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Germany's coordinated policy response to the energy crisis: shielding the export-led model at all costs

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Executive Summary:

- The German government has taken decisive actions in response to the dual economic shocks linked to the Covid-19 pandemic and Russian gas supplies' cut-off – with the main objective of protecting its export-oriented industrial economy.

- By engaging in "competitive corporatism," the coalitional government has worked closely with the social partners – especially representatives from the chemical and metalworking-engineering export sectors – to restore domestic firms' cost competitiveness while providing social compensation to vulnerable households and individuals.

- The government's concerted threefold strategy to uphold the export-led growth regime includes: (1) measures aimed at reducing firms' energy costs; (2) in/direct measures aimed at controlling the rise of labour costs to prevent a wage-price spiral; (3) substantial state aid provided to ailing firms.

- The scope of state intervention in Germany's economy is unparalleled, entailing significant fiscal outlays for protective measures, made possible by Germany's advantageous sovereign refinancing capacity. Germany's economic activism risks jeopardising the EU single market due to extensive state aid, especially since Germany resists joint fiscal resource pooling for EU-wide industrial policy.

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Introduction

Germany is globally renowned for its export-led growth model, an economic system whereby wealth creation is driven primarily and consistently by *net exports* through a resilient and high-quality manufacturing sector. While the institutional roots of this model had already emerged in the post-WWII era, the German economy has become excessively export-oriented[4] since the turn of the century. This was particularly due to a combination of improved unit labour costs' competitiveness and compressed domestic demand, i.e. stagnating household consumption (due to wage restraint and higher household precautionary savings), collapsing public investment among subnational governments and high corporate savings not channelled into productive investment.

Despite the partial attempts to redress its *über* cost competitiveness in the second decade of the Euro era, Germany entered the 2020s with an economic model still largely reliant on the export of industrial goods[5] as the main source of demand and on Russian imports of fossil fuels. Dependencies bring vulnerabilities, however, especially in an increasingly uncertain geopolitical order. The fallout from the outburst of the Covid-19 pandemic and Russia's cut-off of gas supplies to Europe risked jeopardising the viability of Germany's export-oriented growth strategy.[6]

[4] While being negative during the 1990s as a result of the country's reunification, Germany's current account balance increased from -1,7% of GDP in 2000 to a peak of 8,6% in 2016. The share of exports over national GDP more than doubled between 1991 and 2022, increasing from 23,7% to 50,3%. Openness to trade (i.e. the sum of export and imports over GDP) skyrocketed from 48% of GDP in 1991 to 99% in 2022. This trajectory stands out when comparing Germany to the world's other large countries. It is in fact the smaller states which generally display greater trade openness and relatively larger export sectors due to the small size of their domestic markets.

[5] As of 2022, Germany's main exports were: motor vehicles, machinery and equipment, chemicals and chemical products, electronic/computer and optical products, pharmaceutical products, electrical equipment. Between 1993 and 2019, on average, 42,4% of German exports were directed to the eurozone countries (or, for the 1990s, the countries which would later adopt the Euro). Exports toward European countries not belonging to the eurozone amounted to 29,3%, while exports to countries from the "rest of the world" (RoW) stood at 28,3%. Over time, the share of German exports to the RoW has gained prominence due to the rise of China. The share of German exports to China remained relatively constant until 1997. Then it skyrocketed from 1.2% of all German exports to reach 7,2% in 2019. Exports to the US averaged 8.5% throughout the period and varied much less over time.

[6] Germany's current account surplus decreased from 8,2% of GDP in 2019 – before the Covid-19 pandemic – to 4,2% in 2022 and concerns over Germany's competitiveness in world markets and deindustrialization are mounting.

This brief working paper examines Germany's *adjustment strategy* to the inflation crisis. Our analysis indicates that, through concertation with national social partners spearheaded by the chemical and metalworking sectors' representatives (Germany's two largest export sectors), the federal government intervened swiftly and resolutely to shore up the country's industrial export sector via the practice of "competitive corporatism." Competitive corporatism identifies a mode of public policymaking whereby the state, in response to global competition or external economic shocks, actively brokers and incentivises tripartite "pacts" with major stakeholders centred on economic policymaking and/or institutional reforms aimed at enhancing the country's international competitiveness. The concept rarely applied to Germany, generally regarded as having an *ordoliberal* orientation of economic policy focused primarily on guaranteeing a rules-based economic order. Yet, recent developments reveal instead a pronounced pattern of state interventionism in the German economy. We document how, alongside providing social compensation to households and individuals affected by the inflation crisis, the federal government has strategically assisted firms in restoring their international cost competitiveness via measures aimed at reducing firms' energy input costs, measures to help stabilize labour costs' growth (and avoid a price-wage spiral) in sectoral collective agreements and the provision of substantial state aid to ailing firms.

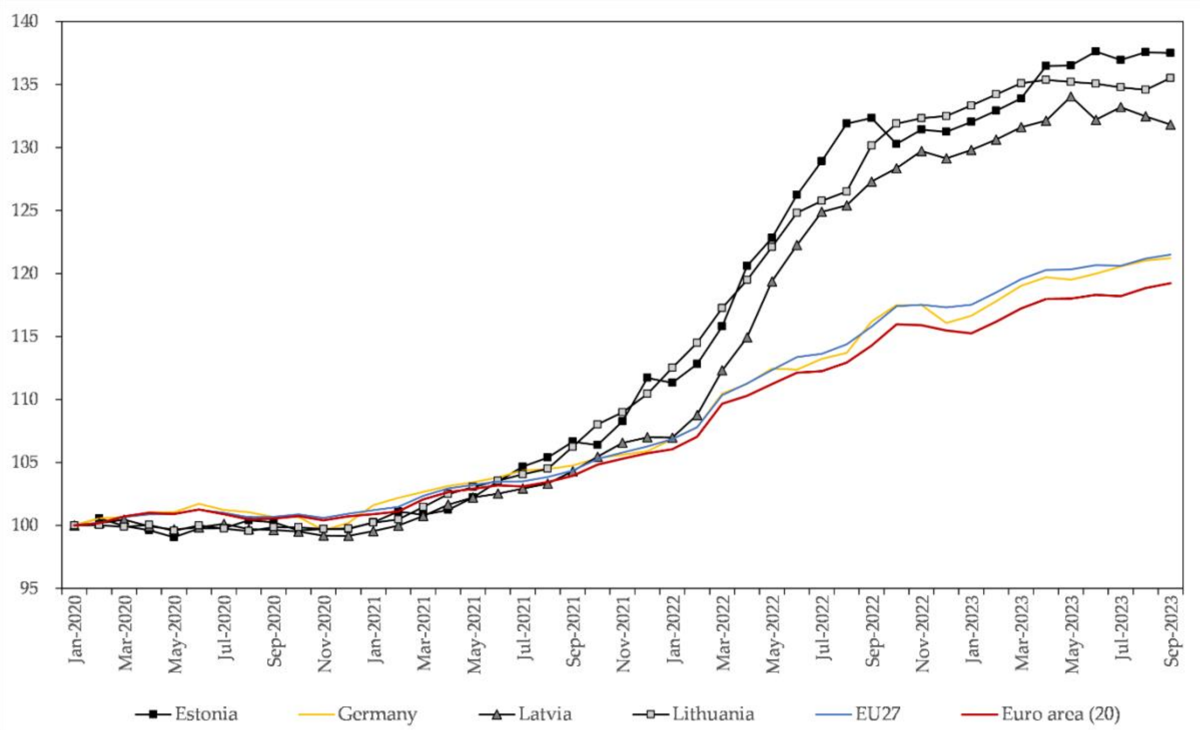
From Covid-19 to energy: Germany's vulnerability to global economic shocks

Between 2012 and 2019, Germany had run budget surpluses and steadily reduced its public debt. When the pandemic spread in 2020, domestic economies shut down and global supply chains faltered, prompting the Merkel government to tear up its fiscal rule book to stabilise the economy. Political willingness and large pockets go hand in glove: Germany has enacted Europe's most extensive fiscal measures, amounting to 5.5% of GDP between 2020 and 2022 (OECD, p.19 and Box 1.1, p.23). With the suspension of the national debt brake, measures included grants to firms (2.1% of GDP), subsidized credit lines (1.65% of GDP), loan guarantees (0.5% of GDP), and short-term work schemes (1.3% of GDP).

The worst was yet to come, however. Putin retaliated to the sanctions deployed by the EU after Russia's invasion of Ukraine by cutting gas supplies to Europe. Germany was hit by the shock harder than other European countries due to its over-reliance on

Russian fossil fuel imports, especially gas. The ratio of Russian imports to total domestic consumption of gas in Germany stood at 60% in 2021. Uncertainty linked to Russian gas supplies threatened the economic interests of Germany's core manufacturing sectors. Germany is a country where industry accounts for 30% of total energy consumption and just five energy-intensive sectors (chemical, metalworking, coke and oil processing, glass, ceramics and paper) account for 77% thereof. Already on the rise since the spring of 2021, inflation skyrocketed between winter and spring 2022, driven by higher energy and food prices. This was a new and an unusual scenario for stability-oriented Germany despite the fact that overall developments in price inflation (HICP) in Germany have remained in line with the European Union's average (EU27) and were only slightly above the euro-area average (EMU20) – differently from the Baltic countries, which were heavily dependent on Russia and were therefore highly affected by the energy shock.

Figure 1: Harmonized Index of Consumer Prices (HICPs) by selected countries, monthly values, January 2020 = 100



Source: OECD, Consumer price indices (CPIs) - Complete database.

The energy shock thus demanded an assertive response by the government to secure energy supplies, shield firms and households and curb a prospective price-wage spiral. The government's strategies to reach energy independence from Russia are reviewed by the OECD (p.22) and other prominent commentators. In what follows, our interest lies in the actions aimed at upholding firms' cost competitiveness.

Germany's competitive corporatism in hard times

Just a few months after entering office, the "traffic light" government coalition[7] was immediately confronted with the Russian attack on Ukraine and the fast rise in energy prices already in early February 2022. The government adopted two relief packages totalling €30 billion between February and March 2022 (see table 1). They comprised tax measures to uphold citizens' net incomes, compensatory social benefits for vulnerable households and individuals, and various measures to mitigate higher energy costs.

To devise the broader adjustment strategy, however, the government turned to Germany's long established economic policy networks and summoned various high-profile concertation meetings held in the Chancellery. The so-called "concerted action group" gathered in Berlin in July 2022. Alongside Social-Democratic Chancellor Olaf Scholz, the high-level circle included Economy Minister Robert Habeck (Greens), Finance Minister Christian Lindner (Liberal Democrats, FDP), the Bundesbank's president, a member from the Economic Experts Council, the President of the Confederation of German Employers' Associations (BDA)[8] Rainer Dulger, and the president of the German Trade Union Confederation (DGB)[9] Yasmin Fahimi, who had formerly been an official from the chemical sector's union IG BCE.

The second meeting of the concerted action group took place in September and coincided with the adoption of the third relief package (€65bn), which includes various measures to shield vulnerable households and energy intensive firms from higher energy prices and the exemption from tax and social contributions of one-off inflation bonuses (*Inflationsausgleichsprämie*) of up to €3,000 to be paid by firms between October 2022 to December 2024.

[7] The coalition partners are the Social-Democratic Party (SPD), the Green Party and the Liberal Party (FDP). The traffic light refers to the colors of the parties: red for the SPD, yellow for the FDP and green for the Green Party.

[8] *Bundesvereinigung der Deutschen Arbeitgeberverbände* (BDA) represents the interests of German employers in public policymaking.

[9] *Deutscher Gewerkschaftsbund* (DGB) is the umbrella organization for eight German trade unions, making it the largest federation of unions in Germany.

Table 1: Germany's relief packages and other salient measures between February 2022 and September 2023

Name of measure	Month	Estimated amount	Main target	Key features
1st Relief Package	February 2022	€16bn	Vulnerable households and individuals	Tax measures to support net incomes; Targeted social benefits (e.g. heating costs allowance, higher commuting lump sum)
2nd Relief Package	March 2022	€14bn	General population	Various measures to reduce the cost of energy consumption (electricity & transport) (e.g. one-time energy allowance, one-off benefits to welfare recipients, one-off benefit for families with children, reduction of excise taxes on fuel, €9 monthly public transport ticket)
3rd Relief Package	September 2022	€65bn	Vulnerable households and individuals + energy-intensive firms	Levies on energy firms' extra profits; Electricity price brake; Tax breaks for energy-intensive firms; Subsidised loans and grants to ailing firms; Social benefits to vulnerable groups (e.g. one-time payments to pensioners and students, citizen's basic income, child allowances); Tax exemptions to allow one-off inflation bonus payments by employers to workers
Energy Support Fund	October 2022	€200bn	Firms	Stabilization tools for firms: Federal guarantees on loans, including credit lines, and capital market products (borrowed capital); Recapitalization measures as a direct means of strengthening equity; Gas and electricity price brakes to be financed by the Economic Stabilization Fund (WSF)
Inflation Compensation Act	December 2022	€18bn (2023) €32bn (2024	General population	Reform of the tax system to reduce income tax; Targeted social benefits (e.g. child benefits and children-related tax allowances)
Growth Oppotunities Act	August 2023	€7bn	Firms: SMEs (*Mittelstand*) Construction sector	Tax allowance for investments in climate change technology and energy efficiency; Tax incentives for R&D; New depreciation allowances to incentivize housing investment

Source: Our elaboration from various governmental sources and the OECD's Energy Support Measures Tracker.

In consultation with economic stakeholders, other measures which followed suit include (see table 1) the establishment of the Expert Commission on Gas and Heat,[10]

[10] Chaired by economist Veronika Grimm, Michael Vassiliadis, chairman of the Mining, Chemical, and Energy Industrial Union (*Industriegewerkschaft Bergbau, Chemie, Energie* – IG BCE) and Siegfried Russwurm, the president of the Federation of German Industries (*Bundesverband der Deutschen Industrie* – BDI).

which recommended a gas price brake[11] to be funded by a €200 billion Economic Stabilization Fund, and the Inflation Compensation Act, approved in December 2022 and encompassing measures to adjust personal income tax brackets to counteract the effects of the so-called bracket creep.[12]

The concerted action group's explicit aim was to "work together to overcome historical challenges, mitigate the effects of lost income and avert the risk of an inflation spiral." In involving the social partners in a federal-level policy concertation network, the chancellor reportedly insisted that, "the only way we as a country can overcome this crisis is if we join forces and agree on solutions together."

Indeed, between September 2021 and the summer of 2023, Germany's fiscal expenditures on compensatory public policies totalled €157bn, or 4.4% of GDP.[13] In per capita terms, Germany has provided – once again after the Covid-related measures – one of the largest fiscal interventions across Europe (figure 1).

However, besides the sheer size of Germany's fiscal intervention, two aspects stand out regarding the forces behind the country's adjustment strategy and its logic.

First, in terms of the driving forces behind the adjustment strategy's design, representatives from the chemical, engineering and metalworking sectors have played the key role in spearheading the workings of the federal level policy concertation networks. Rainer Dulger – President of the Confederation of German Employers' Associations (BDA) – holds a PhD in engineering and led the employers' associations

[11] The gas price brake was turned into law after approval by both chambers between November and December 2022. The adoption of the gas price brake was eventually part of a bigger package of policy measures adopted in late December 2022 to shield households and firms from higher gas, heat and electricity prices, including: the Gas and heat price brake for private households and small and medium-sized companies; the Gas price brake for the industrial sector; the Electricity price brake for households and companies; Hardship case aids for households with oil or pellet heating systems.

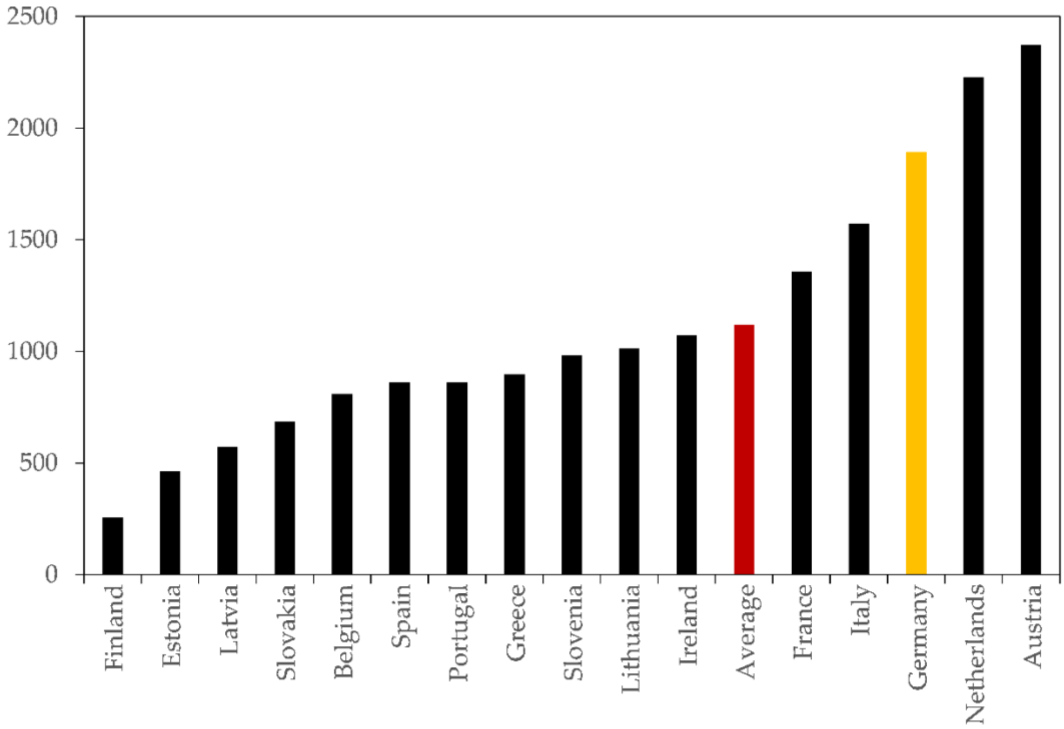
More recently, in August 2023, the Federal government launched the Growth Opportunities Act, a €7bn corporate tax relief package aimed at "improving growth and competitiveness among companies in Germany" through simplifications to the tax code, tax incentives for R&D spending and allowances for investment in clean technologies. The German Federal Ministry for Economic Affairs and Climate Protection (BMWK) furthermore published Germany's latest industrial policy strategy in October 2023.

[12] Bracket creep (*kalte Progression*) refers to a situation in which nominal wage growth linked to higher price inflation pushes individuals' incomes into higher tax brackets where greater tax rates apply. The result is an increase in income taxes but no increase (or even possibly a decrease) in real purchasing power.

[13] As per the database developed by Bruegel, the GDP used for these estimations was retrieved from Eurostat in April 21, 2022 and refers to the year 2021.

of the metal and electrical industry (*Gesamtmetall*)[14] before rising to the leadership of the BDA. BGB President [Yasmin Fahimi]() is a chemist who served as the Trade Union Secretary at the Industrial Union for Mining, Chemistry, Energy (IG BCE) from 2000 to 2013 and [sits]() on the supervisory board of the biotech, pharma and chemical giant Bayern.

Figure 1: Governments earmarked and allocated funding to shield households and firms from the energy crisis (Sep.2021-Jan.2023), euros per capita



Source: Bruegel database: National Fiscal Policy Responses to the Energy Crisis.
Note: as per the database developed by Bruegel, the GDP used for these estimations was retrieved from Eurostat in April 21, 2022 and refers to the year 2021.

Regarding the composition of the Expert Commission on Gas and Heat, the commission's chairperson Michael Vassiliadis has been chairman of the IG BCE since 2009 and us the spouse of DGB President Yeasmin Fahimi (see above). Vassiliadis holds positions in the supervisory board of some of Germany's largest corporations,

[14] *Gesamtmetall* is the main employers' association representing the interests of the metal and electrical-engineering industry in Germany. This sector is one of the country's most important and largest industrial sectors, comprising a wide range of industries from machine and automobile manufacturing to electrical and mechanical engineering. *Gesamtmetall* represents 22 regional employers' associations with over 25.600 companies employing almost 4mn workers across the country, making it a significant voice in German industry.

e.g. the chemical sector's giants BASF and Henkel, among others. Chairperson Sigfried Russwurm – an honorary professor in mechatronics – serves as the president of the BDI and chairs the supervisory boards of some of Germany's leading companies, e.g. ThyssenKrupp (iron and steel) and various subsidiaries of Siemens.

Considering that the chemical and metalworking industries constitute the core of Germany's export-led growth model, and are by far the country's most energy intensive sectors, their influence in shaping federal economic policymaking is both undisputed and easily understandable.

Second, in terms of the logic guiding economic policymaking, corporate Germany's concerted adjustment strategy has developed around three strategic pillars:

(1) subsidising firms' higher energy costs through energy price support and income support for energy-related losses;

(2) enabling the acceptance of wage restraint in sectoral collective agreements via economy-wide social compensation programmes and targeted tax cuts for firm-specific inflation bonuses (*una tantum*);

(3) granting extensive state aid to domestic firms tolerated by the European Commission under the Temporary Crisis Frameworks adopted since March 2022.

Shielding firms from higher energy input costs

To support German firms, the government enacted various types of policies (see table 2 for an overview), ranging from budgetary transfers to tax reductions on energy prices, and – belatedly if compared to France and Spain – brakes on electricity and gas prices. It intervened vehemently by directly enacting measures targeted at smaller and medium-sized *cum* large industrial firms, or through broader measures benefiting all energy users and thus, indirectly, German firms.

As electricity prices are still higher than they were two years ago, energy intensive firms – backed by a large coalition of unions, industry associations, the SPD parliamentary groups, all regional land governments as well as Economy Minister Habeck – are calling for an additional electricity subsidy. At the time this paper was written (October 2023), Chancellor Olaf Scholz has sided with the opposing forces (Finance Minister Lindner and most of the economic advisors) and has not caved in to the demands for further estimated €25-30bn to protect energy intensive industries.

Table 2: Measures implemented in Germany to shield firms and all energy users from the energy crisis

Measure description	Gross fiscal cost	Start date	Duration (months)	Support type	Mechanism	Main beneficiaries	Comment
Grant programme for energy intensive firms	€5bn	Feb-22	11	Income support (energy-related)	Budgetary transfer	Firms: Manufacturing (energy intensive)	Part of the 3rd Relief Package. Active retroactively to Feb. 2022
Pump subsidies through a temporary rebate	€3.15bn	Mar-22	4	Energy price support	Reduced, regulated, or capped marginal energy prices	All energy users	-
Reduction of VAT on gas prices	€2bn	Oct-22	3	Energy price support	Tax measures	All energy users	Costs are estimated at €bn in 2022, €6.5 bn in 2023 and €2.8 bn in 2024
Gas price brake: discount on the gas and heat bill to subsidise 80% of previous gas consumption at a reduced price for households and SMEs and 70% for industrial clients	€56bn	Dec-22	17	Income support (energy-related)	Reduced, regulated, or capped average energy prices	All energy users	Caps and conditionality for enterprises are based on EU state aid rules (TCF). Gas and heat suppliers waive the monthly upfront payment in December 2022 and get reimbursed by the government. Preliminary end date is Dec 23; federal government may extend duration until Apr 24 if EU TCF is extended. Fiscal costs depend on further development of energy prices.
Yearly increase in CO2 prices in heating and transport sector from 2022 to 2023 by 5 Euros has been postponed for one year	€4.4bn	Jan-23	36	Energy price support	Tax measures	All energy users	
Continuation of the reduction of VAT on gas prices	€6.5bn	Jan-23	12	Energy price support	Tax measures	All energy users	Costs are estimated at €2bn in 2022, €6.5bn in 2023 and €2.8 bn in 2025
Electricity price brake: discount on the electricity bill to subsidise 80% of previous electricity consumption at a reduced price for households and SMEs, and 70% for industrial clients	€43bn	Jan-23	16	Income support (energy-related)	Reduced, regulated, or capped average energy prices	All energy users	Caps and conditionality for enterprises are based on EU state aid rules (TCF). Preliminary end date is Dec 23; federal government may extend duration until Apr 24 if EU TCF is extended. Fiscal costs depend on further development of energy prices
Extensions of tax exemptions on energy for energy-intensive firms	€1.7bn	Jan-23	12	Income support (energy-related)	Tax measures	Firms: Manufacturing (energy intensive)	Part of the 3rd Relief Package. The tax exemption was supposed to fade out at the end of 2022 and is now extended for one more year
Continuation of the reduction of VAT on gas prices	€2.8bn	Jan-24	3	Energy price support	Tax measures	All energy users	Costs are estimated at €2bn in 2022, €6.5 bn in 2023 and €2.8 bn in 2026

Source: Our elaboration from the OECD Energy Support Measures Tracker.

Stabilising wage-push inflation

Wage restraint is crucial to the resilience of the German export-led growth model. Yet, in the domain of private sector wage setting, the government cannot intervene directly in collective bargaining as the social partners have exclusive right to collective bargaining autonomy (*Tarifautonomie*). Thus, the government intervened *indirectly* to help firms contain the increase in labour costs and, most fundamentally, to prevent a prospective price-wage spiral. It did so by enhancing the capacity of sectoral wage-setters to accept a policy of wage moderation by compensating households across the economy through un/targeted measures restoring their losses of real incomes (see table 3 for an overview) and by incentivising the sectoral social partners to make use of untaxed inflation bonuses (up to €3.000) to be paid *una tantum* by firms to employees.

The chemical sector played a pivotal role as *pattern setter* in collective bargaining developments after the outbreak of the Russo-Ukrainian war. Amidst the 2022 uncertain economic scenario, the chemical sector union IG BCE opted not to demand a specific wage increase. By April, the IG BCE and the employers decided instead to extend the previous agreement to October 2022 and approve a one-time €1,400 payment for workers in May. This amount could be lowered to €1,000 if a company faced economic challenges.

Chancellor Scholz praised this approach as a solution against rising prices, promoting the use of one-off payments in the "concerted action against price pressure." In fact, one-off compensatory payments at the firm level promised to be a flexible adjustment tool allowing the social partners and the government to find a compromised solution between two contrasting policy objectives, namely the need to sustain workers' purchasing power while escaping a price-wage inflationary spiral which risked damaging the country's cost competitiveness and further reducing workers' real incomes in the medium term. This is because one-off payments consist of a fixed-sum untaxed bonus paid once by firms to employees. This is very different (and cheaper from the employers' perspective) than full-fledged wage increases enshrined into sectoral collective agreements which permanently increase all income levels covered by the agreement by a given percentage.

This method became central in the discussions of the high-level meetings in the summer of 2022. Drawing on the example of the chemical sector's agreement, to sustain the actions of wage setters in other sectors, the federal government decided to use its fiscal capacity to fund the exemption from taxes and social security contributions of one-off firm-level inflation bonuses to employees (up to €3000). It would then be up to the sectoral social partners to agree on the sum of the bonus, but the bonus would be distributed only once by firms and would not alter the structure of income levels within the given sectoral agreements.

Table 3: Energy support measures implemented in Germany to shield households and all energy users

Measure description	Gross fiscal cost	Start date	Duration (months)	Support type	Mechanism	Main beneficiaries	Comment
€9 tickets to encourage use of public transport	€2.5bn	Mar-22	4	Other	Subsidised public transport	Households: All	-
Increase of the one-time COVID-19 subsidy from €100 to 200	€478.25mn	Apr-22	9	Income support (non-energy-related)	Budgetary transfer	Households: Vulnerable	The bill refers to the Covid-19 pandemic and is unrelated to the energy crisis. The benefit then was increased from €100 to €200 EUR by the Bundestag. This adjustment was influenced by high inflation rates and thus rising energy prices. Beneficiaries include the recipients of some unemployment benefits and social security and welfare benefits.
Exemption from taxes and social security contributions of one-off firm-level inflation bonuses to employees (up to €3000) agreed in sectoral collective agreements	-	Oct-22	1	Income support (non-energy-related)	Tax measures	All energy users	There are no reliable costs estimates for this measure
Employees receive a taxable €300 one-time payment to cover increased energy costs	€10.4bn	Oct-22	1	Income support (non-energy-related)	Budgetary transfer	Households: All	
One-off payment to pensioners of taxable €300	€6.29bn	Dec-22	1	Income support (non-energy-related)	Budgetary transfer	Households: All	Pensioners are not necessarily vulnerable (even though the measure is subject to income taxes)
One-off payment to students of taxable € 200	€680mn	Jan-23	12	Income support (non-energy-related)	Budgetary transfer	Households: Vulnerable	The measure is a one-off, application for eligible persons possible since 15 March 2023
Introduction of nation-wide public transport ticket (€49-69)	€6bn	Jan-23	Open-ended	Other	Subsidised public transport	Households: All	The estimated cost of the energy-relief part of the measure is until Dec-24. Costs are €3bn in 2023 and €3bn in 2024
Increase of commuter allowance (up to 38cent/Km).	€250mn	Jan-23	12	Income support (non-energy-related)	Tax measures	Households: All	Costs are 0.25 bn Euros in 2023, 3,2 bn Euros in 2024; The measure is limited to the end of 2026, but cost estimates are just available until 2024
Planned further increase of commuter allowance	€3.2bn	Jan-24	12	Income support (non-energy-related)	Tax measures	Households: All	Costs are €0.25bn in 2023, €3,2bn in 2024; The measure is limited until end of 2026

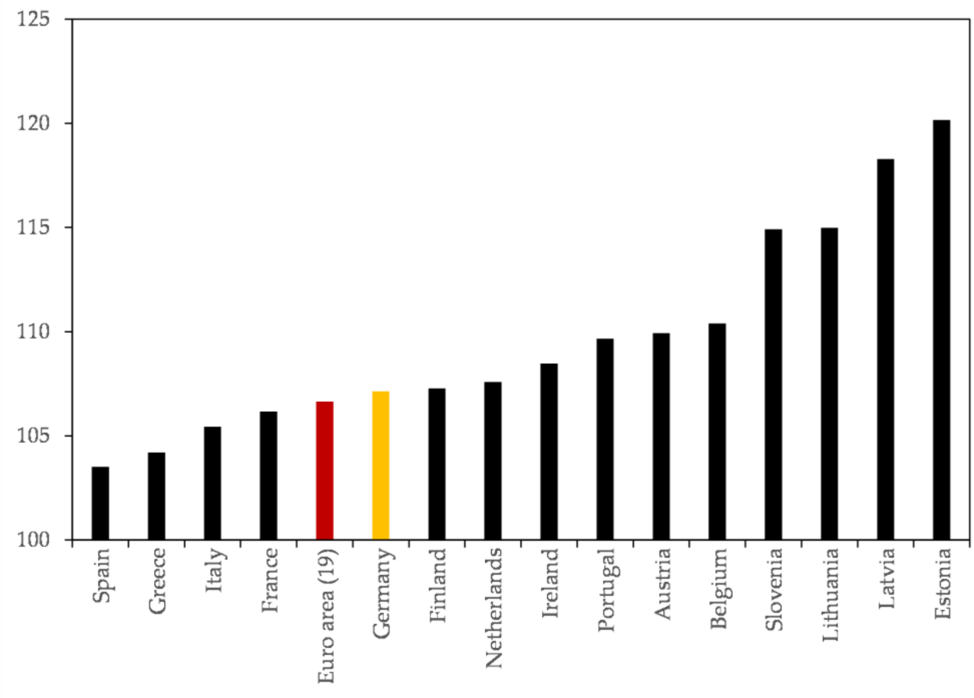
Source: our elaboration from the OECD Energy Support Measures Tracker.

As a result, the use of untaxed one-off compensatory inflation bonuses at the firm level was soon incorporated into the subsequent sectoral agreements. Together with the governmental social policy measures for households, firm-level one-off bonuses thus compensated workers from their loss of purchasing power, easing the pressure-from-below on the trade unions leaders. Wage setters could thus reach various moderate settlements in sectoral collective bargaining negotiations, stabilising wage-push inflation in Germany.

While data is preliminary, various indicators show a trajectory of moderate wage increases since the occurrence of the energy shock.[15] In terms of unit labour costs (ULCs), figure 2 shows only a modest increase during the first quarter of 2022 (i.e., since Russia's invasion of Ukraine) and the latest period for which data is available (i.e., the second quarter of 2022). Germany's ULCs inflation has remained anchored to levels comparable to the rest of the euro-zone countries despite Germany's much greater exposure to the energy shock.

[15] It is important to note that these observations can only be temporary for lack of data. The validity of our argument shall thus be tested over the course of the next two years as collective bargaining develops in Germany in a context of declining inflation.

Figure 2: Cumulated changes in the Quarterly Unit Labour Costs Index (total economy) between Q1/2022 and Q2/2023. Index, Q1/2022 = 100*



Source: Our elaboration from the OECD Main Economic Indicators, "Unit labour cost - quarterly indicators - early estimates."

*Unit labour costs (ULCs) measure the average cost of labour per unit of output. They are calculated as the ratio of total labour costs to real output. Different from the estimates of annual ULCs, the Early Estimates of Quarterly ULC use *employment* and *not* hours worked as measure of labour input due to the lack of data.

State aid to ailing firms

Last but not least, the German government has made extensive use of new largesse for state aid measures to support the economy following the energy crisis. New regulatory flexibilities have in fact been granted by the European Commission to member states via the Temporary Crisis Framework (TCF) adopted in March 2022.

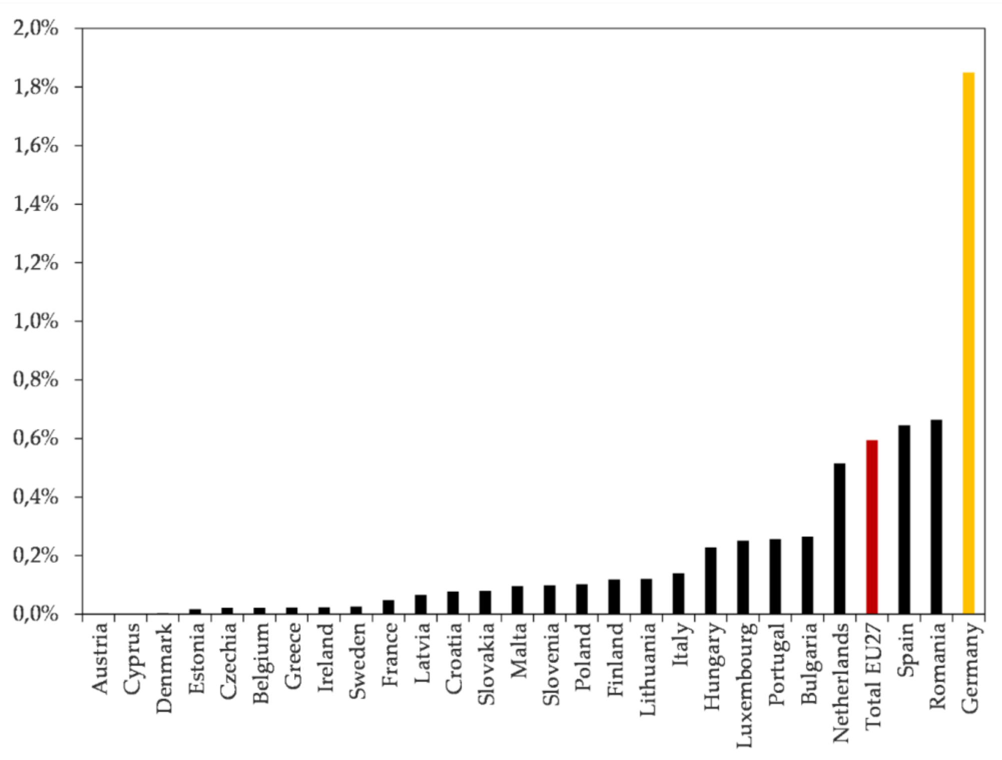
Between then and the end of 2022, the Commission *approved* nearly €672 billion of aid under the TCF (4,3% of combined EU27 GDP in 2022). More than half of this budget was approved in Germany (53%). However, a distinction needs to be made between those measures *de jure* approved by the Commission and the amount of state aid *de facto* utilised by national governments. Of the total €672 billion approved, in fact, only

€93.52 bn [was actually granted by Member States](#) (representing 14% of all the aid approved and corresponding to 0.59% of EU27 GDP in 2022).[16]

Germany accounted for more than €71bn of this total (i.e., 76% of all the aid *de facto* granted). Figure 3 shows that, in GDP terms, the amount of aid granted by Germany to its domestic firms was three times larger (1.8% of GDP) than the average aid of the other EU 27 countries (around 0.6% of GDP).

Among the specific measures, most of the aid was employed to avoid the collapse of the two German utility companies, Uniper SE and SEFE GmbH, which were heavily exposed to trade with Russia. Uniper SE received a recapitalisation of €33 billion and loans worth €16 billion under a German umbrella scheme for guarantees and subsidised loans. Similarly, SEFE GmbH was recapitalised with €6.5 billion and obtained subsidised loans of €13.8 billion under the same scheme.

Figure 3: Total State aid granted in 2022 under the Commission's Temporary Crisis Framework measures or based on its principles as percentage of national GDP



Source: European Commission, State aid Brief N. 1/2023.

[16] As the Commission notes, however, "it is also important to underline that these figures exclusively refer to the measures that qualify as State aid and that have been notified to and approved by the Commission. Member States have also granted sizable support to their economies and households through other measures that are not included in these statistics, and the overall support to the economy and households differs from the State aid figures presented here."

Other specific interventions to provide credit and equity support included the provision of subsidised loans for companies affected by the war in Ukraine and high energy costs, as well as a credit programme for energy companies to secure liquidity for margin calls on electricity and gas markets (see table 5).

Table 5: Measures implemented in Germany to provide credit and equity support to firms during the energy crisis

Measure description	Gross fiscal cost	Start date	Duration (months)	Support type	Mechanism	Main beneficiaries	Comment
Subsidised loans for companies affected by the war in Ukraine and high energy costs	€189.6mn	May-22	20	Credit and equity support	Loan (subsidised or not) or credit line	Firms: All	Loans granted 01.01.2022 to 09.03.2023
Credit programme for energy companies to secure liquidity for margin calls on electricity and gas markets	€100bn	June-22	19	Credit and equity support	Loan (subsidised or not) or credit line	Firms: Energy producers and suppliers (incl. extractives)	

Source: Our elaboration from the OECD Energy Support Measures Tracker.

Conclusion: Safeguarding domestic industries, the German way. Emerging and persistent challenges

Since the Covid-19 pandemic, the German government has embraced a form of activist economic governance which is heavily interventionist and no longer ordo-liberal. Truth being told, the grand coalition navigating the 2007-2008 global financial crisis had similarly spent enormous amounts of money to prevent the banking system's breakdown and resorted to economic instruments such as counter-cyclical demand management and nationalisations. This time again, on the one hand, the government has extended generous social compensation schemes to households and vulnerable individuals (e.g., pensioners and students). On the other, Germany's adjustment strategy evolved around the need to shore up export industries' international cost competitiveness. Three aspects are worth mentioning.

First, while in the past Germany's export-led growth strategy relied heavily on wage restraint and the control of unit labour costs, the responses to the Covid-19 pandemic and the energy crisis mobilised large scale state-aid to unprecedented levels. Beyond "protective" subsidies for energy-intensive and large industrial firms – including the nationalisation of the main gas importing firm Uniper – the government is increasingly prone to exploit state aid to promote and attract investment in key sectors for strategic autonomy and the twin transition, as revealed by the €20bn in aid to bolster semiconductor production in Germany. Second, Germany's concerted adjustment strategy points to the resilience of the longstanding neo-corporatist policy networks underpinning the country's voluntary joint decision-making in economic policy. These networks remain rooted in the manufacturing sector and thrive thanks to the industry representatives and the trade unions' pragmatic capacity to reach compromised agreements on the need to uphold the country's growth regime. A plethora of new government-sponsored committees on gas prices, the transformation of industry, alliance for industry and the like have emerged, all of which operate to shore up the manufacturing sector. Third, Germany's competitive corporatism continues to evolve with little regard for the country's European neighbours. Germany's extensive deployment of state aid is a new feature enabled by the post-pandemic European Competition regime. Germany's subsidising prowess is made feasible by its superior fiscal capacity and risks jeopardising the European single market. The European Commission is urging member states to phase out state aid under the Temporary Framework by December 31, 2023. However, the German coalition government faces internal pressure to prolong the subsidies for energy-intensive industries, particularly amidst concerns that domestic firms might consider relocating production outside Europe. Given the circumstances, Germany is likely to align with France in advocating for an extension of the existing TCF provisions. At the same time, however, thanks to its superior fiscal capacity, Germany is resisting the idea of a pooled supranational fiscal tool in Europe to govern and execute industrial policy across the single market.

It remains to be seen whether and how far Germany's competitive corporatism will continue to succeed. The reliance on exports as the main source of demand remains a source of vulnerability for Germany; increasingly so in the new uncertain geopolitical order. To mention but one example, the German automotive industry increasingly fears retaliation by the Chinese government in light of the European Commission's launch of an anti-subsidy investigation into China's electric car industry. As a result, even the Bundesbank is urging German firms to de-risk from China,[17] itself experiencing economic turmoil. Domestically, the European Central Bank's tightening

[17] As of 2022, China remains Germany's main trading partner – for a total turnover (export + imports) of around €300bn – followed by the United States and the Netherlands. China remains the major source of German imports (€192bn).

of monetary policy conditions further weakens demand, especially dampening the construction sector. Coupled with real wage losses and lower consumption, the EU economy entered a recession in the summer of 2023. Finally, large spending on compensatory state aid, military and energy subsidies risks crowding out public spending on digitalisation, the transition to renewable energies and other areas of innovation.

Germany might for now preserve its industry, but the risk of losing out on strategic future technologies and sectors is concrete.