142304/EU XXVII. GP
Eingelangt am 25/05/23

Council of the
European Union

Brussels, 25 May 2023
(OR. en)

9765/23
ADD 2

ECOFIN 470
UEM 105
SOC 344
EMPL 222
COMPET 480
ENV 527
EDUC 171
RECH 195
ENER 250
JAI 669
GENDER 58
ANTIDISCRIM 56
JEUN 91
SAN 265

COVER NOTE

From:	Secretary-General of the European Commission, signed by Ms Martine DEPREZ, Director
date of receipt:	24 May 2023
To:	Ms Thérèse BLANCHET, Secretary-General of the Council of the European Union
No. Cion doc.:	SWD(2023) 629 final
Subject:	COMMISSION STAFF WORKING DOCUMENT In-depth review for Germany Accompanying the document COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN CENTRAL BANK, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS AND THE EUROPEAN INVESTMENT BANK 2023 European Semester – Spring Package

Delegations will find attached document SWD(2023) 629 final.

Encl.: SWD(2023) 629 final

Brussels, 24.5.2023
SWD(2023) 629 final

COMMISSION STAFF WORKING DOCUMENT

In-depth review for Germany

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN CENTRAL BANK, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS AND THE EUROPEAN INVESTMENT BANK

2023 European Semester – Spring Package

{COM(2023) 600 final} - {SWD(2023) 628 final} - {SWD(2023) 630 final} - {SWD(2023) 631 final} - {SWD(2023) 632 final} - {SWD(2023) 633 final} - {SWD(2023) 634 final} - {SWD(2023) 635 final} - {SWD(2023) 636 final} - {SWD(2023) 637 final} - {SWD(2023) 638 final} - {SWD(2023) 639 final} - {SWD(2023) 640 final} - {SWD(2023) 641 final} - {SWD(2023) 642 final} - {SWD(2023) 643 final} - {SWD(2023) 644 final}

www.parlament.gv.at

Germany

In-Depth Review 2023

www.parlament.gv.at

On the basis of this in-depth review for Germany undertaken under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances, the Commission has considered in its Communication "European Semester – 2023 Spring Package" (COM(2023) 600 final) that:

Germany continues to experience imbalances. The persistent large current account surplus, reflecting also subdued investment relative to savings, which has cross-border relevance, has been gradually reduced, most recently amid the energy crisis, but is expected to increase markedly. The current account surplus receded slowly until 2019 with a gently increasing domestic investment ratio and a falling trade balance and has since been marked by unusual economic circumstances. It decreased markedly in 2022 on the back of higher import energy prices, along with a narrowing of the non-energy trade surplus and a recovery in tourism imports. In 2022, the surplus remained above the levels suggested by the country's fundamentals and it is expected to rebound markedly in 2023 and remain almost unchanged in 2024, it is projected to stay below the MIP threshold. Wages are forecast to grow strongly, supporting domestic demand, while unit labour costs may grow faster than in the rest of the euro area. Nonetheless, consumption and investment are temporarily dampened by high inflation. In recent years, house prices have shown sharp increases, even if easing somewhat since mid-2022. Housing supply cannot catch up with demand amid weak residential investment, which may add to continuing risks of overvaluation. A further reduction of vulnerabilities would benefit from the timely and effective implementation of the public investment initiatives and removing of obstacles to investment.

CONTENTS

1. Introduction 4

2. Assessment of macroeconomic vulnerabilities 6

LIST OF TABLES

Table 2.1: Selected economic and financial indicators (Part 1), Germany 20
Table 2.2: Selected economic and financial indicator (Part 2), Germany 21

LIST OF GRAPHS

Graph 2.1: Decompositions of the external surplus/ net lending/ borrowing 7
Graph 2.2: Evolution of the balance of goods and services in current and constant prices 7
Graph 2.3: Energy price developments 8
Graph 2.4: Productivity by sector and development of manufacturing orders 9
Graph 2.5: Investment by type of investment and net public investment broken down by federal levels 10
Graph 2.6: House price dynamics 12
Graph 2.7: Selected graphs, Germany 17
Graph 2.8: Components of gross fixed capital formation deflator growth and consumer price inflation 18
Graph 2.9: Impact of German value added inflation on EU partners’ consumer price inflation 19

www.parlament.gv.at

1. INTRODUCTION

In 2022, over the previous annual cycle of surveillance under the Macroeconomic Imbalances Procedure (MIP), the Commission identified "macroeconomic imbalances" in Germany. ([1]) These imbalances were related to a persistent large current account surplus, which reflects subdued investment relative to savings, and has cross-border relevance. The 2023 Alert Mechanism Report published in November 2022 concluded that an in-depth review (IDR) should be undertaken also this year for Germany with a view to assess the persistence or unwinding of imbalances. ([2]) The AMR found that Germany's large current account surplus had recently decreased substantially, as a result of the deterioration of terms of trade driven by an adverse external shock. Until early 2022, nominal house price growth had been among the highest in the EU, and house prices were estimated to be overvalued. Core inflation and wage increases in Germany may facilitate euro area rebalancing.

The fundamentals of the German economy have been proven solid, although the COVID-19 crisis, the disruption of energy deliveries from Russia and high energy prices have been testing its resilience. Germany's real GDP grew by 1.8% in 2022, as the recovery from the COVID-19 pandemic was taking place against the backdrop of industry streamlining capacity, the energy crisis, and the urgency of investing in the green transition. Although cost and price inflation and higher interest rates dented purchasing power, private consumption still expanded, whereas investment remained broadly unchanged. Demand conditions reached a trough at the end of 2022 and early 2023, resulting in relatively low GDP growth at 0.2% expected in 2023, which is forecast to accelerate to 1.4% in 2024. ([3]) After having peaked in October 2022 at 11.6% (8.7% for 2022 as a whole), inflation (HICP) has been easing somewhat since, reflecting a reversal of price increases in imported energy. Unemployment is expected to stay low and exert upward pressure on wages and core inflation. Going forward, inflation is easing and is expected to come down to 6.8% in 2023 and 2.7% in 2024 reflecting lower energy prices, while wages move the other direction as growth of gross wages per head is expected to accelerate from 4.7% in 2022 to 5.5% in 2023 and 5.3% in 2024, supporting consumption. Corporate profits remain high, leaving room to cushion further wage increases and to finance investments needed for the transition to a more sustainable growth model. Since the second half of 2022, house prices increases receded, reflecting the increasing interest rate environment and the reduced purchasing power of buyers. As the price of energy imports ease, the current account surplus is partially rebounding from 4.2% of GDP in 2022 towards 6% of GDP in 2023 and 2024. At the same time, the surplus is expected to remain below pre-pandemic levels on account of energy prices still exceeding past levels, the continuation of the trend in increasing investments and accelerating labour cost dynamics. The main risk factors for the economy include an aggravated fragmentation of global trade, a flaming up of energy prices and/or energy shortages amid increasing geopolitical tensions, persistent supply-side bottlenecks, and entrenched inflation necessitating monetary tightening.

This in-depth review presents the main findings of the assessment of macroeconomic vulnerabilities for Germany. Vulnerabilities related to housing and external balances in

([1]) European Commission (2022), European Semester Spring Package 2022, COM(2022) 600 final.

([2]) European Commission (2022), Alert Mechanism Report 2023, COM (2022) 381 final.

([3]) European Commission (2023), European Economic Forecast: Spring 2023, Institutional Paper 200.

www.parlament.gv.at

Germany are also discussed in horizontal thematic notes that were recently published. [4]The MIP assessment matrix is published in the 2023 Country Report for Germany. [5]

(4) European Commission (2023), Housing Market Developments: Thematic Note to Support In-Depth Reviews, European Economy: Institutional Papers, 197. European Commission (2023), External Sustainability Analysis: Thematic Note to Support In-Depth Reviews, European Economy: Institutional Papers, 196.

(5) European Commission (2023), Country Report Germany 2023, SWD(2023) 605 final.

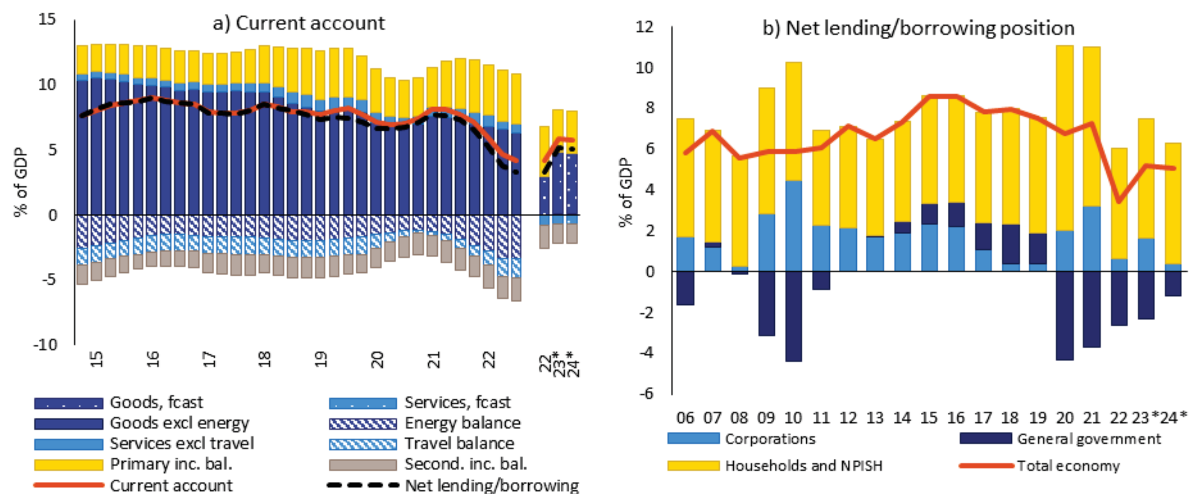
2. ASSESSMENT OF MACROECONOMIC VULNERABILITIES

Gravity, evolution, and prospects

On 5 April 2023, the Commission published a horizontal thematic note on external balances, also explaining that the German current account surplus having declined gradually since its peak in 2015, decreased to 4.2% in 2022. ([6]) The current account surplus of Germany has been persistently high, averaging 7.6% of GDP between 2011 and 2021 (Graph 2.1). After having peaked at 8.6% of GDP in 2015, the surplus declined, yet still amounting to 8.2% of GDP in 2019. In this period, the trade balance of goods and services fell perceptibly, from 7.6% of GDP in 2015 to 5.9% in 2019. However, this decline was somewhat counterbalanced by the swelling primary income balance, reflecting investment returns, that increased from 2.3% of GDP to 3.7% of GDP. During the pandemic, the current account balance eased somewhat, then it dropped markedly from 7.7% of GDP in 2021 to 4.2% of GDP in 2022. This drop was mostly driven by the declining balance in goods and services, which fell from 5.5% in 2021 to 2.1% of GDP in 2022, (Graph 2.1). The balance of trade in goods declined from 5.4% in 2021 to 2.9% of GDP. The balance of services moved from a roughly balanced position to a deficit of -0.8% of GDP, reflecting a normalisation of outbound tourism resuming after COVID-19 related restrictions were largely lifted. The primary income surplus was stable at around 3.9% of GDP, reflecting a high net foreign asset position. The secondary income balance (current transfers) widened slightly to -1.8% of GDP, from -1.6% of GDP in 2021. Overall, the current account balance has declined, while in 2022 it was still above the levels suggested by fundamentals ([7]): economic fundamentals of the German economy, such as high income per capita and high manufacturing intensity suggest a current account surplus of about 1.3% of GDP in 2022.

([6]) For a detailed overview of developments relating to external balances in Europe, including Germany's, see European Commission (2023), External Sustainability Analysis: Thematic Note to Support In-Depth Reviews, Institutional Paper 196. April 2023.

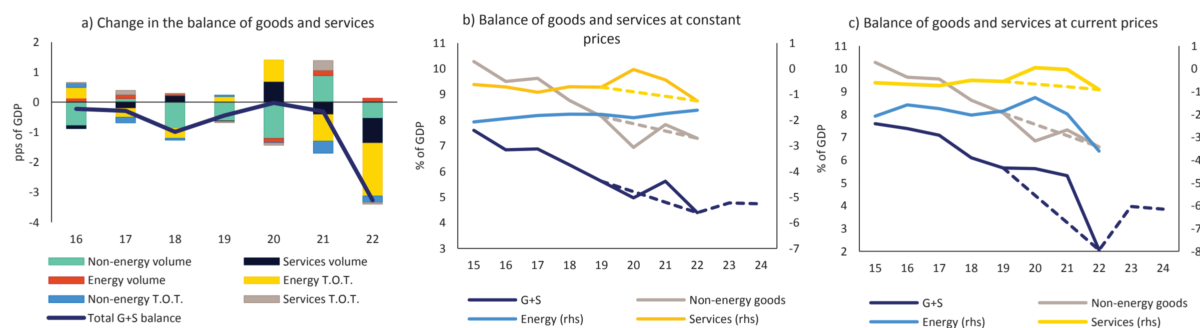
Graph 2.1: **Decompositions of the external surplus/ net lending/ borrowing**



Source: Eurostat, European Commission services

The balance of goods and services has been on a declining trend driven by a declining goods balance while cost competitiveness has been faltering somewhat. The balance of goods and services continuously declined from its peak of 7.6% of GDP in 2015 to 5.9% in 2019 and 5.5% in 2021, driven by declining net exports of goods that came from 8.2% of GDP in 2015 to 6.3% in 2019 and to 5.4% in 2021. In the 2010s global trade growth has slowed considerably. Protectionism increased, resulting in a challenge for the export-centred German economic model integrated in international value chains. Manufacturing productivity has largely stalled since 2017 (Graph 2.4) and manufacturing intensity has been declining since 2016. The energy (notably gas) price hikes of 2021 and 2022, of which only the latter has dissipated, are set to put additional burden on cost competitiveness, which has declined relative to the rest of the euro area with unit labour costs growing faster in Germany between 2012 and the outbreak of the pandemic (Graph 2.7d). These trends have tended to favour a deeper penetration of imports.

Graph 2.2: **Evolution of the balance of goods and services in current and constant prices**



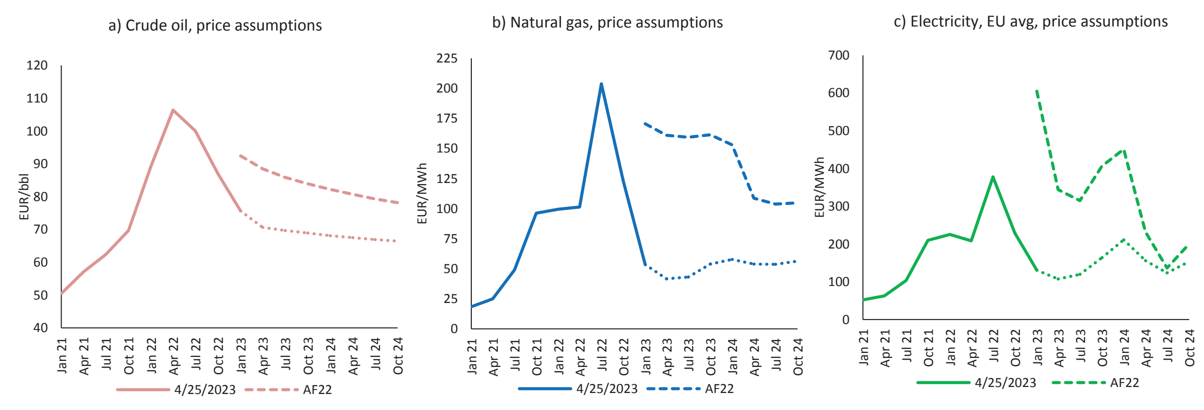
Source: Destatis, Bundesbank, European Commission services

In 2022, sharp price increases for imported energy, loss of export market shares in non-energy goods, higher import of equipment and intermediate goods as well as higher tourism imports drove the decline in the current account surplus. Surging imported energy prices caused the energy balance to deteriorate massively and accounted for 2 percentage points (pps) of GDP of the decline in the current account surplus. This development added to the deterioration in the energy terms of trade of 2021 when gas prices already increased considerably as supply became scarcer (Graph 2.7c). The decline in the surplus in 2022 was also driven by volume effects in non-energy goods and services, accounting for a significant share (1.3 pps). Beyond the normalisation of tourism spending,

there was also an increase in the imports of intermediate goods and non-transport equipment which reflected stockpiling of key raw materials and robust equipment investment.

The current account surplus is expected to increase towards 6% of GDP in 2023 and 2024. In 2023, lower energy prices are expected to improve the current account, partly reversing the deterioration recorded in 2022 as energy prices decrease even if expected to remain markedly high with gas prices at around triple of their pre-2021 levels ([8]). Conversely, moderate external demand, also associated to the Russian military aggression against Ukraine, is expected to limit exports, in particular from the manufacturing sector. At the same time, the current account balance is expected to reflect a structural adjustment to domestic investments motivated by the green transition and onshoring, linked to order books being at historical highs, averaging six months of future orders (Graph 2.4). The corporate sector is being increasingly challenged by emerging competitors in China and beyond and affected by a permanent deterioration in terms of trade on energy relative to pre-pandemic levels. Sustained wage growth is expected to be supportive of consumption. Fiscal support measures are expected to keep the government budget in a deficit.

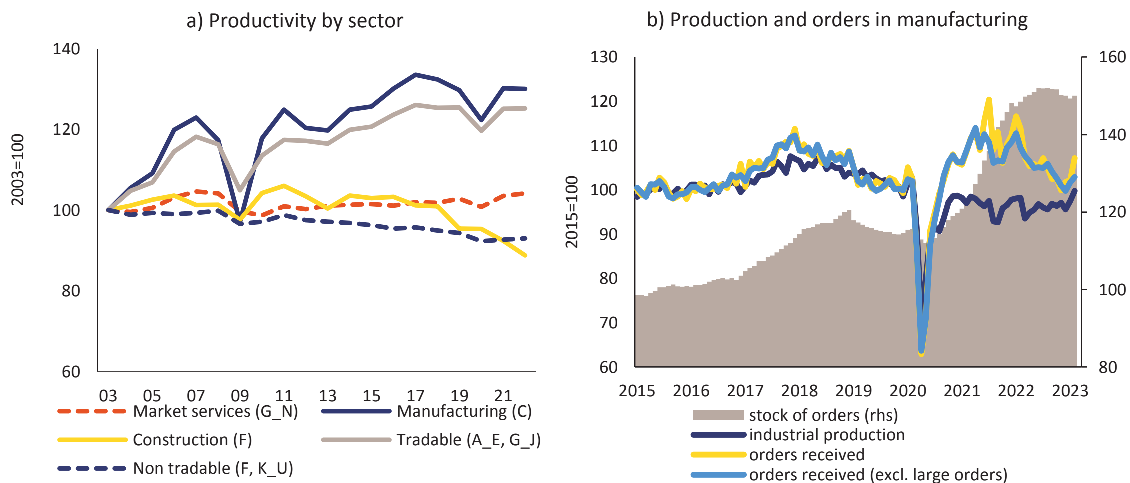
Graph 2.3: **Energy price developments**



Source: European Commission services

([8]) Gas price inflation was already strong in 2021 as demand for low-emission energy (gas) increased worldwide (European Economic Forecast. Autumn 2021 (europa.eu)).

Graph 2.4: **Productivity by sector and development of manufacturing orders**



Source: Eurostat, Destatis, European Commission services

The German economy's large current account surplus also reflects a domestic demand gap relative to output. Prior to the pandemic, the ratio of surplus savings (net lending) to GDP was declining slowly in line with an increase in the investment ratio. In the wake of the COVID-19 pandemic, while government transfers to households and corporates shored up private balance sheets, consumption and investment possibilities were restricted by public health measures, supply bottlenecks and uncertainty. As a result, Germany still had a domestic demand shortfall in 2021 and the decline of the current account to 4.2% in 2022 was only partly explained by a rebound in domestic demand. The investment ratio continued to increase, largely reflecting higher costs and prices for investment goods since investment was stagnant in constant prices. Increased investment was in part the result of rising inventories against the background of impaired supply chains and the gearing up for the execution of investment projects. Consumption expanded more visibly but still remained below pre-pandemic levels.

Wage growth is forecast to accelerate, supporting domestic demand. While real wages declined by 4% in 2022, as of 2023 an increasing number of negotiated wage agreements are being updated to reflect high inflation both in the tradable and non-tradable sector. ([9]) Negotiated hourly wages in February 2023 were 6.5% higher than a year before. The growth of gross wages per head is expected to accelerate from 4.7% in 2022 to 5.5%] in 2023 and 5.3% in 2024, leading to a real wage decline of 0.4% in 2023 and a real wage increase of 3% in 2024. After the minimum wage increase to EUR 12 per hour in October 2022 was decided by the government, the Minimum Wage Commission (*Mindestlohnkommission*) will decide until end June 2023 for an additional minimum wage increase effective from 2024. Wage developments are expected to increasingly support disposable incomes, while also contributing to intra-EU rebalancing. In 2023, unit labour costs are expected to increase in Germany by 5.9% and in the euro area as a whole by 5%, while in 2024 it is forecast to increase by 4.1% in Germany and by 3.2% in the euro area as a whole.

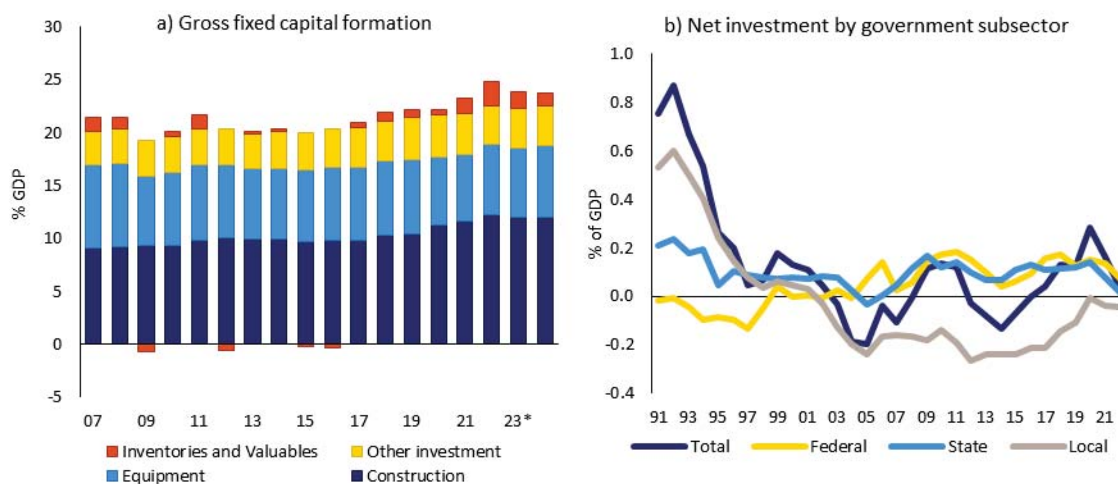
Household savings have largely normalised to levels just above pre-pandemic levels, and consumption is expected to recover further. The household saving rate surged amid the pandemic thanks to income support and restrictions on consumption. In 2022, the surplus of savings over investment eased as the saving rate declined, with households

(9) Representing a major wage negotiation round this year affecting 2.6 million public employees at federal and municipal level, at end April 2023, Germany's ver.di union and the government agreed to pay increases amounting to around 11% for a duration of two years, running until end 2024. Öffentlicher-Dienst.Info - TVöD - Tarifrunde 2023 (oeffentlicher-dienst.info)

spending some of the excess savings from their peak during the COVID-19 pandemic. Private consumption expanded by 4.3% in 2022, reflecting a particularly strong expansion in services by 8.3%. In the future, two effects that still weighed on consumption in 2022 are expected to ease: in the first half of 2022 some COVID-19 related restrictions still pulled down consumption and in 2022, the share of people saving for unexpected need temporarily jumped.

Corporate savings increased during the pandemic, while investment is set to recover somewhat after stagnating in 2022 and 2023. Aggregate corporate profitability benefitted from government support (short-term work scheme *Kurzarbeit* and energy cost support), exercised pricing power and wage costs evolving more slowly than sales prices. In 2020-2022, corporate savings were on average 1.5 pp of GDP higher than pre-pandemic. Investment was constrained by supply bottlenecks, the pandemic and uncertainty and has not yet recovered fully to pre-pandemic levels. Inventories expanded to high levels (see Graph 2.5), reflecting stockpiling amid high uncertainty on the availability and price of supplies. Investment in construction however declined by 1.7% in 2022, driven primarily by a 2.2% reduction in housing investment. Higher costs of financing and increased uncertainty cooled investment dynamics by early 2023, and while equipment investment growth is expected to stay positive, it is not expected to compensate for declining investment in construction, resulting in investment contracting by 0.7% in 2023. As cost pressures ease, investment is expected to strengthen, reflecting the high order books, addressing the digital transition and decarbonisation needs amid continued high energy prices. Housing construction is expected to decline in 2023 caused by high building and borrowing costs and bottom out in 2024, while continued demand for housing, energetic refurbishment and resumption in real income growth remain supportive. Its medium-term development will also depend on demographic developments, including net migration.

Graph 2.5: **Investment by type of investment and net public investment broken down by federal levels**



Source: Eurostat, European Commission services

Germany's government turned from a net lender to a net borrower on account of ample crisis policy support, and is expected to remain a net borrower, supporting investment in the coming years partly due to extra-budgetary funds. After running surpluses in 2014-2019, the government became a net borrower in 2020-2022 with the provision of ample pandemic measures and support programmes. The government deficit was around 4% of GDP in 2020 and 2021, and at 2.6% of GDP in 2022. Government spending helped to shield other sectors: households and corporates benefitted from the short time work arrangement, households benefitted from extended transfers and corporates received guarantees and grants, and thereby had a limited impact on the current account

balance. At the same time, these transfers were to a great extent absorbed by household and corporate savings as households held back their consumption and corporates held back investments during times with COVID-19 restrictions. From 2023, the persistence of some net borrowing by the government is expected to more directly translate into consumption and investment. Germany created or scaled up various extra-budgetary funds, which are expected to lead to additional spending in the following years. As a reaction to Russia's war of aggression against Ukraine, Germany decided to invest an additional EUR 100 billion (around 2.4% of GDP) in its defence capacities in a period of around five years from 2022 onwards and created a special fund outside the national fiscal rules of the so-called debt brake. At the same time, unused pandemic-related loans for around 1.5% of GDP were transferred to the Climate and Transformation Fund (*Klima- und Transformationsfonds*), aimed to finance additional measures for the green transition for a period of around four years from 2022 onwards. For financing the relief measures in reaction to the heightened energy prices, Germany created a EUR 200 billion fund (around 4.9% of GDP). This extra-budgetary fund is intended to finance mainly a gas and electricity price brake in 2023 and in the beginning of 2024.

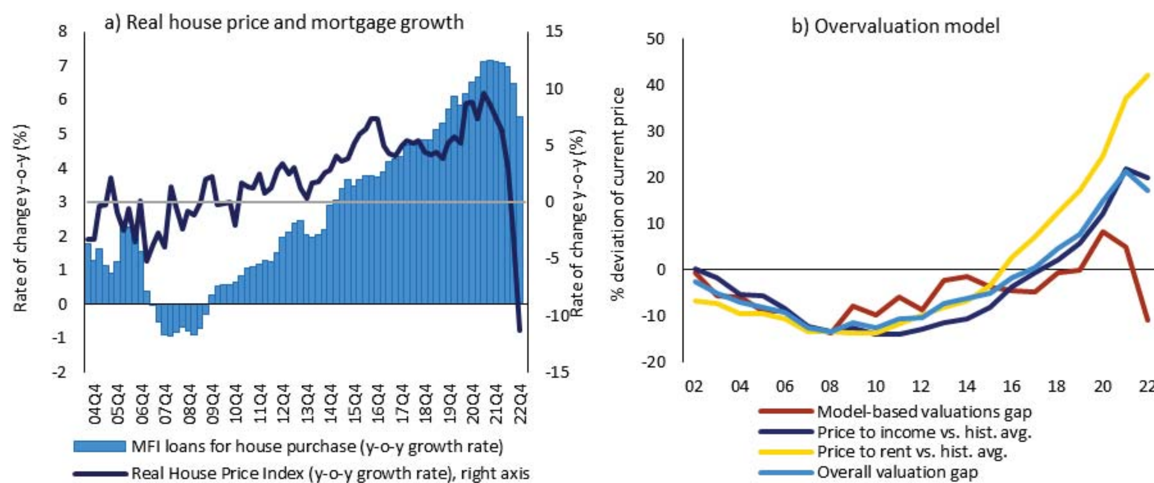
On 5 April 2023, the Commission published a horizontal thematic note on housing which also covers Germany. ([10]) It showed that house prices have been growing for a decade, leading to overvaluation. Following a decade of steady growth, in 2022, house prices in nominal terms were on average 80% higher than in 2012, having expanded with a peak annual growth rate of 12% during the pandemic. Housing affordability declined considerably; the price-to-income ratio has increased by 40% and the house price-to-rents ratio by 58% between 2012 and 2022, resulting in an estimated overvaluation of about 20% (Graph 2.6). ([11]) Bundesbank analysis suggests that house prices in urban areas exceeded fundamentals by 25-40%. ([12])

([10]) For a detailed overview of developments on the European housing markets, including Germany's, see European Commission (2023), Housing Market Developments: Thematic Note to Support In-Depth Reviews, *Institutional Paper* 197. April 2023.

([11]) In order to assess house prices overvaluation, the Commission uses the average of two benchmarks relating prices to incomes and rents, and of the results of a valuation model based on fundamentals. These are described in Philiponnet and Turrini (2017). Compared to the historical relationship between house prices and incomes, house prices in Germany were overall 20% overvalued, while compared to the historical relationship with rents, house prices were overvalued by 41%, also reflecting that rents increased relatively moderately over time. Compared to a housing model using cointegration analysis including income variables, as well as cost variables and demographics, house prices were still 5% undervalued.

([12]) https://www.bundesbank.de/resource/blob/904654/9f38009b7c747cd2013c6200280bc8e4/mL/2023-02-monatsbericht-data.pdf

Graph 2.6: **House price dynamics**



Source: Eurostat and European Commission services

Since the second half of 2022, house prices receded, reflecting the increasing interest rate environment and the reduced purchasing power of buyers. House prices peaked in the second quarter of 2022, declining by 1% in the third quarter and 5% in the fourth quarter, compared to the quarter before. In the fourth quarter, house prices remained 3.6% below their level a year before; combined with the high inflation, real house prices declined a lot more (Graph 2.6). Mortgage loan issuance dropped as interest rates for mortgages with a fixed interest have risen by around 1.7 pp in the year from September 2021 to 2.8% for mortgages with 5-10 years maturity and 3.1% for mortgages with over 10 years of maturity, ([13]). Yet, in Germany mortgage loans typically have the interest rate fixed for over 5 years, therefore increasing interest rates will primarily impact demand for new mortgages while not have an immediate impact on many existing mortgage holders.

Although increased since 2010, housing supply cannot catch up with housing demand, housing completions have declined since 2020. The construction sector has expanded in the 2010s, increasing its share in the value added of the whole economy from 4.3% in 2010 to 5.5% in 2021, matching the EU average. ([14]) The number of housing completions increased from 160 000 in 2009 to 293 000 in 2019 and around 306 000 in 2020, while decreasing to 293 000 in 2021 and further down to 278 000 in 2022. The Central Association of the German Construction Industry assumes that only 245 000 units will be completed in 2023. These levels remain clearly below government estimates that around 400 000 new dwelling are needed a year, which was also included in the coalition agreement of 2021. With building costs increasing rapidly over recent years and demand undermined by higher price of mortgages, many housing construction projects have come to a halt or are not being started, as construction costs would exceed current market prices ([15])

Policy settings marked by administrative burden, divergent construction rules across Länder, while supply of social housing remains low, seem to hold back construction activity. Despite government efforts, there remains considerable administrative burden, divergent construction rules across Länder, and insufficient digitalisation of administrative procedures and barriers to employment of skilled labour. Social housing is a Länder

([13]) https://hypo.org/app/uploads/sites/3/2023/01/EMF-Q3-2022.pdf

([14]) Construction sector activity includes both housing and commercial construction, both construction of new buildings and renovation of the existing stock.

([15]) Supply shortages and rising material costs contributed to high increases in the cost of construction, with the price deflator increasing 8.3% in 2021 and 15.9% in 2022.

www.parlament.gv.at

competence where however the federal government has been increasingly provided support. Still, the availability of social housing remains very limited. In 2021, only about 21 500 social housing units were built while the stock of social housing actually declined by around 27 350 to just above 1.1 million. The government acknowledged that the targeted 400 000 completions of new housing will not be reached at least until 2024, yet it is not clear how government measures would make a tangible contribution towards reaching this objective – although the support for housing renovation is expected to contribute to improvements in the housing stock and to climate-friendly construction.

The overvaluation in the housing market and the ongoing price correction can have implications for the financial sector, meriting close monitoring, even if no major disruption is expected. In December 2021, the European Systemic Risk Board (ESRB) issued a recommendation on medium-term vulnerabilities in the residential real estate sector in Germany. ([16]) The ESRB considered house price overvaluation and high house price growth as well as possible loosening of lending standards and significant data gaps to be the main vulnerabilities in the German housing market. The policy mix is considered only partially appropriate and partially sufficient to address the increasing vulnerabilities. The ESRB has concluded that borrower-based measures, in particular the loan-to-value (LTV) ratio measure, should be activated, and additional capital-based measures such as activating the countercyclical capital buffer or the sectoral systemic risk buffer would increase the resilience of the banking sector. Reflecting the evolving economic situation over the past year, high energy prices and inflation now reduce real incomes and raise default risks, while a reduction in house prices may reduce the value of collaterals. The high share of fixed interest rate mortgages has mixed effects on banks' balance sheets: on the one hand, it can result in a financing mismatch for banks to the extent these used shorter duration liabilities to finance low-yielding fixed interest rate mortgage assets. At the same time, it also limits defaults of creditors. A number of factors contain risks for the financial sector: a gradual and orderly correction in house prices mitigates overvaluation and thus the risk of an abrupt correction, the contraction of supply is supportive of house prices, private indebtedness remains relatively limited, and the low share of non-performing loans provides a cushion for banks.

Assessment of MIP relevant policies

Government measures have cushioned the burden from high energy costs on household disposable income and stabilised domestic demand. In reaction to the heightened energy prices, the German government implemented a wide range of measures supporting domestic demand from households, including one-off payments to all employees, pensioners and students, a temporary reduction in the prices for mass transit and in taxes on motor fuels, temporary VAT tax reductions for hospitality and gas and district heating. The electricity and heating price brakes are addressing the energy price hikes and shielding the households and companies from that price shock. The price brakes are designed that the financial support is higher with increasing energy prices thus having a sustained demand-stabilising effect. At the same time, the price signal of the energy market prices is kept in a way that incentives to reduce overall energy consumption are still intact, independently of the financial support received through the price brakes. ([17]) Beyond temporary support, a

([16]) OJ C 122, 17.3.2022, p. 1–8

([17]) Overall, Germany's price brake measures have not been very targeted to support vulnerable households. The analysis of the distributional consequences of inflation and of the electricity and gas price brakes shows that the price caps

range of measures is expected to have an enduring impact favouring household income. Notable examples are the abolition of the renewable energy surcharge (EEG-Umlage) and the systematic adjustment of the income tax schedule to inflation (Inflationsausgleichsgesetz). Further efforts to target government transfers for those in need could contribute to better use of fiscal resources and also enhance the supportiveness of transfers to consumption against savings.

Various reforms have been adopted to reduce investment barriers. A range of legislative reforms were adopted to improve the legal framework for a quicker deployment of renewable energy generation capacities and the rollout of energy networks and LNG terminals. Among others, these reforms reduce the duration of planning and permitting procedures, make the use of renewable energy an overriding public interest and ease spatial planning rules to open further areas up for investment. ([18]) Announced in April 2023, further acceleration will promote constructing motorways and power generation capacities. Some of the facilitations, based on Council Regulation 2022/2577 laying down a framework to accelerate the deployment of renewable energy, ([19]) are expected to expire in June 2024, which may limit their impact. There is potential for further improvements of planning and permitting procedures, such as setting a single contact point for all permitting procedures, being transparent on deadlines, roles and responsibilities of the different authorities, and applying silence-is-consent rules, as well as raising the capacity of administrative and court staff, in accordance with the expected increase in tenders.

Germany envisages to invest EUR 100 billion (2.4% of GDP) in its defence capacities over the coming years. As a reaction to the Russian attack on Ukraine, the German government announced a historic policy shift and decided to modernise its military forces. For this objective a special purpose vehicle was created in such a way as to comply with the national fiscal rules of the so-called debt brake. From an investment perspective, spending by this defence fund will lead to additional public investment in the year when the actual spending takes place. No consumption spending is planned from this fund (like for example in form of salary payments). This increased military spending is also expected to help Germany reach the 2%-of-GDP NATO target for yearly defence spending. Currently, the lifetime of the fund is expected to be five years, while the exact annual spending profile has not yet been determined.

Investments are expected to benefit from the reinforced Climate and Transformation Fund to finance the green transition in the next years. In 2021, the Climate and Transformation Fund benefitted from the transfer of EUR 60 billion unused credits originally meant for pandemic measures, and the government plans to provide it with funds of EUR 177 billion (4.5% of GDP) in 2023-2026. ([20]) Financed from the revenues of the domestic emission trading system, the fund can meaningfully contribute to finance the green transition in the coming years. This spending for environmental measures will primarily benefit private

---

provide relatively higher support for lower-income households, yet they do not fully compensate for the overall price increases. Resulting from higher energy prices and broader price increases, households in the lowest income decile suffered cost increases of around 14%, whereas for the top income decile saw cost increases of around 5%. The electricity and gas price brakes helped to contain cost increases for the bottom decile at 12% whereas keeping cost increases for the highest decile at around 5%. For the other deciles, the effect lies in-between. (Source: JRC analysis based on EUROMOD, the tax-benefit microsimulation model for the EU countries, and its Indirect Tax Tool extension.)

([18]) Strict minimum distance rules can be a major drag on investment, the introduction of particularly strict minimum distance rules in Bavarian decreased the number of construction permits for wind turbines by 90% (Stede and May, 2020). The new Onshore Wind Energy Act tackles this challenge by limiting the ability of Laender to set overly restrictive rules.

([19]) OJ L 335, 29.12.2022, p. 36-44

([20]) See Institut der deutschen Wirtschaft: "Wirtschaftspolitisches Monitoring des Bundeshaushalts", Studie für die bayerische Wirtschaft, November 2022

www.parlament.gv.at

investment as the majority of the spending will happen as investment grants that are booked as capital transfers in national accounts.

Recent initiatives aim to accelerate the rollout of very high-capacity broadband investments. Overall, only 19.3% of households have access to a fibre broadband connection, placing Germany among the Member States with the lowest fibre. This holds back productivity growth, especially by small and medium-sized businesses. In July 2022, a gigabit strategy, which includes goals on 15 million new fibre-to-the-premises (FTTP) connections by the end of 2025 and on making FTTP connections available for all German households by 2030 was adopted, the implementation of which would require considerable efforts. EUR 17 billion (0.5% of GDP) is to be used to subsidise the rollout of fibre internet connections, at a subsidy rate of 50%. A revised funding programme will come into effect in 2023. The 2019 mobile frequencies auctions obliged the winners to also service all of the rail network (previously ICE (high-speed) lines only) as well as interregional roads (*Land- und Bundesstraßen*, previously only highways) which will trigger them to invest more and increase coverage.

Investment efforts are planned to be stepped up to support public transport including rail. The federal government committed to increase subsidies to regional public transport by EUR 17.3 billion (0.5% of GDP) spread over the years 2022-2031, and after the high take-up of monthly EUR 9 tickets for local and regional transport across Germany over the summer of 2022, the rollout of *Deutschland ticket*, with the same coverage of the EUR 9 ticket and at a cost of monthly EUR 49 started in May 2023, incentivising increased use of public transportation, which will necessitate further investment into public transport infrastructure. In April 2023, it was decided to increase investments in rail by EUR 45 billion until 2027, adding to earlier commitments of EUR 63 billion.

Timely and full implementation of the German Recovery and Resilience Plan is expected to help enhance overall investment levels. The Recovery and Resilience Plan includes important measures to help reducing barriers to investment and promote public and private investment. Yet, the implementation shows significant delays, due to limited internal resources attached to the plan implementation and insufficient prioritisation. The plan is expected to be revised in 2023, to cover among others additional reforms and investments in the REPowerEU chapter, with the overall aim to increase the value of the plan from EUR 26.4 billion to over EUR 30.3 billion, making full use of the grants available.

Government measures contributed to higher wage growth. The minimum wage was increased to EUR 12 per hour in October 2022, representing an increase of 25% compared to its nominal value a year before, bringing the minimum wage up from 48% to 60% of the median wage. The government introduced an inflation bonus that allows employers to pay a one-time bonus of up to EUR 3.000 that is exempt from personal income tax and social contributions.

Changes in macroprudential policy partially mitigate the risk of house price overvaluation while there is room for further measures such as borrower-based ones. Increases in the countercyclical capital buffer of 0.75% by Q1 of 2023 and sectoral systemic risk buffers reflected the recommendation of the European Systemic Risk Board of 2022, acting against the build-up of vulnerability in the residential real estate sector. There is need for further measures, namely activating borrower-based measures such as a loan-to-value (LTV) limit.

www.parlament.gv.at

Conclusion

Germany has shown a gradual reduction in its vulnerabilities relating to a large current account surplus but going forward the surplus is expected to bounce back towards 6% of GDP, staying lower than in pre-pandemic years. For a decade, Germany has recorded large current account surpluses, reflecting subdued domestic investment relative to savings, affecting potential economic growth over time. Since its peak in 2015, the current account surplus tilted downwards with a continued reduction in the balance of trade in goods and services, nonetheless largely counterbalanced by the increase in the primary income balance. At the same time, the domestic investment ratio increased and unit labour costs have been rising faster than the euro area average. In 2022, mainly as a result of temporary events, the current account surplus fell abruptly to 4.2% of GDP, reflecting a drop in the balance of trade driven by soaring energy prices, along with a narrowing of the non-energy trade surplus and a growing deficit in the services balance. From 2023, the current account surplus is expected to bounce back towards 6% of GDP as the prices of energy imports continue to ease while Germany's high net international investment position, at some 71% of its GDP in 2022, is expected to be a lasting source of primary income. The current account balance is expected to remain below pre-pandemic levels as energy prices are forecast to remain above earlier levels. In addition, wage growth is accelerating reflecting continued labour shortages and unit labour cost growth continues to exceed the euro area average. At the same time, it is expected that the trend towards higher investment will resume and the government will run deficits. While in recent years house prices have become increasingly overvalued, since the second half of 2022 house prices started to ease, reflecting increasing interest rates and the reduced purchasing power of buyers. Yet overvaluation persists and housing supply is receding further from levels that were below demand.

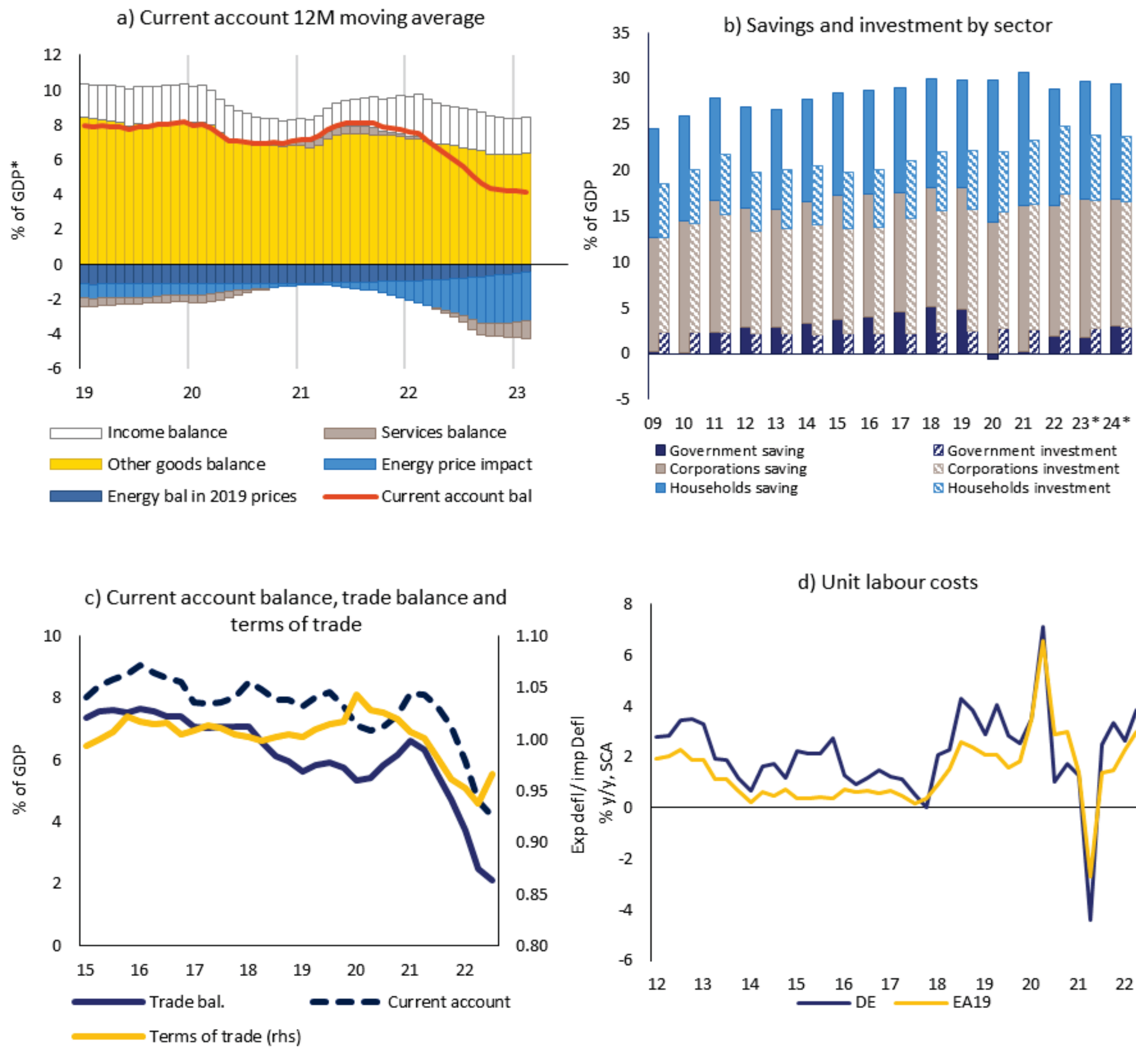
Timely and effective implementation of planned investment and related reforms would support both demand and the adjustment in the current account. To support investment in the green transition and defence, dedicated funds have been set up or capitalised further, and successive reform packages accelerated planning and permitting rules. Germany's Recovery and Resilience Plan includes important measures to help reducing barriers to investment and promote public and private investment. Timely and effective implementation of the investment initiatives and reforms, making full use of the allocated resources, can improve potential growth in Germany while also contributing to a more balanced external position. A range of government transfers have been mitigating the effects of high inflation on household disposable income, and in addition to a strong minimum wage rise, wage increases benefitted from favourable tax treatment. Stricter macroprudential measures helped curb vulnerabilities related to housing prices, and now a cooling housing market is undergoing a contained price correction. Moderate government deficits are projected to persist in the coming years also due to extra-budgetary funds supporting public investment. Further efforts to target government transfers for those in need could contribute to better use of fiscal resources and also enhance the supportiveness of transfers to consumption against savings. Further efforts to improve the availability of skilled staff would tackle a key investment barrier. Policy action could help counter the decline in construction supply, including by streamlining housing-related regulations across Länder and digitalising procedures, as well as promoting social housing.

Based on the findings in this in-depth review, the Communication "European Semester – 2023 Spring Package" sets out the Commission's assessment as to the

www.parlament.gv.at

existence of imbalances or excessive imbalances in Germany, in line with Regulation 1176/2011. ([21])

Graph 2.7: **Selected graphs, Germany**



Source: Eurostat and European Commission services

([21]) European Commission (2023), European Semester Spring Package 2022, COM(2023) 600 final.

www.parlament.gv.at

Box 1: Inflation exposures and cross-border pass-through

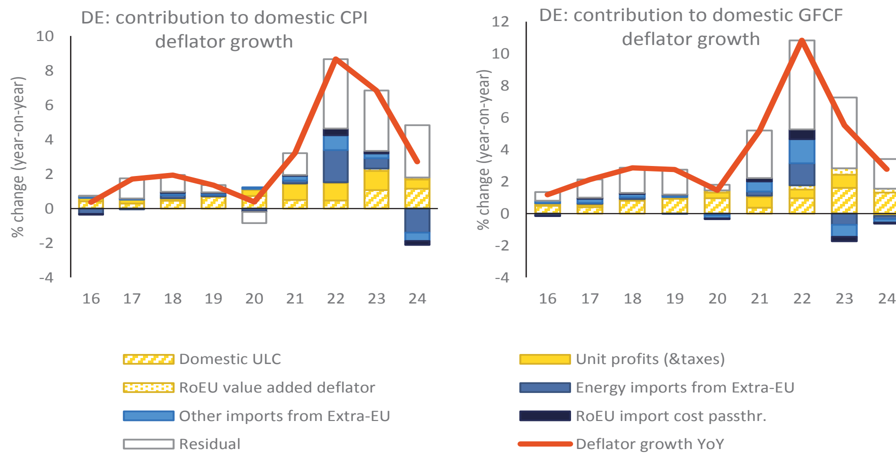
This box sheds light on the sources of inflation in Germany and its spill-overs with EU partners. The period since 2021 has been characterized by pandemic aftershocks and global supply chain disruptions compounding global inflationary pressures and a surge in commodity prices triggered by Russia's war of aggression against Ukraine. As a result, inflation in Germany surged. Wage and profit growth also picked up across the EU. With input-output data, domestic inflation can be decomposed into the contribution from key cost factors. Taking into account some data limitations, the framework can be used to attribute consumer and investment price changes to i) extra-EU import price changes, which include both directly imported inflation and inflation passed through from EU partners import costs ii) domestic unit labour cost changes iii) domestic unit profit changes, including indirect taxation changes and iv) rest-of-EU value added price changes. ([22])

Data suggests that much of inflation in Germany reflected surging energy prices in 2022, while the importance of domestic factors is projected to increase. In 2022, energy imports were key drivers of consumption inflation (Graph 2.8). Energy and extra-EU non-energy imports contributed substantially to the acceleration in investment inflation. Spill-overs from other EU countries remained contained, however. Namely, import cost pass-through from EU partners increased domestic consumption and investment inflation somewhat, whereas value added inflation in other EU countries had only a negligible impact. The contribution from domestic factors, wages and profits, was only slightly larger compared to previous years. The importance of domestic wages and profits is expected to increase, particularly in 2023. By contrast, the impact of energy inflation is set to subside over the forecast horizon. Similarly, the impulse from non-energy import prices is expected to fade and spill-overs from inflation in other EU countries to remain marginal.

([22]) The graphs are based on national accounts data and the Commission's Spring 2023 forecast, which are combined through a 'Ghosh' matrix based on Eurostat's Figaro input-output available for 2015-2020. HICP is taken as the measure of the price of private consumption, including non-residents. Energy import prices from extra-EU reflect realised median prices until 2022, and energy price assumptions underlying the Spring forecast thereafter. Other goods prices reflect median Eureopan prices per industry until 2022, and forecast non-energy goods and service trade prices for 2023-2024. Value added deflators are assumed to affect all industries within a country to the same degree. For a similar analysis using an input-output-based methodology, see "Inflation Differentials in Europe and Implications for Competitiveness: Thematic Note to Support In-Depth Reviews" European Commission 2023, Institutional paper 198.

www.parlament.gv.at

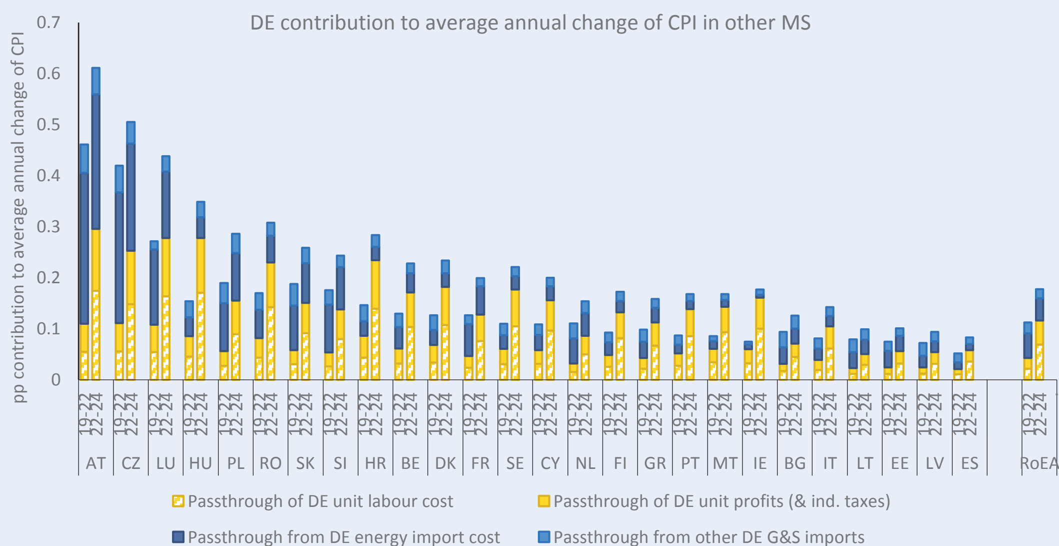
Graph 2.8: **Components of gross fixed capital formation deflator growth and consumer price inflation**



Source: European Commission services

Being the largest EU economy, Germany affects inflation in other Members States, though the contribution to total inflation is rather small. Although Germany has a non-negligible impact on domestic demand in other Member States, spill-overs from value-added inflation in Germany are set to remain contained, as the growth of value added deflator is projected to slow markedly in 2024 (see Graph 2.3). Overall, value added inflation in Germany has contributed little to consumer inflation in the rest of the EU so far. Most exposed countries are Austria, Czechia, Luxembourg and Hungary with value added inflation spill-overs at around 0.3 pps. p.a. over the forecast horizon.

Graph 2.9: **Impact of German value added inflation on EU partners' consumer price inflation**



Source: European Commission services

Table 2.1: **Selected economic and financial indicators (Part 1), Germany**

all variables y-o-y % change, unless otherwise stated	2003-07	2008-12	2013-18	2019	2020	2021	2022	forecast 2023	forecast 2024
Real GDP	1.6	0.7	1.7	1.1	-3.7	2.6	1.8	0.2	1.4
Potential growth (1)	1.3	1.0	1.5	1.1	0.8	0.8	0.5	0.6	1.1
Contribution to GDP growth:									
Domestic demand	0.8	1.0	1.6	1.8	-2.6	1.3	2.5	-0.2	1.7
Inventories	0.0	-0.4	0.2	-0.1	-0.2	0.5	0.4	-0.1	-0.3
Net exports	0.7	0.1	-0.1	-0.6	-0.8	0.8	-1.1	0.5	0.0
Contribution to potential GDP growth (1):									
Total Labour (hours)	0.2	0.2	0.5	0.1	0.0	0.0	-0.2	-0.1	0.2
Capital accumulation	0.3	0.2	0.3	0.4	0.3	0.3	0.2	0.2	0.2
Total factor productivity	0.8	0.6	0.7	0.7	0.6	0.5	0.5	0.5	0.6
Output gap (2)	-0.5	-0.7	0.3	1.3	-3.2	-1.5	-0.2	-0.6	-0.3
Unemployment rate	9.5	6.3	4.1	3.0	3.7	3.7	3.1	3.2	3.1
Harmonised index of consumer prices (HICP)	1.8	1.7	1.2	1.4	0.4	3.2	8.7	6.8	2.7
GDP deflator	1.0	1.2	2.3	2.1	1.8	3.1	5.5	6.1	2.4
External position									
Current account balance (% of GDP), balance of payments	4.6	6.1	7.8	8.2	7.1	7.7	4.2	5.9	5.7
Trade balance (% of GDP), balance of payments	5.3	5.5	6.8	5.9	5.8	5.5	2.1	.	.
Primary income balance (% of GDP)	0.7	2.0	2.5	3.7	2.8	3.8	3.9	.	.
Secondary income balance (% of GDP)	-1.4	-1.4	-1.4	-1.5	-1.6	-1.6	-1.8	.	.
Current account explained by fundamentals (CA norm, % of GDP) (3)	0.0	0.6	1.3	1.6	1.6	1.5	1.3	1.2	1.0
Required current account to stabilise NIIP above -35% of GDP over 20Y (% of GDP) (4)	0.3	0.7	1.8	2.7	3.2	3.3	3.0	2.8	2.8
Capital account balance (% of GDP)	0.0	0.0	0.0	-0.1	-0.3	0.0	-0.5	.	.
Net international investment position (% of GDP)	11.4	23.0	37.7	58.5	63.8	70.1	71.1	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (5)	7.1	19.1	37.7	51.0	54.7	54.3	49.7	.	.
Net FDI flows (% of GDP)	1.1	1.2	1.3	2.5	-0.1	2.8	3.2	.	.
Competitiveness									
Unit labour costs (ULC, whole economy)	-0.4	2.3	2.9	3.3	3.4	0.6	3.7	5.9	4.1
Nominal compensation per employee	0.9	2.2	2.6	3.4	0.4	3.1	4.2	5.5	5.3
Labour productivity (real, hours worked)	1.2	0.5	0.9	0.8	1.0	0.9	0.4	-0.2	0.8
Real effective exchange rate (ULC)	-2.4	0.3	1.8	1.5	-1.0	0.4	0.2	0.1	0.6
Real effective exchange rate (HICP)	1.2	-1.2	0.9	-1.5	0.8	1.0	-1.6	.	.
Export performance vs. advanced countries (% change over 5 years)	13.1	-1.0	-1.0	-2.0	2.4	-0.8	.	.	.
Private sector debt									
Private sector debt, consolidated (% of GDP)	127.8	119.0	108.7	112.7	121.2	120.4	117.8	.	.
Household debt, consolidated (% of GDP)	66.8	59.0	53.7	53.4	57.0	56.7	55.0	.	.
Household debt, fundamental benchmark (% of GDP) (6)	50.9	53.9	54.1	51.6	55.0	54.0	52.9	.	.
Household debt, prudential threshold (% of GDP) (6)	47.0	43.8	43.8	45.4	45.6	46.1	47.3	.	.
Non-financial corporate debt, consolidated (% of GDP)	61.0	60.0	54.9	59.3	64.1	63.7	62.9	.	.
Corporate debt, fundamental benchmark (% of GDP) (6)	52.5	61.8	70.0	71.5	76.8	76.0	74.7	.	.
Corporate debt, prudential threshold (% of GDP) (6)	65.4	62.8	63.2	65.9	67.5	69.4	71.0	.	.
Private credit flow, consolidated (% of GDP)	0.3	1.2	3.5	6.4	6.4	5.7	6.6e	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	1.2	2.4	1.6	0.4	2.0	3.2	0.6	1.6	0.4
Households, net lending (+) or net borrowing (-) (% of GDP)	5.8	5.4	5.2	5.6	9.0	7.8	5.4	5.9	5.9
Net savings rate of households (% of net disposable income)	10.6	10.3	10.2	10.8	16.4	15.1	11.4	.	.

(e) estimate based on ECB quarterly data
(1) Potential output is the highest level of production that an economy can reach without generating inflationary pressures. The methodology to compute the potential output is based on K. Havik, K. Mc Morrow, F. Orlandi, C. Planas, R. Raciborski, W. Roeger, A. Rossi, A. Thum-Thysen, V. Vandermeulen, The Production Function Methodology for Calculating Potential Growth Rates & Output Gaps, COM, European Economy, Economic Papers 535, November 2014.
(2) Deviation of actual output from potential output as % of potential GDP.
(3) Current accounts in line with fundamentals ("current account norms") are derived from reduced-form regressions capturing the main determinants of the saving-investment balance, including fundamental determinants, policy factors and global financial conditions. See L. Coutinho et al. (2018), "Methodologies for the assessment of current account benchmarks", European Economy, Discussion Paper 86/2018, for details.
(4) This benchmark is defined as the average current account required to halve the gap between the NIIP and the indicative MIP benchmark of -35% of GDP over the next ten years, or to stabilise the NIIP at the current level if it is already above the indicative MIP benchmark. Calculations make use of Commission's T+10 projections.
(5) NENDI is a subset of the NIIP that abstracts from its pure equity-related components, i.e. foreign direct investment (FDI) equity and equity shares, and from intracompany cross-border FDI debt, and represents the NIIP excluding instruments that cannot be subject to default.
(6) Fundamentals-based benchmarks are derived from regressions capturing the main determinants of credit growth and taking into account a given initial stock of debt. Prudential thresholds represent the debt threshold beyond which the probability of a banking crisis is relatively high, minimising the probability of missed crisis and that of false alerts. Methodology to compute the fundamentals-based and the prudential benchmarks based on Bricongne, J. C., Coutinho, L., Turrini, A., Zeugner, S. (2019), "Is Private Debt Excessive?", Open Economies Review, 1- 42.
Source: Eurostat and ECB as of 2023-04-28, where available; European Commission for forecast figures (Spring forecast 2023)

www.parlament.gv.at

Table 2.2: **Selected economic and financial indicator (Part 2), Germany**

all variables y-o-y % change, unless otherwise stated	2003-07	2008-12	2013-18	2019	2020	2021	2022	forecast 2023	forecast 2024
Housing market									
House price index, nominal	-0.5	2.0	5.2	5.8	7.8	11.5	5.3	.	.
House price index, deflated	-1.8	0.7	4.1	4.4	7.1	8.2	-1.5	.	.
Overvaluation gap (%) (7)	-8.3	-11.6	-2.5	7.6	15.0	21.4	17.0	.	.
Price-to-income overvaluation gap (%) (8)	-6.7	-13.3	-5.3	5.7	12.2	21.9	20.0	.	.
Residential investment (% of GDP)	5.2	5.4	6.0	6.4	7.0	7.2	7.6	.	.
Government debt									
General government balance (% of GDP)	-2.4	-1.7	1.0	1.5	-4.3	-3.7	-2.6	-2.3	-1.2
General government gross debt (% of GDP)	65.5	76.2	70.1	59.6	68.7	69.3	66.3	65.2	64.1
Banking sector									
Return on equity (%)	.	-1.6	2.1	1.7	1.9	3.9	.	.	.
Common Equity Tier 1 ratio	.	11.1	15.5	15.6	16.1	15.9	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (9)	.	2.1	1.8	1.1	1.1	1.0	.	.	.
Gross non-performing loans (% of gross loans) (9)	.	.	2.5	1.2	1.2	1.1	1.0	.	.
Cost of borrowing for corporations (%)	4.7	3.5	2.0	1.6	1.6	1.4	3.5	.	.
Cost of borrowing for households for house purchase (%)	4.7	3.8	2.0	1.3	1.2	1.3	3.5	.	.

(7) Unweighted average of price-to-income, price-to-rent and model valuation gaps. The model valuation gap is estimated in a cointegration framework using a system of five fundamental variables; total population, real housing stock, real disposable income per capita, real long-term interest rate and price deflator of final consumption expenditure, based on Philiponnet, N., Turrini, A. (2017), "Assessing House Price Developments in the EU," European Economy - Discussion Papers 2015 - 048, Directorate General Economic and Financial Affairs (DG ECFIN), European Commission. Price-to-income and price-to-rent gaps are measured as the deviation to the long term average (from 1995 to the latest available year).
(8) Price-to-income overvaluation gap measured as the deviation to the long term average (from 1995 to the latest available year).
(9) Domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.
Source: Eurostat and ECB as of 2023-04-28, where available; European Commission for forecast figures (Spring forecast 2023)