: Evolution of output in the total (weighted) of energy-intensive sectors

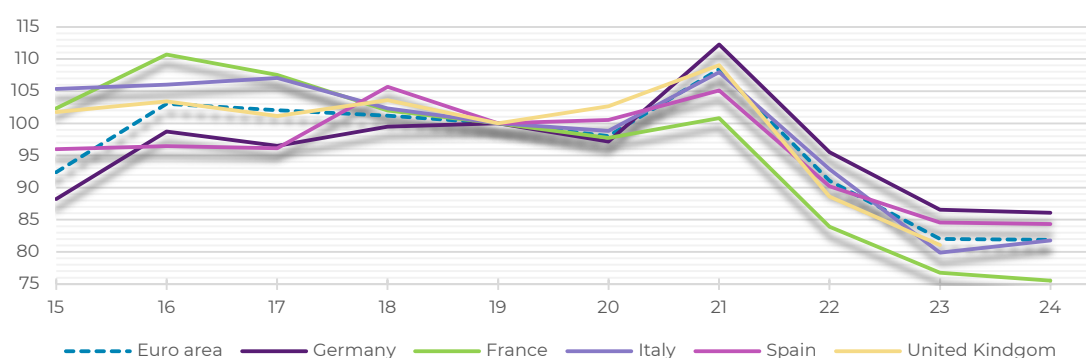


Source: Eurostat, Natixis CIB Research

Households: A restructuring of energy demand since 2022

The impact of rising gas prices is also being felt acutely by European households. Whilst the trend was relatively stable prior to 2022, the outbreak of the Ukrainian conflict marked a distinct break for the four major Euro area economies. Household natural gas consumption fell sharply between 2021 and 2022 (-16.2% in the Euro area), a decline that persisted into 2023 (**Chart 12**). A partial stabilisation emerged in 2024, though without returning to levels comparable to the pre-war period (-24.5% in the Euro area between 2021 and 2024). Spain experienced the least severe decline in consumption at -19.8%, whilst the others converged towards the Euro area average, led by France at -25.1% between 2021 and 2024. In Spain, substantial support measures to mitigate the shock, such as VAT and tax cuts, were implemented. These likely explain why Spanish households were less affected and, consequently, had less incentive to reduce their consumption.

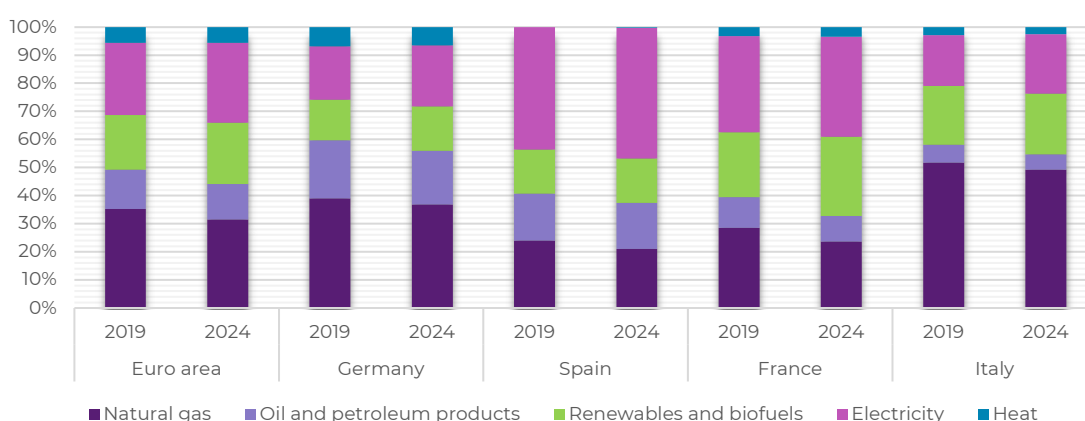
Chart 12: Evolution of natural gas consumption by Euro area and UK households (base 100 in 2019)



Source: Eurostat, Natixis CIB Research

Finally, this is compounded by a gradual transition in the household energy consumption mix away from gas (down from 35.0% in 2019 to 31.4% in 2024 on average in the Euro area) and oil, towards alternative energy sources such as renewables (up from 19.3% in 2019 to 21.8% in 2024) (**Chart 13**)

Chart 13: Evolution of the household energy mix between 2019 and 2024



Source: Eurostat, Natixis CIB Research

How energy prices are fuelling the euro area inflation surge

While the driving forces and magnitude differ, the current trend in inflation echoes the historic price spikes of 2022. Headline inflation peaked at an annual average of 8.56% year-on-year (yoy) in 2022 (**Table 2**). This inflationary shock was remarkably balanced between energy and non-energy components, which contributed 4.00 percentage points (pp) and 4.56 pp to the headline rate, respectively. These pressures stemmed from generalized post-pandemic supply-demand imbalances coupled with the onset of the war in Ukraine.

Table 2: Non-energy and energy contributions to euro area headline inflation

	2019	2020	2021	2022	2023	2024	2025
Inflation % yoy	1.21	0.27	2.61	8.56	5.49	2.39	2.15
Contribution to inflation (pp)							
Non energy	1.08	0.94	1.35	4.56	5.7	2.58	2.27
Energy	0.13	-0.67	1.26	4.00	-0.21	-0.19	-0.12
Refined oil products	0.01	-0.55	0.76	1.54	-0.19	-0.15	-0.16
Gas	0.04	-0.08	0.22	1.23	-0.05	-0.01	0.02
Electricity	0.07	-0.03	0.27	1.12	0.00	-0.06	0.01
Others	0.01	-0.01	0.01	0.11	0.03	0.03	0.01
Average Brent (\$/bbl)	64	43	71	99	82	80	68
Average natural gas (€/MWh)	15	10	47	131	42	35	36
Average price electricity (€/MWh)	46	36	115	259	108	83	91

Source: Eurostat, Natixis CIB Research

Although the 2022 energy price shock hit mid-demand shock (with buoyant growth and already high inflation), 2026 opened with sluggish economic growth and clear disinflationary pressures.³ Specifically, first-quarter GDP growth slowed sharply from a robust 5.6% yoy in 2022 to just 0.6% yoy in 2026. This slowdown was mirrored in the inflation data, with rates remaining below the 2% target until March (**Table 3**), when the outbreak of war involving Iran triggered a pronounced upward trend that pushed headline inflation to 3.25% yoy by August

Unlike in 2022, the non-energy contribution to headline inflation remained remarkably stable at around 2.0 pp throughout 2026. This indicates that the 2026 inflation spike has, so far, been almost entirely an energy-driven supply shock.

Table 3: 2026 Non-energy and energy contributions to euro area headline inflation

	2026							
	Jan.	Fev.	Mar.	Apr.	May	Jun.	Jul.	Aug.
Inflation %	1.68	1.89	2.55	3.03	3.17	2.75	2.94	3.25
Contribution to inflation (pp)								
Non energy	2.04	2.17	2.1	2.07	2.2	1.99	2.03	1.99
Energy	-0.36	-0.28	0.45	0.96	0.97	0.76	0.91	1.26
Refined oil products	-0.16	-0.13	0.58	0.96	0.92	0.61	0.74	1.04
Gas	-0.08	-0.09	-0.08	0.01	0.06	0.08	0.10	0.13
Electricity	-0.13	-0.07	-0.06	-0.02	-0.02	0.05	0.06	0.08
Others	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01
Average Brent (\$/bbl)	65	69	100	103	104	84	84	88
Average natural gas (€/MWh)	34	32	53	45	47	45	54	62
Average price electricity (€/MWh)	107	76	93	82	91	107	124	146

Source: Eurostat, Natixis CIB Research

³ See Durré, A. (2026), "Central Bank's Stagflation Dilemma: The case of the ECB", EMEA Macro Insights: April 16.

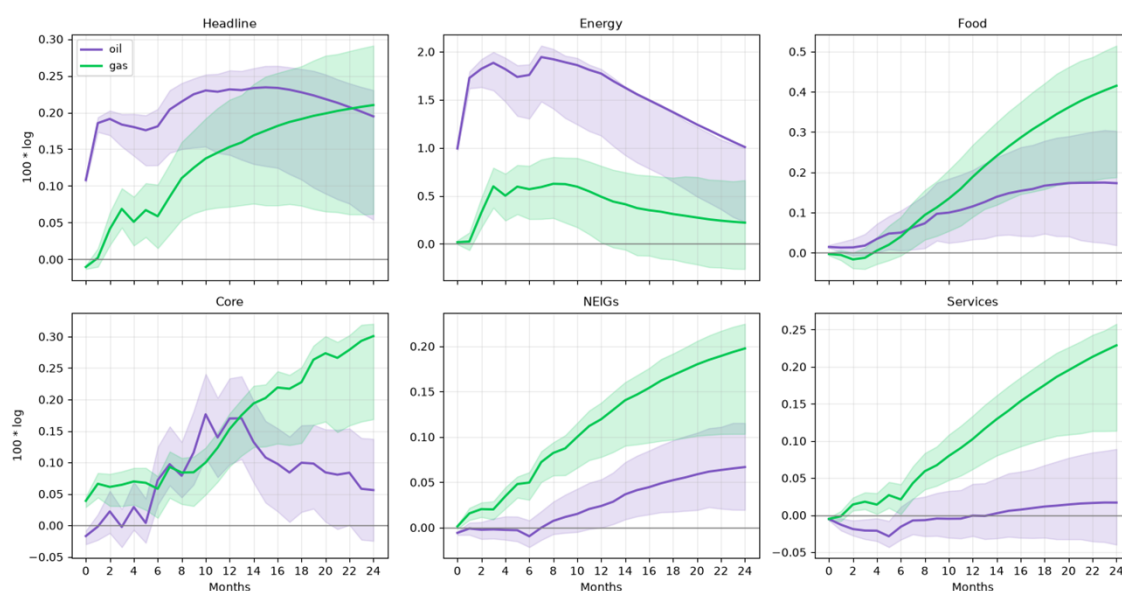
The direct contribution of energy to inflation highlights the velocity of the 2026 shock. In January 2026, energy dragged inflation down by -0.36 pp. By August 2026, the energy contribution swung aggressively to 1.29 pp, accounting for nearly 40% of the total monthly inflation rate. While this is still below the extreme annual average in 2022, the upward trajectory is steep and shows no signs of stabilizing yet:

- ▶ Refined oil products, the primary driver: Brent crude's surge from \$65/bbl in January to a peak of \$104/bbl in May, before settling at \$88/bbl in August, raised its contribution from -0.16 pp to 1.29 pp. This high volatility mirrors 2022, when Brent averaged \$99/bbl and oil products contributed 1.54 pp.
- ▶ Gas, so far contained but rising: Prices increased from €34/MWh in January to €62/MWh in August, lifting its inflation contribution from -0.08 to 0.13 pp. This is far below the 2022 shock, when gas averaged €131/MWh and contributed 1.23 pp.
- ▶ Electricity, a delayed but growing threat: After averaging €93/MWh in H1, prices surged to €146/MWh in August, lifting its inflation contribution to 0.08 pp. This remains far below the 2022 benchmark of €259/MWh, which contributed 1.12 pp.

The Pass-through of oil and gas shocks to inflation: Assessing direct and indirect effects via a VAR model

To assess the impact of a 10% oil and gas price shock on key inflation components, we implemented a VAR model (see the box on methodology in the Appendix). The resulting impulse responses, (**Chart 14**), lead to the following key findings.

Chart 14: Response of the HICP components to a 10% energy price shock



Source: Natixis CIB Research

- ▶ There is a systematic reversal in hierarchy depending on whether the energy component or non-energy components are considered. For the energy component, oil clearly dominates with immediate transmission. In contrast, the transmission of gas is delayed and more persistent to some extent. This divergence stems from retail pricing structures: fuel prices adjust continuously,

whereas gas and electricity tariffs are revised at longer intervals due to regulation and phased indexation. For the four non-energy components, this hierarchy is reversed, with gas dominating across the board. This hierarchy is consistent with the structure of intermediate consumption: gas and electricity are significant inputs in agri-food, manufacturing, and various service sectors, whereas oil mainly affects non-energy components through transport cost channels.

- ▶ The two shocks differ in their transmission profiles. The core index response to the oil shock is bell-shaped, peaking at 0.17 in the twelfth month before receding. This reversal also occurs in the overall index (peaking at 0.23 in month 12) and the energy component (declining after month 8). Conversely, the response to the gas shock grows continuously without peaking across all four non-energy components. Thus, oil shock indirect effects dissipate, while gas shock effects accumulate. This asymmetry stems from two factors: oil disruptions resolve faster due to a global, integrated market, whereas European gas and electricity contracts are long-term and updated less frequently.
- ▶ Gas shocks exhibit greater persistence than oil shocks: Indeed, the ratio of gas to oil pass-through⁴ increases as the transmission channel becomes less direct (**Table 4**): rising from 2.4 for food to 3.0 for industrial goods, 5.4 for core inflation, and peaking at 13.6 for services. Energy is the only exception (0.22), owing to the dominant role of fuel prices.
- ▶ Gas and oil price transmission channels differ significantly. While oil shocks affect consumption prices mainly through direct channels (fuel prices), gas impacts pass through almost entirely via indirect channels (production costs). Accordingly, the gap between the overall and core indices (**Table 5**), which excludes energy, reflects oil's direct impact. For gas, however, the overall and core responses are nearly identical for the first year, with the core response even exceeding the overall index by month 24, highlighting the dominant role of indirect effects over time. These results represent orders of magnitude rather than an exact accounting decomposition, as the underlying systems are estimated independently without aggregation constraints

Table 4: Transmission coefficients at 24 months

HICP components	Oil	Gas	Ratio
Headline	0,02	0,02	1,1
Energy	0,10	0,02	0,2
Food	0,02	0,04	2,4
Core*	0,01	0,03	5,4
NEIG**	0,01	0,02	3,0
Services	0,00	0,02	13,6

**NEIG: Non-energy industrial goods

Source: Natixis CIB Research

Table 5: Response by shock and horizon (months)

	Horizon	Headline	Core	Gap
Oil	6	0,18	0,07	0,11
	12	0,23	0,17	0,06
	24	0,20	0,06	0,14
Gas	6	0,06	0,06	0,00
	12	0,15	0,15	0,00
	24	0,21	0,30	-0,091

Source: Natixis CIB Research

⁴ Impulse responses are converted into pass-through coefficients by dividing the response of each price index by the initial magnitude of the energy shock.

Euro area inflation is expected on the rise

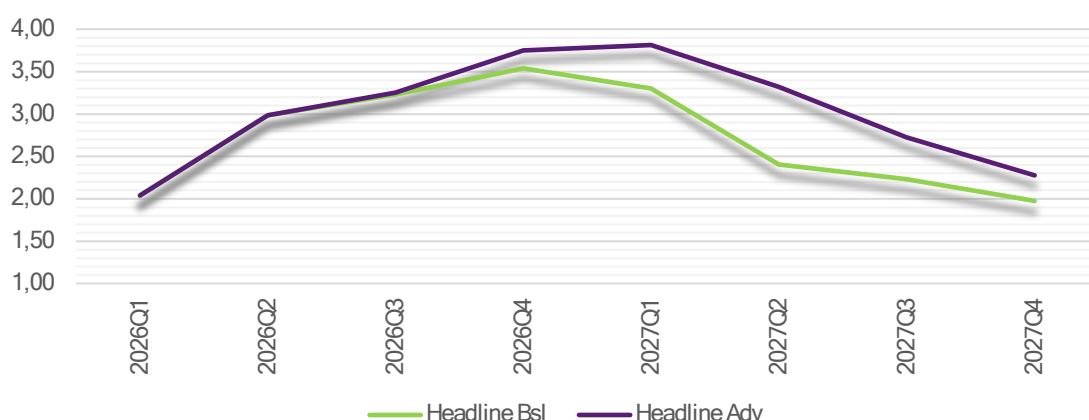
The inflation outlook depends heavily on global commodity markets. Under our Baseline scenario, energy prices are expected to ease after peaking in late 2026: Brent crude is projected to decline from its 2026Q2 peak (\$104.4/bbl) to end the year at \$91.7/bbl, averaging \$79.8/bbl in 2027. Similarly, natural gas is forecast to peak at €78.3/MWh in 2026Q4 before moderating to a 2027 annual average of €52.9/MWh.

Conversely, the Adverse scenario simulates a severe energy supply shock starting in late 2026. Brent crude is projected to spike to \$106.7/bbl in 2026Q4 and average \$91.3/bbl in 2027 (+14.4% vs. Baseline). Simultaneously, European natural gas skyrockets to €111.7/MWh in 2026Q4, peaking at €133.3/MWh in 2027Q1, with a 2027 average of €77.9/MWh (+47.3% vs. Baseline). Both scenarios assume a stable USD/EUR exchange rate of 1.20 from 2026Q3 onward.⁵

Driven by these contrasting energy trajectories, headline inflation (**Chart 15**) exhibits diverging paths over the forecast horizon. In the Baseline scenario (Bsl), headline inflation peaks in 2026Q4 at 3.54% yoy before embarking on a steady disinflationary path throughout the following year, ultimately converging back to the target at 1.98% in 2027Q4. On an annual basis, Baseline headline inflation averages 2.95% in 2026 and 2.48% in 2027.

Under the Adverse scenario (Adv), the supply-side shock delays the inflation peak to 2027Q1, where headline inflation reaches 3.82% (+52 basis points above the Baseline). Due to the persistence of high energy prices, the subsequent decline is significantly slower, with inflation only easing to 2.28% by 2027Q4. Consequently, yearly headline inflation under the Adverse scenario remains virtually unchanged between 2026 (3.01%) and 2027 (3.04%), creating a substantial gap of +56 basis points in 2027 compared to Baseline. This highlights the vulnerability of consumer prices to prolonged commodity market tensions.

Chart 15: Euro area headline inflation under baseline and adverse scenarios



Source: Eurostat, Natixis CIB Research

⁵ Note that a weaker euro below the level of 1.20 USD (like today at 1.13) fuels additional pressure for the Brent price once converted.

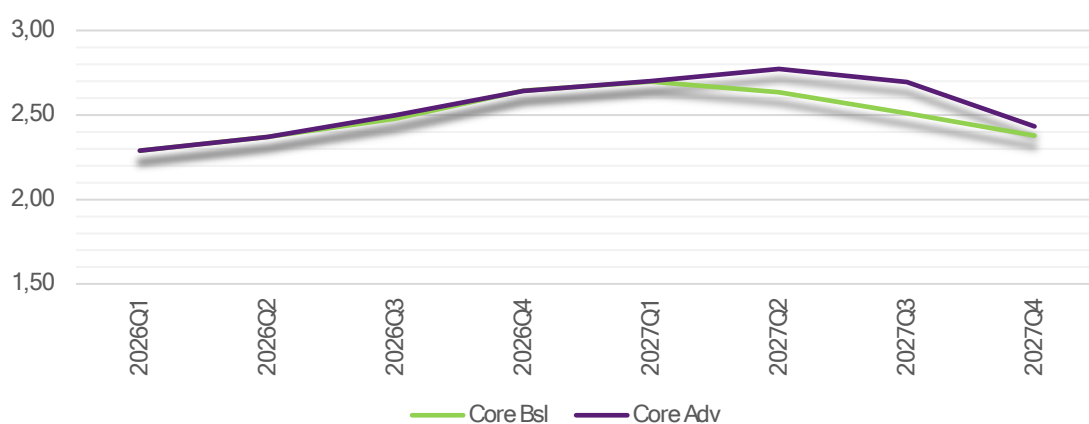
The trajectory of core inflation (excluding energy, food, alcohol and tobacco) (**Chart 16**) illustrates the delayed transmission of energy shocks to the broader economy. In this forecasting model, gas prices serve as the primary external cost driver for core inflation, operating with a two-quarter transmission lag. Consequently, the massive natural gas shock that begins in the second half of 2026 does not immediately impact core inflation. In both 2026Q4 and 2027Q1, core inflation remains identical. This is because core pricing during these quarters is driven by 2026H1 gas prices, which were identical prior to the divergence of the scenarios.

The macroeconomic pass-through of the shock becomes prominent in 2027Q2, where core inflation under the Adverse scenario jumps to 2.77% compared to 2.64% in the Baseline (+13 basis points). This rise is the direct, lagged result of the €33.4/MWh gap in natural gas prices observed in 2026Q4 (where Adverse gas surged to €111.7/MWh vs. €78.3/MWh in the Baseline).

The peak divergence in core inflation is reached in 2027Q3, with the Adverse scenario running 19 basis points higher than the Baseline (2.70% vs. 2.51%). This peak is mathematically explained by the €58.3/MWh natural gas price spike in 2027Q1 (€133.3/MWh in Adverse vs. €75.0/MWh in Baseline). In 2027Q4, as gas prices in both scenarios ease, the core inflation gap narrows to +5 basis points (2.43% in Adverse vs. 2.38% in Baseline), reflecting the lagged impact of lower Q2 gas prices (€71.7/MWh vs €50.0/MWh).

Due to this lagged transmission profile, the annual average for core inflation in 2026 is unchanged at 2.45% in both scenarios. However, the accumulated lagged effects in 2027 push the annual average core inflation in the Adverse scenario to 2.65%, compared to 2.56% in the Baseline, confirming that temporary energy spikes leave a persistent footprint on underlying price stability.

Chart 16: Euro area core inflation under baseline and adverse scenarios

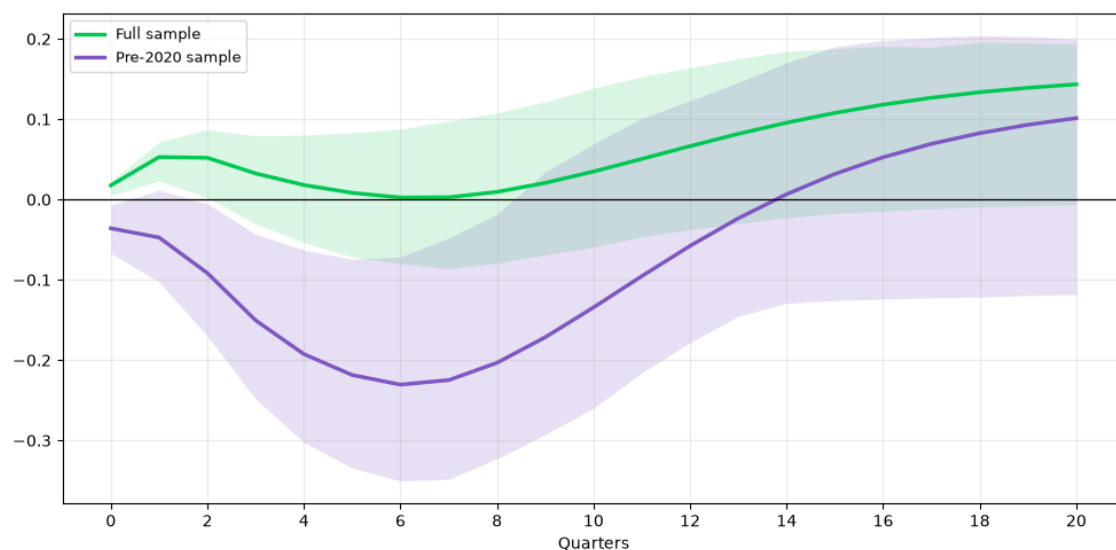


Source: Eurostat, Natixis CIB Research

Extending our analysis to GDP

Complementing this inflation analysis, we evaluate⁶ how the gas price hike impacts GDP growth (**Chart 17**). Over the full sample, the effect is small and short-lived. The response is significant only over the first three quarters, where it is positive and does not exceed +0.05%; it then becomes indistinguishable from zero. This is in line with Adolfsen et al. (2024)⁷, for whom shocks specific to the gas market have historically not been large enough to weigh on the European business cycle. The initial positive sign most likely reflects demand-driven price increases, notably during the 2021 reopening, which recursive identification does not separate from supply shocks.

Chart 17: Response of real GDP to a 10% gas price shock



Source: Natixis CIB Research

The volatility correction is decisive here. Without it, the response reaches +0.33% in the second quarter and stays around +0.30% over five years⁸. Estimated on the sample ending in 2019Q4, the response is instead clearly recessionary: negative but transitory impact, its troughs at -0.23% in the sixth quarter and fades out after about three years. The full-sample response lies outside the pre-2020 band up to the eighth quarter: including the 2020-2026 period removes the short- and medium-term recessionary effect.

⁶ The response of activity is estimated with a quarterly VAR over 2000-2026 that includes the index of global real activity of Kilian (2009), the wholesale gas price and euro area real GDP, in log levels. The shock is identified through a recursive decomposition in this order, and coefficients are estimated with the volatility correction of Lenza and Primiceri (2022). Responses correspond to a 10% increase in the gas price on impact and are expressed as the percentage deviation of the level of GDP from its no-shock path; 68% confidence bands are obtained by wild bootstrap. References: Kilian, L. (2009). Not all oil price shocks are alike: disentangling demand and supply shocks in the crude oil market. *American Economic Review*, 99(3), pp. 1053-1069; Lenza, M. & Primiceri, G.E. (2022). How to estimate a vector autoregression after March 2020. *Journal of Applied Econometrics*, 37(4), pp. 688-699.

⁷ Adolfsen, J. F., Ferrari Minesso, M., Mork, J. E. and Van Robays, I. (2024). Gas price shocks and euro area inflation. *Journal of International Money and Finance*, 149, 103183. Also published as ECB Working Paper No 2905.

⁸ The simultaneous collapse and rebound of gas prices and GDP in 2020 are enough to create a positive covariance that least squares attributes to the gas shock.

United Kingdom: Importance of gas in the economy and impact on GDP from a gas shock

The strategic importance of gas in the UK

Despite long-term decarbonization targets, natural gas remains a cornerstone of the UK economy, accounting for 35% of total energy demand in 2025, which is consistent with 2024 levels. This reliance persists despite a structural decline in domestic extraction. North Sea basin depletion caused UK natural gas production to fall by 3.4% in 2025, reaching its lowest level since 1973. While historically high prices kept overall gas demand near record lows—down 1.0% in 2025 compared to 2024, maintaining levels not seen since 1992—gas continues to play a critical systemic role. Overall, the UK's energy security remains dependent on external partners, with Norway standing as the UK's primary sovereign partner for energy imports, providing the largest share of natural gas. For crude and refined oil imports, the United States represents the largest single supplier in 2025.

The UK's reliance on energy imports has continued to rise. In 2024, net import dependency stood at 43.8% of final energy consumption, up from 40.3% in 2023. Over 90% of these imports consist of oil and gas, with Norway serving as the primary supplier, while net import dependency for gas specifically stands at 49%.

UK gas demand: Sectoral breakdown and price shock vulnerabilities

The 35% share of total UK energy demand supplied by natural gas is distributed across several key economic pillars.

- The domestic household sector is the largest consumer of natural gas, accounting for 37% of total gas demand (the equivalent of 332.1 TWh) and representing 12.95% of total UK energy demand.

Representing around 13% of UK energy demand, the domestic sector is highly vulnerable due to inelastic demand. Natural gas dominates household heating at 64% (compared to electricity at 24%, oil at 6%, and bioenergy/coal at 6%). Due to this structural reliance, household gas use fell just 0.8% even during 2025, the warmest year on record. Consequently, gas price shocks act as immediate, regressive taxes that drain discretionary income, depressing consumer confidence and wider retail/service spending. However, domestic demand remains 15% below the 2017–2021 average, reflecting permanent behavioural changes triggered by the post-2022 energy crisis.

- The transformation sector, which uses gas for electricity generation to power the UK grid, constitutes key infrastructure, accounting for 32% of total gas demand and 11.20% of total UK energy demand.

Although low-carbon sources dominated 2025 electricity generation—with renewables at a record 52.1% and nuclear filling the rest—gas-fired generation rose by 7.0% to a 31.8% market share to offset record-low nuclear output. This highlights gas's highly reactive role as the primary marginal technology used to balance the grid and cover supply deficits. Because electricity prices are cleared by the most expensive marginal source, any gas price shock is instantly and automatically transmitted to the entire electricity market. This inflates power bills for all sectors of the economy, even those relying solely on electricity.

- ▶ The services and public administration sector, which encompasses schools, hospitals, offices, and local government, is responsible for 14% of total gas demand, or 4.90% of national energy consumption.

Representing 4.90% of UK energy demand, the services and public sector saw a 7.6% demand reduction in 2025, driven by two distinct trends. In the public sector, gas consumption fell by 13%, reflecting permanent structural reductions from planned electrification and technology switching. Conversely, commercial gas demand fell by 5.5% due to milder weather, though it historically faces upward pressure from the expansion of the UK's service economy.

The primary risk for the public sector is budgetary displacement. Because critical institutions like schools and hospitals cannot shut down during price shocks, high utility bills force them to divert capital directly from essential front-line services, creating a severe fiscal squeeze.

- ▶ The industrial manufacturing sector claims 9.4% of total gas demand, which equates to 63.7 TWh—composed of 2.2 TWh for iron and steel and 61.5 TWh for other industrial processes—representing 3.29% of total UK energy demand.

Although the industrial sector represents a small share of total economy-wide energy, its gas demand is highly concentrated in vulnerable Energy-Intensive Industries (EIIs) like chemicals, glass, and steel. Reflecting a long-term decline across Europe driven by energy efficiency and the retreat of heavy industry, UK industrial gas demand fell by 7.8% in 2025, reaching levels last seen in the 1970s. This was highlighted by a 41% drop in the iron and steel sector following major plant closures in late 2024. Because industry has very little capacity to absorb high gas prices, price shocks result in severe demand destruction rather than efficiency gains. Reductions in consumption typically manifest as forced factory shutdowns and curtailed production.

- ▶ Other miscellaneous sectors make up the remaining 7.6% of gas demand, representing 2.66% of total UK energy demand.

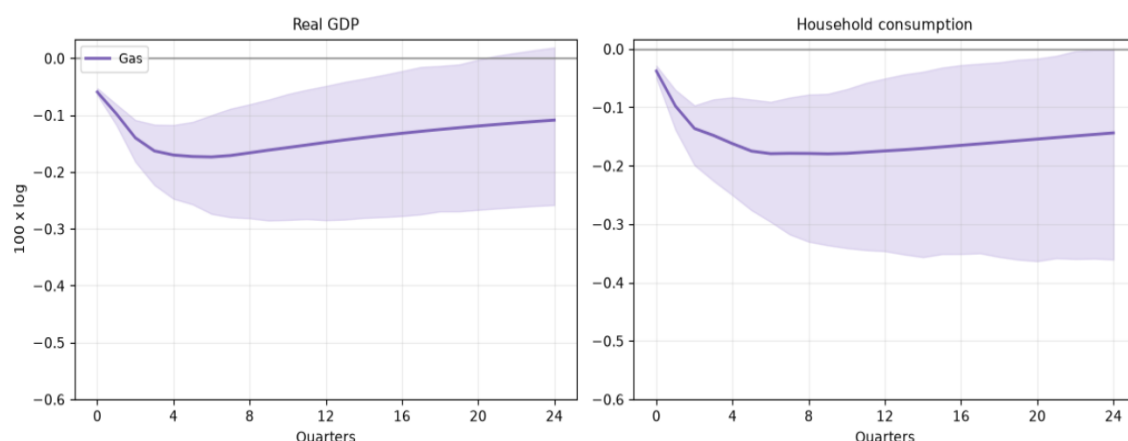
Macroeconomic consequences of the gas shock

GDP impacts and outlook

This high import dependency leaves the domestic economy highly exposed to external price volatility. While the initial impact of the recent shock on economic activity was relatively muted, UK GDP growth is projected to weaken in late 2026. The intensifying drag from elevated gas prices is expected to persist into 2027, lowering GDP by approximately 0.3%. Although this drag is projected to fade by early 2028—allowing growth to return to its trend rate of 1.3%—this temporary deceleration will leave the absolute level of real GDP permanently lower over the long term.

Our quantitative forecasts are supported by a modeling exercise plotting the impulse response functions (IRFs) of GDP and household consumption (the category most exposed to utility price fluctuations) to a +10% shock in gas prices (**Chart 18**), illustrating the depth and duration of these macroeconomic headwinds.

Chart 18: Response of real GDP and household consumption to a +10% gas price shock⁹



Source: Natixis CIB Research

In the UK, a +10% gas price shock triggers a rapid, persistent contraction in both real GDP and household consumption, with neither returning to baseline over the 24-quarter horizon. While real GDP contracts quickly and begins a partial recovery, household consumption is more severely and durably depressed, reflecting a prolonged weakness in private demand. Economically, the shock initially raises corporate production costs to constrain supply but ultimately acts as a persistent drain on real disposable income, keeping consumption weakened long after aggregate activity begins to stabilize. Confidence bands are narrow in the short-to-medium term, confirming a highly significant negative impact, but they widen at longer horizons—with upper bounds approaching zero, particularly for GDP—indicating increased uncertainty in the very long run even as central trajectories remain firmly negative (**Table 6**).

Table 6: IRFs for real GDP and household consumption following a 20% gas price shock, by horizon

Horizon (Quarters)	Real GDP	Household consumption
3	-0.312	-0.284
6	-0.332	-0.343
9	-0.309	-0.344
12	-0.283	-0.334
15	-0.260	-0.321

Source: Natixis CIB Research

⁹ The responses are expressed as a percentage deviation from the path the variable would have followed in the absence of an energy shock. In other words, the values discussed below should be read as deviations from the counterfactual scenario without a gas shock.

Table 6 highlights a persistent negative impact of the gas shock on the UK economy, with both real GDP and household consumption, measured over quarterly horizons, remaining below baseline from the 3rd to the 15th quarter. However, their dynamics differ. Real GDP is hit hardest initially, falling from -0.312 in the 3rd quarter and reaching a trough of -0.332 in the 6th quarter, before steadily recovering to -0.260 by the 15th quarter. Conversely, household consumption deteriorates more gradually, starting at -0.284 in the 3rd quarter, bottoming out later at -0.344 in the 9th quarter, and recovering very slowly to -0.321 by the 15th quarter. Consequently, from the 6th quarter onward, consumption is systematically weaker than GDP. This indicates that the gas shock exerts a more persistent drag on household demand than on aggregate activity. Economically, this profile suggests the gas price increase initially acts as a supply-side cost shock constraining production, transitioning into a prolonged drain on household purchasing power and real income.

Energy crisis comparison and impact on inflation from a gas shock

Historical precedents and winter projections

During the post-COVID energy crisis, oil prices rose from over \$40 per barrel in 2020 to surpass \$100 by early 2022. Concurrently, UK wholesale gas prices spiked heavily, peaking at 450 GBp/therm in March 2022 and 600 GBp/therm in August 2022. This volatility drove a 54% increase in the Ofgem price cap in April 2022. A subsequent October hike was mitigated only by government intervention, which capped the rise at 27% instead of the projected 80%.

This severe energy shock heavily impacted domestic inflation. In 2022, headline inflation reached 9%, driven significantly by electricity, gas, and other fuels, which contributed 2.27pp, and transport costs, which added 1.6pp (with fuels and lubricants accounting for 0.89pp of this total). Food price increases added a further 1.1pp. Overall, headline inflation was boosted by goods inflation, which contributed a substantial 6.8pp, compared to a 2.3pp contribution from services inflation. Meanwhile, core inflation averaged 5.9% during this period.

By 2023, headline inflation moderated to 6.3% (with core inflation averaging 6.2%). The contribution from the housing, water, electricity, and fuels category dropped to 0.8pp, with electricity, gas, and other fuels adding just 0.3pp. Transport also provided relief as fuels and lubricants detracted -0.39pp, though food continued to apply upward pressure with a 1.38pp contribution. During 2023, the contribution of goods to headline inflation moderated to 3pp, while the contribution of services inflation rose to 3.2pp.

In 2024, headline inflation cooled further to 2.4%, but core inflation remained sticky at 3.7%. This stickiness was highlighted by a widening divergence between sectors: goods inflation detracted 0.1pp, whereas services inflation remained highly persistent, adding 2.6pp. This structural persistence of services inflation carried into 2025, contributing 2.4pp to inflation, while goods inflation rebounded to add 1pp.

It is against this backdrop of persistent services inflation that recent Middle East tensions have renewed upward pressures on energy markets. While the outbreak of conflict initially caused a brief spike to 150 GBp/therm, prices rebounded to hover around 150 GBp in mid-July 2026 and reached approximately 200 GBp/therm in September. The relatively stable gas prices during the first phase of the conflict led to a 13% increase in the Ofgem price cap in July (Q3 2026), followed by a 4% rise scheduled for October (Q4 2026). Yet, given renewed geopolitical pressures, low European storage levels, and expected winter demand, further notable increases in the price cap are projected for January and potentially April 2027.

While current wholesale prices remain below 2022 peaks, they are expected to hover slightly above 200 GBp/therm through the winter, potentially driving a 20% increase in the Q1 2027 price cap. Under a more adverse scenario—characterized by a harsh winter and no recovery of Qatari LNG shipments—the price cap could surge by nearly 50%.

Assuming that, in the baseline scenario, oil prices hover around \$90 to \$100 per barrel and gas prices remain somewhat above 200p/therm in Q4 and Q1 2027, the macroeconomic impact will be significant. Inflation is projected to rise by an additional 0.8pp to 1pp (on top of already being roughly 1pp above expectations prior to the Iran conflict), while output growth is forecast to slow by 0.3% next year, driven by a deeper contraction during the winter quarters.

Unlike during the post-COVID-19 crisis, the UK's challenging fiscal backdrop makes broad-based government intervention highly unlikely this time, meaning the bulk of this financial burden must be absorbed across various sectors.

However, several mitigating factors are tempering the immediate impact on the most exposed group, which is households. Approximately 35% of households (around 11 million) are currently shielded by fixed tariffs, and overall prices remain below the peak of the 2022 crisis when bills were capped at £2,500. Furthermore, a suite of targeted government support measures is in place to ease the strain this winter. The government removed an average of £150 in costs from household energy bills starting in April 2026, alongside a £53 million support package allocated to households most vulnerable to heating-oil price increases.

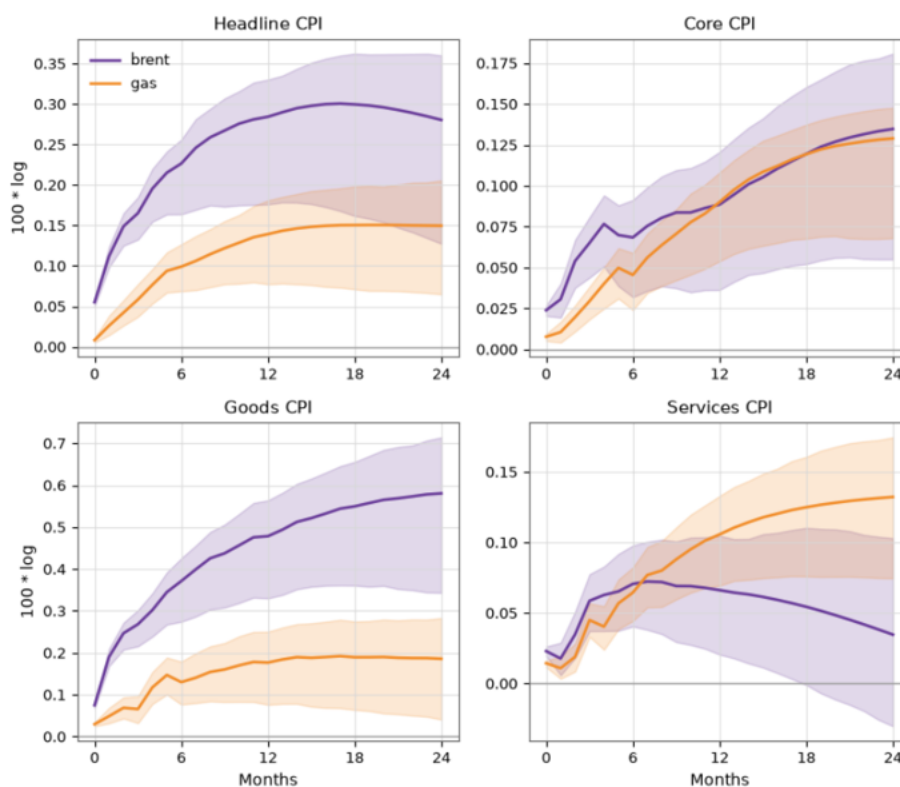
Additionally, around 6 million households on means-tested benefits remain entitled to the £150 Warm Home Discount on their electricity bills, while eligible individuals born on or before June 27, 1960, can receive a Winter Fuel Payment of £100 to £300, subject to income rules. Easing winter costs further, the government has cut VAT on domestic electricity from 5% to 0% between October 1, 2026, and March 31, 2027, stabilizing electricity costs and saving households approximately £45.

Nevertheless, because these measures do not directly cap wholesale gas prices, they will only partially cushion consumers from upcoming market pressures. Following the 13% price cap rise in Q3 2026 and the scheduled 4% increase in Q4, the core drivers of the market indicate that the Ofgem energy price cap is still set to escalate by approximately 20% in Q1 2027.

The persistent toll of gas shocks on inflation

Using the same methodological approach as for the euro area, our forecasts are supported by a modelling exercise using impulse response functions (IRFs) to illustrate the depth and duration of macroeconomic impacts following a 10% gas price shock on headline CPI and its components (**Chart 19**).

Chart 19: Response of CPI components to a +10% energy price shock¹⁰



Source : Natixis CIB

In the UK, Brent and gas shocks exert upward pressure on consumer prices across all four components, but with distinct transmission channels and temporal profiles. The Brent shock acts as a rapid, high-impact inflationary driver concentrated on Goods CPI and—by aggregation—Headline CPI, reflecting immediate oil-sensitive transport, logistics, and supply chain costs. Conversely, the gas shock is a more diffuse, slow-acting, and persistent cost pressure that primarily transmits into Core and Services CPI over the medium-to-long term through operating expenditures, heating, and second-round effects. Consequently, while oil dominates the short-term inflation outlook through goods, gas exerts a more durable influence on the broader, underlying services sector, highlighting that the two energy shocks differ fundamentally in both speed and point of impact (**Table 7**).

¹⁰The responses are expressed as a percentage deviation from the path the variable would have followed in the absence of an energy shock. In other words, the values discussed below should be read as deviations from the counterfactual scenario without a gas shock.

Table 7: IRFs for the different CPI components following a 20% gas price shock, by horizon

Horizon (Months)	Headline CPI	Core CPI	Goods CPI	Services CPI
3	0.112	0.0564	0.126	0.0861
6	0.189	0.0871	0.249	0.123
9	0.233	0.135	0.307	0.168
12	0.266	0.172	0.338	0.202
15	0.284	0.208	0.360	0.225
18	0.288	0.228	0.363	0.239
21	0.288	0.241	0.360	0.248

Source: Natixis CIB

A positive 20% gas price shock transmits progressively but unevenly across UK CPI components, with monthly data revealing an economically coherent hierarchy of speed and intensity (**Table 7**).

Goods CPI acts as the primary transmission channel, showing the swiftest and most pronounced response due to its direct exposure to production, transport, storage, and supply chain costs. Headline CPI displays a more aggregate, tempered profile before stabilizing, reflecting broader upward pressure across the wider consumption basket. Core CPI follows a lagged upward trajectory, indicating that the shock eventually feeds underlying inflation through diffuse, persistent channels like intermediate consumption and operating expenses. Meanwhile, Services CPI is the least immediately reactive; it rises moderately as less energy-intensive activities adjust slowly to indirect costs such as heating, rents, and intermediate services. Ultimately, this sequence highlights a clear diffusion process, where the shock impacts energy-sensitive goods first before gradually permeating the broader, more indirect components of UK inflation.

Conclusion

The European gas market faces a tight winter heading into Q4-26, underpinned by a persistent gas storage deficit - Northwest European gas storage levels are trending 10bcm lower year-on-year, currently at 62% capacity. Persistent geopolitical tensions in the Middle East have reduced Qatari LNG exports, whilst Asian LNG demand has remained robust through the summer. Under the base-case scenario, TTF prices are forecast to average €76/MWh this winter, peaking at €80/MWh, while an adverse colder winter scenario could push prices to a €122/MWh average.

This persistent tightness has highly heterogeneous macroeconomic impacts on both inflation and GDP growth in the euro area and the UK. One of the most striking result from our estimations resides in the fact that the persistence of the energy price shock (and more the gas shock than the Brent one) on inflation – and on core inflation in particular – stems from their impact on food and manufactured products. This means that, even in the absence of second-round effects, core inflation could deviate from target if the energy shock is too persistent. Such dynamics complicate the work of central banks. They may, to some extent, force institutions like the ECB and the Bank of England to adopt a more restrictive stance than anticipated at the onset of the shock.

Appendix

Models

Two sets of vector autoregressions are estimated. For economic activity, a quarterly VAR over 2000–2026 in $y_t = (\kappa_t, g_t, q_t)'$ where κ_t is the index of global real economic activity of Kilian (2009), g_t the log wholesale gas price (TTF, in euros) and q_t log euro area real GDP. For consumer prices, six monthly VARs over 1997–2026, one per HICP component j (headline, energy, food, core, non-energy industrial goods, services), in $y_t^{(j)} = (\kappa_t, b_t, g_t, \pi_t^{(j)})'$, where b_t is the log Brent price in euros, included as a control, and $\pi_t^{(j)}$ the log price index. Each system is a VAR(p) in log levels:

$$y_t = c + \sum_{\ell=1}^p A_{\ell} y_{t-\ell} + u_t, \quad \mathbb{E}[u_t u_t'] = \Sigma. \quad (\text{A.1})$$

The Kilian index enters in levels, as it is constructed as a deviation from trend. Estimation in levels keeps least squares consistent in the presence of unit roots without requiring a stand on the order of integration (Sims, Stock and Watson, 1990). Energy prices are nominal.

Identification

Structural shocks η_t are recovered recursively: $u_t = P\eta_t$, with $PP' = \Sigma$, P lower triangular and $\mathbb{E}[\eta_t \eta_t'] = I$. Variables are ordered as listed above: global activity is predetermined within the period, energy prices do not respond contemporaneously to euro area variables, and GDP and consumer prices respond to all shocks within the period. In the price systems, the correlation between oil and gas innovations is low (0.11–0.17), so that $\sqrt{1 - \rho^2} \geq 0.98$ and their relative ordering has no material effect on the identified gas shock. This shock is an innovation to the gas price orthogonal to global activity (and to oil); it does not separate supply from demand disturbances in the gas market.

Covid-19 volatility correction

Following Lenza and Primiceri (2022), the extreme observations of 2020 are down weighted rather than dropped:

$$u_t = s_t \varepsilon_t, \quad \varepsilon_t \sim \mathcal{N}(0, \Sigma), \quad (\text{C.1})$$

With $s_t = 1$ before t_0 , $s_{t_0+j} = \bar{s}_j$ for $j = 0, \dots, n-1$, and $s_t = 1 + \left(\bar{s}_{n-1} - 1\right) \rho^{t-t_0-n+1}$ thereafter. We set t_0 to 2020Q1 (March 2020 for monthly data) and $n = 3$. The parameters maximise the concentrated likelihood

$$\ell(\theta) = -K \sum_{t=1}^T \log s_t - \frac{T}{2} \log |\hat{\Sigma}(\theta)|, \quad (\text{C.2})$$

where K is the number of variables and $\hat{\Sigma}(\theta)$ the residual covariance of the regression. The estimated Σ , and hence the Cholesky factor P , thus reflect normal times.

Impulse responses

With Φ_h the moving-average coefficients of (A.1) and $\theta_h = \Phi_h P$, the response of variable i to a shock to energy price k , scaled to a $\delta = 10\%$ increase, is

$$IRF_{i,k}(h) = \theta_h[i, k] \frac{\delta}{\sqrt{\Sigma_{kk}}}. \quad (\text{D.1})$$

As variables are in logs, it measures the percentage deviation of the level of variable i from its no-shock path.

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