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In-depth review for Germany

in accordance with Article 5 of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances

Accompanying the

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

Economic policy coordination in 2021: overcoming COVID-19, supporting the recovery and modernising our economy

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EXECUTIVE SUMMARY

The 2021 Alert Mechanism Report concluded that an in-depth review should be undertaken for Germany to examine further the persistence of imbalances or their unwinding. In February 2020, under the previous annual cycle of surveillance under the Macroeconomic Imbalances Procedure, the Commission identified "macroeconomic imbalances" in Germany. These imbalances related to a persistent current account surplus, reflecting among others excess savings and weak private and public investment. The analysis shows that these vulnerabilities remain. It should be noted that the context of the assessment of vulnerabilities in this year's in-depth review (IDR) for Germany is markedly different from last year. Also, the evolution of the COVID-19 pandemic, the strength of the recovery, and possible structural implications of the crisis are all still surrounded by high uncertainty, requiring caution in the assessment. In general, policy action over the past year focused on cushioning the impact of the COVID-19 shock and facilitating the recovery. This should support adjustment in the medium-term. Looking forward, the Recovery and Resilience Plan provides an opportunity to address imbalances, investment and reforms needs.

Main observations and findings of this IDR analysis are:

- **This IDR is informed by the 2021 spring forecast, which expects a recovery in economic activity in Germany with the easing of the COVID-19 crisis.** After the steep drop of 4.9% in 2020, real GDP is projected to increase by 3.4% this year and 4.1% next year, allowing the economy to recover its pre-pandemic level by the end of 2021.

- **While easing further in the pandemic, the German current account surplus is expected to remain high.** Following a gradual decline since 2015, the current account surplus eased further by 0.5 pps to 7% of GDP in 2020. Due to the quick recovery of external demand, it is forecast at 7.8% in 2021, before falling again by almost 1 pps. in 2022, as recovering domestic demand and in particular the resumption of tourism is set to spur imports.

- **Germany's response to the COVID-19 pandemic helped stabilise the economy and, at the same time, it helped addressing the imbalances.** In 2020, annual public investment growth accelerated further to 4.2%, *inter alia* by supporting municipalities and by frontloading mature public investments. While there was a substantial acceleration of the upward trend in public investment in 2020, private investment suffered considerably in the context of the COVID-19 crisis. It would have suffered even more if not for liquidity support to companies, debt and insolvency moratoria, as well as the government's effort to shield the labour market and household income by providing short-term work compensation (*Kurzarbeitergeld*).

- **The household savings rate is set to remain high this year, before returning broadly to pre-crisis levels in 2022.** In 2020, the gross household saving rate jumped by 5 pps. to 23.5%, and is expected to remain similarly high in 2021, reflecting private consumption constrained by restrictions and suspended contact-intensive services, as well as a strong fiscal support for household incomes. Accumulated savings are forecast to fuel a recovery in consumption in line with the lifting of restrictions. Aggregate household savings are forecast to fall by more than 5 pps., returning broadly to their pre-crisis level.

- **Existing barriers including administrative ones constrain public and private investment.** In 2020, gross fixed capital formation declined by 3.1%, despite the acceleration in public investment, since business investment declined by close to 8%. Public and private investment are constrained by protracted planning and plan approval procedures, skills shortages, insufficient capacity of municipalities to implement investments, as well as incoherent taxes and levies on electricity and barriers to competition. The Recovery and Resilience Plan presents an opportunity to implement needed reforms and investments.

1. ASSESSMENT OF MACROECONOMIC IMBALANCES

Introduction

In February 2020, over the previous annual cycle of surveillance under the Macroeconomic Imbalances Procedure, the Commission identified "macroeconomic imbalances" in Germany. These imbalances related to excess savings and weak private and public investment reflected in a persistent current account surplus well above fundamental benchmarks. The 2021 Alert Mechanism Report published in November 2020 concluded that a new in-depth review (IDR) should be undertaken for Germany with a view to assessing the persistence or unwinding of imbalances.

The context of the assessment of vulnerabilities this year is markedly different from last year's IDRs, which took place before the COVID-19 pandemic. The evolution of the pandemic, the strength of the recovery, and possible structural implications of the crisis are still surrounded by high uncertainty requiring caution in the assessment. Policy action over the past year focused on cushioning the impact of the COVID-19 shock and on facilitating the recovery. Follow-up to country-specific recommendations from 2019 and 2020, including those that are MIP-relevant, is taking place in the context of the assessment of the Recovery and Resilience Plans (RRPs). The analysis of policies in the present report was finalised before the formal submission of RRPs and does not draw on information included in RRPs. It is therefore without prejudice to the Commission's assessment of RRPs, which is ongoing at the time of publication of this report.

The assessment follows a similar structure as the IDRs that were included in Country Reports in recent annual cycles. The remainder of this chapter presents the main findings for the assessment of imbalances, also summarised in the MIP assessment matrix. The assessment is backed by selected thematic chapters that look more at length at savings, investment, and external imbalances. Spillovers and systemic cross-border implications of imbalances are also taken into account. In addition, also assessments from previous IDRs are recalled.

Macroeconomic context

Economic activity is expected to recover to its pre-crisis quarterly level in late 2021. Overall, GDP is expected to rebound by 3.4% in 2021. In 2022, the level of activity is forecast to be 4.1% higher than the year before as private consumption regains pre-pandemic levels and investment bounces back. The recovery in exports continues unhindered by the COVID-19 pandemic. The current account surplus is set to climb to 7.8% of GDP this year, reflecting buoyant export growth and imports being dragged down by depressed consumption and subdued private investment. In 2022, the surplus is expected to decline again to 6.9% – below its pre-crisis level, as cross-border travel resumes and recovering domestic demand spurs imports. Unemployment has stayed stable at 4½% since mid-2020 and the job losses were contained at 1.1% in 2020 thanks to the support measures shielding the labour market by providing short-term work compensation (*Kurzarbeitergeld*). Aggregate household incomes slightly increased due to the stabilisation policies, but with consumption depressed by containment measures, the gross household saving rate increased to 23.5% in 2020 and is expected to remain similarly high in 2021. In 2022, the savings rate is forecast to fall, returning broadly to its pre-pandemic level of around 18½% of GDP. The budgetary costs of the COVID-19 crisis will continue accumulating, but the fiscal deficit is expected to narrow in 2022. The government deficit reached 4.2% of GDP in 2020 and is projected to reach 7.5% of GDP in 2021 due to revised emergency support measures and deferred payments from the previous year. Based on unchanged policies, the deficit would decrease to around 2.5% of GDP in 2022.

The economic recovery is expected to be supported by private consumption as containment measures are phased out, and by strong exports. Vaccinations are gaining traction and a relaxation of restrictions is expected to allow a gradual reopening of contact-intensive services. Accumulated savings are likely to fuel a recovery in consumer spending in line with the lifting of containment measures; though still hampered by the limited deferability of the spending concerned by the restrictions. Even as

industrial production growth stalled in early 2021 due to shortages of semi-conductors, the tradable sector was largely unaffected by the containment measures and has been recovering continuously since the second half of 2020. Manufacturing is expected to boost overall economic growth thanks to the favourable external demand developments and spur a recovery in business investment. Exports continued increasing and new orders are above pre-pandemic levels. Business expectations point to a continuation of these trends.

Imbalances and their gravity

The German economy's large current account surplus reflects among others a subdued level of domestic demand relative to income. While there has been a continuing shift towards more domestic demand-driven growth, the overall shares of consumption and investment remained relatively low, given the strong labour market, favourable financing conditions and persistent investment needs, and high incomes building on a competitive export sector. As a result, the current account surplus remained considerably above what could be inferred from fundamental factors such as Germany's high manufacturing intensity, demographics, and reserve asset status (see Chapter 2).

The surplus was only slightly affected by economic fallout of the COVID-19 pandemic, as the exports held relatively strong. It is forecast to increase to 7.8% of GDP in 2021, reflecting buoyant export growth and imports dragged down by depressed consumption and subdued private investment in the first half of the year. In 2022, the surplus is expected to decline again to 6.9% of GDP, as foreign travel resumes and recovering domestic demand spurs imports.

The external imbalance remains persistent with a current account surplus persistently above 6% of GDP. It had been declining gradually since 2015; it was only transitorily affected by the pandemic and it is expected to fall below its pre-crisis level in 2022. Having peaked at 8.6% of GDP in 2015, the current account surplus has been gradually declining. It was only slightly affected by the economic fallout of the COVID-19 pandemic, as the exports held relatively strong. It is forecast to increase to 7.8% of GDP in 2021, reflecting buoyant export growth and imports dragged down by depressed consumption and subdued private investment in the first half of the year. In 2022, the surplus is expected to decline again to 6.9% of GDP - below its pre-crisis level, as foreign travel resumes and recovering domestic demand spurs imports. The volatility of the external environment contrasts with persistent domestic framework conditions, characterised by an excess of savings over investment. Despite ample funding prospects, structural bottlenecks keep inhibiting public and private investment, as summarised in Chapter 3. Household savings display a high surplus of net savings over net investment, which is largely held by non-bank financial sector (Chapter 4).

Germany is a major partner for almost all EU Member States, via trade and financial linkages. Germany's strong exports make it a key trading partner for all EU countries. High trade volumes also reflect the fact that German companies operate and invest in other Member States, resulting in integrated value chains, making Germany both a major market for exports and a major source of imports. Almost all EU countries export at least 3% of their GDP to Germany, and most countries bordering Germany export at least 15% of their GDP to Germany (see Table 1.1). These shares increased considerably over the past years, reflecting increasing internationalisation of value chains. Imports of services account for about one-fourth of total imports. Some countries rely particularly on service exports to Germany and were strongly affected by the COVID-19 related restrictions of international mobility, which was especially the case of the tourism sector. In 2020, German imports of goods declined by 8.1% while imports of services fell by 19% (see Box). German consumption and investment directly accounts for approximately 6% of value added in the rest of the euro area, and thus has important second-round effects on the income and savings of other Member States (see Country Report 2017, pp. 18-19). ([1]) Reflecting restrictions imposed for health considerations, the decline of German cross-border demand during the COVID-19 pandemic is estimated to have had an impact of 1 pp on the euro-area GDP that year (see Box). This also suggests that German import demand will be an important factor for the recovery of the euro area.

([1]) In view of the impact on the euro area, the Commission thus had continuously recommended Germany to promote wage growth, and implement measures that foster investment and support domestic demand (Euro-area recommendations 2017-2020, Country-specific recommendations for Germany 2017-2020).

Table 1.1: **Outward spillover heat map for Germany**

	EU partner																								
	AT	BE	BG	HR	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK
Imports	19	17.9	7.3	3.8	0.6	28.6		7.5	4.9	3.3	3.9	5.3	4.3	24.5	7	4.2	7.3	34.3	4.4	3.4	22.8	15.2	5	7.4	4.4	17.8	21.5
Imports (in value added)	7.3	3.6	3.2	4.8	1.9	7.9		2.9	2.6	1.7	2	1.9	2	6.6	4	1.9	3.3	8.2	2.1	5	4.4	5.6	1.9	3.1	2.1	4.7	6.1
Financial liabilities	34.8	29.8	7.2	6	27.3	9.1		41.4	3	5.1	6.2	13.1	15.4	12.6	57.1	8.9	2.3	1151.4	1.8	49.3	91.5	2.4	6.4	5.3	12.7	6.9	5.1
Financial assets	57.6	33.5	8.1	10.6	22.8	20.4		25.1	4.1	47.1	21.1	29.6	28	24.2	77.8	13.4	9.5	1404.9	11.7	112.3	98.1	14.7	17	7.8	23.4	21.1	18.9
Liabilities (to banks)	11.5	2.1								2.4	6.3	4.9	8		0.4	12					23.5	1.2			5.4		
Bank claims	10.8	5.2	0.6		6.2	3.3		4.4	0.7	1.8	5.7	7.9	6.7	2.93	9.3	5	1.2	126	1.8	10	9.5	9.6	4.2	0.5	5.3	3.6	3.4

Cross-border figures for Germany, expressed as a % of the GDP of the partner country. The darkest shade of red corresponds to percentile 95 and the darkest shade of green to percentile 5. The percentiles were calculated for each variable based on the full available sample of bilateral exposures among EU countries. The blank spaces represent missing data. Data refer to: Imports - 2018, Imports (in value added) - 2015, Financial liabilities - 2018, Financial assets - 2018, Liabilities (to banks) - 2020-Q3, Bank Claims - 2020-Q3.
Source: IMF, OECD, TiVa, BIS and Commission services

Evolution, prospects and policy responses

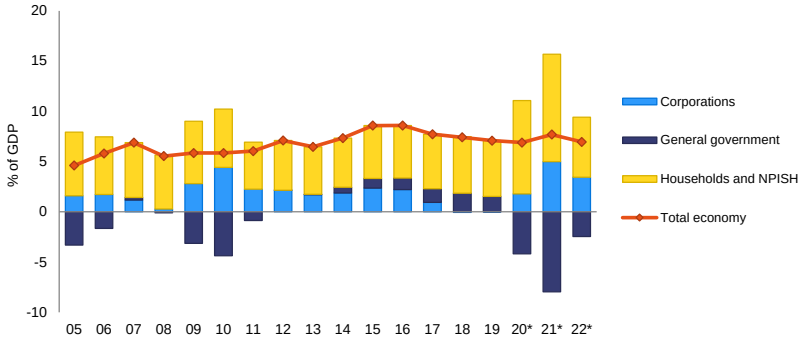
The considerable support measures helped to stave off a more substantial decline of investment and consumption. Germany was among the Member States committing the most comprehensive support to their economy and society, with a lifeline against economic hardship and avoid longer-term scarring effects, in view of structural impediments. Federal support for municipalities was key to keep local public investment on track despite uncertainty and revenue shortfalls. ([2]) Overall, though, implementation fell slightly short of announcements, partly because of administrative bottlenecks. Non-financial corporations benefitted from liquidity support, from debt and insolvency moratoria, as well as from the government's effort to reduce the labour cost by providing short-term work compensation (*Kurzarbeitergeld*). However, due to considerable uncertainty and restrictions on activity, business investment remained subdued and is only expected to recover gradually (Chapter 3). As a result, corporate net savings are likely to increase in 2021, but they are set to decrease by 2022 (see Graph 1.1). *Kurzarbeit* and fiscal support stabilised households' income and with private consumption curtailed by containment measures, thus the household saving rate increased, but is expected to broadly return to its pre-pandemic level of around 18½% of GDP in 2022.

In the coming quarters, private consumption is likely to remain constrained by containment measures, but it is likely to recover to its pre-crisis level in 2022. Overall, wages are set to continue growing somewhat faster than in the rest of the euro area, and employment prospects remain positive. The labour market was historically strong before the COVID-19 crisis with low unemployment and high employment. The short-time work scheme (*Kurzarbeit*) shielded the labour market, allowing a considerable reduction of hours worked, but only a moderate increase of unemployment from 3.1% in 2019 to 4.2% in 2020. *Kurzarbeit* also helped to contain losses in earned income and stabilised wages. Real household consumption is thus likely to recover to its pre-pandemic level by 2022 already, though that would still leave Germany with the highest household saving rate in the euro area. Corporate earnings are expected to increase, as large pockets of the economy remain largely unaffected by restrictions on activity. Corporate investment should start recovering, but the investment-to-GDP ratio will likely remain relatively low relative to peer economies and macroeconomic conditions. This way, the private sector's net lending position is expected to remain high. On the external side, exports are expected to grow more strongly than imports against the recovery of demand in key trading partners and still muted domestic demand due to ongoing restrictions. Overall, these factors should contribute to a slight increase in the surplus in 2021. ([3])

([2]) Measures included compensation for the tax losses of the local business tax, compensation for revenue shortfalls of public transport, and partial assumption of social security costs, as well as accelerating projects and revising investment-related procedural rules (see Chapter 3).

([3]) Note that commodity price swings as observed during 2020 and 2021 can have a non-negligible impact on the trade balance in the near term (cf. Country Report Germany 2017). Forecasts are subject to uncertainty regarding such terms of trade effects, which may modulate the short-term current account fluctuations described here.

Graph 1.1: **Net lending/borrowing by institutional sector**



Source: Eurostat

The current account surplus is expected to fall to 6.9% of GDP in 2022 – below its pre-crisis level. In 2020, the current account surplus eased by 0.5 pps to 7% of GDP in balance of payments terms. On the back of emptying inventories, the quarterly current account decreased to around 5% of GDP in the second quarter of 2020. It rebounded again to well above 7% of GDP in the second half of 2020, as exports strongly surpassed imports in the third quarter. In 2020 as a whole, the trade surplus narrowed from 6.3% to 5.7% of GDP as exports contracted more than imports, despite cheaper commodity imports. The services deficit also receded on the back of subdued cross-border tourism (Chapter 2). In 2021, the current account surplus is expected to increase somewhat, and then ease in 2022, to 6.9% of GDP, below its pre-crisis level of 7.3% in 2019.

Government debt increased to 69.8% of GDP in 2020, but is forecast to start declining in 2022. The increase in 2020 reflects the considerable support in the COVID-19 crisis, and the crisis-related drop in government revenues and GDP. While the general government deficit would remain sizeable in 2021 and 2022, the rapid recovery in nominal GDP is set help reduce the government debt ratio to about 72% of GDP by 2022. The latest debt sustainability analysis confirms that the country faces *low* risk in the medium-term. ([4]) The German banking system remains adequately capitalised with a very low level of NPLs. Nevertheless, profitability remains low and there is uncertainty to what extent the phasing-out of the suspension of the obligation to file for insolvency in May 2021 will affect NPLs. Structurally, the capital position of the important insurance sector remains affected by their maturity mismatch in the face of low yields undershooting previous stress test scenarios (cf. Country Report 2017).

Investment was strongly impacted by the COVID-19 crisis, yet remains significantly more resilient than in the rest of the euro area. Overall gross fixed capital formation declined by 3.1% in 2020, compared to 8.2% for the euro-area aggregate. Reflecting government measures to maintain and frontload investment, public investment growth accelerated to 4.2% year-on-year in 2020, though from a low base. Residential housing construction remained buoyant (2.8% real growth year-on-year). Yet residential investment remained focused on renovation rather than new dwellings, despite house prices accelerating further to 7.3% growth in 2020. At the same time, private business investment (machinery and equipment, non-residential construction and other assets) declined by close to 8%, though less than in the rest of the euro area. ([5]) Private equipment investment was particularly affected. It declined by 14%, following weak growth already in the year before. The relaxation of confinement measures mid-year and the resumption of foreign trade helped business investment to recoup at least some of the losses, and business investment remained relatively resilient to the subsequent confinements thanks to a swift rebound in manufacturing activity. Net of amortizations, fixed capital formation is thus set to slightly exceed its pre-pandemic level by 2022, though it remains somewhat smaller as a share of GDP than in the rest of the euro area.

([4]) See Article 126(3) report (June 2021) and also the Debt Sustainability Monitor 2020 for detailed methodological aspects.
([5]) In nominal terms the decline was 6.4% compared to 12.2% in the rest of the euro-area.

Overall assessment

Policy support to sustain businesses and protect incomes and jobs was considerable in 2020. Germany was among the Member States committing the most comprehensive support to their economy and society, to cushion against imminent hardship and longer-term scarring effects. Public investment is on an upward trajectory, which was further accelerated in response to the COVID crisis. Policy support and the additional public investment managed to stave off a more substantial decline of domestic demand. Total investment is expected to grow at a solid rate both in 2021 and 2022, also on the back of public investment, albeit from low initial levels.

Net lending of the private sector increased considerably due to the pandemic. Consumption is currently severely affected by the ongoing COVID crisis and household savings are expected to stay elevated, before broadly returning to their pre-crisis level. Despite the ample support measures, private investments dropped considerably due to restrictions and elevated uncertainty.

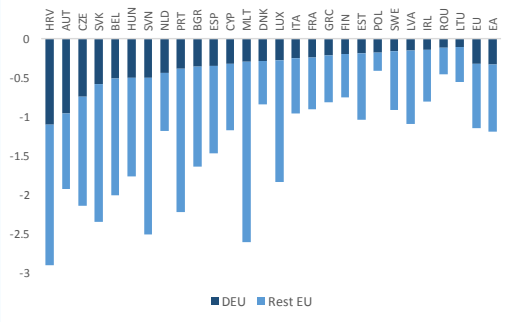
While easing further in the pandemic, the German current account surplus is expected to fall below its pre-crisis level, but it will remain elevated. Following a gradual decline since 2015, the current account surplus eased further by 0.5 pps to 7% of GDP in 2020. Due to the quick recovery of external demand, it is forecast at 7.8% in 2021, before falling again by almost 1 pp. in 2022 - below its pre-crisis level, as recovering domestic demand and in particular the resumption of tourism is set to spur imports.

Box 1.1: **Spillovers Germany**

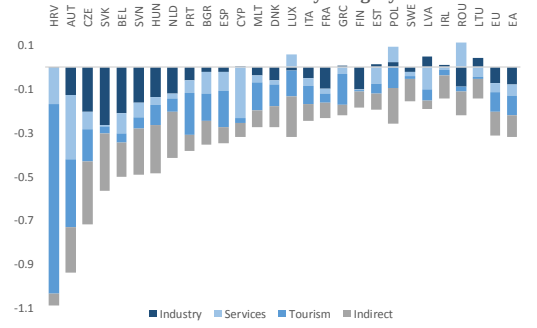
The pandemic recessions in EU Member States also reflected faltering cross-border demand from trade partners. An inspection of the COVID-19 crisis impact illustrates that Germany's aggregate demand will continue to play a significant role for the output of several close partners. During the recovery, cross-border spillovers may undo their negative impact of 2020, yet the uncertain timing and extent of the recovery make a forward-looking assessment difficult. As a first step, this box thus aims to take stock of the heterogeneous spillovers of German demand to other Member States' value added in 2020. It quantifies cross-border effects applying latest production data to input-output estimates. ([1]) This allows for synthesizing supply chain effects, e.g. detailing how German consumption from domestic providers affected those providers' foreign suppliers, and their suppliers in turn. While these results allow for country-specific sectorial detail, note that they reflect partial equilibrium effects in the goods and services market only – they do not include second-round effects on foreign wage income, interest rates, prices etc.

Graph 1a shows the overall cross-border impact of the heterogeneous final demand changes during 2020, and highlights the German contribution therein. Overall, 1.2 pp of the 2020 EU output decline can be attributed to cross-border demand effects, with German demand accounting for 0.3 pp thereof. Yet small open service-intensive economies were hit stronger than the average: Croatian value-added was the most affected, with declining final demand from the rest of the EU (RoEU) accounting for 3 pp of its output loss, 1.1 pp of which can be attributed to German demand. In contrast, RoEU demand spillovers accounted for only 0.3 pp of the Polish output slump. The importance of German demand varies significantly across partners, with higher relevance in neighbouring countries. For instance, half of the VA impact in Austria due to intra-EU demand changes is driven by a reduction in German demand, whereas this share is less than 1/7 in Latvia that was affected more by other trading partners.

Graph 1a: **VA impact (%) of cross-border demand change 2019-2020**



Graph 1b: **VA impact (%) of change in DEU demand 2019-2020 by category**



Graph 1b highlights the heterogeneous effects of the pandemic by zooming in on the German contribution by sector (the dark-blue bar in Graph 1a). ([2]) Unsurprisingly, the decline in German tourists accounted for the bulk of German demand spillovers to Croatia, Portugal, Spain, Greece, Italy, Bulgaria, and several neighbouring countries, notably Austria. Demand changes for non-tourist services were more diverse, and even seem to have had a positive impact on Romania, Poland, and Luxembourg. Changes in the final demand for industry products had a strong impact on Central European economies in particular. Those economies also stand out by the importance of indirect spillovers, which captures supply chain interlinkages. ([3]) Such indirect cross-border spillovers account for 0.1 pp of total impact of German demand on the RoEU output loss, on a par with German tourist demand. Overall, 2020 German demand changes thus had a significant impact on the RoEU, with the size of the impact determined by Member States' tourism intensity and/or their degree of integration with German supply chains.

([1]) The estimates derive from a two-step analysis: 1) Compiling 2020 output declines at the sector-level across the globe. For the EU Member States, detailed information for 2020 is available in Eurostat. For non-EU countries,

sectoral output changes in 2020 are approximated by IMF WEO GDP changes, thus implicitly abstracting from sectoral heterogeneity; 2) Using output changes in all country-sector pairs to trace back changes in final demand, based on global supply chain interlinkages as captured by the OECD ICIO tables. The resulting set of final demand changes can then be used to simulate the impact of the COVID-19 crisis on each country-sector's value added. Two important assumptions are made to allow for such a translation of output changes into demand changes. First, the technological coefficient matrix, which captures the required amount of supplies from any sector to produce a given sector's output, is assumed to have remained fixed since the latest ICIO data (2016). Second, the country allocation final demand for a specific sector is assumed to have remained proportional to 2016.

([2]) Distinguishing by the source of the demand allows to quantify the impact of demand changes in a certain country on VA production in all its trading partners, by type of good or service. Given the particular nature of the COVID-19 crisis, with a strong impact on hospitality sectors, the analysis distinguishes between tourism (NACE sector I), all other services (G-N excl. I) and industry (A-F).

([3]) For example, a drop in German demand for German cars reduces Slovak production of engines, with a knock-on effect on Czech suppliers of engine parts.

Table 1.2: **Assessment of Macroeconomic Imbalances Matrix - Germany**

	Gravity of challenge	Evolution and prospects	Policy response
Imbalances (unsustainable trends, vulnerabilities and associated risks)			
External balance	Germany has a persistently large current account surplus considerably above the level of 3.4% of GDP suggested by empirical benchmarks. Accumulated surpluses have resulted in a large positive net international investment position of 76.3% of GDP in 2020. The surplus reflects a substantial private savings overhang, considerably above domestic investments A persistent backlog in domestic investment has resulted in bottlenecks in taking up renewable energy sources, in making transport and mobility more sustainable, in expanding the housing supply; in slow progress in digitalisation; and in a significant underinvestment at municipal level. All of this poses risks to Germany's future growth prospects. Considering the strong economic links, strengthening investment in Germany would benefit both Germany and its euro area and EU partners.	In 2020, the current account surplus eased by 0.5 pps to 7% of GDP and is thus considerably below its peak of 8.6% of GDP in 2015. However, the decline in the *annual* current account surplus ratio conceals the persistence of the imbalance. The current account surplus dropped in the second quarter of 2020, due to the dip in exports and an emerging government deficit, but already bounced back in the third quarter due to the quick recovery of external demand, but still muted domestic consumption. In 2021, these trends will likely continue, leading to an increase of the current account surplus to 7.8% of GDP. In 2022, the surplus is expected to decrease again as recovering domestic demand spurs imports and foreign travel resumes. The gross saving rate jumped to 23.5% in 2020, reflecting a lack of consumption possibilities, but also government transfers that kept household disposable income on an increasing path (+0.9% in 2020). Household savings are expected to stay elevated, as private consumption is likely to remain constrained by containment measures. The fiscal position turned from surplus to a sizable deficit of 4.2% of GDP because of automatic stabilisers and policy measures to contain the economic and sanitary impact of the COVID-19 pandemic. At the same time, net lending of the private sector increased, reflecting above all curtailed consumption and restrained corporate investment due to the pandemic und elevated uncertainty. Corporate investment should start recovering, although the investment-to-GDP ratio risks to remain relatively low.	Germany has taken some policy steps to address its imbalances. Real public investment increased by about 4% p.a. on average over 2015-2019 which led to a partial catch-up of the investment backlog. In 2020, public investment was further accelerated in response to the crisis, also by frontloading mature investment projects. The crisis response consisted in promoting public investment, *inter alia* by supporting municipalities, by frontloading mature public investment projects, as well as by revising some investment-related procedural rules. Investment is focused on education, R&D, digitalisation, sustainable transport, energy networks and affordable housing. In 2020, private investment benefited indirectly from liquidity support to companies, from debt and insolvency moratoria, as well as from the government's effort to reduce the labour cost by providing short-term work compensation (*Kurzarbeitergeld*), which also helped to contain losses in earned income. The cap on social security contributions in 2021 is an important policy fix to prevent further increases of the tax wedge, but structural issues such as disincentives to work longer hours remain in place.

Main takeaways

- Germany continues to run a large current account surplus, reflecting private consumption restraint and persistently subdued investment relative to savings. Existing barriers, including administrative ones, constrain public and private investment.

- The current account surplus eased somewhat further in 2020. Underlying this development were – in a context of COVID-19-related restrictions – the counterbalancing effects of an increase in household savings in the absence of spending opportunities and reduced investment, as well as strong fiscal support. The German current account is forecast to increase in 2021, before declining below its pre-crisis level in 2022.

- There was an acceleration of the upward trend in public investment in 2020, while private investment suffered considerably in the context of the COVID-19 crisis. After a fall in 2020, total investment is expected to grow at a solid rate both in 2021 and 2022, in part driven by increasing public investment, albeit from low initial levels. With consumption possibilities returning after the lifting of containment measures, savings are forecast to return broadly to their pre-crisis level.

Source: European Commission Services

Table 1.3: **Selected economic and financial indicators, Germany**

	2004-07	2008-12	2013-18	2019	2020	forecast 2021	forecast 2022
Real GDP (y-o-y)	2.2	0.7	1.1	0.6	-4.9	3.4	4.1
Potential growth (y-o-y)	1.3	1.0	1.0	1.2	0.9	1.2	1.0
Private consumption (y-o-y)	0.6	0.9	1.5	1.6	-6.1	0.1	7.3
Public consumption (y-o-y)	0.7	2.1	1.0	2.7	3.3	3.6	1.0
Gross fixed capital formation (y-o-y)	2.9	0.7	2.2	2.5	-3.1	3.2	3.9
Exports of goods and services (y-o-y)	9.8	2.2	3.4	1.0	-9.4	10.4	4.8
Imports of goods and services (y-o-y)	7.8	2.3	4.3	2.6	-8.5	7.9	7.2
Contribution to GDP growth:							
Domestic demand (y-o-y)	1.0	1.0	0.9	1.9	-3.2	1.6	4.8
Inventories (y-o-y)	0.0	-0.4	0.3	-0.7	-0.8	0.4	0.0
Net exports (y-o-y)	1.1	0.1	0.0	-0.6	-0.9	1.5	-0.6
Contribution to potential GDP growth:							
Total Labour (hours) (y-o-y)	0.2	0.1	0.4	0.3	0.2	0.2	0.0
Capital accumulation (y-o-y)	0.3	0.2	0.2	0.4	0.2	0.3	0.4
Total factor productivity (y-o-y)	0.8	0.6	0.4	0.5	0.5	0.6	0.6
Output gap	-0.4	-0.8	0.6	1.0	-4.8	-2.7	0.0
Unemployment rate	10.3	6.7	4.4	3.1	3.8	4.1	3.4
GDP deflator (y-o-y)	0.9	1.2	1.7	2.2	1.6	1.6	1.5
Harmonised index of consumer prices (HICP, y-o-y)	1.9	1.7	1.0	1.4	0.4	2.4	1.4
Nominal compensation per employee (y-o-y)	0.7	2.2	1.7	3.0	0.5	2.8	2.9
Labour productivity (real, person employed, y-o-y)	1.5	-0.1	0.3	-0.3	-3.7	.	.
Unit labour costs (ULC, whole economy, y-o-y)	-0.8	2.3	2.0	3.3	4.5	-0.8	-0.2
Real unit labour costs (y-o-y)	-1.7	1.1	0.3	1.1	2.9	-2.4	-1.7
Real effective exchange rate (ULC, y-o-y)	-1.9	-0.2	1.5	-0.4	.	.	.
Real effective exchange rate (HICP, y-o-y)	-0.1	-1.6	0.6	-1.5	1.4	1.8	-0.6
Net savings rate of households (net saving as percentage of net disposable income)	10.6	10.3	10.2	10.9	16.2	.	.
Private credit flow, consolidated (% of GDP)	0.3	0.6	3.2	5.4	.	.	.
Private sector debt, consolidated (% of GDP)	115.7	106.7	101.0	105.4	.	.	.
of which household debt, consolidated (% of GDP)	65.9	59.0	54.1	54.4	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	49.8	47.7	46.9	51.0	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (2)	.	2.1	1.8	1.1	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	1.6	2.4	1.1	0.0	1.8	4.5	2.8
Corporations, gross operating surplus (% of GDP)	26.4	25.1	24.0	22.6	22.0	25.0	23.8
Households, net lending (+) or net borrowing (-) (% of GDP)	5.9	5.4	5.2	5.6	9.3	10.6	6.4
Deflated house price index (y-o-y)	-2.0	0.7	6.7	4.3	6.6	.	.
Residential investment (% of GDP)	5.2	5.4	6.0	6.6	7.1	.	.
Current account balance (% of GDP), balance of payments	5.5	6.1	7.4	7.5	7.0	7.5	6.9
Trade balance (% of GDP), balance of payments	5.6	5.5	6.4	5.7	5.7	.	.
Terms of trade of goods and services (y-o-y)	-0.7	-0.5	0.1	0.9	2.1	-1.8	0.1
Capital account balance (% of GDP)	-0.1	0.0	0.0	0.0	-0.1	.	.
Net international investment position (% of GDP)	14.1	24.2	48.7	71.9	76.2	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (1)	9.6	19.0	37.5	51.1	53.3	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (1)	125.9	164.3	148.2	140.8	164.7	.	.
Export performance vs. advanced countries (% change over 5 years)	15.6	-1.1	-2.3	-2.8	6.4	.	.
Export market share, goods and services (y-o-y)	-0.4	-3.6	0.2	-1.9	2.8	2.3	-0.5
Net FDI flows (% of GDP)	1.7	1.2	1.1	2.2	0.0	.	.
General government balance (% of GDP)	-2.0	-1.7	1.0	1.5	-4.2	-7.5	-2.5
Structural budget balance (% of GDP)	.	.	0.8	1.0	-1.8	-6.2	-2.5
General government gross debt (% of GDP)	65.8	76.4	70.3	59.7	69.8	73.0	72.1
Tax-to-GDP ratio (%) (3)	39.2	39.5	40.4	41.7	41.9	41.0	41.1
Tax rate for a single person earning the average wage (%) (4)	42.3	40.4	39.6	39.3	38.9	.	.
Tax rate for a single person earning 50% of the average wage (%) (4)	31.8	31.1	31.0	30.7	30.3	.	.

(1) NIIP excluding direct investment and portfolio equity shares
(2) domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.
(3) The tax-to-GDP indicator includes imputed social contributions and hence differs from the tax-to-GDP indicator used in the section on taxation
(4) Defined as the income tax on gross wage earnings plus the employee's social security contributions less universal cash benefits, expressed as a percentage of gross wage earnings
Source: Eurostat and ECB as of 2021-05-05, where available; European Commission for forecast figures (Spring forecast 2021)

2. THEMATIC ISSUE: EXTERNAL IMBALANCES

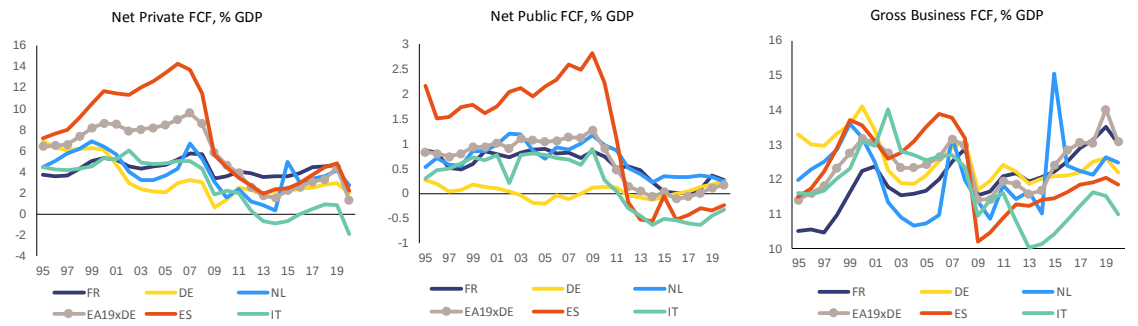
After a strong drop at the onset of the COVID-19 pandemic, the current account returned quickly to its pre-pandemic level. Graph 2.4(b) shows that despite cheaper energy imports and declining tourism services demand, the annual current account surplus declined from 7.5% of GDP in 2019 by EUR 26.7 bn, to reach a level of 7.0% of GDP in 2020. ([6]) Yet this is mostly due to the extraordinary slump of cross-border trade in March-May 2020, that hit exports more strongly than imports, and led to a brief slump in the current account balance (Graph 2.4(c)). By June 2020, the current account balance had returned to the same level as in June 2019. Goods and services trade recovered to its usual level by the autumn of 2020, and continued to follow its regular pattern into early 2021. The current account surplus is thus expected to increase in 2021. Thereafter it is expected to continue its steady trend decline observed since 2015, yet remain persistently higher than 6% of GDP, at roughly double the level suggested by fundamentals (Table 2.1).

The COVID-19 pandemic affected both exports and imports simultaneously, thus steadying the trade balance. The trade balance accounts for the bulk of the German current account surplus, and is characterised by large gross exports and imports, partially reflecting supply chain links in the competitive manufacturing industries. ([7]) The pandemic affected inventories, and thus the timing of such imports and exports, leading to brief volatility in the trade balance. In addition, the value of energy imports had declined strongly in 2020 on account of oil prices, and tourism imports responded to the pandemic (Graph 2.4(b)). National account identities also imply that the trade balance equals the difference between GDP and aggregate demand. Output and demand have moved broadly together during 2020 and are expected to recover at a similar pace; hence, the trade balance is expected to remain in surplus (Graph 2.4(a)). Besides constrained household consumption, in particular regarding hospitality services, aggregate demand declined mostly due to reduced investment, also affected by the pandemic. During 2020, German net investment (net of amortizations) declined by 76%, somewhat more than the average for the rest of the euro-area (70%) (Graph 2.4(d)). This in turn resulted from a slump in inventories, and declining corporate investment. Abstracting from negative investment in inventories, German net fixed capital formation contracted considerably less (30%) in the COVID-19 pandemic than in the rest of the euro area (57%), partially on account of construction site lockdowns in other major euro area economies during spring 2020. Yet the German level of net fixed capital formation (i.e. the increase of the capital stock) in the corporate sector remained below that of euro area partners, even if net public investment relative to GDP was slightly above the average for the rest of the euro area.

([6]) The figures referenced here denote the current account balance as reported in balance of payments (BoP) terms. The current account balance in national accounts (NA) terms differs slightly from that figure, but displays the same dynamics (see Table 3.1).

([7]) Among other components of the current account, the secondary income balance mainly comprises cross-border transfers and remittances, and remained rather stable during the pandemic and earlier years.

Graph 2.1: **Investment trends by sector**



Note: Business investment approximated as total less public less residential construction investment
Source: ESTAT, AMECO

The German government made use of fiscal space and accumulated savings to react to the COVID-19 crisis by expanding government consumption, subsidies and transfers. However, in the absence of spending opportunities, household savings increased while corporate savings remained largely stable. In the case of households, the net saving rate, jumped to 16.2% in 2020, reflecting lack of consumption possibilities, but also government transfers that ensured that household disposable income increased (+0.7% in 2020) despite the weakening of the labour market. These aggregate figures mask an underlying heterogeneity with a considerable fraction of households adversely affected by the crisis. Concerning corporations, subsidised labour costs and direct support measures played a role for the increase in net savings. Firms reduced the wage bill by cutting work time, but government support measures compensated workers for lost labour income and averted substantial job losses. Due to lower earnings, the tax bill was also reduced. However, the lion's share of the belt-tightening seems to have been borne by the company owners: by them relinquishing dividend pay-outs, (gross) corporate savings were maintained stable.

In 2019, the current account surplus remained above what could be inferred from fundamental factors. The impact of fundamental factors on the current account balance can be assessed using a 'current account norms' model as introduced by the IMF. Both the relevant IMF model ([8]) as well as the Commission model ([9]) suggest that about 3½ pp of the pre-pandemic 2019 German surplus can be explained by fundamentals. Commission calculations can explain ca. 1.7 pp of these fundamentals surplus by demographic factors, notably that Germany is ageing faster than the rest of the world. Other fundamental drivers at play are the high incomes in, and manufacturing intensity of, the German economy, though partially offset by its reserve asset status (see Graph 3.3(d)). A large part of the surplus can be attributed to how Germany compares to the world economy with respect to policy-dependent factors. In particular, the relatively tight fiscal stance compared to the rest of the world contributed ca. 1 pp to the surplus, while muted credit provision and construction investment, account for another 1.2 pp. The German business cycle had moved broadly in sync with the world average, and thus had a limited impact on the current account. Finally, past persistent surpluses led Germany to accumulate net foreign assets, which supports the income balance. Net foreign assets are thus estimated to contribute another 2 pp. by 2019, and are a structural factor that is expected to continue contributing to the surplus.

The persistent, albeit steadily diminishing, current account surpluses led the net international investment position (NIIP) to further expand. The NIIP reached +76% of GDP in 2020, whereas the bulk of the NIIP is accounted for by net marketable debt and similar defaultable instruments (NENDI). In terms of instruments, the NIIP increase since the global economic and financial crisis is mainly due to net purchases of debt securities and mutual funds, which increased from -14% of GDP in 2011, to +21% of GDP in 2020. The Bundesbank's Target2 balance expanded by some 8 pp of GDP in 2020 but was

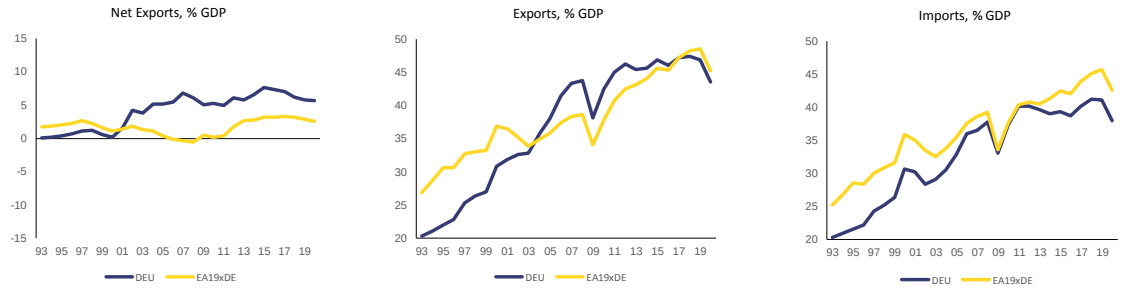
([8]) IMF, External Sector Report 2020.
([9]) Coutinho, L., Turrini, A., and Zeugner, S. (2018): Methodologies for the Assessment of Current Account Benchmarks. European Economy Discussion Paper 86

broadly offset by changes in other NENDI instruments. ([10]) The net external assets of Germany thus remain characterized by relatively liquid instruments, which are mostly held by the non-bank financial sector. The declining yield on such net assets partly explains why the external investment income balance remains broadly stable despite the steadily increasing NIIP.

Equity continues to account for a limited share of the NIIP. In 2020, net direct investment amounted to 19% of GDP, complemented by small net holdings of equity shares (4%). Gross direct investment continued to expand until 2019 (Graph 2.4(h)) and stayed broadly stable in 2020. In net terms, direct investment has barely changed since 2015. Overall, direct investment is focused on EU and OECD partners, notably the Netherlands, Luxembourg, France, the UK and US. Net direct investment into non-EU/OECD economies amounted to some 7% of GDP in 2019.

The German external balance remains intertwined with that of the euro area. The German savings-investment discrepancy balance accounts for most of the euro area current account surplus (Graph 2.4(f)). The German contribution to the overall euro-area savings investment gap held constant over time. The evolution of the German external balance differs to that of the euro area, principally due to a different evolution of imports. While German exports have been moving broadly in line with those of relevant euro-area partners during the last decade (Graph 2.3(a)), imports have been more muted.

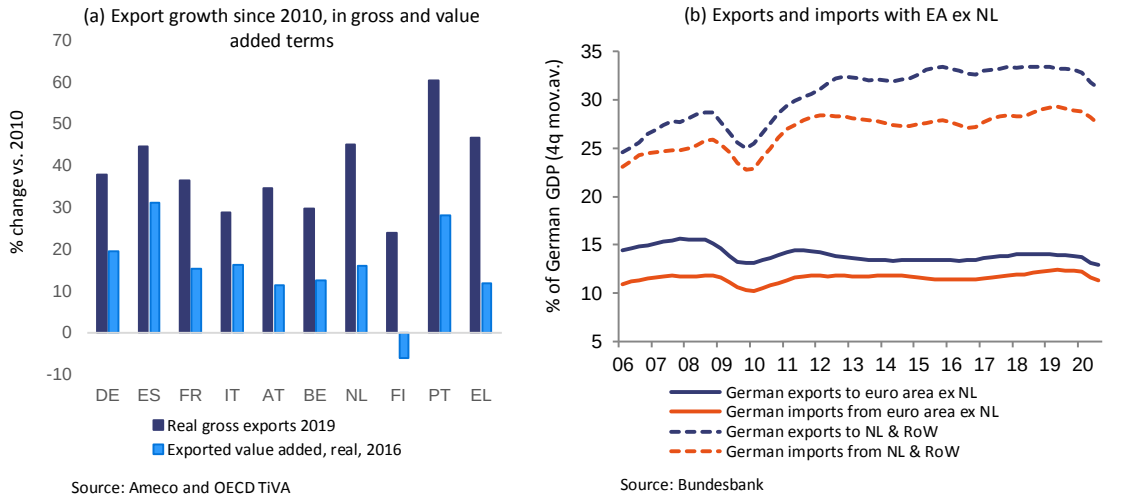
Graph 2.2: Import and export ratios



Source: AMECO

([10]) The Bundesbank Target2 balance increased from +26% of GDP end 2019 to +34% of GDP in 2020. Preliminary analysis suggests that this may be partly on account of German securities purchased by quantitative easing being less as % of GDP than in the rest of the euro area. As of early 2021, the Target2 balance is declining.

Graph 2.3: **Exports**



Source: Eurostat and AMECO

Overall, the German current account surplus was only transitorily affected by the COVID-19 pandemic. After a strong drop at the onset of the crisis, the current account returned quickly to its pre-pandemic level on the back of strong exports and imports constrained by restrictions. Fiscal support stabilised households' income and with private consumption curtailed by containment measures, thus the household saving rate increased, but is expected to broadly return to its pre-pandemic level of around 18½% of GDP in 2022. While there was a substantial acceleration of the upward trend in public investment in 2020, private investment suffered considerably in the context of the COVID-19 crisis. With the recovery and expected normalisations, the current account surplus is forecast to drop to 6.9 of GDP in 2022, below the pre-crisis level. Thus, the COVID-19 pandemic led only to some transitory fluctuations and the surplus is expected to return to its pre-pandemic profile, a steady decline since 2015, but still at a high level. In 2019, the current account surplus has been well above what could be inferred from fundamental factors and indicators used in the context of the MIP and in turn leads the net international investment position (NIIP) to expand further.

Table 2.1: **Selected external indicators, Germany**

Flows [1]	Source:	2003-07	2008-12	2013-17	2018	2019	2020	2021f	2022f
CA balance as % of GDP, NA	*(b)*	**4.7**	**6.2**	**7.9**	**7.6**	**7.3**	**7.2**	**7.8**	**6.9**
CA balance as % of GDP, BoP	*(a)*	4.6	6.1	7.7	7.9	7.5	7.0	7.5	6.6
Cyclically adj. CA balance as % of GDP [2]	*(c)*	3.9	6.5	8.5	7.7	7.0	7.9	7.9	7.2
CA req. to stabilize NIIP above -35% [3]	*(c)*	0.3	0.6	1.2	1.6	1.9	2.1	2.7	2.6
CA explained by fundamentals (CA norm) [4]	*(c)*	0.6	1.4	2.9	3.5	3.5	3.4	3.2	3.2
Required CA for specific NIIP target [5]	*(c)*	1.4	1.7	1.7	1.4	1.4	1.2	1.6	1.4
Trade bal. G&S, % of GDP, NA	*(b)*	5.3	5.5	6.9	6.1	5.8	5.8	6.4	5.5
Required TB for specific NIIP target [5]	*(c)*	2.6	1.0	1.0	0.7	0.3	-0.2	0.0	-0.2
Capital account bal. as % of GDP, NA	*(b)*	**0.0**	**-0.1**	**-0.1**	**-0.1**	**-0.2**	**-0.3**	**-0.3**	**-0.3**
Stocks									
NENDI as % of GDP	*(a)*	**7**	**19**	**35**	**46**	**51**	**53**		
of which: net portfolio debt	*(a)*	-20	-19	-5	5	6	2		
of which: net mutual fund shares	*(a)*	9	9	12	13	17	19		
of which: net other investment	*(a)*	15	23	23	23	23	26		
NIIP as % of GDP	*(a)*	**11**	**24**	**46**	**63**	**72**	**76**	**79**	**81**
Prudential NIIP/NENDI benchmark [6]	*(c)*	-78	-81	-82	-84	-83	-83	-83	-84
Fundamentally expl. NIIP benchmark (NIIP norm) [6]	*(c)*	14	17	29	36	40	44	43	44

NA=National Accounts, BoP=Balance of Payments, CA=Current Account, NENDI= NIIP excluding non-defaultable instruments, TB= Trade Balance

(1) Flow data refer to national account concept, unless indicated otherwise.

(2) Cyclically adjusted Current Account is the Current Account adjusted for the domestic and foreign output gaps, taking into account trade openness.

(3) The average Current Account needed in order to stabilise the NIIP is based on T+10 ECFIN projections.

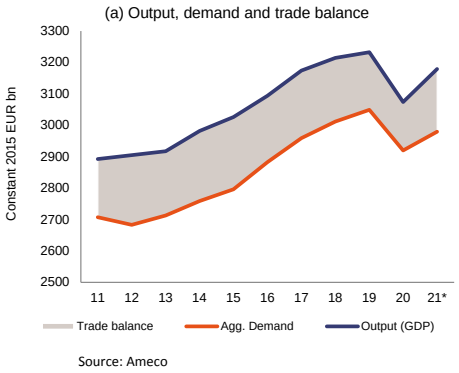
(4) The Current Account explained by fundamentals refers to the expected Current Account given the level of its fundamentals with respect to world average.

(5) The Current Account or Trade Balance needed either to halve the distance to fundamental NIIP benchmark, or to reach the prudential NIIP benchmark in 10Y, whichever is higher. Based on T+10 ECFIN projections.

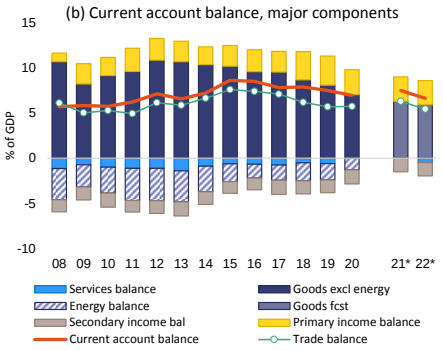
(6) The country-specific prudential benchmark denotes the NIIP level beyond which the probability of an international economic and financial crisis becomes higher. The NIIP level explained by fundamentals ('NIIP norm') represents the NIIP that would result if a country had run its current account in line with fundamentals since 1995. For details see Turrini and Zeugner (2019), "Benchmarks for Net International Investment Positions", European Economy, Discussion Paper 097/2019.

Source: (a) Eurostat, (b) AMECO, (c) European Commission calculations, (d) WIOD database

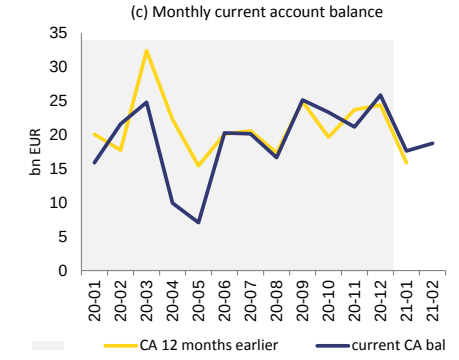
Graph 2.4: **Thematic Graphs: External imbalances**



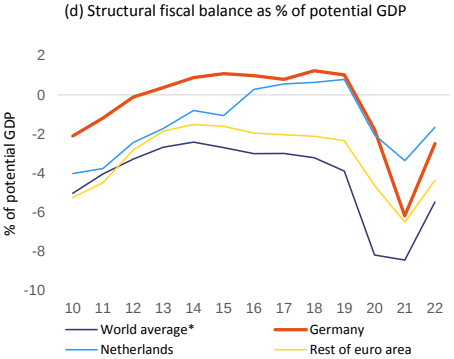
Source: Ameco



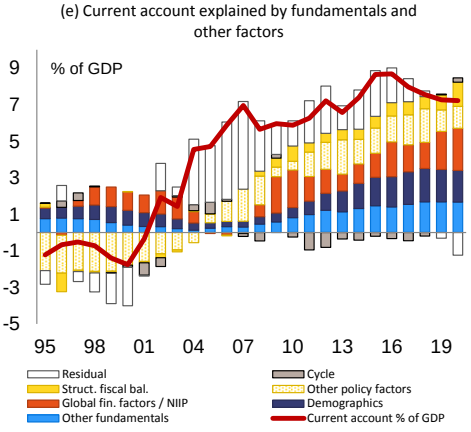
Source: Ameco and Eurostat



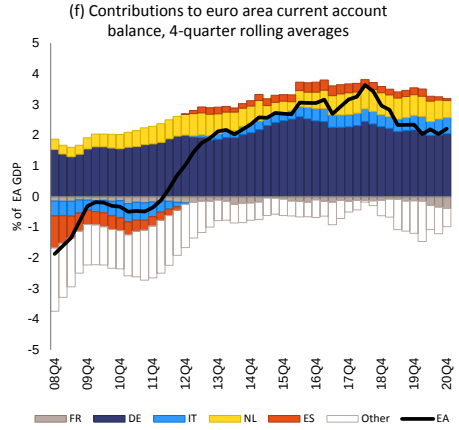
Source: Ameco and Bundesbank



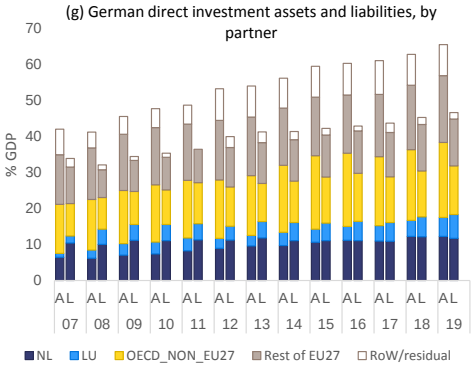
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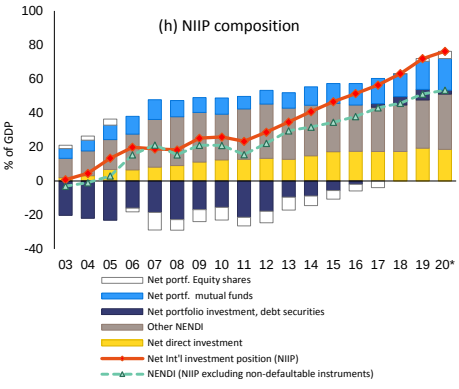
Source: Commission services calculations based on Coutinho et al. (2018)



Source: Eurostat



Source: Ameco



Source: Eurostat

Source: European Commission Services

3. THEMATIC ISSUE: INVESTMENT

Before the COVID-19 crisis, public investment was on an upward trajectory but still below net replacement at the municipal level. In 2020, public investment accelerated substantially in response to the crisis and will likely remain high in the coming years. While municipalities felt constrained by declining tax revenue and were considering cutting investment expenditure at the beginning of the COVID-19 crisis (Brand et al, 2020), the federal level provided compensation for the loss in local trade tax and took over parts of social expenditure (Kommunaler Solidarpakt 2020). This was instrumental in that the municipal level could expand tangible investment (Sachinvestitionen) by 11.7% to EUR 38.6 bn. ([11]) Nevertheless, the strain on municipal finances remains considerable, affecting future investment potential (Brand et al, 2021).

The COVID-19 pandemic has accentuated sectoral disparities, which could be a drag on private investments. The outbreak of the COVID-19 pandemic affected the German economy via the disruption of supply chains and through the suspended activity in the contact-intensive services, which are particularly (even if not only) relevant for consumer spending. Initially this affected business sentiment negatively in all sectors – industry, construction, services – although to a varying extent (Graph 3.2). Since mid-2020, international trade has normalised and manufacturing, largely unhindered by the sanitary fall-out, has been in an upswing with prospects steadily improving. The services sector continued to suffer from restrictions on activity, which have been quite stringent since late 2020. Although sentiment has improved somewhat, it remains well below pre-pandemic levels. Bearing in mind that investment in manufacturing has consistently been more dynamic than in the services sector in recent years the differential impact of the COVID-19 pandemic is likely to reinforce this divide.

In 2020, more than EUR 3 bn of announced federal government investment could not be realised due to delays in the pay-out of support measures. ([12]) This problem slows down timely implementation of investment projects, contributes to Germany's persistent current account imbalance, limits the scope for timely stabilisation policies, and thus undermines economic resilience. Therefore, reducing investment barriers is a key policy challenge for the German Recovery and Resilience Plan and beyond.

Protracted planning and plan approval procedures frequently lead to an insufficient outflow of public investment funds and slow down private investment projects. Small municipalities and districts (*Kreise)* in particular often lack the administrative capacity to manage investments and larger approval procedures. These challenges frequently lead to an incomplete outflow of public investment funds and slow down private investment projects, contributing to the investment-savings imbalance. The expansion of the electricity grid and the deployment of very high-capacity broadband are slowed down by complex and long-lasting planning procedures and protracted participation procedures and judicial proceedings. In 2020 Germany adopted a law to speed up investment in infrastructure (*Investitions-beschleunigungsgesetz*), which contains some welcome changes to reduce the length of court procedures. In 2015, Germany set up a commission to reduce construction costs (*Baukostensenkungskommission*). Its recommendations are still to be implemented, for instance a stringent and streamlined building code (*Musterbauordnung)* that is the same across the *Länder*.

Local administrations suffer from a persistent skills shortage, both in number of people but also in the technical and digital competences. Human resource capacities have repeatedly been identified among the most important bottlenecks (Krone and Scheller 2020). Additionally, a lack of skilled workforce in the construction sector contribute to hampering the absorption of public funds and the completion of private investment projects. Public administration will also be severely affected by the ageing of its staff, but current measures to ensure long-term government capacity and attractiveness as an employer are insufficient. About 30% of all government employees are retiring over the next ten years.

([11]) https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/03/PD21_152_71137.html
([12]) Bundesfinanzministerium Monatsbericht Januar 2021, Tablle 6.

Already today about 4% of all government positions (mostly IT and specialist functions) cannot be filled and it is estimated that this number will rise to about 16% in 2030.

A lack of skilled workers is a considerable barrier to investment. More than 8 in 10 German firms (83%) consider the availability of skilled staff as the biggest long-term barrier to investment, making it the most important one (European Investment Bank, 2020). An ageing workforce is expected to make this an even more binding constraint, necessitating continued efforts on education and skills.

Investment plans at the level of municipalities might be constrained by the pro-cyclicality of local business taxes. More stable tax revenues could help municipalities to maintain more appropriate investment plans also in adverse periods. The Bund provided ample support to municipalities during the crisis to compensate for the extraordinary drop in local business taxes. However, public investment projects at local level will most likely still be constrained by the uncertainty of local tax revenues and continuation or end of support from the Bund.

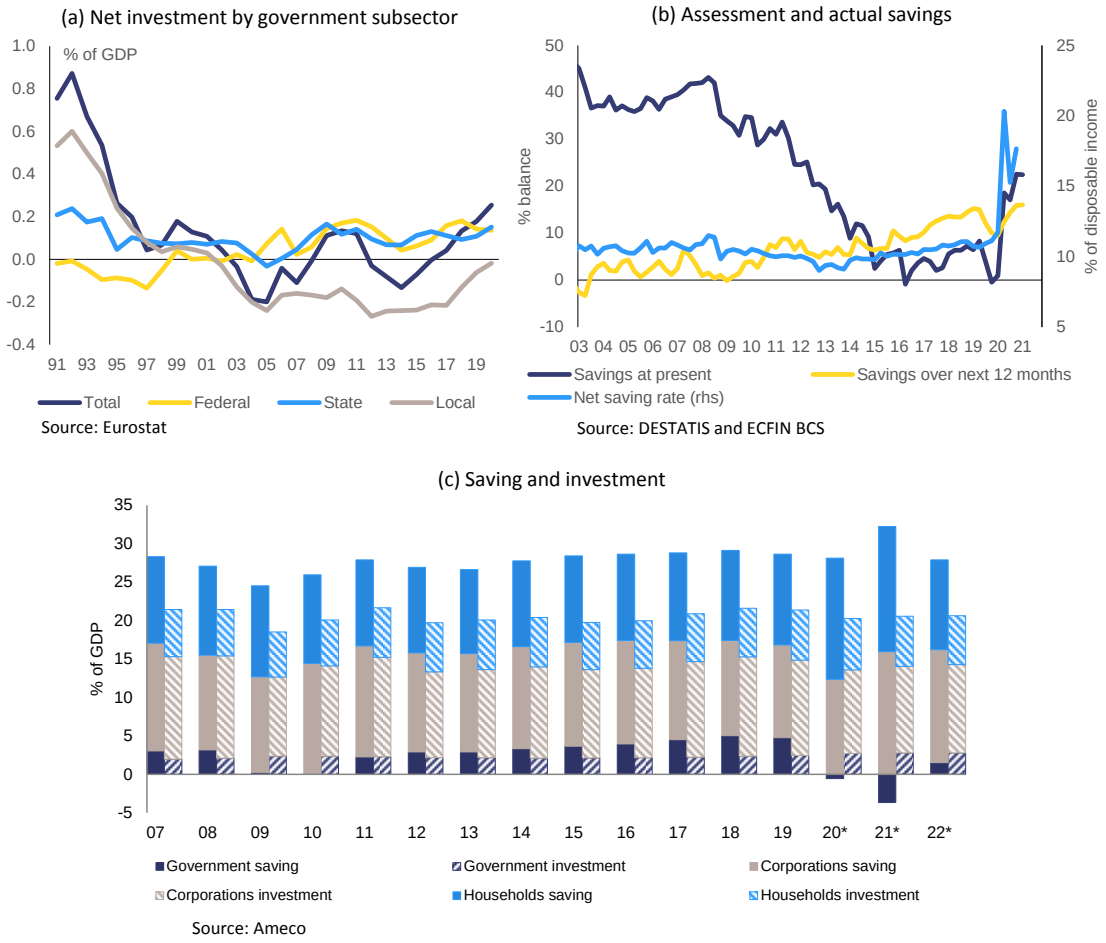
Incoherent taxes and levies on electricity hamper investment in decarbonisation and the smart integration of sectors. The renewable energy surcharge scheme (*Erneuerbare-Energien-Gesetz*) has played a key role in the expansion of renewables. However, as it is now, its cost (EUR 24 billion in 2020) substantially increases electricity prices for both households and small and medium-sized businesses (exemptions apply for energy-intensive companies), creating a barrier for electrification. At the same time, the prevailing uncertainty about the surcharge scheme and doubts about future financing hold back investments in technologies based on clean electricity (GCEE, 2020). The phasing in of a CO_2 price for transport and heating from 2021 onwards addresses some of these concerns; however, price signals remain inconsistent, and somewhat weak. A definite phase-out of the surcharge would strengthen the emission-related price signal from the CO_2 price and incentivise investment.

Germany is lagging behind its own goals concerning eGovernment, provision of digital public services as well as digital infrastructure and its electricity grid. Despite some ongoing initiatives and recent improvement in digital services for businesses, the level of online interaction between the public authorities and the general public is low. Thus, continuing with the progress and forceful implementation of online services in line with the German Online Access Act, along with the digitalisation of internal workflows and the installation of an adequate digital infrastructure at all levels of government, should be among the priorities. Harmonisation and standardisation of IT infrastructure would speed up the process and reduce operating costs and bureaucracy. The expansion of the electricity grid is slowed down by planning procedures and long-lasting construction projects. The lack of adequate transmission and distribution grid infrastructure slows down the penetration of renewables and the smart integration of sectors, and thus also slows down additional investments.

Changes in the regulation of business services could boost economic activity and investment. Economic analysis concludes that some professional services are over-regulated, with measures in place that stifle competition and increase prices, e.g. exclusivities on the exercise of certain activities. In some cases, differences in regulation across *Länder* may act as a barrier to business expansion. In 2020, qualification requirements (*Meisterpflicht*) were re-instated for 12 crafts professions, after these had been abolished in 2004 for 53 crafts professions. Overall, barriers to market entry and competition for regulated professions in Germany remain, despite a related CSR repeated every year since 2011.

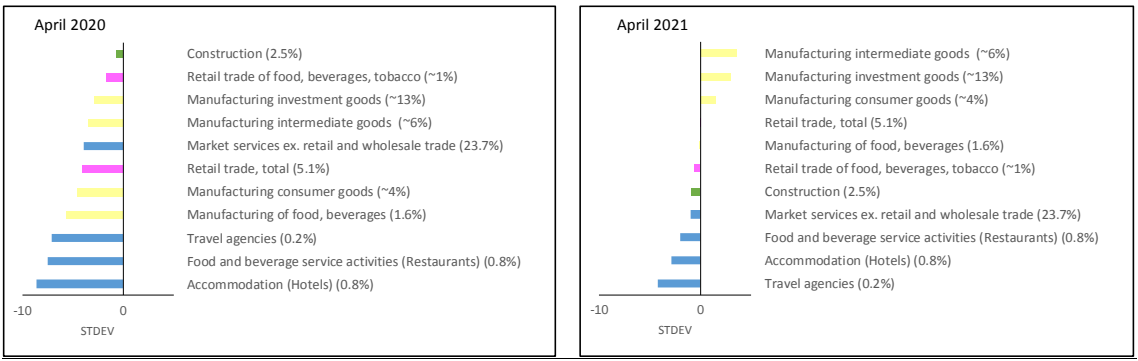
Overall, Germany exhibits persistent barriers to private and public investment; Support measures by the federal level stabilised tangible investment at the municipal level during the COVID-19 pandemic, but did not alleviate the structural financial situation of municipalities, whose investment plans might be constrained by the pro-cyclicality of local business taxes and thus a lack of an adequate funding perspective for multi-year projects. Private investment is constrained by incoherent taxes and levies on electricity and barriers to competition. The German Recovery and Resilience Plan is an opportunity to address these structural issues.

Graph 3.1: **Thematic Graphs: Savings and investment**



Source: European Commission Services

Graph 3.2: **Comparison of business expectations to 2019 average (in standard deviations)**



(1) selection is non-exhaustive and overlapping; (2) standard deviations over 2005-2019
Source: European Commission services calculations based on business and consumer surveys

4. THEMATIC ISSUE: FLOW OF FUNDS PERSPECTIVE

This chapter presents a factual description of the total economy surplus from the financial balances perspective. Overall, financial relations among institutional sectors remained relatively stable during the pandemic. Household savings continue to be channelled abroad by the non-bank financial sector, amid low domestic capital investment. Graph 4.1 displays sectoral financial asset holdings in 2019. Bank assets invested in the non-financial corporations (NFCs) and government sectors are smaller than the financial sector's net liabilities to households, and its cross-border exposures. Household assets are concentrated in the financial sector, with a large share attributed to non-bank financial intermediaries (mainly insurance and pension funds). Overall, the government and private sector's holdings in banks (other than the central bank) exceed domestic banks' holdings in government and private sectors by only some 5% of GDP. ([13]) Banks (other than the central bank) thus display broadly balanced exposures with domestic non-financials on aggregate. This contrasts with non-bank financials, with liabilities mainly owed to the domestic household sector, and assets mostly held abroad. Overall, non-bank financials allocate only a limited part of their consolidated assets to equity ([14]), while the bulk of their assets is invested in debt and mutual funds. These assets are characterised by cross-border holdings, mirroring the limited share of government and NFC-issued debt available domestically.

The small debt liabilities of the NFC and government sectors mean that they account for a limited share of assets by the other domestic sectors. Government liabilities, for their part, are mostly held by banks (including the central bank) and foreign investors. To some extent, these are offset by strong government assets held in banks and abroad. The largest part of government assets consists of holdings in domestic NFCs (mostly equity), which appear larger than holdings in domestic NFCs by households. ([15]) NFC liabilities to banks are smaller than equity liabilities to domestic holders, and half offset by NFC deposit holdings in banks. Traditionally, NFCs and government had been the main suppliers of net debt liabilities, and their combined gross debt liabilities had been increasing slowly before and strongly during the COVID-19 pandemic. ([16]) Yet these increases had been mostly offset by increasing debt assets held by the NFC and government sectors, along with bond purchases by the central bank and a strong role of foreign investors. Graph 4.3 shows that on account of accelerating trends, 2020 saw the first time where all of government and NFC debt liabilities were either covered by these sectors' debt holdings, or held by the central bank and foreign investors.

The private sector's net funding *flows* to other sectors before and during the COVID-19 pandemic significantly outstripped investment. Graph 4.2 decomposes savings (net of amortisations) for each major sector of the economy. These 'net' savings can be attributed to (i) net investment, i.e. an increase (+) or decline (–) in the capital stock, (ii) net flows of financial assets to (+) or from (–) other sectors, or (iii) any other financial flows, notably grants (KA) and items that cannot be allocated to other sectors from available data. Net flows to other sectors arise from the net acquisition of financial assets from other sectors (e.g. household deposits in banks), minus the net incurrence of liabilities from other sectors (e.g. household loans from banks). ([17])

German households differ from their peers in other EU Member States by a high savings rate, a large part of which is devoted to retirement savings through the non-bank financial sector. Over the last decade, the net savings of German households typically amounted to 6% of GDP p.a. Of these savings, only some 1 pp was attributed to net investment, in particular investment in residential dwellings.

([13]) In the wake of QE, the entire banking sector holds some 5% of GDP more domestic assets than the domestic economy in the entire banking sector - despite bank deposits in the Bundesbank exceeding Bundesbank loans to banks by some 10% of GDP.
([14]) Only 10% of total consolidated assets held by insurers and pension funds in 2019 was held in equity.
([15]) Note that to gaps in the source data, the exercise here assumes non-listed equity held be the consolidated general government sector to be fully attributed to the domestic NFC sector. See notes to Graph 4.1.
([16]) Here, debt is defined according to national accounts concepts, i.e. the combined market value of deposits (F2-F21), debt securities (F3), and loans (F4). Note that for NFC, a large part of debt is accounted for by cross-border intra-company loans.
([17]) Note that in the German case, net acquisition and net incurrence of liabilities flows often results from an active reduction of exposures, which means that gross flows are negative.

Due to the low home ownership share in Germany compared to other Member States, ([18]) household savings mostly accrue to financial assets. In net terms, a significant part of this financial asset acquisition goes to the banking sector, as household deposit inflows regularly exceed the take-up of loans from the banking sector. Yet, German households are particular, since the bulk of their savings occur in life insurance and pension fund savings, reflecting the high propensity for third-pillar pension savings, and thus in the non-bank financial sector, unchanged from the situation noted in the 2019 Country Report (European Commission, 2019). In 2020, household savings increased to 9.9% of GDP, with much of the increase accruing to the non-bank financial sector, as well as savings abroad.

In 2020, NFCs reduced their investment by more than their savings. During 2018 and early 2019, NFCs increased their investment funding it with bank loans, which explains why net funding from the banking sector increased to around 1% of GDP per annum. However, for any year but 2019, NFC savings exceeded investment. The resulting acquisition of net financial assets was mostly attributed to net equity flows abroad (direct investment to OECD countries, see Chapter 2). During the COVID-19 pandemic, with the restrictions constraining the economic activity, net flows to banks increased, as corporate deposits at banks rose faster than the incurrence of corporate bank loans.

The banking sector mainly redistributed financial flows within the domestic economy, while banks had hardly changed their net assets abroad in recent years. ([19]) The banking sector's net exposures abroad are increasingly routed through non-bank financials, mainly via mutual funds. Banks receive continuous funding from households, as deposits expand more strongly than loans to households. Prior to the COVID-19 pandemic, following the abatement of QE funding flows from the Bundesbank to the government sector by 2018, banks had reduced their net exposure to the government, and had increased funding towards NFCs. In 2020 however, this reversed, and banks routed increased net savings from the private sector to the rapidly expanding fiscal deficit.

The non-bank financial sector continues to play a key role in routing savings abroad. Insurers and pension funds receive strong inflows from the household sector via second- and third-pillar pension saving systems. Furthermore, they continue to reduce their exposures to the domestic banking and government sectors. These net funding inflows from domestic sources are almost exclusively matched by net outflows to other countries. Such funding outflows are concentrated on bonds and mutual funds abroad, with a strong focus on the euro area, as highlighted in the 2016 Country Report (European Commission, 2016). Finally, domestic mutual funds also play a role in transmitting funding flows from the bank and private sectors to assets abroad (mainly bonds).

Finally, the general government sector stands out by its surplus prior to the COVID-19 pandemic. During the ECB's quantitative easing, government funding flows were characterised by a withdrawal of foreign investors from scarce government bonds. This pattern is illustrated by net inflows from the (central) banking sector and net outflows to the rest of the world during 2017. During 2018/2019 banks slightly reduced their exposure to governments, while the government sector increased its deposit holdings in the banking sector. As a result, fiscal surpluses were mainly directed to banks. These flows reversed in 2020. Despite large gross flows, this was only partly attributable to banks: government liabilities to banks as a share of GDP increased by 5.3 pp in 2020, whereas government deposits in banks increased by 4.5 pp over the same period. In contrast to financial flows, net investment remained stable and close to zero before and during the COVID-19 pandemic. Overall, government liabilities continue to be held by domestic banks (including the Bundesbank) and foreign investors (see also Graph 4.3(a)). As of 2020, the government sector held 15.6% of GDP in deposits, 4.3% in debt securities, and 1.6% in mutual funds.

Overall, German households display a high surplus of net savings over net investment, which is largely routed abroad via the non-bank financial sector. With a modest share of net funding transmitted to the NFCs and the government, only a part of the households' savings surplus is transmitted

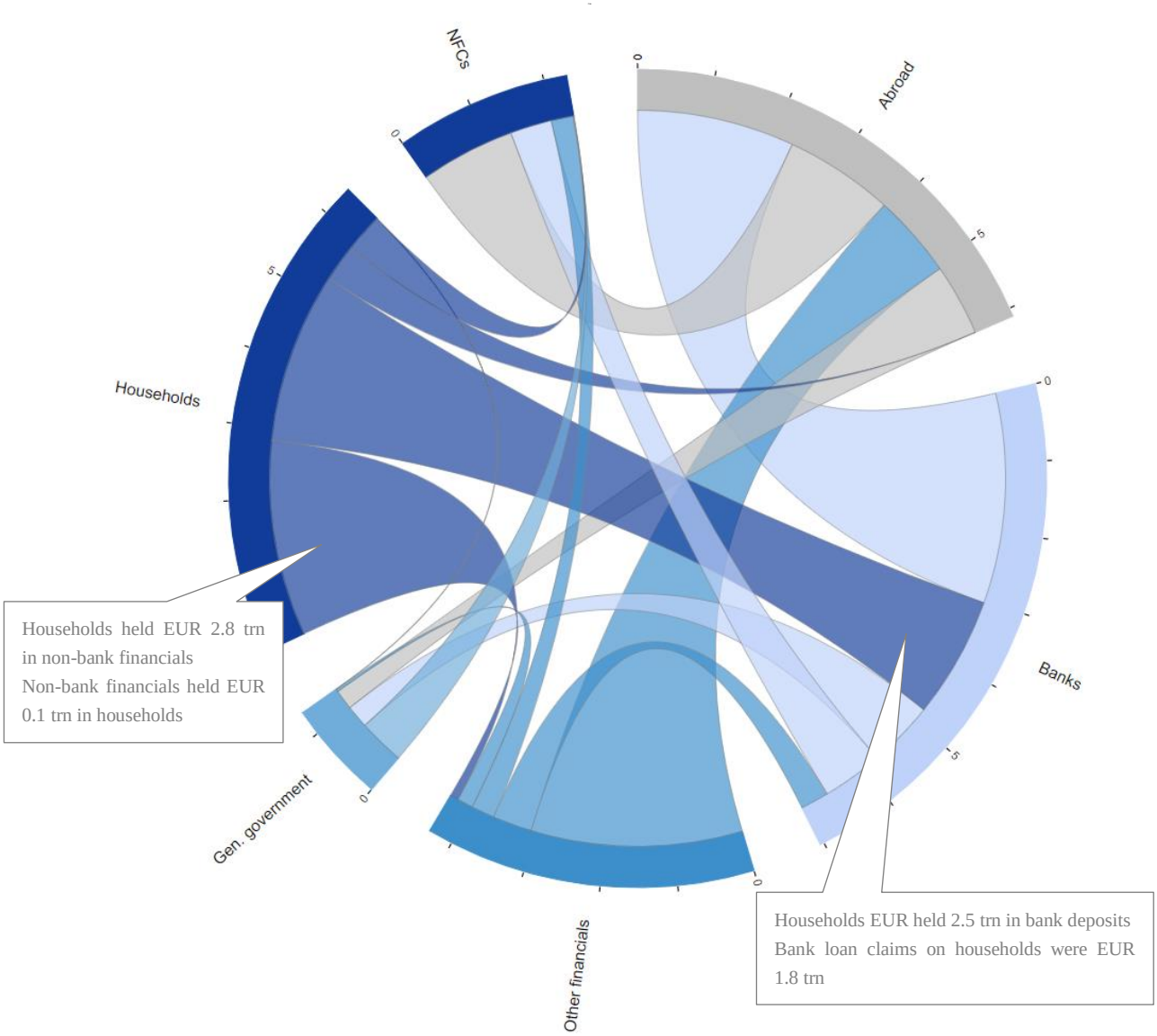
([18]) German household gross capital formation (6.5% of GDP in 2019) is higher than in the euro-area average (5.6%), yet characterized by higher amortizations too. Net capital formation by households is thus below the euro area average, and amounts to around ½ to 2/3 of neighbouring Member States.

([19]) Note that here, the 'banking sector' refers to monetary financial institutions, which covers all banks including the Bundesbank,. The data thus includes net flows to/from abroad via Target2 balances.

to domestic borrowers. The bulk of household savings is invested in the form of low-yielding secure and/or guaranteed claims on the financial sector, which in turn has to match such funding by secure assets (mostly debt). ([20]) The financial sector as a whole routes much of its funding inflows into assets abroad. Within the financial sector, the non-bank financial sector is the major recipient of domestic savings, and the main holder of foreign assets. This comprises household second- and third pillar pension savings going towards insurers and pension funds. The volume of such pension savings as well as their subsequent portfolio allocation reflects fiscal incentives and national regulation. ([21])

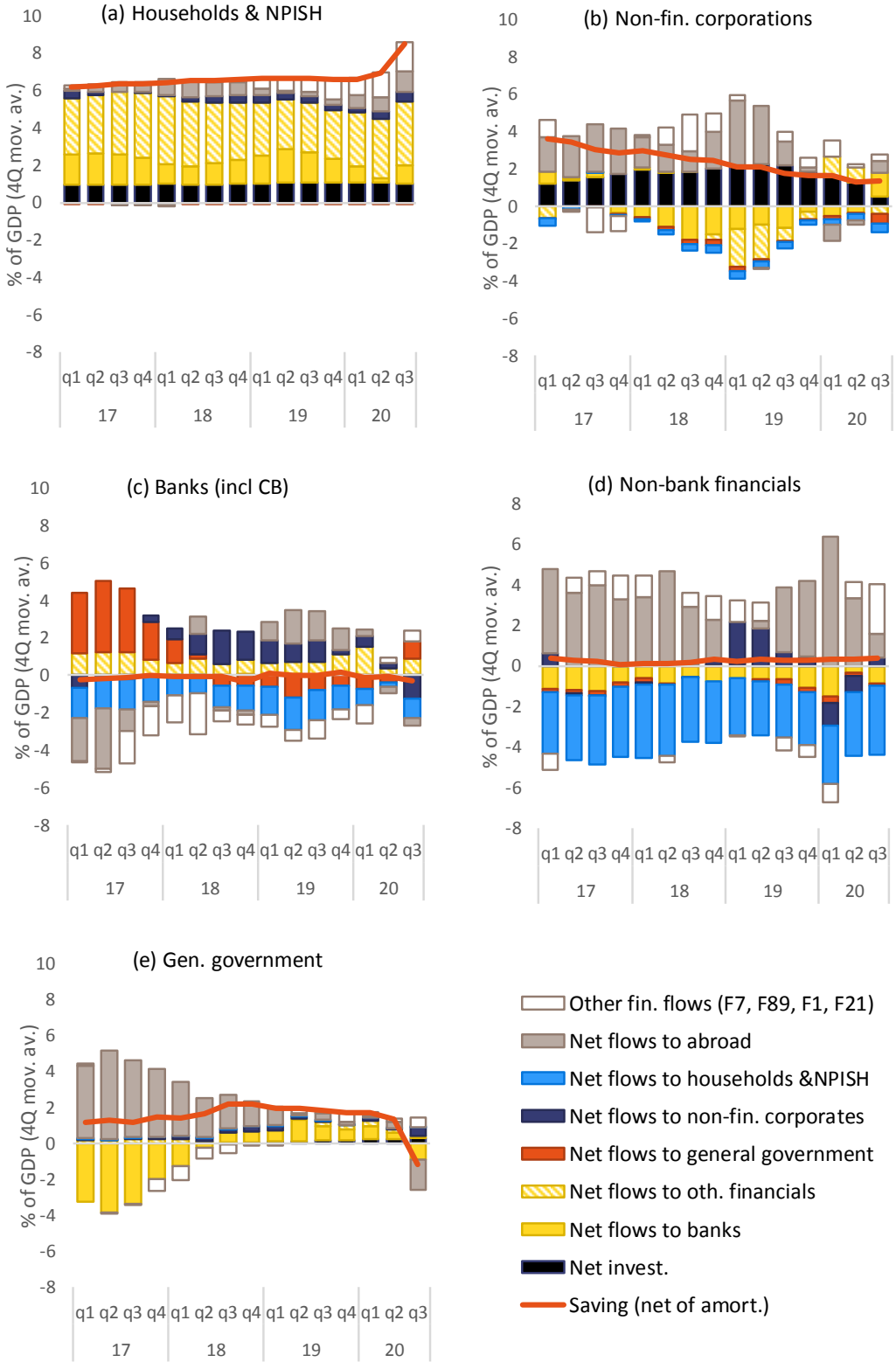
([20]) In 2020q3 according to ECB QSA, of the identifiable foreign assets held by the non-bank financial sector, ca. 46% were invested in debt securities, 11% in mutual funds, 7% in loans, and 5% in deposits.
([21]) see Country Report Germany 2016.

Graph 4.1: **Consolidated holdings of major financial assets by sector, 2019, EUR trillion**



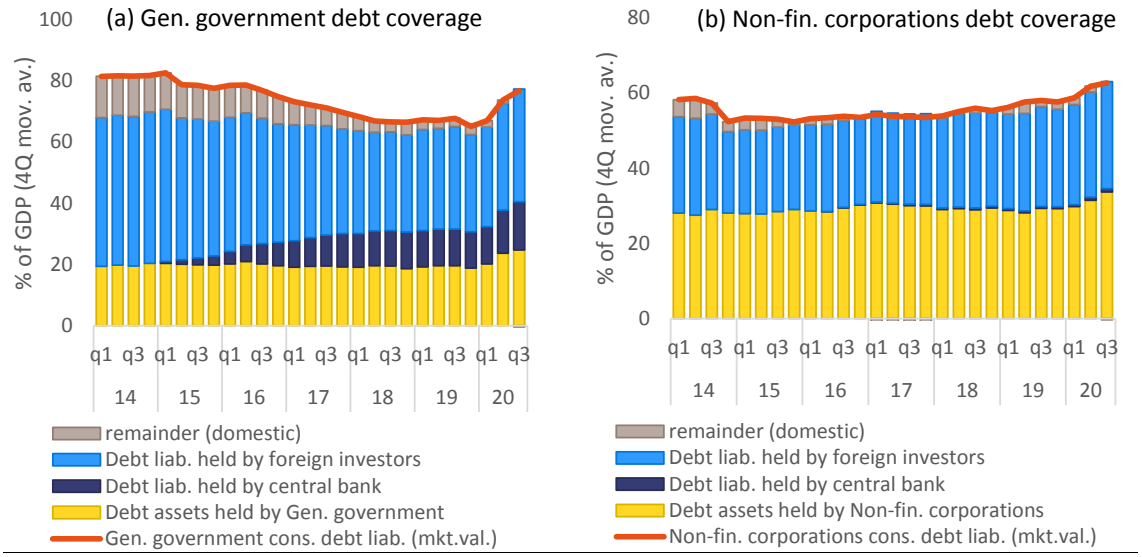
This graph denotes the gross holdings of financial assets (defined below) by sector pair. The size of a link between sectors X and Y denotes the importance of gross holdings. The width of the link at the sector-X end denotes the size of sector X's holdings in sector Y (in trillion EUR). The width of the link at the sector-Y end denotes the size of sector Y's holdings in sector X. For instance, bank holdings in general government are considerably larger than government holdings in banks. Graph depicts ECB QSA outstanding amounts at the end of 2019Q4. Banks refers to MFIs, i.e. banks including the central bank and money market funds. 'Oth. financials' refers to non-MFI financial sector corporations, which notably includes insurers, pension funds, and mutual funds. 'Households' includes non-profit institutions serving households (NPISH) in addition to households. Here, 'financial assets' denotes most instruments, i.e. total financial assets excluding bullion (F1), cash (F21), financial derivatives (F7), and other accounts (F89). Among those financial assets, ECB QSA details the attribution of deposits (F2-F21), debt securities (F3), loans (F4), listed shares (F511), and mutual funds (F52). For the purpose of this analysis, the graph attributes the remaining instruments as follows: insurance claims (F6) not held abroad (as per Eurostat BoP) are attributed to 'Other financials', while unlisted and other equity (F5-F511) and trade credit (F81) not held abroad are attributed to the NFC sector.
Source: European Commission Services

Graph 4.2: **Attribution of net savings, 4-quarter moving sums**



Charts detail the net funding to other institutional sectors based on ECB QSA data (see notes to Graph 2.2 on the instruments). Here 'Households' refers to both the sector of households (S14) and non-profit institutions serving households (S15). 'Banks' denotes monetary financial institutions, i.e. the combination of the central bank (S121), other deposit-taking corporations (S122), and money market funds (S123)
Source: Eurostat

Graph 4.3: **Public and corporate debt coverage by debt assets, foreign and central bank investors**



Based on ECB QSA, consolidated gross debt (the red line) closely reflects the national accounts definition of debt instruments, namely deposits (F2 excl cash/F21), debt securities (F3), and loans (F4) liabilities to other sectors, in market value terms. Note that this definition differs from the standard definition of government debt, which is usually stated in nominal, rather than in market value terms. The bars indicate how much of this is covered by the sectors' own debt assets, plus the gross holdings by foreign investors and the central bank. The remainder thus corresponds to net debt liabilities to domestic agents excluding the central bank, minus foreign debt assets held by the government/NFC sector. Note that in the case of non-financial corporations, a significant part of debt assets and foreign investor-held liabilities is in the form of intra-company loans. (1)
Source: ECB and Eurostat