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European Commission
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This in-depth review presents the main findings of the Commission's staff assessment of macroeconomic vulnerabilities for Germany for the purposes of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances. It provides technical input to the Commission for the Communication '"European Semester – 2024 Spring Package" that will set out the Commission's assessment as to the existence of imbalances or excessive imbalances in Germany. That Communication will be published in June 2024. The current version has been presented and discussed with the Member States in the Economic Policy Committee of the Council.

This publication reproduces staff working document SWD(2024) 101 final, that was discussed with Member States in the Economic Policy Committee of the Council on 18 April 2024.

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1. INTRODUCTION

This in-depth review (IDR) analyses the evolution of Germany's vulnerabilities related to the persistent current account surplus, which is linked to an imbalance between savings and investments and carries cross-border relevance, and possibly newly emerging risks. This year's IDR, which follows the 2024 Alert Mechanism Report (AMR) published in November 2023, assesses the persistence or unwinding of the vulnerabilities identified last year, potential emerging risks, and relevant policy progress and policy options that could be considered for the future ([1]). Given the size of the German economy and its interlinkages with the other Member States, these vulnerabilities have a cross-border relevance.

The German economy has been facing continuing weak growth in view of muted domestic demand, which is expected to recover only gradually ([2])**.** Real GDP declined by 0.3% in 2023. Private consumption fell by 0.7% as inflation reduced the real incomes of households. Investment declined by 0.7% in view of faltering construction investment. Export volumes fell in a context of weak global trade, but imports declined even more as domestic demand remained sluggish. This resulted in an increase in the trade surplus, and the current account surplus rose from 4.2% of GDP in 2022 to 5.9% of GDP in 2023. After having exceeded the euro area average in 2023, inflation fell to a level broadly in line with that of the euro area, declining to 2.7% year-on-year by February 2024. Inflation is expected to ease further in the future, in line with the euro area as a whole. GDP growth is forecast to be the lowest in the euro area, at 0.3% in 2024 and 1.2% in 2025. Despite low unemployment and real wage increases, private consumption is expected to remain sluggish. Continued weak construction investment is expected to weigh on overall investment growth. Furthermore, public investment prospects have become more uncertain as a result of the recent tightening of fiscal policy. On the positive side, market financing conditions have eased somewhat, and further easing is expected through the bank lending channel. The main risk factors for the economic outlook include a further weakening of domestic demand amid fiscal consolidation and persistent investment bottlenecks, as well as trade disruptions amid increasing geopolitical tensions.

High integration with other major EU and non-EU partners, makes Germany prone to spillovers resulting from economic developments in these economies ([3]). The German economy relies on production from China, US, UK, the Netherlands and Poland in particular. On external demand in value added terms, Germany's main counterparts are the US, France, China, the

([1]) European Commission (2023), Alert Mechanism Report 2024, COM (2023) 902 final; and European Commission (2023), Alert Mechanism Report 2024, SWD(2023) 901 final.

([2]) Figures for GDP growth and inflation originate from the Commission Winter 2024 interim Forecast (European Economy, Institutional Paper 268). All other forecast data used in the IDR come from the Commission Autumn 2023 Forecast (European Economy, Institutional Paper 258), unless stated otherwise, and all calculations are done using these data to ensure the coherence of their various components. Actual outturn data that became available after the Autumn and Winter interim Forecasts and before the cut-off date for the IDR, are used and supersede figures from those forecasts. The cut-off date for the data used to prepare this in-depth review is 27 March 2024. This is later than that of peer Member States due to the significant revision of balance-of-payments data reported by the Bundesbank on 14 March that had been reflected in published Eurostat statistics by 27 March.

([3]) In the context of the multiple disrupting shocks that have affected the world economy and the EU in the past few years, Commission Services have run an exercise to estimate the spillovers and the degrees of exposures of Member States' economies to various partners and industries, in terms of nominal trade, value-added trade, inflation and financial assets. See European Commission Institutional Paper 2024 - Economic spillovers and exposures in the EU.

UK and Italy ([4]). Locational banking statistics show that large shares of claims of German financial institutions are located in the UK, and sizeable ones in France and the US.

2. ASSESSMENT OF MACROECONOMIC VULNERABILITIES

For the past 15 years, Germany has been marked by a persistently high current account surplus. The surplus exceeded 6% of GDP between 2011 and 2021, but dropped to 4.2% in 2022 before widening again to 5.9% of GDP in 2023. The three-year average for 2021-2023 stands at 5.8%, which is below the indicative MIP scoreboard threshold for the first time in a decade. Exports continue to be a key strength, reflecting Germany's competitiveness, while domestic demand is relatively constrained. The resulting persistently high current account surplus therefore reflects a shortfall in investment and consumption relative to income. Despite recording an increase since 2015, the overall investment level has remained low, which weighs on the country's potential to adapt to ongoing structural changes such as the green and digital transition. This year's IDR also focused on property prices which have been falling from high levels since 2022, with the correction in the commercial real estate market possibly exerting pressure on certain financial sector entities.

Assessment of the gravity, evolution and prospects of macroeconomic vulnerabilities

German GDP growth remains anaemic, reflecting weak domestic and external demand. In 2023, real GDP in Germany was only 0.7% above 2019 levels, and considerably below the rest of the euro area (+4%) and the US (+10%). The slow growth reflects a combination of weak external and domestic demand. Household consumption remained below its pre-pandemic level and gross fixed capital formation kept stagnating below 2019 values. Domestic demand was underpinned by an expansion of government consumption in 2020-2022 and an increased inventory stock during 2021-2023 but is unlikely to proceed at a similar pace in the future.

External balances

The current account surplus reflects a trade balance surplus, also as a sign of a domestic demand gap relative to output. The current account surplus of 5.9% in 2023 remains below its peak of 8.6% of GDP in 2016 and its pre-pandemic level of 8.2% of GDP in 2019 (see also Graph 2.2, right panel). Compared to 2019, the government sector contributes more to internal demand (by about 3 pps of GDP), yet investment and consumption remain relatively weak. The demand contribution of the household sector slightly declined as household savings remained high. Corporate investment also decreased (see also Graph 2.7, panel a). Economic fundamentals of the German economy, such as high income per capita and high manufacturing intensity, would suggest a current account surplus of 1.4% of GDP in 2022, considerably lower than the headline figure ([5]).

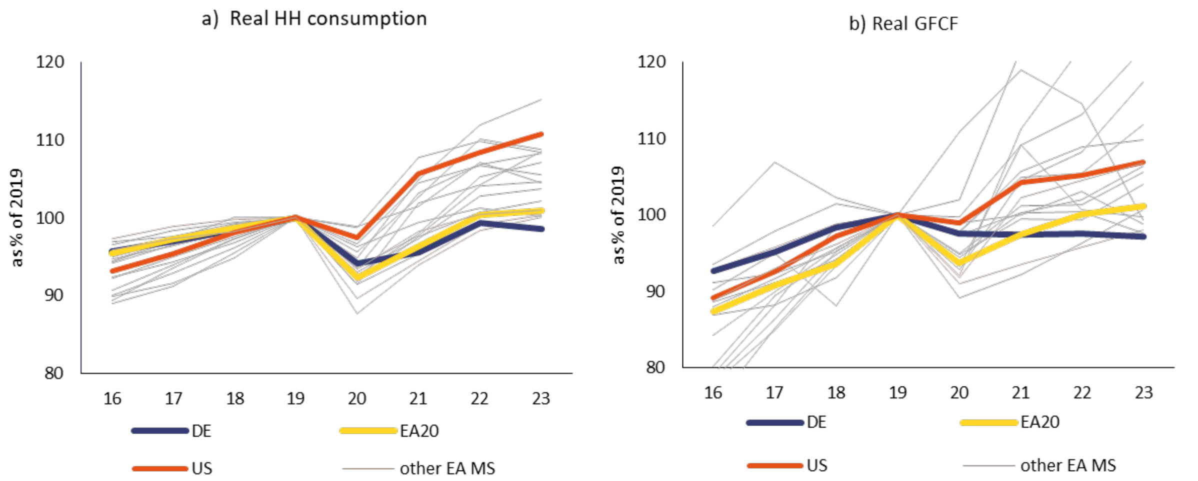
([4]) See also Box 1 on trade.

([5]) For a methodology, see Coutinho, L., Turrini, A., and Zeugner, S. (2018): Methodologies for the Assessment of Current Account Benchmarks, European Economy Discussion Paper 86. The methodology is comparable to the one used in the IMF External Sector Report, which suggests a current account 'norm' for Germany at 2.5% of GDP based on model results factoring in staff assessment.

The return of energy prices to normal levels and the contraction of domestic demand contributed to the rebound of the current account surplus in 2023. The widening current account balance mainly reflects the trade balance rebounding from 2.3% of GDP in 2022 to 4.0% in 2023, due to terms of trade as well as real dynamics. The reversal of the 2021/2022 terms-of-trade shock, notably the easing of the price of imported energy, contributed to the trade balance increase, along with a reduction in the volume of imported energy ([6]). Amid stagnant GDP, there was also a contribution from declining domestic demand: during 2023, private consumption fell by 0.7% and investment contracted by 0.7% ([7]). In trade terms, this is reflected by the value of German exports declining by 2.6% (see also Box 1), while the value of imports fell even more (9.7%) ([8]).

Stagnating domestic demand is a key factor behind the anaemic GDP. Real GDP barely exceeded 2019 levels in 2023, considerably below the rest of the euro area (+4%) or the US (+10%). Domestic demand remained weak, growing slower compared to 2019 than in any other euro area country (see Graph 2.1). Germany's overall contribution to euro area domestic demand and GDP growth during 2020-2023 was therefore considerably below that of its peers.

Graph 2.1: **Real household consumption and real gross fixed capital formation**



Source: Eurostat and European Commission services.

The tradeable sector has been contracting with sluggish exports, despite relatively stable price competitiveness. In 2022, Germany's price competitiveness developed at a similar pace as the euro area average ([9]). The real effective exchange rate (with HICP as a deflator) has

([7]) The comparatively bigger drop in exports resulted in a higher surplus of goods trade, which increased from 3.1% of GDP in 2022 to 5.7% of GDP in 2023. At the same time, the trade deficit in services increased from 0.8% of GDP in 2022 to 1.4% in 2023 as outward tourism continued to fully recover from the pandemic. The primary income surplus was stable at around 4% of GDP, reflecting Germany's high net international investment position (NIIP). Germany's NIIP, at 69% of its GDP in Q3 2023, is expected to be a lasting source of primary income also in the future. The secondary income balance (current transfers) improved slightly to -1.5% of GDP, from -1.8% of GDP in 2022, driven by reduced government transfers abroad.

([8]) Import prices fell by 3.5% in 2023 (coming down from record highs) while export prices increased by 0.6%, also reflecting exporters' ability to pass through increased input costs. Imports of mineral fuels declined by 40% since Russia's war of aggression against Ukraine started in February 2022, reflecting savings in energy use, also seen in a 20% drop in the output of energy-intensive industries.

([9]) [Is price competitiveness favourable in Germany and the euro area? (bundesbank.de).](#)

remained relatively stable since 2019; it appreciated by 1.3% in 2020, and by 0.8% in 2021, then depreciated by 2.9% in 2022 before appreciating again by 1.8% in 2023 (see also Graph 2.7, panel c) and d)). The relative cost effect of high energy prices on price competitiveness was small, and increased import prices could be largely passed on to higher export prices. A mild decrease in price competitiveness may follow as unit labour costs are expected to increase slightly more than the euro area average ([10]).

Tradeable sectors are facing a continued contraction. Manufacturing value added peaked at the end of 2017 and has declined by 4.2% in real terms since then, whereas it increased by 3% in the euro area as a whole. Employment in manufacturing has retreated by 300 000 jobs (-4%) compared to the pre-crisis peak. Automobile production, responsible for one sixth of industry gross value added, has been facing disruptions and increasing international competition: it shrunk from 4.7 million units in 2019 to 4.1 million in 2023, with a commensurate decline in exports ([11]). Export-oriented manufacturing seems to be challenged by a confluence of factors including higher energy costs, labour scarcity, transformational shifts in technology, and global markets and geoeconomic tensions ([12]).

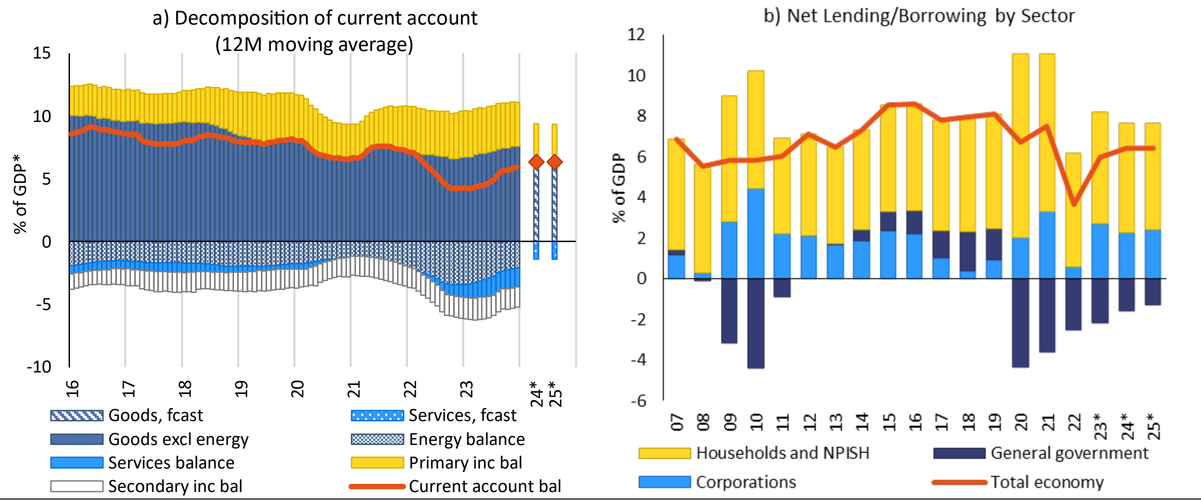
The non-tradeable sector has been expanding. To respond to the need for more public services, employment has been expanding in healthcare, public administration and education, with an increase of 1.1 million jobs since the end of 2017 and of 0.7 million jobs since the end of 2019. While the real value added of manufacturing has shrunk, real value added in these sectors has expanded by 5.2% since the end of 2017, growing at a similar pace as in the euro area as a whole (+5.5%) (see also Graph 2.7, panel b). Considering further demographic ageing and an increasing demand for local services, the importance of the non-tradeable sector will likely expand further.

([10]) According to the European Commission's Autumn Forecast, in 2023, unit labour costs are expected to have increased in Germany by 6.5% and in the euro area as a whole by 6%. For 2024, unit labour costs are forecast to increase by 4.7% in Germany and by 3.8% in the euro area as a whole, while for 2025 the forecast is 2.4% in Germany and 2.3% in the euro area as a whole.

([11]) Produktion und Markt im Dezember 2023 | VDA.

([12]) An increasing number of studies are exploring economic challenges to Germany, including Germany as a business location: selected aspects of current dependencies and medium-term challenges (bundesbank.de) and Sachverständigenrat für Wirtschaft: Jahresgutachten 2023/24 (sachverstaendigenrat-wirtschaft.de).

Graph 2.2: **Decompositions of the external surplus/ net lending/ borrowing**



Note: (a) GDP* denotes weighted average of year t and t-1 GDP.
Source: Eurostat, European Commission services.

Consumption and investment

Households have suffered considerable real wage losses since 2019, but wages started to recover in 2023. Nominal wage growth has been lagging behind inflation. This also reflects that negotiated wage agreements tend to cover a duration of about 2 years, and that agreements preceding the inflation surge were based on lower inflation expectations. As of 2023, negotiated wages were 8% below their real value in 2019 and and wages in general were close to 7% below their real value in 2019, despite government interventions such as the 25% minimum wage increase in 2022 and the inflation bonus (see Chapter 3). Real wage growth turned positive as from Q2-2023, with a further pick-up expected in 2024 as more wage negotiations incorporate the recent inflation peak ([13]).

Households' real disposable income has been declining since 2019 and real consumption remains below 2019 levels. Households' disposable income has been more resilient than wages, in part reflecting government transfers and tax cuts, but it has also lost value compared to 2019. In 2023, real disposable income stagnated and real household consumption fell by 0.8%. Consequently, the savings rate of households remained high at 11.3% of disposable income, up 0.2 pps from 2022. The increase in savings reflects weak consumer sentiment and preoccupations about the general economic situation and prospects as shown, for example, in GfK consumer climate surveys ([14]). Overall, in 2023, real private consumption remained 1.6% below its level in

([13]) In 2024, collective agreements covering close to 9 million employees are set to expire. This concerns about one fifth of all employees and half of employees covered by collective agreements. Major negotiating rounds are being held for the construction sector with 730 000 employees, temporary work agencies with 700 000 employees (current agreement expiring in March), the chemical industry with 590 000 employees (current agreement expiring in June), metal and electrical engineering with 3 630 000 employees (agreement expiring in September) and the government sector with 2 440 000 employees (agreement expiring in December).

([14]) https://www.gfk.com/de/presse/konsumklima-herber-rueckschlag-zum-jahresbeginn Consumer Climate: Stabilization at low level (gfk.com).

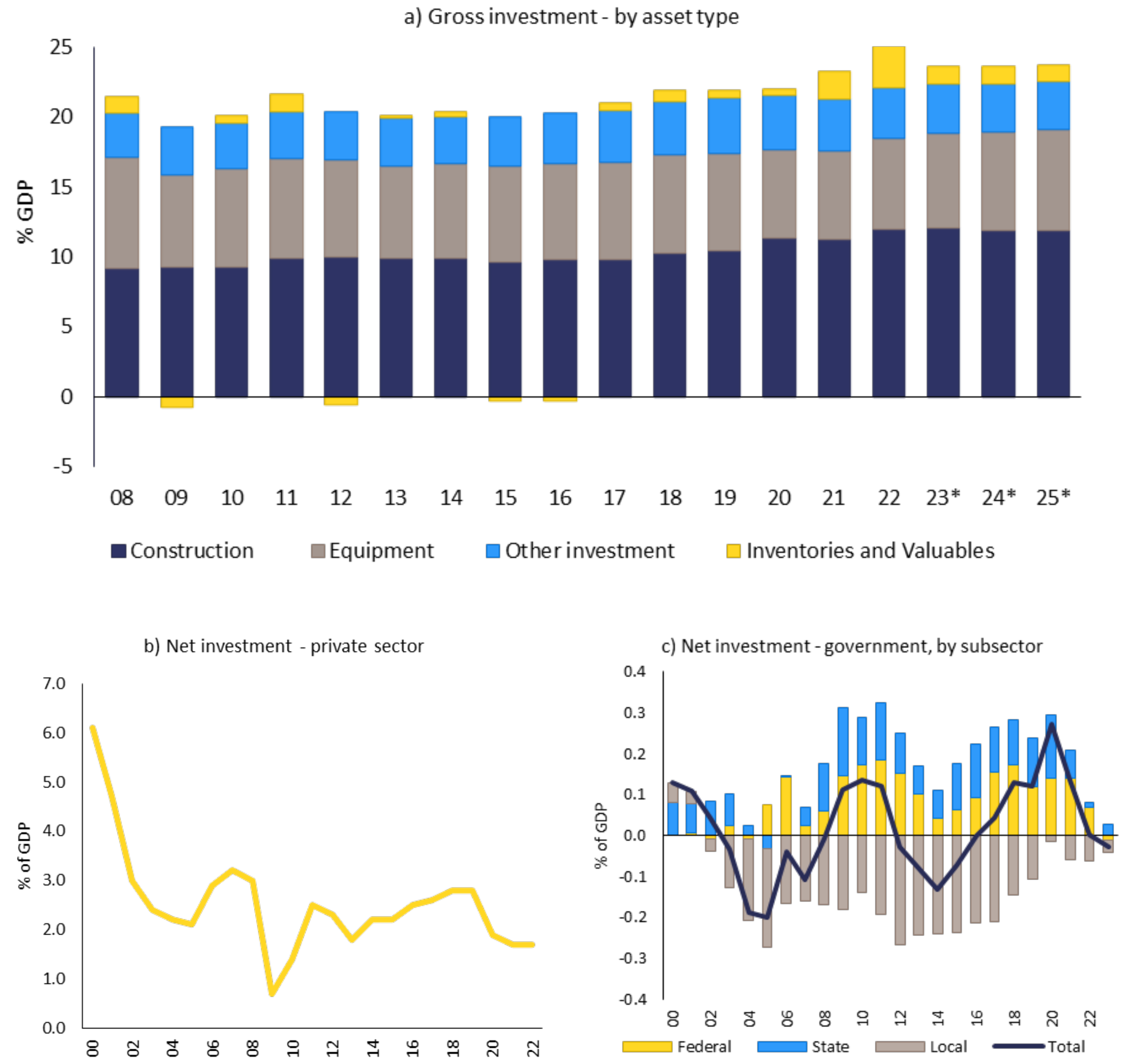
2019 and the savings rate exceeded the pre-pandemic average (2017-2019) by 0.4 pps ([15]). Despite the high level of savings, household investment remained sluggish. This is reflected in a continued drop in construction investment which fell back to 2017 levels in real terms.

Real total investment remains below pre-crisis levels, primarily due to private investment which accounts for about nine tenths of total investment. Real private investment fell from its all-time high in 2019 and has since stayed low. In 2023, a gap of 3.3% persisted compared to 2019 levels (in real terms). This is a partial reversal of the dynamic private investment growth seen since 2013 ([16]). At the same time, gross profit margins held up even as prices for energy and intermediate goods soared in 2022. This suggests that, overall, companies were in a position to pass on increased costs to customers. Stable profits and sluggish investment led to a higher corporate savings rate which exceeded pre-crisis levels. This in turn is reflected in a strong increase in corporate net savings, through which the corporate sector made the biggest contribution to the increase in total net lending (and thus the current account surplus) in 2023 (see Graph 2.2, right panel). Real wages are expected to continue to grow, though the economic rebound is set to be sluggish. Corporate profit shares are therefore projected to remain below their long-term average and, as a result, somewhat narrow corporate net lending is expected in future.

([15]) Savings from the pandemic period have so far been largely persistent, as also shown in [European Economic Forecast. Winter 2024 (europa.eu).]

([16]) Although private investment increased after 2013, private investment net of depreciation as a percentage of GDP remained very low (see Graph 2.3 panel b), as a result of which the capital stock has barely expanded (See also European Commission (2023), In-depth review on Germany, SWD(2023) 629 final).

Graph 2.3: **Gross investment by type of investment, net private sector investment and net public investment broken down by federal administrative levels**



Source : Eurostat, DESTATIS, European Commission services.

In the short term, private investment is not expected to fully recover. In 2023, private investment kept stalling at 2017 levels. For construction, which accounts for about half of overall investment (see Graph 2.3 panel a), early indicators, such as awarded building permits suggest that a quick recovery is unlikely. Investment in equipment developed more positively in 2023. However, this is partly driven by an anticipatory effect due to the phase-out of a subsidy scheme for electric vehicles. Nonetheless, a gradual easing of financing conditions is expected to contribute to the recovery in investment in general ([17]). Despite decreasing new orders, order books for both manufacturing and construction remain above pre-crisis levels. German firms consider themselves affected by obstacles to investment at rates above the EU average, in particular concerning the

([17]) European Commission, European Economic Forecast Winter 2024, institutional paper 268, page 9.

availability of skilled staff, electricity costs and business regulations ([18]). The recovery in investment may be slow as weak export dynamics dampen investment efforts in export-oriented sectors. Lower government support for private investment may reduce investment incentives further.

Public investment has been increasing as a share of GDP, yet has been insufficient to meet public investment needs, in particular at municipal level. The public investment ratio increased steadily from 2.1% of GDP in 2014 to 2.7% of GDP in 2022 and 2023 ([19]). However, this is below both the euro area average (3.0% of GDP in 2022) and the EU average (3.2%). In 2023, real gross public capital formation stood at 2.1% above pre-pandemic levels. A combination of factors weighs not only on private investment, but also on and public investment management in Germany, most notably cumbersome administrative planning and permitting procedures, a lack of planning capacities and labour shortages. As a result, overall net public investment has been close to zero over the past two decades. Non-financial factors dampening investment seem to impact the Länder and localities in particular, as funding allocated at federal level seems to have been underutilised in recent years. This is mainly due to a lack of experienced staff ([20]) and administrative complexity ([21]). Negative net investment at local level seems to be the main reason for the weak overall public investment performance (see Graph 2.3 panel c), which mostly affects local infrastructure. Survey data suggests that only 44% of municipalities in 2022 were able to secure investment ([22]). However, the continuous budget surpluses Germany achieved between 2014 and 2019 show that available financial resources were not necessarily the limiting factor.

Public investment can improve private investment. Public or publicly induced investment in education, skills, electricity generation and transmission and digital and transport networks can improve the conditions for private investment, leading to potential crowding-in. Investment needs for the digital and green transition, particularly for the necessary grids and clean energy production, are estimated to reach the hundred-billions ([23]). Survey data also suggest that the declining quality of public infrastructure and the insufficient modernisation of public services are hindering business activities ([24]).

The planned fiscal consolidation is expected to weigh on domestic demand. Since its creation in 2010, the debt brake has not been applied in full. Transitory rules were in place for the federal government until 2016 and at Länder level until 2020. Between 2014 and 2019, Germany benefited from a period of sustained economic growth and ran budgetary surpluses. As a consequence, available funding was not the limiting factor for federal government investment or

([18]) European Investment Bank Investment Survey 2023.

([19]) Notably, the nominal public investment ratio in 2020 stood at 2.7%, decreasing slightly to 2.6% in 2021-2023 and is set to increase again to 2.7% in 2024 and 2025. At the same time, considering that deflators for public investment were high, the volume of public investment declined somewhat from 2020 to 2021 and 2022, before increasing again in 2023. The real public investment ratio peaked at 2.6% in 2020, decreased to 2.4% in 2021 and decreased further to 2.3% in 2022 and 2023.

([20]) Rösel, F., Wolffson, J (2022): Chronischer Investitionsmangel – eine deutsche Krankheit.

([21]) Kommunale Entwicklungspolitik in Deutschland (idos-research.de).

([22]) KfW-Kommunalpanel 2023.

([23]) Bardt, Dullien, Hüther, Rietzler (2019): Für eine solide Finanzpolitik: Investitionen ermöglichen!, IW-Policy Paper 10/19
Wulf-Holger, Schneider (2023): Investitionsbedarfe für ein nachhaltiges Verkehrssystem, Deutsches Institut für Urbanistik.
Krebs, Seitz (2021): Öffentliche Finanzbedarfe für Klimainvestitionen im Zeitraum 2021-2030, Forum New Economy.

([24]) Puls, Thomas / Schmitz, Edgar (2022): Wie stark beeinflussen Infrastrukturprobleme die Unternehmen in Deutschland?, IW-Trends, Institut der deutschen Wirtschaft.

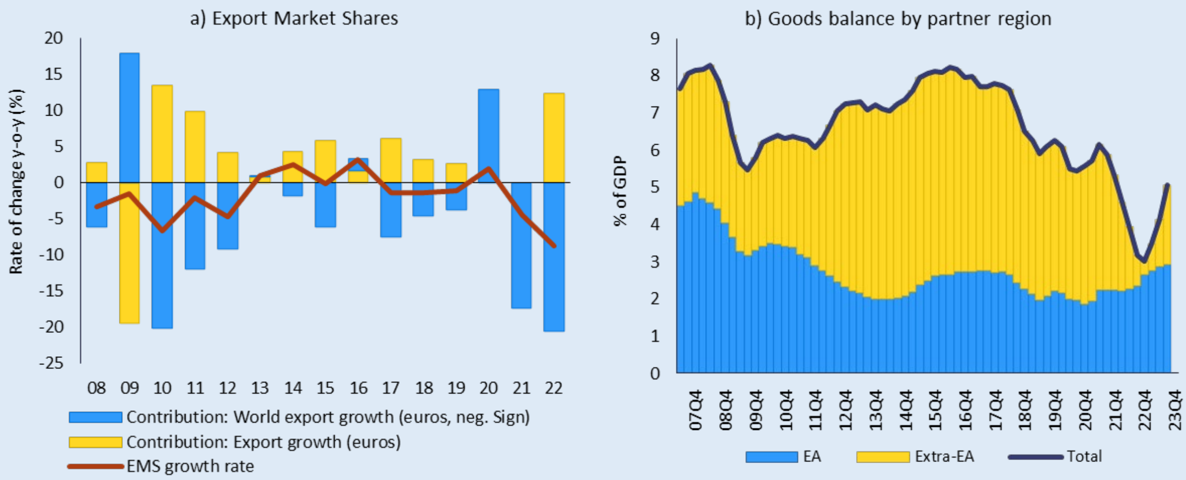
spending in general before the COVID-19 crisis. From 2020 to 2023, the pandemic and the energy crisis led to a temporary suspension of the fiscal rules. As such, 2024 will mark the first year of the full applicability of the debt brake in a significantly new economic context. The full application of these rules is expected to constrain government spending with potential implications for public investment. Moreover, the ruling by the Constitutional Court in November 2023 annulled the use of pandemic-related credits to finance the green transition. Therefore, the EUR 60 billion (1.5% of GDP) that was planned to be used for additional spending on green investment projects in 2024-2027 are no longer available. There are ongoing discussions about the fallout for public finances in Germany.

Box 1: A look at Germany's trade

Trade represented 110% of Germany's GDP in 2023 and the country was the third largest importer and third largest exporter in the world. Germany is one of the world's top three largest exporters of automobiles, with automobiles accounting for 17.2% of German exports in 2023. Machinery (14.3%) and chemical products (9.0%) are ranked second and third, respectively. The main imported goods were gas (4.6%), vehicles and vehicle parts (4.4%), and petroleum/oil (4%) in 2022.

The trade surplus with other EU partners has been rather stable at around 2-3% of GDP in the past decade, with the surplus with non-EU trade partners being more volatile (chart below). With a foreign trade volume of over EUR 253 billion, China was Germany's most significant trading partner in 2023 for the eighth year in a row. However, the volume of foreign trade with China was only EUR 0.7 billion higher than the foreign trade volume with the US, down from a difference of over EUR 50 billion in 2022. In 2023, German trade in goods with China declined significantly, by 15.5% compared to 2022. In parallel, trade with the US grew by 1.1%. As in previous years, the Netherlands was Germany's third most significant trading partner, with exports and imports having a combined value of EUR 215 billion (down by 5.5% year-on-year).

Graph 2.4 : **Trade indicators**



Source : Eurostat, Commission services calculations.

Housing market

House prices grew strongly during a decade-long boom, reducing housing affordability and leading to calls for authorities to act also on macroprudential concerns. Between 2012 and 2022, nominal house prices increased by 80%. Land prices increased even more, by over 120%. In this period, housing affordability declined considerably. The price-to-income ratio has increased by 40% and the house price-to-rents ratio by 58%. This resulted in an estimated overvaluation of about 20% at the end of 2022 ([25]) (Graph 2.5). The housing price overvaluation, high house price growth and loosening lending standards that emerged in the early 2020s prompted a recommendation by the European Systemic Risk Board (ESRB) on the medium-term vulnerabilities in the residential real estate sector in Germany in 2021 ([26]). In its updated assessment of February 2024, the ESRB still considered that the residential real estate market in Germany was subject to medium-sized risks ([27]).

German house prices experienced one of the strongest corrections in the EU last year and residential construction declined. House prices started to fall in Q3-2022 as high inflation reduced real incomes and higher interest rates made borrowing more costly ([28]). By Q3-2023, house prices were 10.9% below their Q2-2022 peak ([29]). Germany therefore experienced one of the sharpest housing price declines in the EU, with the number of transactions also decreasing. The reduction in house prices contributed to a decline in the estimated overvaluation to around 8% at the end of 2023. The extent of the price correction differed between German regions, with the areas where house price growth exceeded fundamental factors earlier adjusting the most ([30]). By Q4-2023, there were signs of house price declines bottoming out, with the price of multifamily houses starting to increase ([31]). As demand for housing was constrained, supply has been adjusting downwards. Housing completions peaked in 2020 at 306 000, after which they declined ([32]), falling further behind the government target of 400 000 and remaining considerably below the housing gap estimated at 720 000 ([33]). In future, house prices are expected to be supported by the suppressed housing supply, and by immigration and real wage increases from the demand side. At

([25]) To assess house price overvaluation, the Commission uses the average of two benchmarks relating prices to incomes and rents as well as the results of a valuation model based on fundamentals, described in Philiponnet and Turrini (2017).

([26]) The ESRB considered house price overvaluation, high house price growth, as well as possible signs of loosening of lending standards and significant data gaps, to be the main vulnerabilities in the German housing market. The ESRB concluded that borrower-based measures, in particular the loan-to-value (LTV) ratio measure, should be activated, and that 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. (OJ C 122, 17.3.2022, p. 1–8).

([27]) ESRB (2024), Follow-up report on vulnerabilities in the residential real estate sectors of the EEA countries (europa.eu).

([28]) The number of housing permits fell from 380 000 in 2021 to 355 000 in 2022. In the first 11 months of 2023 the permits of 238 500 housing units were approved, 25.9% less than in the same period in 2022.

([29]) Alternative house price indices used by the Bundesbank suggest that the decrease could have been only of around 7% from the peak.

([30]) Box on Potential for correction of residential property price exaggerations in Germany: https://www.bundesbank.de/resource/blob/915638/f5ad749c9617d31f2cec56eb1ac81f2c/mL/2023-08-konjunktur-data.pdf.

([31]) GREIX: German Real Estate Index.

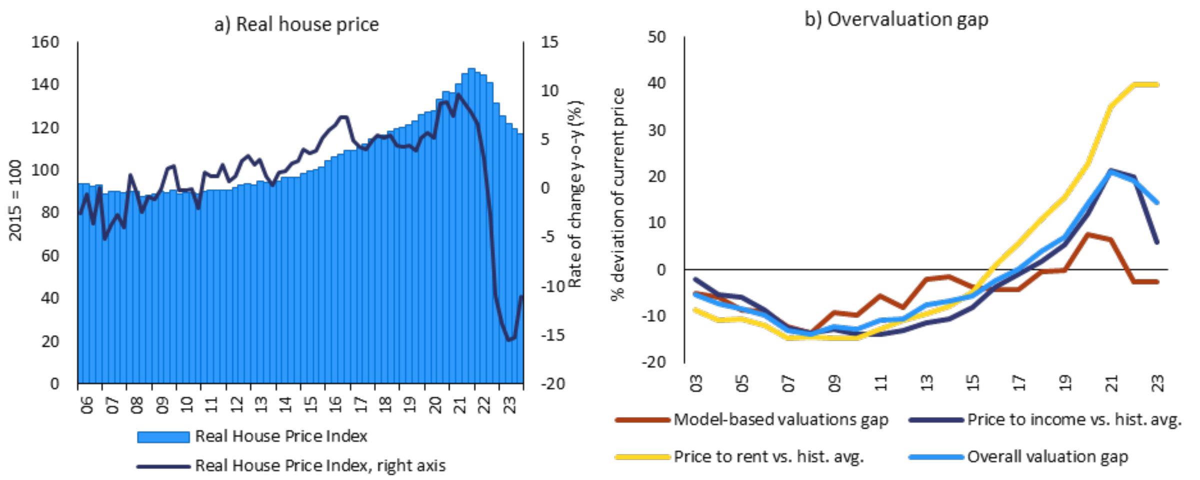
([32]) The latest data for house completions is for 2022, showing 295 000 new housing units completed. The decline in the number of housing permits quoted earlier suggests strong declines in house completions for 2023 and 2024.

([33]) 2024 Frühjahrsgutachten der Immobilienweisen.

the same time, a persisting shift towards urban areas is expected to support prices, particularly in densely populated areas.

Housing market developments have so far had a limited effect on the financial sector, but mortgage credit has fallen strongly. Credit quality for mortgage books remained good amid the tightening of lending standards and a significant decline in new mortgage credit. This reflects the relatively limited household debt-to-GDP ratio (at 52.1% of GDP in 2023), the stable labour market, the high savings rate and the high share of fixed interest rates mortgages, which cushioned households from interest rate increases. However, credit flows fell as the borrowing capacity of potential buyers declined amid a significant increase in mortgage interest rates, which rose faster than in comparable euro area countries and is related to an increase of loans with very short maturities. The losses for banks and credit quality have overall remained contained and the banking system still benefits from a low non-performing loan ratio, at 1.1% in 2023.

Graph 2.5: **House price dynamics**



Source : Eurostat and European Commission.

The adjustment in the commercial real estate market (CRE) has been more abrupt than for housing, with possible implications for the financial sector. The price of office buildings in Germany fell considerably faster than in the rest of the euro area since their peak in 2022. Though German banks have a relatively high exposure to CRE, the overall impact on the financial sector has been relatively contained so far. Nonetheless, the adjustment could significantly affect domestic and euro area credit provision. ESRB (2023) and the Federal Financial Supervisory Authority (BaFin) highlighted the risks from CRE exposure ([34], [35]). Box 2 discusses these exposures in more detail and highlights the specific factors that distinguish the German CRE sector from that of other euro area countries.

([34]) Vulnerabilities in the EEA commercial real estate sector (europa.eu). BaFin – Publikationen & Daten – Risiken im Fokus 2024.

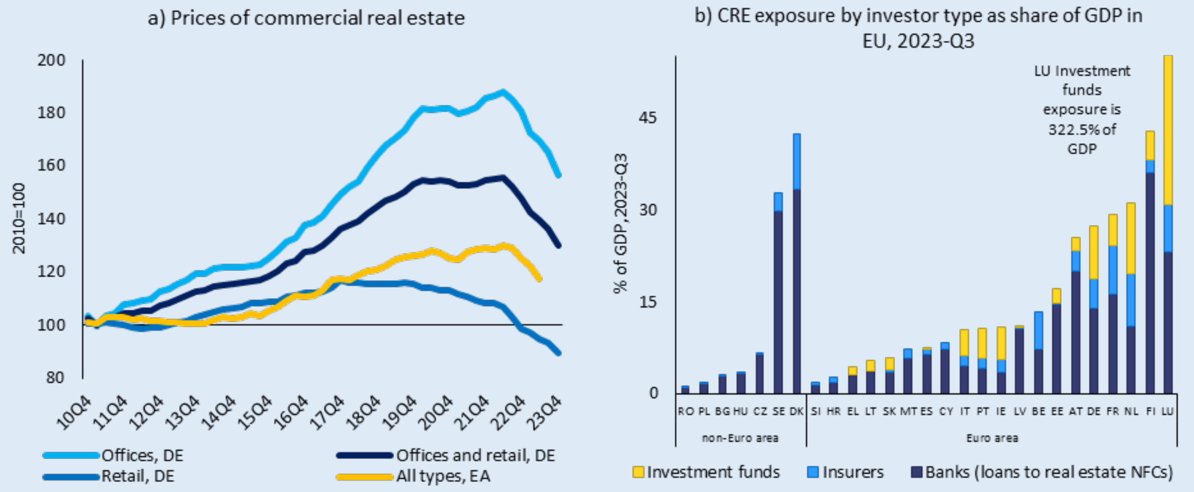
([35]) Data related to CRE market are still very scarce and incomplete. For this reason, the ESRB issued recommendations to ESTAT in 2016 and 2019 to take action to close this CRE data gap. In January 2023, the ESRB issued a recommendation to EU and national authorities, supported by a report on CRE vulnerabilities.

Box 2: Commercial real estate vulnerabilities

The German real estate market has been challenged by interest rate increases. The decade that preceded the pandemic was simultaneously characterised by low interest rates and declining commercial real estate (CRE) rental yields. The increase in interest rates since 2022 significantly affected CRE companies, which are mostly debt-funded with a relatively short maturity of liabilities. The increased financing costs are now hovering at around 6% (compared with 4% for households), which made the funding of new projects and refinancing increasingly challenging. Several CRE companies are characterised by high leverage ratios and short to medium-term debt, making them very sensitive to the current developments in interest rates. Moreover, the low activity on the market makes it more challenging to repay maturing debt through asset sales. Investor surveys suggest that at its peak, the German CRE market was seen as the most overvalued in the EU ([36]). At the same time, challenges are mitigated through limited increases in vacancies and recovering rental yields.

Exposure to the CRE market is an important feature of the German financial sector. While the share of non-performing loans has remained stable, Stage 2 loans have increased in the last years. The average loan-to-value ratio on CRE remains close to 60%, although there exist small pockets with significantly higher exposure, as highlighted by recent developer insolvency proceedings ([37]). Besides, the CRE collateral of German banks seems to be also revaluated less frequently than in other EU countries ([38]). While banks account for the lion's share (70%) of the German financial sector's exposure to CRE. Of the rest, around 20% relate to investment funds and 10% to insurers. German real estate investment funds have experienced a significant inflow over the last decade. However, their prices have fallen sharply since 2022, as in contrast to the US, most German real estate funds are open-ended and may therefore face a liquidity mismatch in future.

Graph 2.6: **Commercial real estate indicators**



Notes: In panel b) exposure of investments funds to CRE is missing for MT, CY and all non-euro area countries. The chart shows only CRE loans, not total bank exposure to CRE.
Source : Panel a) Deutsche Bundesbank, vdpResearch, ECB, Panel b) ECB CBD2 and IVF, EIOPA statistics.

([36]) Pierce Daly, Lennart Dekker, Seán O'Sullivan, Ellen Ryan and Michael Wedow, 'The growing role of investment funds in euro area real estate markets: risks and policy considerations'. ECB Macroprudential Bulletin, Art. No. 20, April 2023.

([37]) ECB, FINREP.

([38]) Horan, A, B Jarmulska and E Ryan (2023), 'Asset Prices, Collateral and Bank Lending – The Case of Covid-19 and Real Estate', ECB working paper series, No. 2823.

Assessment of MIP-relevant policies

The government has taken action to simplify planning and permitting procedures and improve the tax environment for investment. Having benefited from accelerated planning and permitting procedures since 2022 ([39]), three liquified natural gas (LNG) terminals became operational in mid-2023([40]) and further terminals began trial operations in 2024 ([41]). Planning and permitting procedures have been simplified for a range of investments, including solar and wind energy. The Permit Acceleration Act aims to speed up the implementation of selected transport infrastructure projects ([42]). For example, important rail projects are deemed to be of overriding public interest, bridges that are to be widened in the course of renovation no longer need a new approval, and the construction of wind and photovoltaic systems along highways will be significantly simplified. Moreover, in November 2023, the federal government concluded the 'Pact for Accelerating Planning, Approval and Implementation' with the federal states, which contains numerous acceleration measures in various areas ([43]). Finally, the Growth Opportunities Act (*Wachstumschancengesetz*) includes a package of measures to improve the tax system and reduces red tape in order to boost climate-friendly investment and R&D ([44]).

Subsidies and investment commitments are facilitating investment, as well as efforts to ease shortages of skilled workers through skilled immigration. Despite the overall fiscal consolidation, public investment remained stable at 2.7% of GDP in 2022 and 2023, providing financing for several noteworthy projects. In June 2023, investments worth EUR 30 billion in microelectronics were announced as a reaction to the government's commitment to provide a EUR 10 billion investment subsidy. Also reflecting a revised subsidy policy, the rollout of fibre networks was accelerated, and the coverage jumped from 19% in mid-2022 to 36% by mid-2023 ([45]). About half of the EUR 100 billion fund for defence investments (*Sondervermögen Bundeswehr*) was committed by the end of October 2023 ([46]). Furthermore, the federal government committed to invest an additional EUR 40 billion in Deutsche Bahn until 2027. The new Skilled Immigration Act (*Gesetz zur Weiterentwicklung der Fachkräfteeinwanderung*), adopted in June 2023, is expected to facilitate skilled immigration in Germany. The impact, was estimated at 70 000 incoming skilled workers per year ([47]).. There is further potential to activate groups that are underrepresented on the labour market, and to increase up- and re-skilling. Discussions are ongoing on the fallout of the November 2023 ruling by the Constitutional Court amid the re-activation of the debt brake (Chapter 2).

([39]) LNG: securing national energy supplies | Federal Government (bundesregierung.de).

([40]) Wilhelmshaven, Brunsbüttel and Lubmin – see Natural gas as a bridge to climate neutrality in Germany – a reassessment (kfw.de).

([41]) Mukran/Rügen.

([42]) Deutscher Bundestag - Entwurf will schnellere Genehmigungsverfahren im Verkehrsbereich and Bundesgesetzblatt Teil I - Gesetz zur Beschleunigung von Genehmigungsverfahren im Verkehrsbereich und zur Umsetzung der Richtlinie (EU) 2021/1187 über die Straffung von Maßnahmen zur rascheren Verwirklichung des transeuropäischen Verkehrsnetzes.

([43]) 2023-11-06-beschluss-top4-planungsbeschleunigung-data.pdf (bundesregierung.de).

([44]) Deutscher Bundestag - Bundestag stimmt Kompromiss zum Wachstumschancengesetz zu.

([45]) BREKO Marktanalyse (brekoverband.de).

([46]) 18-ruestungsbericht-data.pdf (bmvg.de).

([47]) IAB (2023), Stellungnahme zum Entwurf eines Gesetzes zur Weiterentwicklung der Fachkräfteeinwanderung (bund.de).

A timely and full implementation of Germany's recovery and resilience plan is expected to reduce barriers to investment. The plan includes measures that are key for addressing investment barriers ([48]). Its investment component is expected to average 0.2% of GDP per year over the coming years. It was expanded in December 2023 with further investment commitments. The plan includes key measures that contribute to reducing barriers to investment, digitalising the economy, education and public administration and promoting the green transition. A dedicated measure supports municipalities in their investments and in the digitalisation of schools ([49]).

Wages grew broadly in line with those of the euro area in recent years, also reflecting supportive government measures. Government measures helped to increase wages from 2021 levels, with overall wage increases exceeding negotiated wage increases ([50]). With the phase-in of the 25% minimum wage increase in 2022, the matching increase in the 'mini-job' earning threshold to EUR 520 and collective agreements frequently using lump-sum remunerations, lower wage earners saw relatively high wage increases. The one fifth of workers with the lowest wages saw their wages increase by 11.4% in 2023, compared to an average wage growth of 6.0%. This provided some cushion for this group which is particularly affected by high inflation. Impulses for future wage increases are more limited as minimum wage increases in 2024 and 2025 are expected to be smaller. The government's inflation bonus, introduced in October 2022, has allowed employers to pay a one-off bonus of up to EUR 3 000 exempt from personal income tax and social contributions, and set to expire at the end of 2024. The minimum wage has been increasing again following the recommendation of the social partner led Minimum Wage Commission (*Mindestlohnkommission*). This Commission proposed to increase the minimum wage by 3.4% in 2024 and by 3.3% in 2025, which remains below the expected increases in negotiated wages in 2024-2025 combined.

The changes in macroprudential policy partially mitigated housing market risks. Some measures are being introduced that may somewhat improve housing supply. To counteract the build-up of vulnerabilities in the residential real estate sector, in 2021, the ESRB issued a recommendation to complete the legal framework for borrower-based measures (BBMs). Consequently, this recommendation was partially addressed and legal bases for some BBMs such as a loan-to-value (LTV) limits or amortisation requirements was adopted. However, to date, Germany is one of few EU Member State without any BBMs being adopted. However, the regulator increased the countercyclical capital buffer of 0.75% by Q1-2023, as well as sectoral systemic risk buffers. The 2024 ESRB assessment highlighted once again the potential need for some BBMs such as a loan-to-value (LTV) limit and debt-service-to-income (DSTI) limit being implemented along with still missing legal bases for income-based BBMs([51]). The Growth Opportunities Act (*Wachstumchancengesetz*) currently in the legislative phase includes the possibility of declining balance depreciation (AfA) for the construction of rental apartments, which may incentivise private investment.

Further investment is needed to address long-standing vulnerabilities related to low productivity growth, new challenges related to the green and digital transition, and the

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([48]) Germany's recovery and resilience plan - European Commission (europa.eu).

([49]) Deutscher Aufbau- und Resilienzplan (DARP) - PD - Berater der öffentlichen Hand (pd-g.de).

([50]) In 2022, wages per employee increased by 4.1%, compared to a 2.6% increase in negotiated wages. In 2023, wages increased by 6.1%, compared to a 4.0% increase in negotiated wages.

([51]) ESRB publishes follow-up report on residential real estate sector vulnerabilities (europa.eu). Similar assessment was provided by the IMF. See: IMF Country Report No. 23/259.

shortfall in domestic demand. On the corporate side, declining investment despite high profits highlights the need to introduce policies to better address investment bottlenecks and improve investment incentives. Furthermore, the comparatively strong decline of the construction sector related to interest rate hikes highlights that country-specific macroprudential policy tools remain necessary to help dampen asymmetric responses to common euro area shocks. Finally, strengthening housing supply could alleviate housing market pressures.

Table 2.1: **MIP-relevant policy progress in Germany**

Vulnerability	Policies enacted since January 2023	Policies in progress since January 2023
External position	Growth Opportunities Act (*Wachstumschancengesetz*, currently in the legislative process), includes more than 40 measures to improve the tax system, reduce red tape, boost climate-friendly investments and R&D Germany Pact (*Deutschlandpakt*) between the federal government and the states consists of around 100 individual provisions for accelerating the planning, approval and implementation of investments	Permit Acceleration Act (*Genehmigungsbeschleunigungsgesetz*) to speed up the implementation of selected transport infrastructure projects. Skilled Immigration Act (Gesetz zur *Weiterentwicklung der Fachkräfteeinwanderung)*: to facilitate skilled immigration in order to ease labour shortages. The Act notably lower salary thresholds and partly removes the need of recognition of foreign professional qualifications. The recovery and resilience plan was expanded in December 2023 with further investment commitments and is at the mid-point of its implementation.
Housing	Since 1 January 2023, the regular depreciation rate for buildings for residential purposes completed after 31 December 2022 has been increased from 2% per year to 3% per year. The *Wachstumchancengesetz* includes the possibility of declining balance depreciation (AfA) for the construction of rental apartments.	Regulators increased the countercyclical capital buffer (CCYB) to 0.75% by February 2023 as well as systemic risk buffers. Progress has been made on implementing the Affordable Housing Alliance (*Bündnis Bezahlbarer Wohnraum*) ([52]), but housing completions are falling further behind the government target of completing 400 000 housing units.

Conclusion

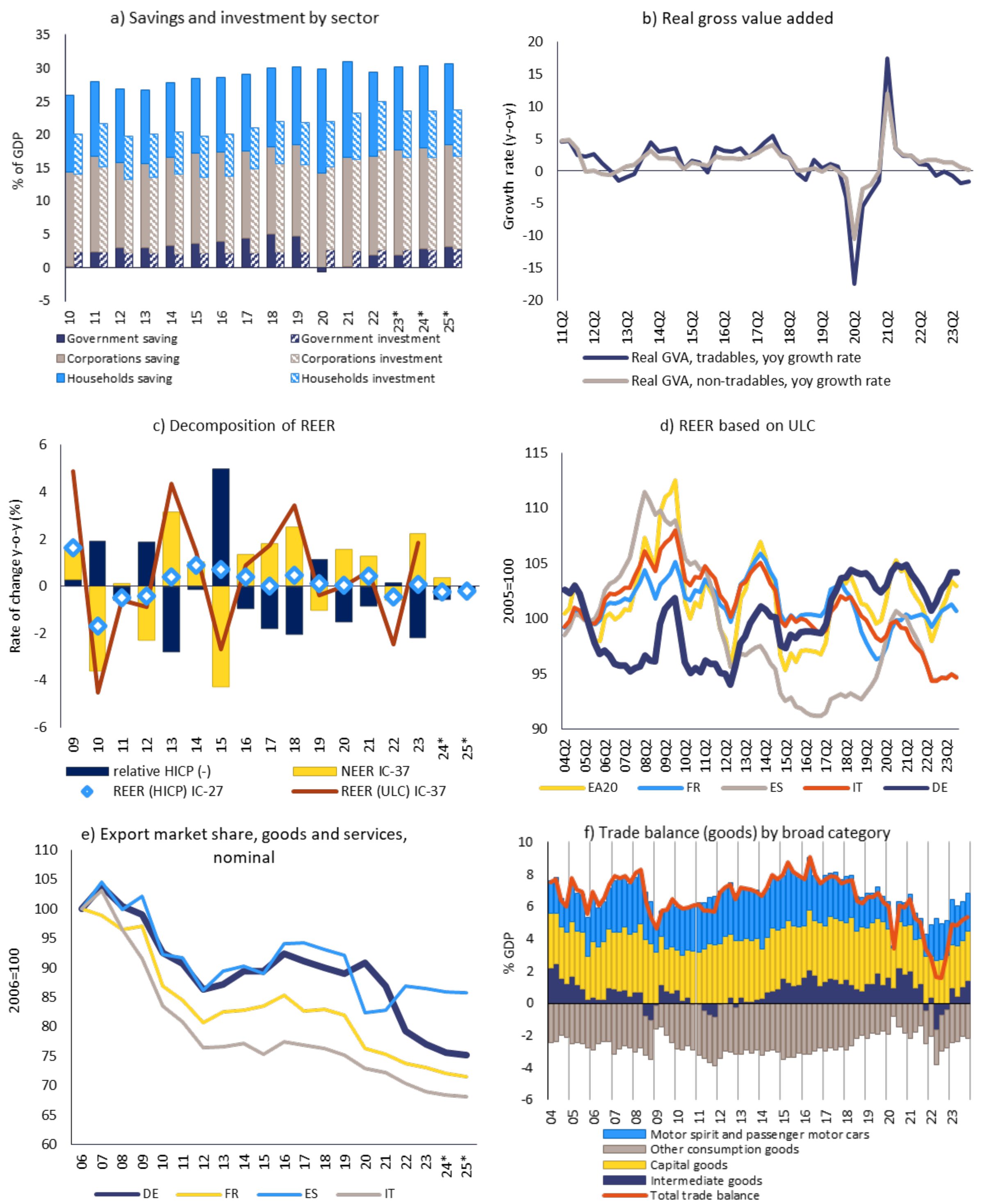
The current account surplus has rebounded but it is expected to remain below the pre-pandemic level. With the reversal of the terms-of-trade shock of high energy prices and weak domestic demand, the current account surplus bounced back from 4.2% of GDP in 2022 to 5.9% of GDP in 2023. The current account surplus is not expected to return to the pre-pandemic level (8.2% of GDP in 2019), as the tradeable sector has contracting compared to its peak before the pandemic. Moreover, a mild decrease in price competitiveness is expected, with rises in unit labour costs somewhat exceeding those of the euro area, and households are beginning to recoup some of the real wage losses suffered during the energy crisis. At the same time, the current account surplus is not expected decrease sharply as the recovery of private investment is taking time and

([52]) Concrete achievements as of 25/09/2023. https://www.bmwsb.bund.de/SharedDocs/downloads/Webs/BMWSB/DE/veroeffentlichungen/pm-kurzmeldung/kurzinfo-buendnis-bezahlbarer-wohnraum.pdf?__blob=publicationFile&v=1.

fiscal consolidation is expected to weigh on domestic demand. House price overvaluation has been reduced considerably, with limited negative effects on the financial system so far, yet commercial real estate in particular continues to warrant monitoring.

A timely and effective implementation of planned investment and structural reforms would improve Germany's growth potential and support rebalancing. Considerable efforts have been made to simplify planning and permitting procedures, and steps are being taken to improve the tax environment for investment. The government is committed to investing in defence, infrastructure and the green transition. Germany's recovery and resilience plan also includes key measures to help to reduce barriers to investment and promote public and private investment. At the same time, following the Constitutional Court's decision on the use of extra-budgetary funds, there is increased uncertainty on whether investment plans can come to fruition, and a stronger fiscal consolidation is expected. Timely and effective implementation of the investment initiatives and reforms can improve Germany's growth potential and contribute to a more balanced economy. In recent years, government measures have been mitigating the effects of high inflation on household disposable income, and in addition to a strong minimum wage rise, wage increases benefited from favourable tax treatment. Government impulses for higher wages are waning now, yet as inflation is falling, a gradual recoupment of real wage losses is expected. An important investment barrier remains the lack of skilled labour. The declining construction supply is made worse by government policies, such as complex housing-related regulations across Länder and limited digital services.

Graph 2.7: **Selected graphs, Germany**



Note: REER refers to real effective exchange rates. ULC refers to unit labour costs.
Source: Eurostat, Ameco, ECB and European Commission calculations.

Table 2.2: **Selected economic and financial indicators (Part 1), Germany**

all variables y-o-y % change, unless otherwise stated	2003-07	2008-12	2013-19	2020	2021	2022	2023	forecast 2024	forecast 2025
Real GDP	1.6	0.7	1.6	-3.8	3.2	1.8	-0.3	0.8	1.2
p.m.: Real GDP (Winter 2024 interim Forecast)							*-0.3*	*0.3*	*1.2*
Contribution to GDP growth:									
Domestic demand	0.8	1.0	1.6	-2.7	1.4	2.3	-0.8	0.6	1.0
Inventories	0.0	-0.4	0.1	-0.2	0.9	0.7	0.0	0.1	0.0
Net exports	0.7	0.1	-0.1	-0.9	0.9	-1.2	0.6	0.1	0.2
Output gap (1)	-0.6	-0.7	0.4	-3.3	-0.9	0.1	-0.9	-1.0	-0.6
Unemployment rate	9.5	6.3	4.0	3.7	3.7	3.1	3.0	3.1	3.1
Harmonised index of consumer prices (HICP)	1.8	1.7	1.2	0.4	3.2	8.7	6.0	3.1	2.2
p.m.: HICP (Winter 2024 interim Forecast)								*2.8*	*2.4*
HICP excluding energy and unprocessed food (y-o-y)	1.3	1.3	1.4	0.9	2.3	5.0	6.3	2.8	2.5
GDP deflator	1.0	1.2	3.2	1.9	3.0	5.3	6.6	3.0	2.6
External position									
Current account balance (% of GDP), balance of payments	4.6	6.1	7.8	7.1	7.7	4.4	5.9	6.3	6.3
Trade balance (% of GDP), balance of payments	5.3	5.5	6.7	5.8	5.5	2.3	4.0	.	.
Primary income balance (% of GDP)	0.7	2.0	2.6	2.8	3.8	3.9	3.5	.	.
Secondary income balance (% of GDP)	-1.4	-1.4	-1.4	-1.6	-1.6	-1.8	-1.6	.	.
Current account explained by fundamentals (CA norm, % of GDP) (2)	0.0	0.6	1.4	1.7	1.6	1.4	1.4	1.2	1.2
Required current account to stabilise NIIP above -35% of GDP over 20Y (% of GDP) (3)	0.3	0.7	1.9	3.2	3.3	3.0	2.8	2.8	0.0
Capital account balance (% of GDP)	0.0	0.0	0.0	-0.3	0.0	-0.5	.	.	.
Net international investment position (% of GDP)	11.4	23.0	40.7	63.7	68.0	70.2	.	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (4)	7.1	19.1	39.6	54.8	54.1	49.8	.	.	.
Net FDI flows (% of GDP)	1.1	1.2	1.5	-0.1	2.8	3.2	.	.	.
Competitiveness									
Unit labour costs (ULC, whole economy)	-0.4	2.3	4.1	3.5	0.1	3.4	6.9	4.7	2.4
Nominal compensation per employee	0.9	2.2	2.7	0.4	3.1	3.9	5.8	5.2	3.6
Labour productivity (real, hours worked)	1.2	0.5	0.9	1.2	0.6	0.5	-0.7	0.1	1.0
Real effective exchange rate (ULC)	-2.4	0.3	2.3	-0.7	0.0	-0.5	-0.3	0.3	-0.3
Real effective exchange rate (HICP)	1.2	-1.2	0.7	0.8	1.1	-1.7	1.8	.	.
Export performance vs. advanced countries (% change over 5 years)	.	-2.7	-1.4	1.9	-2.0	-9.7	.	.	.
Private sector debt									
Private sector debt, consolidated (% of GDP)	127.8	119.0	109.0	120.9	120.4	118.4	.	.	.
Household debt, consolidated (% of GDP)	66.8	59.0	53.7	57.0	56.5	55.0	.	.	.
Household debt, fundamental benchmark (% of GDP) (5)	50.9	53.9	53.7	55.0	54.0	52.9	53.9	.	.
Household debt, prudential threshold (% of GDP) (5)	47.0	43.8	44.0	45.6	46.1	47.3	49.2	.	.
Non-financial corporate debt, consolidated (% of GDP)	61.0	60.0	55.4	63.9	64.0	63.4	.	.	.
Corporate debt, fundamental benchmark (% of GDP) (5)	52.5	61.8	70.2	76.8	76.0	74.7	75.7	.	.
Corporate debt, prudential threshold (% of GDP) (5)	65.4	62.8	63.6	67.5	69.4	71.0	74.6	.	.
Private credit flow, consolidated (% of GDP)	0.3	1.2	3.9	6.8	6.8	6.7	.	.	.
Household credit flow, consolidated (% of credit stock)	-0.2	0.1	2.7	4.3	.	.	.	.	.
Non-financial corporate credit flow, consolidated (% of credit stock)	0.7	1.9	4.7	7.8	7.6	8.7	.	.	.
Net savings rate of households (% of net disposable income)	10.6	10.3	10.3	16.5	14.9	11.1	.	.	.

(e) Estimate based on ECB quarterly data

(1) Deviation of actual output from potential output as % of potential GDP.
(2) 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.
(3) This benchmark is defined as the average current account required to reach and stabilise the NIIP at -35% of GDP over the next 20 years. Calculations make use of the Commission's T+10 projections.
(4) 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.
(5) Fundamental benchmarks are derived from regressions capturing the main determinants of credit growth and taking into account a given initial stock of debt. Prudential thresholds identify a threshold above which banking crises become more likely. The fundamentals-based and the prudential benchmarks are calculated following 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 19.3.2024, where available; European Commission for forecast figures (2023 Autumn Forecast).

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

all variables y-o-y % change, unless otherwise stated	2003-07	2008-12	2013-19	2020	2021	2022	2023	forecast 2024	2025
Housing market									
House price index, nominal	-0.5	2.0	4.8	7.8	11.5	5.3	.	.	.
House price index, deflated	-1.8	0.7	3.9	7.2	8.3	-1.3	.	.	.
Overvaluation gap (%) (6)	-8.6	-11.9	-1.4	14.4	21.3	19.4	7.6	.	.
Price-to-income overvaluation gap (%) (7)	-6.8	-13.4	-3.9	12.1	21.4	20.1	4.1	.	.
Residential investment (% of GDP)	5.2	5.4	6.0	7.0	7.0	7.3	7.2	.	.
Government debt									
General government balance (% of GDP)	-2.4	-1.7	1.1	-4.3	-3.6	-2.5	-2.2	-1.6	-1.3
General government gross debt (% of GDP)	65.5	76.2	68.7	68.8	69.0	66.1	64.8	63.6	62.7
Banking sector									
Return on equity (%)	.	-1.6	2.0	1.9	3.9	4.2	.	.	.
Common Equity Tier 1 ratio	.	11.1	15.5	16.1	15.9	15.8	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (8)	.	2.1	1.7	1.1	1.0	1.0	.	.	.
Gross non-performing loans (% of gross loans) (8)	.	.	2.3	1.2	1.1	1.1	1.2	.	.
Cost of borrowing for corporations (%)	4.7	3.5	2.0	1.6	1.4	3.5	5.4	.	.
Cost of borrowing for households for house purchase (%)	4.7	3.8	1.9	1.2	1.3	3.5	4.1	.	.

(6) 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 from the long-term average (from 1995 to the latest available year).
(7) Price-to-income overvaluation gap measured as the deviation from the long-term average (from 1995 to the latest available year).
(8) 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 19.3.2024, where available; European Commission for forecast figures (2023 Autumn Forecast).

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