



EURO AREA POLICIES

July 2023

2023 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR EURO AREA

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2023 Article IV consultation with member countries forming the euro area, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its July 12, 2023, consideration of the staff report that concluded the Article IV consultation with member countries.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on July 12, 2023, following discussions that ended on May 26, 2023, with the officials of EU institutions on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 28, 2023.
- A **Statement by the Executive Director** for France, on behalf of the euro area member states and the European community.

The documents listed below have been or will be separately released.

Selected Issues

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International Monetary Fund
Washington, D.C.



IMF Executive Board Concludes 2023 Article IV Consultation with Euro Area

FOR IMMEDIATE RELEASE

Washington, DC – July 19, 2023: On July 12, the Executive Board of the International Monetary Fund (IMF) concluded the 2023 discussions on common euro area policies with member countries¹

The euro area economy has shown remarkable resilience in the aftermath of Russia's invasion of Ukraine and the largest terms of trade shock in several decades, thanks to a swift policy response and a strong rebound in contact-intensive services. However, economic activity weakened significantly in the second half of 2022 and slipped into a mild technical recession in early 2023 as financial conditions tightened, real wages declined, and consumer confidence fell. Looking ahead, growth is expected to pick up gradually throughout 2023 and 2024, supported by a recovery in real incomes in the context of continued tight labor market conditions, a further easing of supply constraints, and firmer external demand, even as financial conditions continue to tighten. While headline inflation has fallen sharply recently after reaching record high levels, core inflation is proving more persistent. As tight financial conditions restrain demand and supply shocks dissipate further, inflation is set to decline further but is expected to remain elevated for an extended period.

Uncertainty surrounding the outlook is high. Turbulence in financial markets, including from distress elsewhere, could lead to a contraction in credit and broader increase in risk aversion, while weaker external demand would negatively affect the bloc's growth prospects. More persistent inflation, including due to strong wage growth, would require a tight policy stance for longer, weighing on domestic demand. Renewed supply shocks, which could result from an escalation of the war in Ukraine and a related increase of commodity prices, or a further intensification of geoeconomic fragmentation, would also push up inflation and hurt growth. On the upside, the economy could again prove more resilient than expected, especially amid a still large stock of excess savings.

Executive Board Assessment²

Executive Directors agreed with the thrust of the staff appraisal. They commended the authorities for their decisive policy actions, which supported the resilience of the euro area economy in the face of a complex economic environment. Directors concurred that growth is

¹ Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. Staff hold separate annual discussions with the regional institutions responsible for common policies for the countries in four currency unions – the Euro-Area, the Eastern Caribbean Currency Union, the Central African Economic and Monetary Union, and the West African Economic and Monetary Union. For each of the currency unions, staff teams visit the regional institutions responsible for common policies in the currency union, collect economic and financial information, and discuss with officials the currency union's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis of discussion by the IMF Executive Board. Both reports subsequently are considered an integral part of the Article IV consultation with each member.

² At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.IMF.org/external/np/sec/misc/qualifiers.htm>.

set to pick up gradually, even as financial conditions tighten further, but recognized that the outlook is surrounded by high uncertainty. In this context, they agreed that bringing inflation back to target, while preserving financial stability, remains the near-term priority. Sustained structural reforms to enhance medium-term growth are also needed.

Directors noted the need to maintain a tight monetary policy stance to ensure that inflation returns to target in a timely manner, with most Directors stressing that further monetary policy tightening is needed. More generally, Directors called for a continued flexible and data-dependent approach. They also agreed that the Eurosystem's bond holdings should continue to be reduced in a gradual and predictable manner, with the policy rate serving as the primary tool of monetary policy.

Directors welcomed that euro area banks are overall well capitalized and liquid. They stressed the importance of strong supervision and regulation of banks and nonbank financial intermediaries to mitigate risks related to asset valuations, liquidity, funding, and exposures to real estate markets. Directors called for making further progress toward completing the EU's financial architecture to enhance economic and financial resilience.

Directors agreed that a tighter fiscal stance, as planned in 2024, would help contain inflationary pressures. In addition, they stressed that a reduction in deficits is essential to safeguard fiscal sustainability in many high-debt countries, including by phasing out energy relief measures and saving any revenue windfalls. Directors emphasized the importance of protecting investment as public finances are consolidated. They supported the ongoing reform of the European economic governance framework and encouraged reaching an agreement swiftly to anchor medium-term fiscal policy making. A number of Directors also considered that an EU-wide fiscal capacity for macroeconomic stabilization and provision of public goods would help strengthen this framework.

Directors noted that ambitious structural policies and investments are instrumental to increase potential growth and support the digital and green transitions. In this context, they underscored that making progress toward the National Recovery and Resilience Plan targets, with further efforts to promote innovation, facilitate the sectoral reallocation of labor, and reskill and upskill the workforce are crucial to achieve these objectives. Directors also stressed the EU's critical role in promoting rules-based, open trade and welcomed its commitment to the World Trade Organization.

It is expected that the next consultation on euro area policies in the context of the Article IV obligations of member countries will be held on the standard 12-month cycle.

Table 1. Euro Area: Main Economic Indicators, 2019–2028										
					Projections 1/					
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Demand and Supply (y/y percent change, unless otherwise specified)										
Real GDP	1.6	-6.1	5.3	3.5	0.9	1.5	1.8	1.7	1.4	1.3
Private consumption	1.4	-7.7	3.7	4.5	0.5	2.1	2.0	1.8	1.4	1.3
Public consumption	1.7	1.0	4.3	1.4	0.0	0.8	0.7	0.9	1.1	1.1
Gross fixed investment	6.9	-6.2	3.9	3.7	1.5	1.3	2.3	2.4	1.9	1.8
Final domestic demand	2.7	-5.5	3.9	3.6	0.6	1.6	1.8	1.7	1.4	1.4
Stockbuilding 2/	-0.2	-0.3	0.3	0.3	-0.1	-0.1	0.0	0.0	0.0	0.0
Domestic demand	2.4	-5.7	4.1	3.8	0.6	1.6	1.8	1.7	1.4	1.4
Foreign balance 2/	-0.7	-0.5	1.3	-0.2	0.4	0.0	0.1	0.1	0.1	0.0
Exports 3/	2.9	-9.0	10.7	7.2	3.4	3.9	3.5	3.4	3.2	3.1
Imports 3/	4.8	-8.5	8.4	8.3	2.7	4.2	3.6	3.5	3.3	3.3
Resource Utilization										
Potential GDP	1.4	-1.4	2.5	1.2	1.4	1.5	1.5	1.5	1.4	1.3
Output gap	-0.1	-4.7	-2.1	0.0	-0.4	-0.5	-0.2	0.0	0.1	0.1
Employment growth 4/	1.3	-1.4	1.5	2.3	0.5	0.2	0.3	0.2	0.1	0.1
Unemployment rate 4/	7.6	8.0	7.7	6.7	6.8	6.7	6.6	6.5	6.5	6.5
Prices										
GDP deflator	1.7	1.8	2.1	4.6	5.3	3.2	2.3	1.9	1.9	1.9
Consumer prices	1.2	0.3	2.6	8.4	5.2	2.8	2.1	2.0	1.9	1.9
Public Finance (percent of GDP)										
Overall fiscal balance	-0.6	-7.1	-5.3	-3.6	-3.5	-2.7	-2.3	-2.1	-2.0	-2.0
Primary balance	0.8	-5.7	-4.0	-2.1	-2.0	-1.0	-0.5	-0.2	-0.1	-0.1
Structural balance 5/	-0.4	-4.0	-3.5	-2.4	-2.8	-2.3	-2.2	-2.1	-2.1	-2.1
Structural primary balance 5/	1.0	-2.7	-2.2	-0.9	-1.2	-0.7	-0.4	-0.2	-0.1	-0.1
Gross public debt	83.7	96.8	95.1	91.2	89.4	88.2	87.1	86.3	85.6	85.1
External Sector 6/, 7/										
Current account balance	2.2	1.6	2.3	-1.0	0.9	1.1	1.4	1.6	1.7	1.7
Interest Rates (end of period) 4/ 8/										
Euro short-term rate (€STR)	-0.5	-0.6	-0.6	1.6	3.1	...	...	...	...	...
10-year government benchmark										
bond yield	0.4	-0.1	0.3	3.0	3.2	...	...	...	...	...
Exchange Rates (end of period) 8/										
U.S. dollar per euro	1.11	1.22	1.13	1.06	1.09	...	...	...	...	...
Nominal effective rate (2005=100)	106.0	114.5	110.8	111.1	112.7	...	...	...	...	...
Real effective rate (2005=100, ULC based)	83.7	87.4	82.1	81.1	82.0	...	...	...	...	...
Sources: IMF staff estimates; Eurostat; Global Data Source; and Refinitiv.										
1/ Projections are based on aggregation of the latest projections by IMF country teams.										
2/ Contribution to growth.										
3/ Includes intra-euro area trade.										
4/ In percent.										
5/ In percent of potential GDP.										
6/ In percent of GDP.										
7/ Projections are based on member countries' current account aggregations excluding intra-euro flows and corrected for aggregation discrepancy over the projection period.										
8/ Latest monthly available data for 2023.										



EURO AREA POLICIES

STAFF REPORT ON THE 2023 CONSULTATION WITH MEMBER COUNTRIES ON COMMON EURO AREA POLICIES

June 28, 2023

KEY ISSUES

Context. The euro area economy has shown resilience in the aftermath of Russia's invasion of Ukraine and the largest terms of trade loss in several decades, reflecting strong policy efforts to secure gas supplies and cushion disposable incomes. Nonetheless, activity has weakened, with the economy slipping into a mild technical recession in early 2023, and inflation is far above target. While headline inflation has started to decline with the easing of supply bottlenecks and energy prices, core inflation is proving more persistent. Euro area banks are well capitalized and liquid overall, but the rapid tightening of monetary policy after a prolonged period of accommodation can expose pockets of weakness in the financial system, including in the nonbank sector.

Outlook and risks. Growth in the euro area is projected to pick up gradually as real incomes slowly recover, supply constraints ease further, and external demand firms up, even as financial conditions continue to tighten. Output is likely to remain below pre-war trends throughout the forecast horizon since some of the weakening in the terms of trade will likely persist. Inflation is projected to converge to target by mid-2025. Uncertainty surrounding this baseline outlook, however, remains high. A sharp tightening of credit conditions, potentially arising out of market stresses, and a greater-than expected persistence of inflation, in the context of accelerating wages, are key near-term risks; the possibility of sovereign stress lingers in the background as an ever-present danger. On net, risks are skewed downward for growth and upward for inflation.

Policy priorities. The key near-term priority is to guide inflation back to target in a timely manner while preserving financial stability. This will necessitate a well-coordinated policy response with agility to adjust course if needed.

- Further monetary policy tightening, maintained for some time, is needed to bring inflation to target, but high uncertainty calls for a flexible approach to policy setting. The policy rate should remain the primary policy tool, well understood in its effects and not constrained by any upper bound per se. At the same time, the Eurosystem should continue to reduce its bond holdings to shrink its footprint in the financial markets, in a gradual and predictable manner.
- Enhancing the transparency of banks' financial positions, including through rigorous supervisory scrutiny of the valuation of fixed income assets, liquidity, funding

structures, and exposures to the cooling in real estate markets, is critical. Stress tests, including for interest rate risk, will help identify vulnerabilities. Supervisors and macroprudential policy setters should seek to ensure that temporarily elevated bank profits are used to build capital buffers against potential risks. Recent bouts of financial market turbulence underscore the importance of making the EU crisis management and bank resolution framework more flexible, implementing Basel III in a full and timely manner, ratifying the amended treaty of the European Stability Mechanism (ESM), and making meaningful progress toward the Banking Union (BU) and Capital Markets Union (CMU), all of which would enhance resilience. Strengthening regulations and closing data gaps in the nonbank financial sector are also essential to better understand and control risks to financial stability.

- Tightening the fiscal stance in 2024 would help to dampen aggregate demand and limit additional pressure on inflation. Allowing energy support measures to expire, saving any temporary revenue windfalls, and refraining from discretionary policy packages with a negative impact on the overall fiscal balance would deliver the needed tightening.

Over the medium term, key challenges are to safeguard sustainability, deliver on climate commitments, and address structurally weak productivity growth.

- *Safeguarding fiscal sustainability:* With debt above the already elevated pre-pandemic levels, a renewed emphasis on rebuilding fiscal space—focused on reversing the expenditure expansions of the past few years while protecting public investments—is key. This is particularly critical for high-debt countries. A new fiscal governance framework—consistent with sustained and meaningful fiscal adjustments in high debt countries, guided by medium-term plans—is urgently needed to anchor fiscal policy. Establishing an independent European Fiscal Council and creating a central fiscal capacity for macro-stabilization and the provision of common goods would help strengthen economic governance and resilience.
- *Delivering the green transition while strengthening trade:* EU countries remain far off from achieving their commendably ambitious emission reduction objectives, highlighting the importance of maintaining policy momentum. The proposed EU emissions trading scheme (ETS) reform is welcome and should proceed as planned. A common EU Climate Investment Fund would help ensure that the EU's emissions reduction goals are achieved efficiently. Policy initiatives should safeguard the integrity of the single market and the EU should continue to work toward globally cooperative green solutions that minimize distortions. In a period of rising trade tensions and barriers, the EU should remain rules-based and open. Foreign subsidies, investment screening, and export controls should be narrowly targeted to specific objectives, and the authorities should resist calls to use such tools to provide a competitive advantage to domestic industries.
- *Raising productivity and potential growth:* Expedient implementation of National Recovery and Resilience Plans (NRRPs) would help achieve the EU's green objectives, and boost resilience and growth. Ensuring reskilling and upskilling of the workforce, with a strong focus on digital skills, could raise the dynamism of labor markets while a renewed emphasis on innovation is warranted to durably lift productivity growth.

Approved By
Alfred Kammer (EUR)
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Discussions took place during May 12–26, 2023. Mission members included O. Celasun (head), L. Brandao Marques, N. Klein, G. Ljungman, V. Nguyen, L. Ratnovski, A. Santos, A. Shahmoradi, and F. Toscani (all EUR), joined by A. Bhatia, N. Arnold, N. Belhocine and J. Frie (all EUO). The Executive Director, M. Buisse, and his advisor, I. Valdés Fernández, and R. Ruffer, ECB observer at the IMF, participated in the meetings. N-J. Hansen (WHD), M. Patnam, T. Lan, J. Zhou (all EUR) and R. Meeks (MCM) contributed to the report. M. Maneely, W. Zhao, X. Li, and K. Cerrato (all EUR) supported the mission.

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Acronyms

AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism
APPs	Asset Purchase Programs
BU	Banking Union
BRRD	Bank Recovery and Resolution Directive
CAPB	Cyclically-Adjusted Primary Balance
CBAM	Carbon Border Adjustment Mechanism
CCyBs	Countercyclical Capital Buffers
CET1	Common Equity Tier 1
CIF	Climate Investment Fund
CMU	Capital Markets Union
CMDI	Crisis Management and Deposit Insurance
CRD	Capital Requirements Directive
CRE	Commercial Real Estate
CRR	Capital Requirements Regulation
DSA	Debt Sustainability Analysis
GDIP	Green Deal Industrial Plan
EBA	European Banking Authority
ECA	European Court of Auditors
EC	European Commission
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EFC	European Fiscal Council
EIB	European Investment Bank
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETS	Emission Trading Scheme
EU	European Union
FCI	Financial Conditions Index
IEA	International Energy Agency
LCR	Liquidity Coverage Ratio
LSI	Less Significant Institution
LTROs	Longer Term Refinancing Operations
MiCA	Regulation on Markets in Crypto-Assets

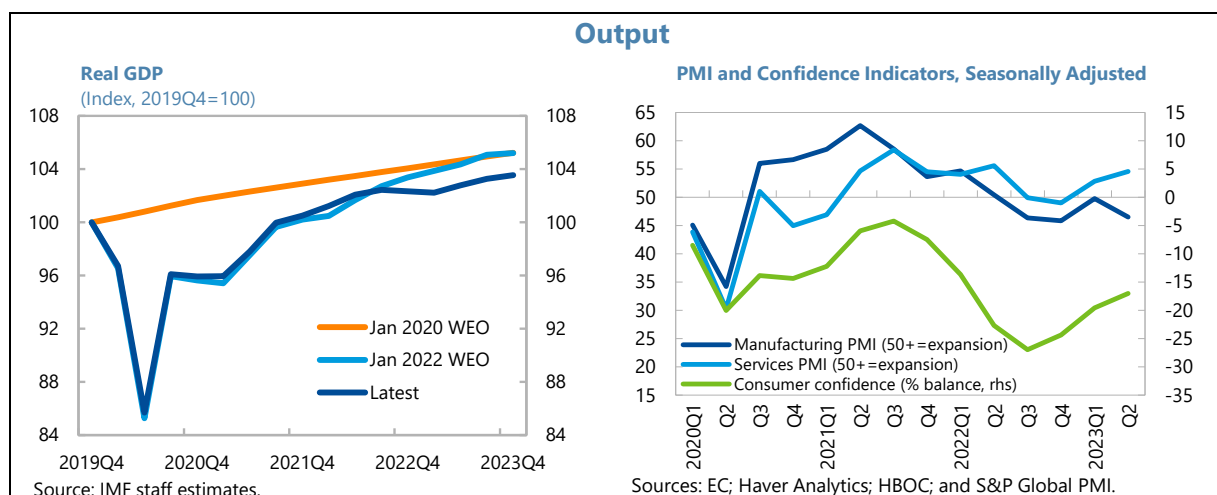
MRO	Main Refinancing Operations
NBFIs	Non-bank Financial Intermediaries
NCB	National Central Bank
NFC	National Fiscal Council
NGEU	Next Generation EU
NII	Net Interest Income
NIM	Net Interest Margin
NPL	Nonperforming Loan
NRRPs	National Recovery and Resilience Plans
NSFR	Net Stable Funding Ratio
OECD	Organization for Economic Co-operation and Development
PEPP	Pandemic Emergency Purchase Program
PD	Probability of Default
REIFs	Real Estate Investment Funds
RRE	Residential Real Estate
RRF	Recovery and Resilience Facility
RWA	Risk-weighted Assets
SI	Significant Institution
SPF	Survey of Professional Forecasters
SRB	Single Resolution Board
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
TLTRO	Targeted longer-term refinancing operation
TPI	Transmission Protection Instrument
QT	Quantitative Tightening
WEO	World Economic Outlook
WTO	World Trade Organization

CONTEXT

1. The euro area economy has shown notable resilience as it navigates the consequences of two exceptionally large supply shocks. Coming close on the heels of the pandemic shutdowns and associated supply chain disruptions, Russian energy flows to Europe were sharply curtailed following Russia's invasion of Ukraine and the associated economic sanctions (see Annex VI). While this led to the largest terms of trade shock in decades, with natural gas and electricity prices peaking at over ten and seven times their early 2021 levels, respectively, the euro area economy has proven robust, partly due to the nimble policy response in cushioning incomes and securing energy supply. The immediate shocks are now partially dissipating, and both worldwide supply bottlenecks for manufactured goods and European energy prices have eased significantly. However, their ramifications—including elevated and persistent inflation—will influence European economic policies for some time. Moreover, structural challenges—including an incomplete architecture and the need to deliver on ambitious plans for the green transition—have gained renewed urgency, given the outlook for permanently higher energy prices, concerns about energy security, and growing geo-economic fragmentation.

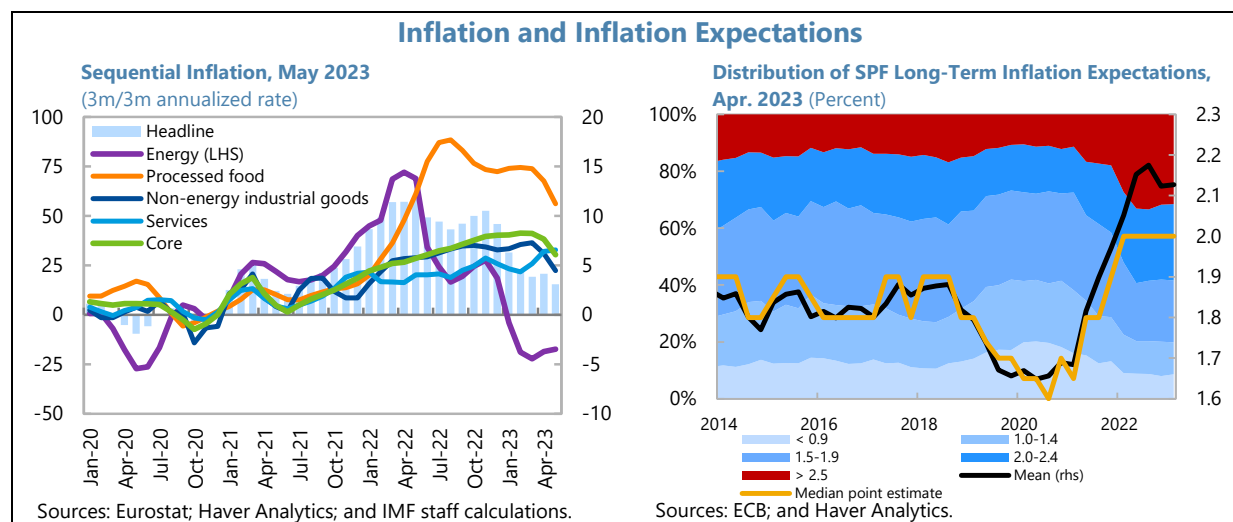
ECONOMIC AND POLICY DEVELOPMENTS

2. Russia's war in Ukraine disrupted the expected recovery of euro area output toward its pre-pandemic trend. Growth of 3.5 percent in 2022 was stronger than initially projected after the outbreak of the war, as a strong rebound in contact-intensive services over the summer and less contractionary fiscal policy, largely due to the deployment of energy relief measures, cushioned the terms of trade shock. Nevertheless, activity weakened considerably in late 2022 and early 2023 as the reopening effects gradually waned, financial conditions tightened, and consumer confidence plummeted. Euro area GDP contracted 0.1 percent q/q in both 2022Q4 and 2023Q1, marking a mild technical recession. The level of GDP in 2023Q1 stood about 1.4 percent below the level staff projected pre-pandemic, with private consumption remaining at its 2019 level. High-frequency indicators point to a return to growth in Q2, driven by the services sector (Figure 2).



3. Product and labor markets were nevertheless tight in 2022. Both the output gap and unemployment gap are estimated to have been at their tightest level since early 2008, despite output standing below the pre-pandemic projections. Labor market tightness, as measured by the vacancy-to-unemployment ratio, reached an all-time high in 2022Q3 with widespread labor shortages, especially in services. The area-wide unemployment rate reached a historical low and employment and participation rates exceeded their pre-pandemic trends. The flip side was an incomplete recovery in hours worked per employee—reflecting the continuation of a long-term trend—which appears to have led firms to compensate by hiring more workers. Amidst tight labor market conditions, expected capacity constraints in industry also showed the second tightest reading in nearly 15 years.¹

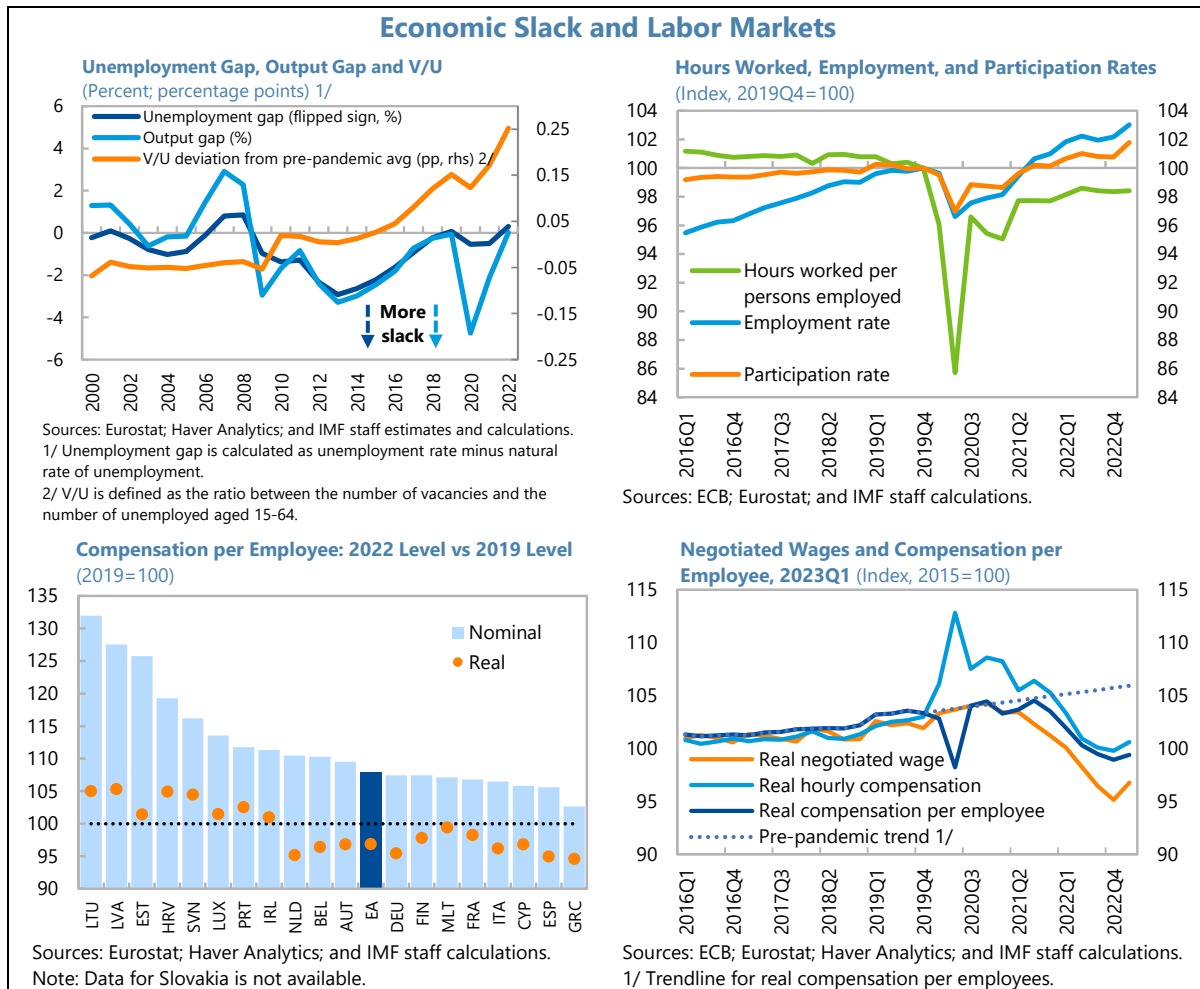
4. Inflation is far above target and core inflation is proving to be persistent. Headline inflation peaked in 2022Q4 and has fallen sharply in recent months due to lower energy prices, but sequential core inflation (3m/3m) has only just started to decrease. Twelve-month core inflation (headline excluding energy and unprocessed food) was far above target at around 6.9 percent in May (5.3 percent excluding also processed food) with services now the largest contributor to inflation. Inflation expectations have generally moderated recently, with some divergence among different measures. Consumer inflation expectations for the 12 months ahead dropped by almost 1 percentage point in April, in line with the downward trend in near-term market-based expectations. Consumer expectations for 2-3 years ahead also declined but market-based longer-term expectations have inched upward with 5y5y inflation linked swaps reaching 2.6 percent (possibly reflecting higher inflation risk premia). Finally, the ECB’s Survey of Professional Forecasters (SPF) and those based on Consensus Forecasts remained anchored at 2.1 percent and 2.0 percent, respectively (Figure 3).



5. Despite increasing nominal wage growth, real wage erosion has been substantial. By end-2022, nominal wage growth reached roughly 5 percent y/y according to most available measures, doubling the growth rate seen during 2018-19. In real terms, however, hourly

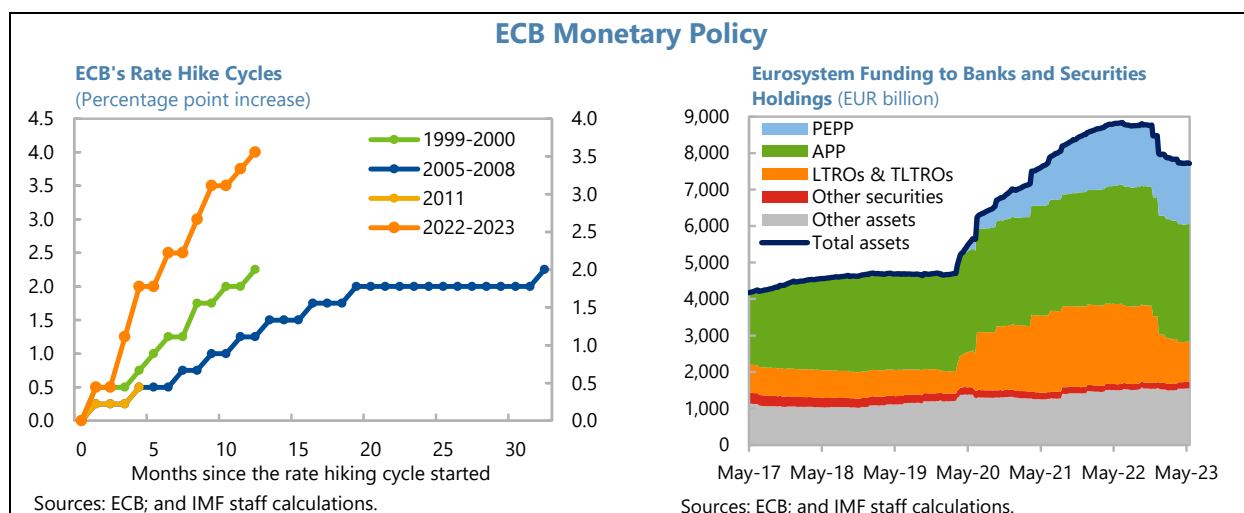
¹ European Commission Business and Consumer Survey.

compensation fell by about 5 percent in 2022, with losses accelerating throughout the year. Real compensation per hour and per employee are now back at 2015 levels, while real negotiated wages—which may not be fully harmonized across countries and have a narrower coverage—are 5 percent lower. With continued annual nominal wage growth of around 5 percent amid falling inflation, real wages stabilized in 2023Q1. Dispersion in nominal wage developments has been wide across the euro area with possible implications for relative competitiveness. This is a consequence of both differences in inflation (which has run highest in the Baltics given their openness to trade and exposure to the energy shock) and differences in wage setting practices.



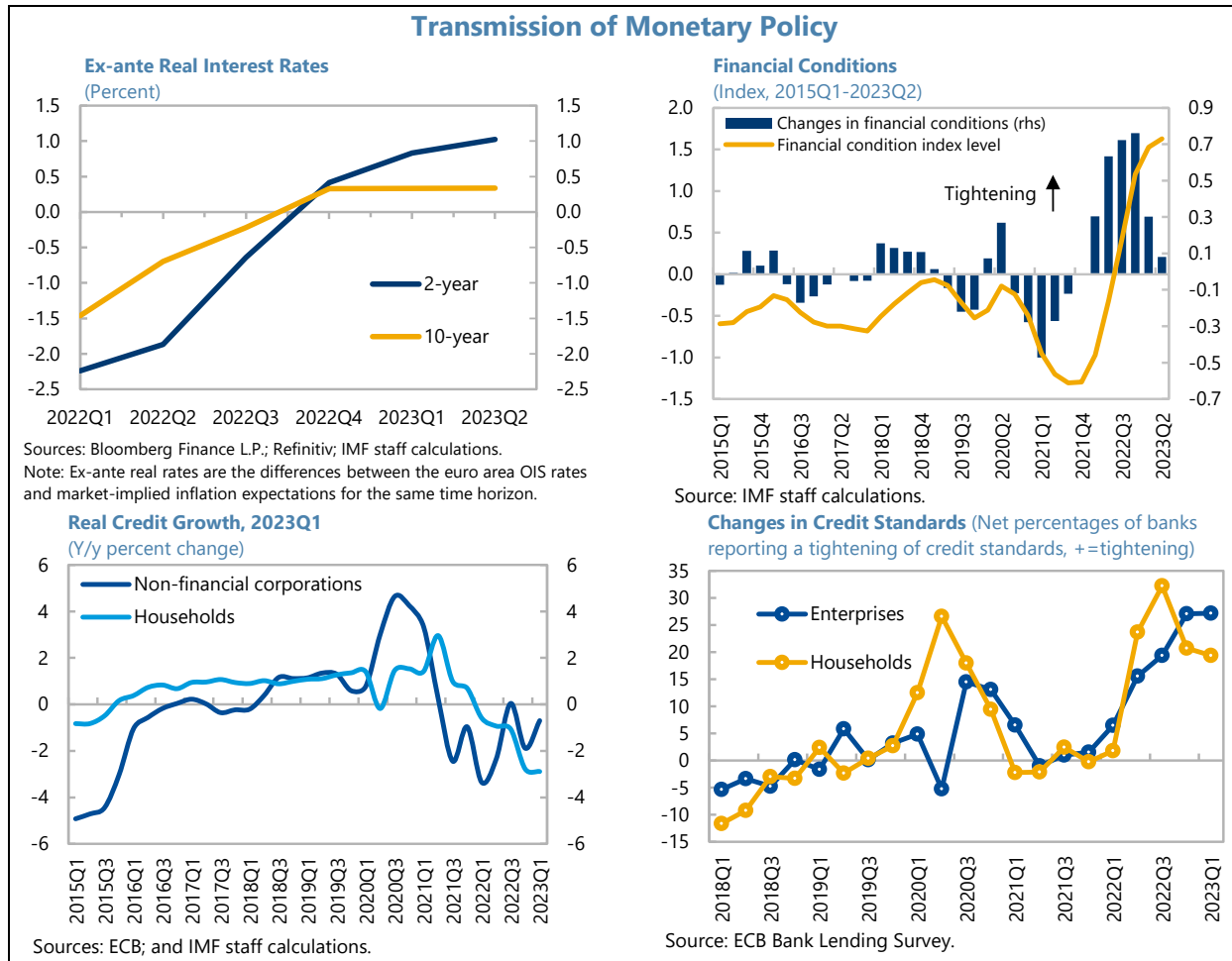
6. The ECB embarked on the steepest hiking cycle in the history of the monetary union. Key policy rates started to rise in July 2022 and, following a cumulative increase of 400 basis points, the deposit facility rate reached 3.5 percent in June. In addition, the ECB started to reduce the Eurosystem’s securities holdings (acquired under the Asset Purchase Program, APP) by €15 billion per month on average—an amount equivalent to roughly half of the APP maturing assets—from March through end-June, and it will discontinue all APP re-investments as of July 2023. With the winding down of Targeted Longer-Term Refinancing Operations (TLTRO) loans, the ECB balance sheet has shrunk by 18 percent since the start of the tightening cycle. Although the flexible re-investment of maturing securities under the Pandemic Emergency Purchase Program (PEPP)

continues to serve as a first line of defense to tackle disruptions to market functioning, in July 2022, the ECB introduced the Transmission Protection Instrument (TPI) as an additional policy tool to ensure effective transmission of monetary policy.



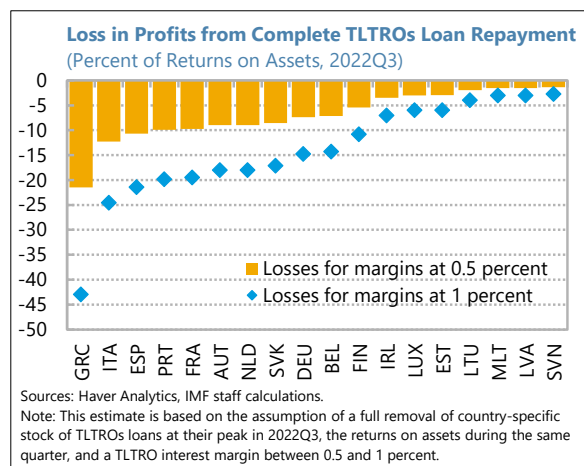
7. The shift to a more restrictive monetary policy stance has translated into tighter financial conditions. In 2023, financial conditions indices (FCIs) have continued to tighten for the aggregate euro area but at a slower pace compared to end-2022. ECB bank surveys show a significant decline in credit demand due to higher interest rates and lower consumer confidence, and a continued tightening in credit standards to firms and households on the back of an uncertain economic outlook and lower risk tolerance since 2022Q2. In line with these survey indicators, bank lending growth has moderated for both households and corporates suggesting that the interest rate and the credit channels of monetary policy transmission are working. With the phasing out of the pandemic support schemes and higher interest rates, insolvencies in the euro area have ticked up to slightly above pre-pandemic levels.

8. The euro area banking system entered the monetary policy tightening cycle with solid buffers. As of end-2022, significant institutions' aggregate Tier 1 capital ratio exceeded 15 percent, and the leverage ratio was about 5.5 percent. The risk-weighted capital metrics are generally stronger than those at large US banks, whereas leverage ratios are comparable. Bank liquidity is robust, with the liquidity coverage ratio (LCR) at 165 percent, but liquidity buffers in foreign currencies are lower. Funding structures have been stable over time, with the aggregate loan-to-deposit ratio at 103 percent and the net stable funding ratio (NSFR) at 126 percent at end-2022. Return on equity in 2022 was 7.7 percent, a percentage point higher than in 2021. The EU applies Basel capital, liquidity coverage, and stable funding requirements to all banks.



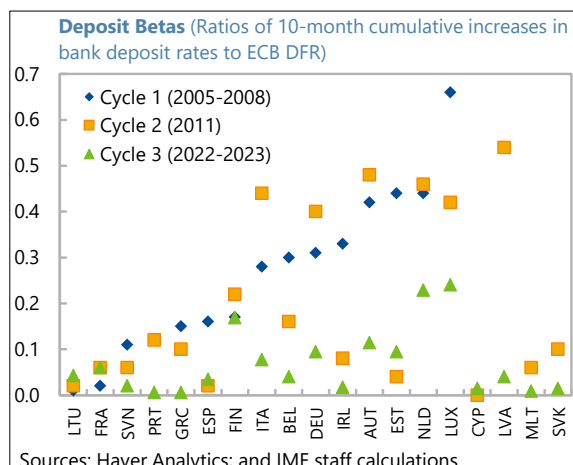
9. Tighter monetary policy is affecting banks through several channels, as expected, and bringing some vulnerabilities to the fore.

- Asset values.** Higher interest rates affect the valuation of bank assets and liabilities, especially the long-dated fixed-interest-rate ones, such as sovereign and other bonds and mortgages. While unrealized valuation losses are reflected in capital for those securities held for trading or available for sale, this is not the case for the (in-some-cases-substantial) held-to-maturity books (held at amortized cost). The valuation loss on sovereign bond holdings in the latter category since mid-2021 could be around 1 percentage point of the common equity tier 1 capital ratio on average in the euro area, with wide variation across countries. Although some of this unreported valuation loss may be offset by hedges and through lower

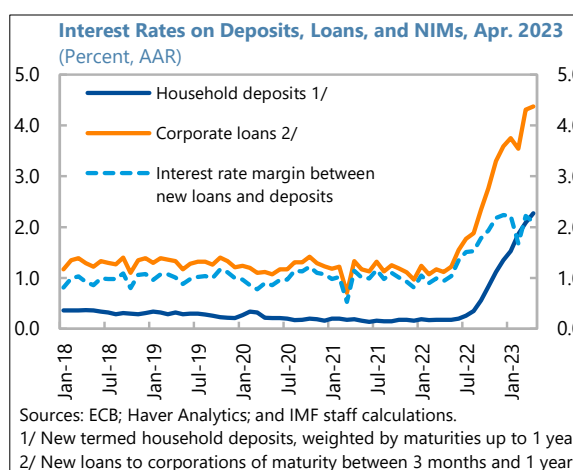


valuations for some liabilities (making this estimate an upper bound), unreported losses are creating uncertainty about banks' underlying financial health.

- *Funding costs.* Deposit rates have risen very little in this cycle amidst high levels of excess reserve balances. Yet, the cost of deposits is expected to increase over time as TLTRO repayments drain liquidity, and competition for retail saving among banks and from non-banks (such as money market funds) intensifies. The overall cost of funds is also likely to increase given the upcoming TLTRO repayments, which carry lower costs and represented about 7 percent of bank liabilities, on average, in 2022Q3. Banks that are more reliant on this form of funding are likely to experience the highest increase.



- *Net interest margins (NIMs).* NIMs have increased since the end of 2021, as interest rates on new loans increased faster than those on deposits. Given sticky deposit rates, this trend could continue for a while including because some of the increase in loan rates could reflect higher default risk. However, higher NIMs are likely to be temporary as deposit rates are expected to eventually increase.

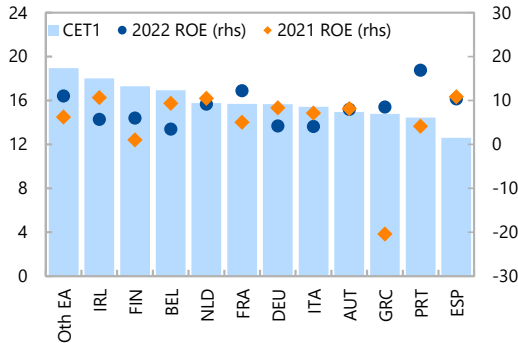


- *Credit quality.* As higher interest rates and a weaker economy feed through to credit conditions, banks' nonperforming loans (NPLs) are set to increase from their current all-time low levels, broadly as suggested by a currently high and rising share of Stage 2 loans and insolvencies, thus weighing on bank capital and credit growth.² Households with variable interest rate mortgages have faced a sharp rise in their debt service payments, though their default rates have not risen, in part thanks to the recourse nature of mortgage lending in the euro area and still-low unemployment.
- *Exposure to real estate.* With higher interest rates, the prices of residential real estate—which had previously risen rapidly in many countries on the back of low-for-long interest rates—and commercial real estate (RRE and CRE, respectively) are softening, reducing collateral values, increasing provisioning needs, and amplifying the slowdown in bank credit.

² Staff research suggests that it takes, on average, three years for NPLs to peak after a negative shock to macro-financial conditions (see [IMF Working Paper 2019/12](#)).

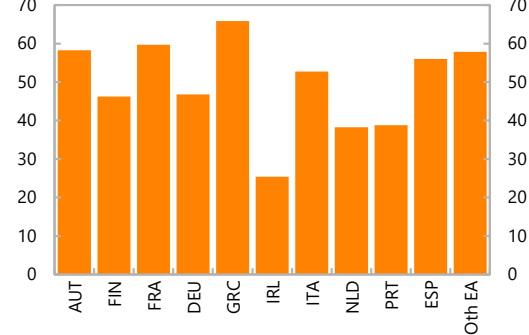
Figure 1. Euro Area: Banking Sector Overview

Common Equity Tier 1 Ratio and Return on Equity, 2022
(Percent)



Source: ECB.

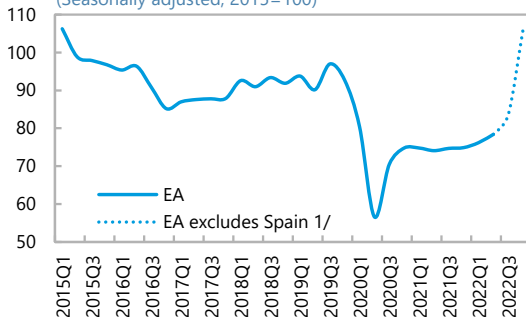
Share of Sovereign Bonds Held at Amortized Cost
(Percent)



Sources: 2022 EBA Transparency Data; and IMF staff calculations.

Declarations of Insolvencies

(Seasonally adjusted, 2015=100)

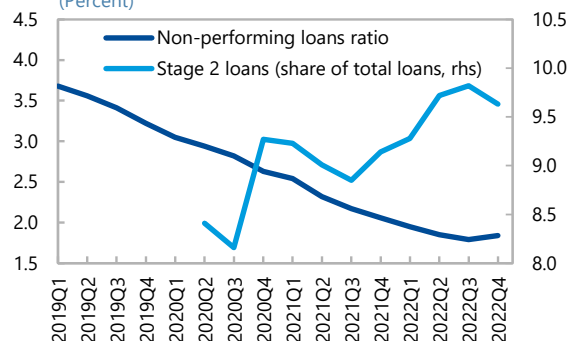


Sources: Eurostat; and Haver Analytics.

1/ Spain is excluded due to an exceptional rise in bankruptcy declarations that is associated with the recent reform of its private debt resolution framework.

NPLs and Stage 2 Loans, 2022Q4

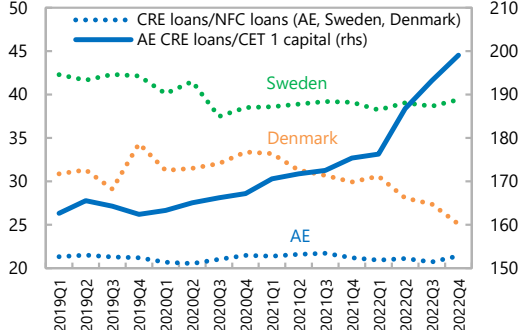
(Percent)



Source: ECB.

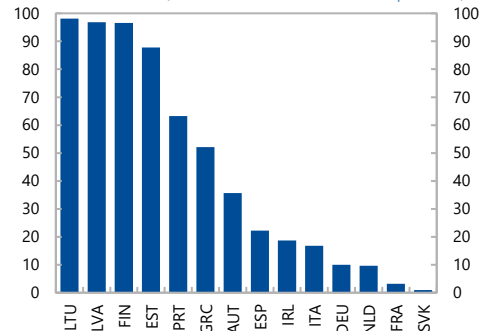
CRE Loans Risk Indicators, Dec. 2022

(Percent)



Sources: EBA; and IMF staff calculations.

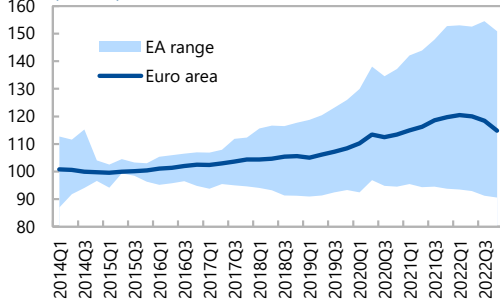
Share of Mortgages with Interest Rate Fixation of less than One Year
(Percent of total loans for house purchase)



Sources: ECB; Eurostat; Haver Analytics; and IMF staff calculations.

Price to Income Ratio

(Percent)

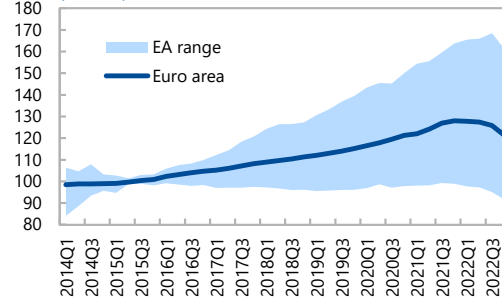


Source: OECD.

Note: The ratio of nominal house prices to nominal household disposable income per capita.

Real House Price Index

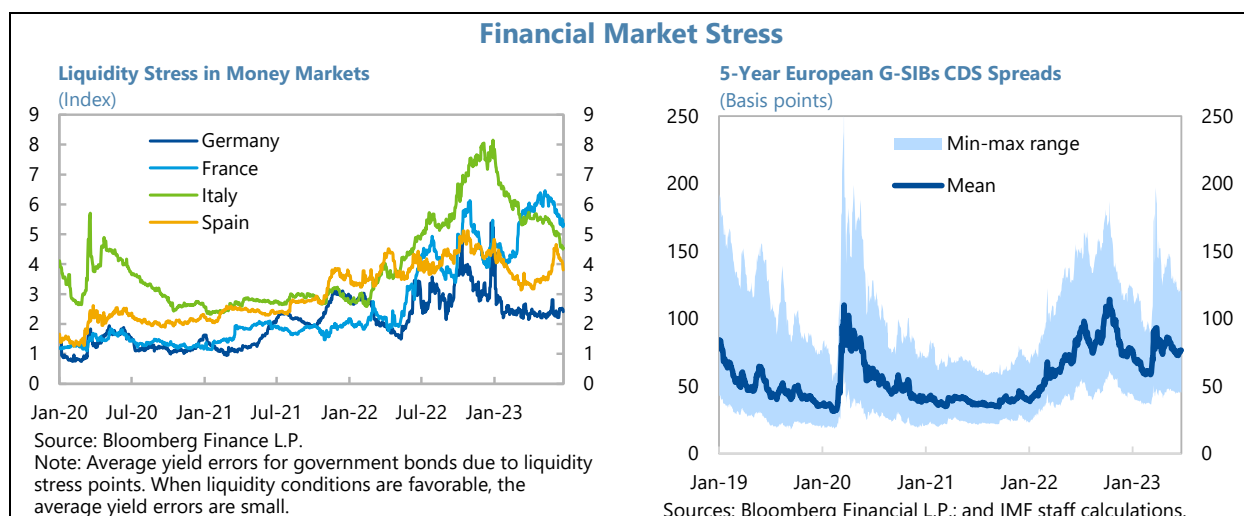
(Percent)



Source: OECD.

Note: The ratio of seasonally adjusted nominal house prices to the seasonally adjusted consumers' expenditure deflator.

10. Money market developments signal possible fragility in the nonbank financial intermediation (NBFi) space. Higher interest rates and risk premia contributed to increased volatility in financial markets and, consequently, to more frequent margin calls from open positions in financial derivatives held by nonbanks. Some segments of the investment fund sector (which between 2010 and 2022 more than doubled its assets under management from 18 trillion euro to 42 trillion euro)³ have experienced significant outflows, while EU pension funds and other NBFi entities were forced to liquidate part of their portfolios throughout 2022. So far, this has proceeded in an orderly fashion, but stress may arise in the less regulated and more opaque NBFi sector and potentially lead to larger market dysfunction.



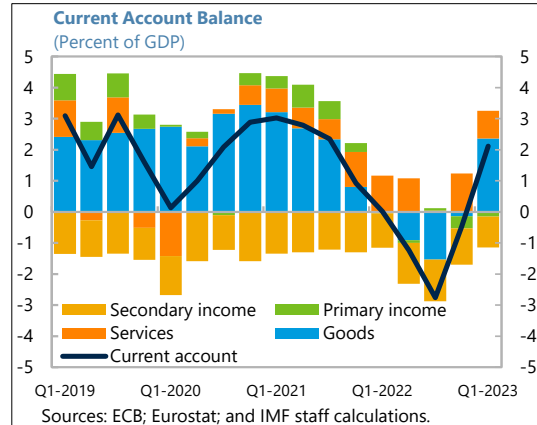
11. The overall fiscal balance improved in 2022, although less than projected before the war. The aggregate euro area fiscal deficit fell to 3.6 percent in 2022 from 5.3 percent of GDP in 2021 as nominal GDP and revenue collections increased significantly and pandemic support largely expired. However, the improvement was nearly 1 percentage point of GDP smaller than projected pre-war as governments deployed energy support measures to cushion the impact of the terms of trade shock on household and firms.⁴ The consolidated euro area cyclically-adjusted primary balance improved by 0.7 percentage points to -2.1 percent of potential GDP in 2022 (compared to a projected improvement of 1.4 percentage points pre-war).⁵ The public debt-to-GDP ratio increased sharply during the pandemic but has decreased somewhat since, supported by the rebound in real growth and high inflation. At 90 percent of GDP in 2022, it remained high and some 6 percentage points above 2019 levels (Figure 4).

³ AUM of real estate investment funds have seen impressive growth, with AUM tripling to almost 1.3 trillion euros in the last 10 years and now accounting for 40 percent of CRE markets on average in the euro area ([See ECB macroprudential Bulletin, April 2023](#)).

⁴ The smaller than projected improvement in the deficit was also partially due to the recent Eurostat ruling regarding the classification of the Superbonus program in Italy.

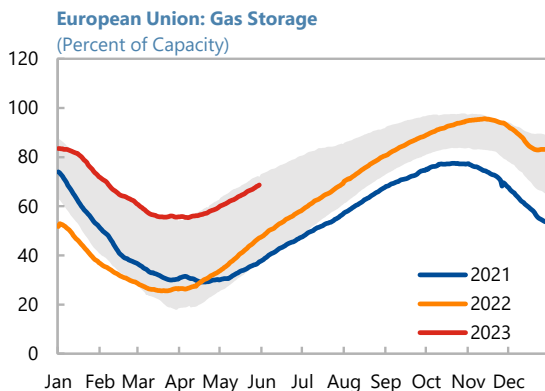
⁵ The grant component of the RRF is accounted both as revenue and expense in national budgets and does not affect the balance. In 2021, €43 billion (0.35 percent of GDP) in RRF grants were disbursed, and in 2022 €44 billion (0.33 percent of GDP) were disbursed.

12. Surging energy prices drove the euro area current account balance into deficit in 2022. The current account was in a deficit of 1 percent of GDP in 2022, down from a surplus of 2.3 percent of GDP in 2021, reflecting a sizable increase in the value of energy imports and a modest deterioration in net exports of non-energy goods on the back of continued supply chain disruptions (Figure 5). The NEER and REER depreciated by 3.7 and 3 percent, respectively, in 2022, while the terms of trade deteriorated by 4.4 percent. The weakening current account and REER depreciation were widespread across the euro area. Staff assesses the external position to be broadly in line with the level implied by medium-term fundamentals and desirable policies in 2022 (ESA, Table 2), after being assessed as “moderately stronger” in 2021. Early 2023 saw a sharp reversal in the current account, which rebounded to a surplus of 2 percent of GDP as energy prices eased.

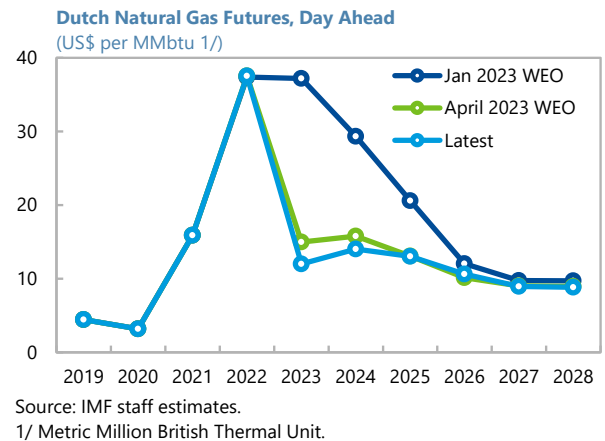


Energy Sector Developments

Increased LNG deliveries and lower demand – partly explained by the lack of severe winter weather – have kept gas storage high...

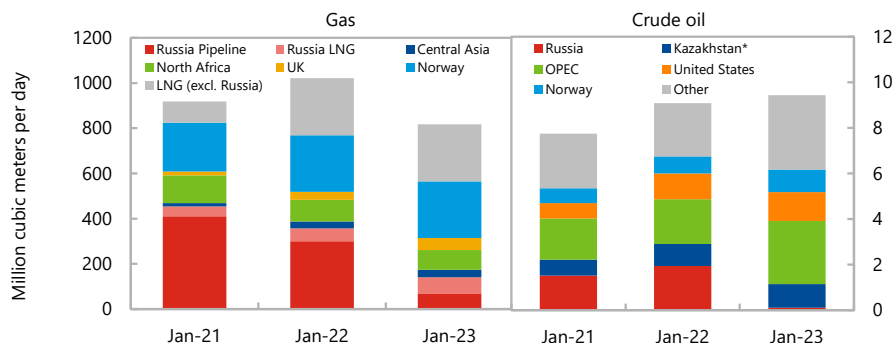


...contributing to a sharp reversal in prices over the past months....

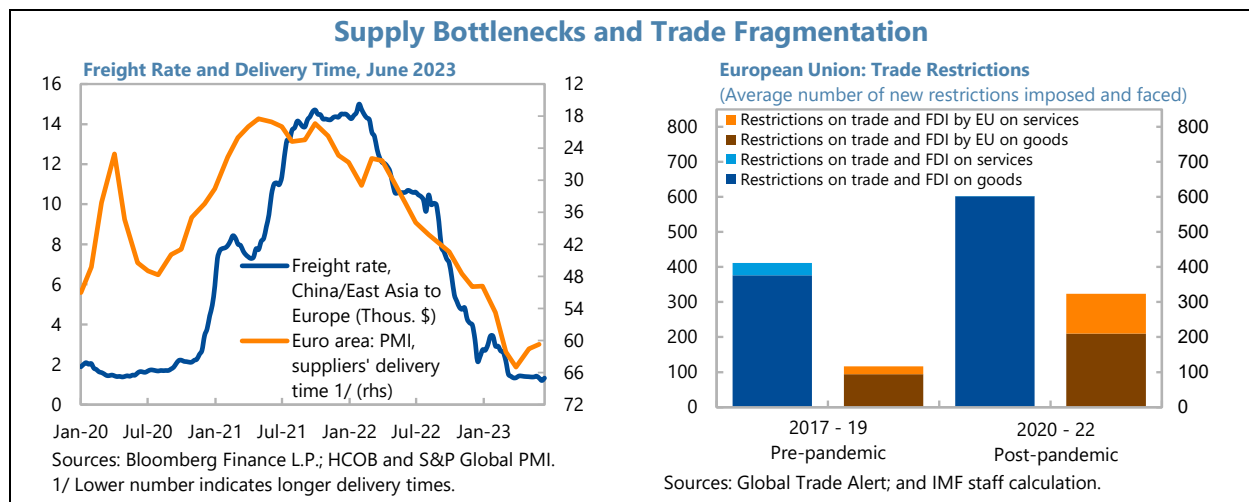


...with Russian pipeline flows accounting for only around 6 percent of current EU consumption. Meanwhile European crude oil and refined petroleum product imports from Russia have virtually ceased as of early 2023 because of the EU's embargo (Annex VI).

European Union: Energy Imports by Origin

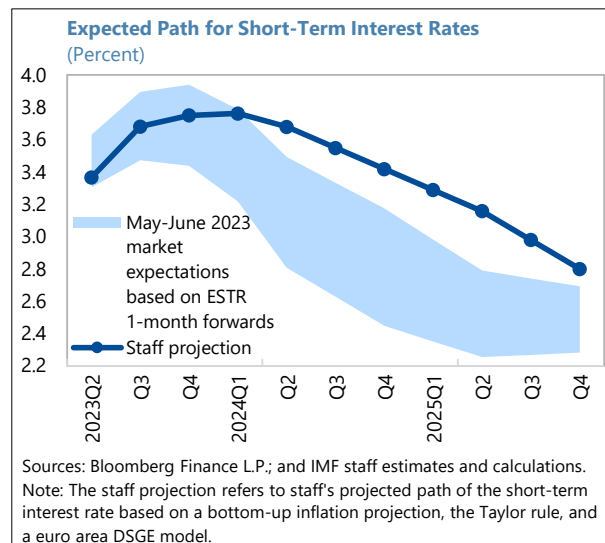


13. While the pandemic- and energy-related supply shocks are unwinding, increasing trade barriers amid geoeconomic fragmentation constitute a new challenge. The large supply shocks of the past three years are unwinding. Freight rates and delivery times have normalized as of early 2023 and, despite continued volatility and a relatively high level in historical comparison, wholesale energy prices are down significantly relative to their peaks. At the same time, the war in Ukraine has reinforced a trend of global geoeconomic fragmentation, adding to developments including those stemming from Brexit and US-China trade disputes. New trade barriers, which include local content requirements, range from the imposition of export bans on food and fertilizers, to restrictions on trade in microchips and on green investment that are aimed at preventing the transfer of technology. Given its trade openness, with exports accounting for 31 percent of GDP and source concentration of several key imports (such as certain minerals), the euro area is highly exposed to an acceleration of geoeconomic fragmentation and attendant trade disruptions.⁶



OUTLOOK AND RISKS

14. The outlook is shaped by opposing forces. Continued monetary policy tightening will restrict financial market conditions further. Using a Taylor-rule and a euro area DSGE model, staff project the short-term interest rate to reach a peak of 3¾ percent in late 2023 and ease gradually from early-to-mid 2024 onwards to deliver inflation to target over a 2-year horizon (staff assumes the easing in the short term rate to be more gradual than envisaged in the current market expectations). Credit growth is set to moderate reflecting cooling demand and more

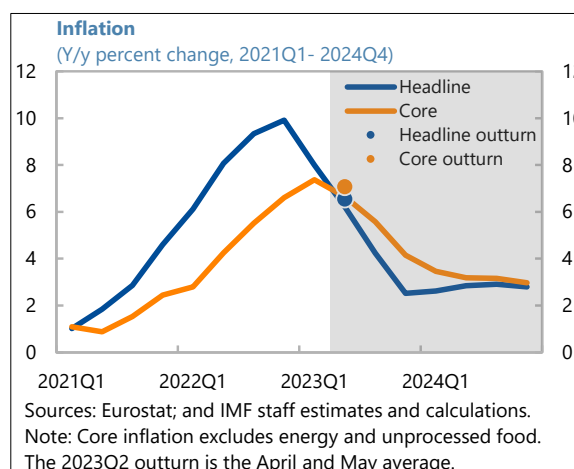
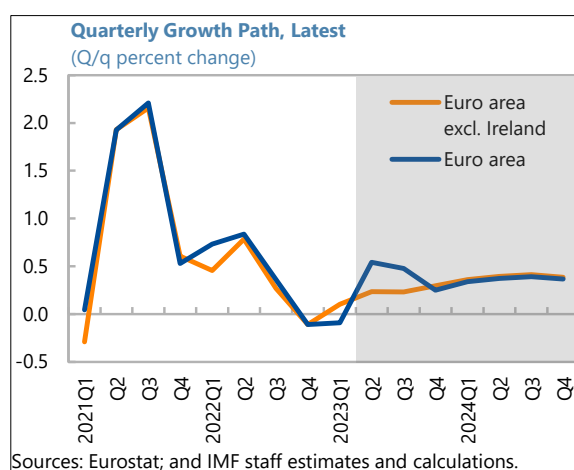


⁶ The April 2023 World Economic Outlook estimates that advanced economies' real GDP per capita could fall by slightly less than 1 percent in a baseline fragmentation scenario. Those losses could approach 2 percent in case of more extreme geoeconomic fragmentation.

restrictive lending standards as banks aim to conserve capital. Risk aversion is expected to remain high, with possible bouts of financial volatility, but not rising to the level of systemic disruption. The external environment—although remaining weak in the near term—is expected to gradually strengthen, reinforced by China’s reopening. With the energy market expected to continue rebalancing, energy prices are expected to further decline. However, they are projected to remain some 15-20 percent above pre-pandemic levels over the forecast horizon.

15. The baseline forecast is for a slow pickup in growth. Monetary policy tightening reduced real incomes, and weak growth in key trade partners will weigh on demand and constrain the near-term recovery. Sequential growth (excluding volatile figures for Ireland) is projected to continuously increase from its current weak pace, especially in 2024, as headwinds gradually fade and supply bottlenecks holding back industry dissipate further. The current account is projected to turn positive again in 2023 and recover toward a surplus of 1¾ percent in the medium-term with improving terms of trade but remain below pre-pandemic levels (Text Table 1).

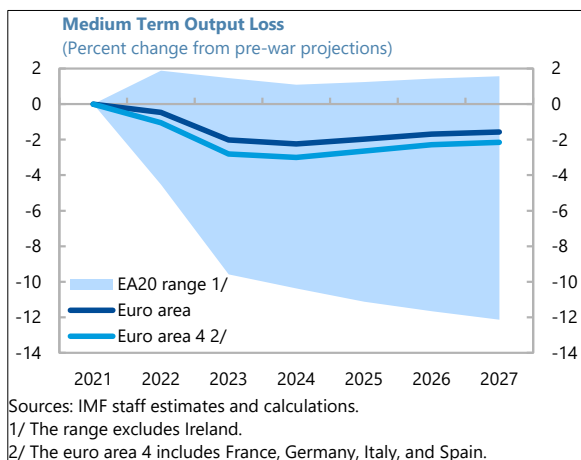
16. Headline and core inflation are projected to decline gradually, returning to target only in mid-2025. In the near term, unwinding supply shocks will continue to reduce headline inflation, especially through the energy component. Food inflation is easing but is likely to remain elevated well into mid-2023 as pass-through from higher commodity prices continues. Core inflation has proven to be persistent and will only slowly ease as tight policies and negative output gaps take effect. For inflation to converge to target in the next two years, the recovery in real wages will likely have to be drawn-out and firms will need to absorb part of these wage increases through a lower profit share (Box 1). The strong base effects of energy prices as well as the persistence of services and processed food prices mean that core inflation is expected to exceed headline inflation for several quarters before the two converge in mid-2024.



17. The energy shock will lead to permanent output losses.

While uncertainty remains high, euro area output is projected to be about 1½ percent below its the pre-war trajectory by the end of the forecast horizon reflecting permanently higher energy prices in the aftermath of the war as well as some persistent damage to supply chains and trade (see Box 2 for model estimates of the impact of the energy shock component).

Permanent output losses vary widely across countries, largely reflecting differing energy mixes and sectoral composition, ranging from losses of more than 5 percent for the Baltics and Slovakia, to small gains for Greece and Portugal.



Text Table 1. Euro Area: Main Economic Indicators, 2021-28
(Percent change, unless indicated otherwise)

	2021	2022	Projections					2028
			2023	2024	2025	2026	2027	
Real GDP growth	5.3	3.5	0.9	1.5	1.8	1.7	1.4	1.3
with contributions from (percentage points):								
Private consumption	2.0	2.3	0.3	1.1	1.1	1.0	0.7	0.7
Public consumption	0.9	0.3	0.0	0.2	0.1	0.2	0.2	0.2
Gross fixed investment	0.8	0.8	0.3	0.3	0.5	0.5	0.4	0.4
Net exports	1.3	-0.2	0.4	0.0	0.1	0.1	0.1	0.0
Current account (% of GDP)	2.3	-1.0	0.9	1.1	1.4	1.6	1.7	1.7
Unemployment rate (%)	7.7	6.7	6.8	6.7	6.6	6.5	6.5	6.5
Potential GDP growth	2.5	1.2	1.4	1.5	1.5	1.5	1.4	1.3
Output gap (% of potential GDP)	-2.1	0.0	-0.4	-0.5	-0.2	0.0	0.1	0.1
Headline HICP	2.6	8.4	5.2	2.8	2.1	2.0	1.9	1.9
Core HICP 1/	1.5	4.8	5.9	3.2	2.2	2.0	1.9	1.9
Overall fiscal balance (% of GDP)	-5.3	-3.6	-3.5	-2.7	-2.3	-2.1	-2.0	-2.0

Source: IMF staff estimates.

1/ Excludes energy and unprocessed food.

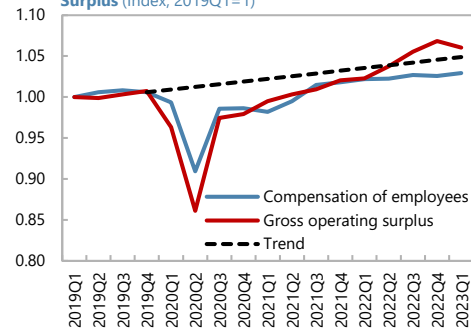
Box 1. Euro Area: Inflation, Imported Prices, Profits, and Wages

Profits as a share of value added and per unit of output increased sharply in the second half of 2022. The mining and utilities sector saw the sharpest increase, as the increase in global prices and market structures allowed for significant windfall profits. Profits relative to value added also increased in agriculture, construction, manufacturing, and contact-intensive service sectors. This increase does not necessarily imply higher markups but shows that firms have been able to set their prices such that they reflect (more than) the import cost shock.

Import prices and firm profits were a larger counterpart to surging inflation than labor costs. A consumption deflator decomposition shows that import prices accounted for 40 percent of average inflation over 2022Q1 – 2023Q1, while domestic profits were the counterpart for 45 percent, labor costs for 25 percent and net taxes were slightly deflationary.

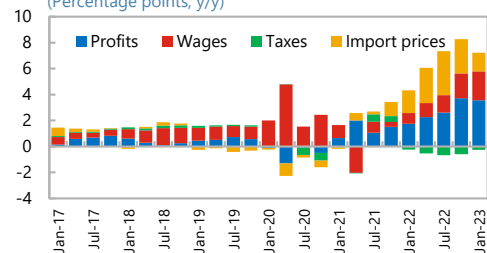
Based on historical evidence, the contribution of labor costs could increase in 2023. After a sharp drop in real wages (not uncommon following an inflationary shock as wages are stickier than prices), workers will likely want to recoup their losses. The experiences from the first and second oil price shock suggest that the contribution of labor costs should increase in 2023 relative to 2022 – and indeed we are already seeing this play out. The contribution of labor costs has so far been significantly smaller than during the shocks in the 1970s, where profits were compressed.

Real Compensation of Employees and Gross Operating Surplus (Index, 2019Q1=1)



Sources: Eurostat; and IMF staff calculations.

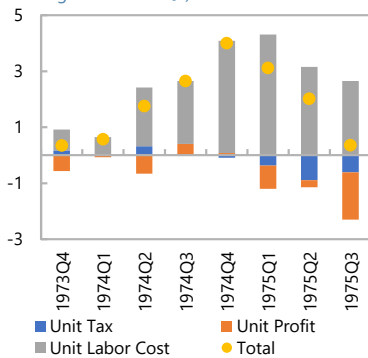
Consumption Deflator Inflation Decomposition (Percentage points, y/y)



Sources: Eurostat; OECD; and IMF staff calculations. Note: Profits, wages, and taxes refer to the total contributions from their nominal values per unit of real value added summed up from sectoral level, and import prices refers to the contribution from foreign value added. See Hansen, Toscani, and Zhou (2023) for details.

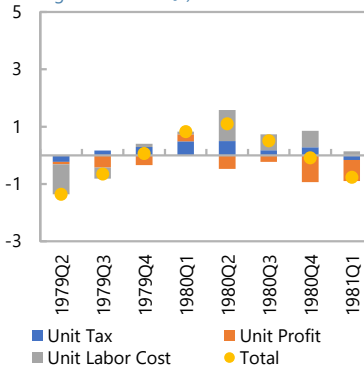
First Oil Shock

(GDP deflator, year-on-year, percentage points change since 1973Q3)



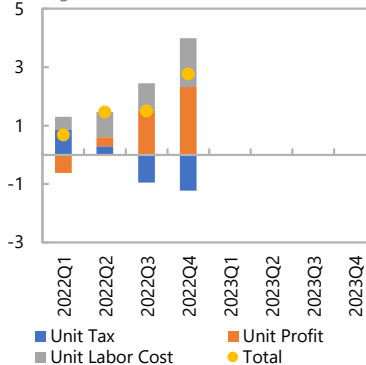
Second Oil Shock

(GDP deflator, year-on-year, percentage points change since 1979Q1)



Ukraine War Shock

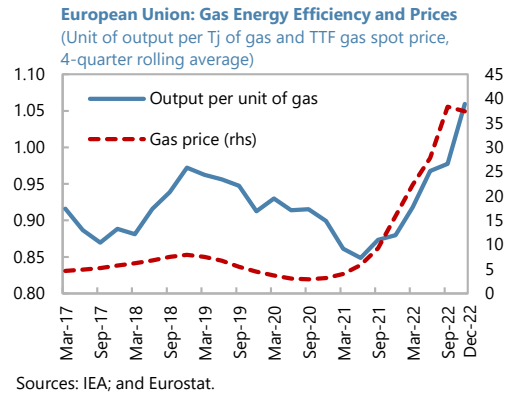
(GDP deflator, year-on-year, percentage points change since 1921Q4)



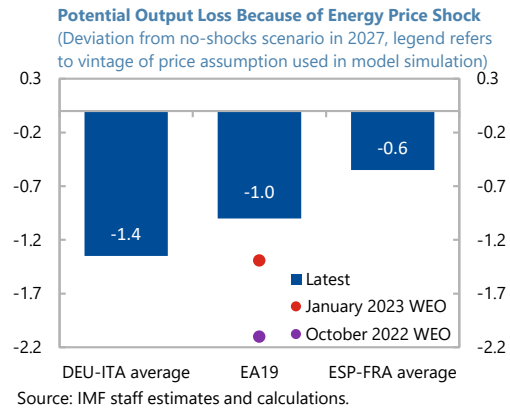
Given that Europe is a net energy importer, the (permanent) adverse terms of trade shock implies that national income has to fall. This can work through lower real income for corporations, workers, or both. As of Q1 2023, profits (adjusted for the GDP deflator) stood about 1 percent above their pre-pandemic trend, while compensation of employees (also adjusted for the GDP deflator) stood about 2 percent below trend. A fall in profits as well as moderate nominal wage growth underpins the baseline inflation projections.

Box 2. Euro Area: Energy Prices, Energy Efficiency and Potential Growth

The sharp rise in natural gas prices led to energy efficiency gains. Natural gas demand in industry fell around 25 percent in 2022 amid record high prices. Empirical estimates suggest that substituting energy with other factors of production is difficult in the short run. But energy can be used more efficiently (energy productivity increases) or there can be substitution between different types of energy. According to [IEA analysis](#), half of the 25 percent drop in natural gas use in 2022 was on account of reduced output, 30 percent of the drop was a consequence of fuel switching and 20 percent were efficiency gains. In other words, high prices led to a five percent improvement in natural gas efficiency in industry in only one year. Efficiency gains and behavioral change in the residential sector were also meaningful. The observed pattern is consistent with historical evidence, for example, following the 1970s oil price shock, energy efficiency in the US started to rise for an extended period after having been stagnant before.

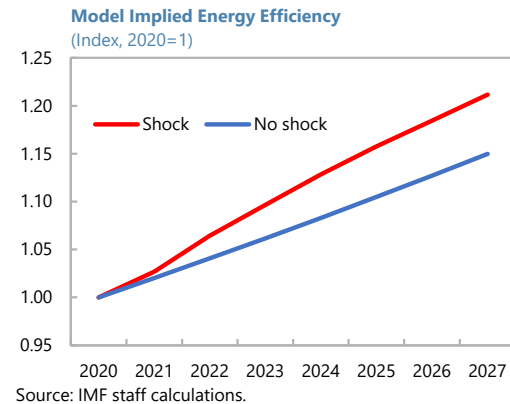


Model estimates suggest that the energy price shock reduced potential output in the euro area by 1 percentage point in the baseline, with the impact of the shock buffered by efficiency gains. The impact of the energy price shock on potential output is studied through the lens of an [endogenous technical change model](#).



A key mechanism in the model is that there is a tradeoff between energy productivity and capital-labor productivity. As energy prices increase, firms prioritize investment in energy productivity. These energy efficiency gains cannot fully offset the negative price effect and the transitional cost of shifting investment from capital-labor productivity to energy productivity, but they limit the reduction in potential output (by as much as 1 percentage point). Using the latest staff projection of the energy price path (15-20 percent above pre-pandemic levels by 2027-28), we estimate a loss of 1 percent in euro area potential output. This is relative to an impact of over 2 percentage points from the October 2022 WEO (70 percent above pre-pandemic levels by 2027-28). Given that firms adapt, there is essentially no impact on potential output growth in the medium-term. The model-predicted energy efficiency gains of 5-10 percent by 2027-28 suggest that the energy price shock will be beneficial for the green transition.

A smoother increase in energy prices, allowing for adaptation, is less costly in terms of output. Energy efficiency gains can also be achieved through a more gradual increase in energy prices, for example through carbon taxes. We calculate that a smooth increase in energy prices to yield the same 2027 price endpoint as the gas shock, would have reduced potential output by only 0.5 percentage points.

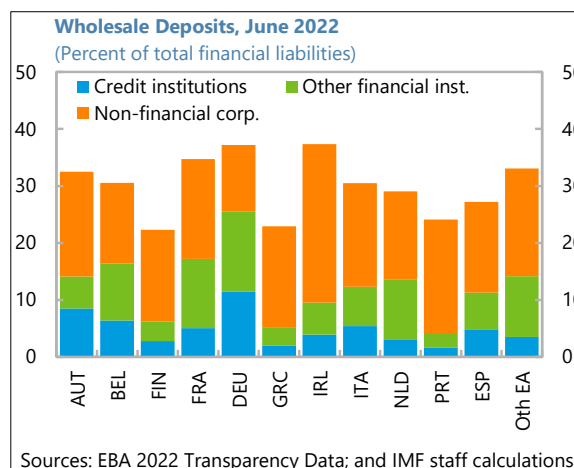


18. Uncertainty continues to be high, with risks to growth skewed to the downside and risks to inflation to the upside, though less than before (See Risk Assessment Matrix, Table 3).

High uncertainty clouds both the short and medium outlook as the euro area economy adjusts to the recent shocks and high interest rate environment.

Low Growth-low Inflation Risks

- *Risks in the financial sector have increased over the last year with the rise in interest rates and can emerge from various sources.* In terms of credit risk, while lenders appear generally insulated from the direct effects of RRE price declines thanks to the largely recourse nature of RRE lending in the euro area, potential distress in CRE markets may spill over to banks both directly and via bank exposures to real estate investment funds (REIFs). Beyond REIFs, negative developments in the NBFIs sector could spill over to banks through direct



exposures and via increased stress in funding markets. Deteriorating credit quality in the broader corporate sector could also erode banks' capital through rising NPLs, limiting their ability to extend new loans, with adverse effects on investment and growth. Liquidity risks are also present given the meaningful share of wholesale deposits in some euro area banks, which are more volatile than other funding sources such as retail deposits or bonds. While the ratio of wholesale deposits to total liabilities has been stable over time on average in the euro area, there is some heterogeneity, with several institutions having experienced substantial growth in wholesale deposits since the pandemic. Moreover, recent events in the U.S. and Switzerland indicate that the liquidity risks driven by wholesale deposits can come to the forefront forcefully if triggered by other events, such as concerns about banks' risk management practices and business models. Large TLTRO repayments appear geographically concentrated (including in Italy), they may lead to large funding needs for banks, tighten credit, and have broader repercussions for activity and financial stability. While the strength of the aggregate banking metrics in the euro area is an important mitigating factor against such risks, stresses cannot be ruled out. The realization of these risks would increase risk aversion, tighten credit standards, and thus dampen both growth and inflation.

- *Risks in the high-debt countries' sovereign bond markets.* In addition to potential vulnerabilities in the financial system, there is also the risk that an abrupt shift in market sentiment or changes in fundamentals could result in sharply higher sovereign spreads for some countries. This would exacerbate cross-country differences in interest rate transmission and, if sustained, hurt growth

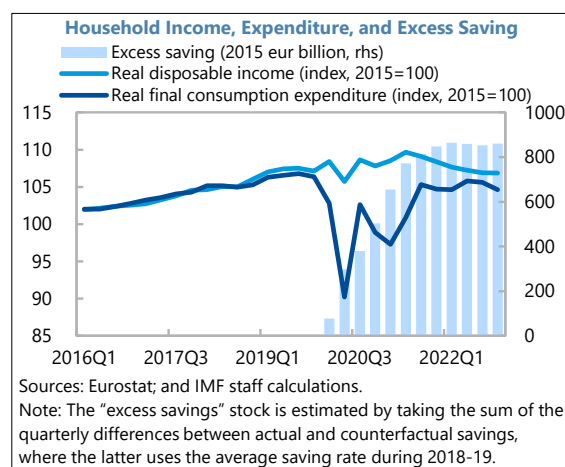
and public debt sustainability, potentially triggering concerns about the health of banks as well, given their large holdings of domestic sovereign securities.⁷

- *Weaker external demand* would negatively affect euro area growth prospects, particularly if it emanates from an abrupt slowdown in key trading partners such as China and the US. At the same time, excess capacity in China could ease the prices of tradable goods including commodities, and thus reduce policy tradeoffs in the euro area.

Low Growth-high Inflation Risks

- *Escalation of Russia's war in Ukraine* could trigger a renewed energy crisis in Europe and push food prices up, with adverse confidence effects. A full Russian gas shutoff combined with higher Chinese demand and a cold 2023/24 winter, for example, could lead to a renewed spike in prices.⁸
- *Higher than expected persistence in inflation* would require a tight policy stance for longer, which would weigh on domestic demand. In this regard, with labor markets remaining exceptionally tight, stronger than expected wage growth could pass through into core inflation, particularly if firms' profit margins do not fall. In such a scenario, inflation expectations could de-anchor and result in wage-price spirals.
- *A further intensification of geoeconomic fragmentation* would be akin to an adverse supply shock, pushing up inflation, harming trade, and weaken confidence. This will undermine the recovery with uneven sectoral effects.

19. Upside risks to growth could also materialize. Should commodity prices drop below pre-pandemic levels and/or substantial excess capacity in key segments of the world economy emerge, this would support faster disinflation, with the attendant loosening in monetary policy supporting a faster rebound in growth. In addition, domestic demand could turn out stronger than projected if the recent declines in wholesale gas prices pass through to consumer prices more strongly, and consumption proves more resilient amidst a still high stock of excess household savings, and/or stronger than expected real disposable income.



20. More generally, the euro area's medium-to-long run growth prospects are uncertain given the legacies of the pandemic and war. Uncertainties include: (i) where energy prices,

⁷ Sovereign bond holdings still make up about 10 percent of large banks' total financial exposure, with Greek, Italian, and Portuguese banks having sovereign bond holdings that approach 20 percent of total financial exposure. Bank sovereign bond holdings exhibit home bias, as banks tend to allocate half or more of those to the bonds of their own sovereign.

⁸ Russian pipeline gas currently accounts for only 6 percent of EU consumption, highly concentrated in a handful of countries. Including LNG deliveries, Russian gas accounts for around 10 percent of EU consumption.

especially natural gas, ultimately settle over the medium-term; (ii) how persistent the post-pandemic reduction in hours per employee will be, and especially whether the pre-existing trend toward fewer hours has durably accelerated; and (iii) how pervasive remote working will become and what demand and productivity shifts it will lead to. All of these, as well as climate-related risks, have implications for potential growth. In addition, while there are good reasons to believe that neutral rates will ultimately settle at low levels again ([April 2023 WEO](#)), significant uncertainty also surrounds the trajectory of the neutral interest rate going forward.

Authorities' Views⁹

21. The authorities generally shared staff's assessment of the macroeconomic outlook.

They noted that the economy had been resilient to the war in Ukraine and ensuing energy crisis, largely due to the agile policy response, including successful diversification of energy sources, demand reduction, and deployment of fiscal support measures. With positive momentum coming from the lower energy prices, abating supply constraints, and a strong labor market, the authorities saw a gradual expansion in the course of 2023 and 2024. Policy tightening will continue to weigh on demand. Over the medium-term, the authorities see somewhat less scarring from the war in Ukraine and lower energy prices than staff, with limited losses to the level of output.

22. Headline inflation is on a downward path and core inflation is likely to have peaked, but the declining path is projected to be gradual given the upward pressures from, among others, strengthening wage growth.

The authorities projected that core inflation will gradually decline during the second half of 2023 and into 2024 as tighter financial conditions weigh on demand and lower energy prices feed through to price setting. Given the recent contractual agreements concluded in late 2022 and in the early months of 2023, the projected wage growth in the euro area is expected to accelerate in 2023 and moderate in 2024. Sustained moderation in non-energy inflation is thus predicated on the expectation that wage growth will moderate somewhat and that firms' profit margins will compress and partly accommodate recent increases in labor costs.

23. The authorities agreed that risks to growth are tilted to the downside and risks to inflation remain skewed to the upside.

They stressed that the upside risk to inflation relates to the persistence of core inflation, which could turn out higher than expected in case of stronger-than-expected wage growth coupled with unabated profit margins. Upside surprises on inflation could also lead to a stronger reaction of monetary policy, leading to more pronounced tightening of lending standards than currently assumed. Additional tightening could come from renewed market stress and weigh on investment and consumption, highlighting in particular the potential adverse effect on heavily indebted households and firms. In this context, lack of policy consistency could also pose a risk as an expansionary fiscal stance with untargeted support measures would necessitate stepping up monetary policy tightening. While the threat of gas shortages has significantly abated, future developments in energy prices remain highly uncertain, and a return of higher energy prices, including due to an escalation in the war in Ukraine, could adversely affect growth and inflation. In addition, the authorities noted the downside risks related to the external environment, including a

⁹ The term 'authorities' refers to regional institutions responsible for common policies in the currency union and not to the respective member states' authorities, unless specifically identified by the country's name.

slowdown in the US or in the global economy and financial market tensions. On the upside, a resilient labor market could boost growth, or the economy could again surprise with greater resilience than expected of households and corporates.

24. The authorities concurred with staff’s assessment of the Euro area’s external position, noting that the sharp deterioration in the current account balance in 2022 is likely to be temporary. They saw a gradual increase in the current account balance over the forecast horizon as terms of trade improve, external demand strengthens, and the services sectors, particularly tourism, fully normalize. While noting that the euro area aggregate current account is likely to stay somewhat below pre-pandemic levels over the forecast horizon, the authorities saw external imbalances persisting at the country levels and highlighted the role of national policies to address them.

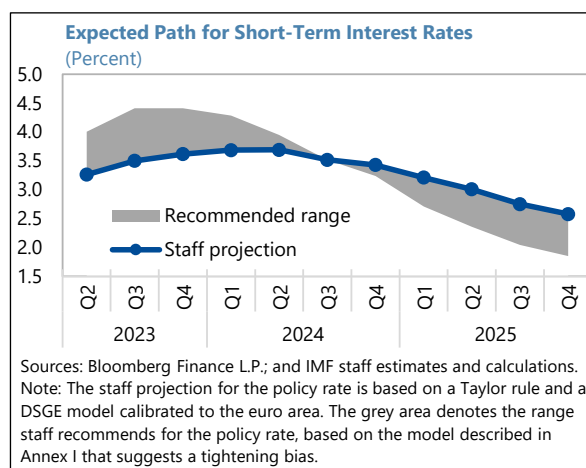
POLICY DISCUSSIONS

As inflation proves persistent, the priority for near-term policies is to guide inflation back to target in a timely manner while preserving financial stability. Under the baseline scenario, monetary and fiscal policies should tighten further to reduce price pressures and, in the case of fiscal policy, rebuild policy space. While the euro area banking sector appear resilient overall, rapid monetary policy tightening could expose pockets of vulnerability, requiring enhanced monitoring, disclosure, and contingency planning. In a significant financial stress scenario, temporary liquidity support to financial markets and institutions, and orderly restructuring interventions, may be warranted, as well as a rapid adjustment in broader macroeconomic policies. The permanent structural shifts caused by the pandemic and energy shocks also add to the urgency of further enhancing euro area resilience by completing the institutional architecture of the economic and monetary union, safeguarding sustainable public finances, delivering on the green transition, and raising potential growth.

A. Reducing Inflation while Preserving Financial Stability

Continued Monetary Policy Tightening

25. With headline and core inflation remaining persistently high, monetary policy should continue to tighten. Recent policy rate hikes have shifted market rates up, to above the estimated neutral rate, bringing the monetary policy stance into contractionary territory.¹⁰ Going forward, a more restrictive stance than at present. In this regard, while the policy interest rate path assumed in staff’s baseline (¶14) is projected to bring inflation to target by mid-2025, uncertainty



¹⁰ Staff estimates the nominal neutral rate at 2-2¼ percent based on a long-term average estimate of the real neutral rate of around zero and the current level of long-term inflation expectations. These estimates are surrounded by much uncertainty but are in line with market expectations, [survey of analysts](#), and ECB staff estimates (e.g. Brand et al. [ECB Occasional Paper series No. 217/2018](#)).

around this baseline projection is high, with risks skewed to the upside. Staff’s analysis of robust monetary policy decision making, presented in Annex I, suggests that, when inflation persistence is uncertain, the economic losses to be incurred from reacting too late are larger than those from reacting too forcefully early on, because underestimating persistence could entrench high inflation and force central banks to ultimately tighten more and for longer to bring inflation back to target, resulting in a sharper downturn.¹¹ Staff therefore sees merit in further hikes of the key policy rates than assumed in the baseline to limit the risks of a meaningful overshoot of inflation above the baseline projection and a potential upward shift in inflation expectations. Moreover, a tightening bias, with stronger responses to upside than downside surprises on inflation, would be appropriate. That said, uncertainty around the path of inflation is high and two-sided, and a flexible meeting-by-meeting approach to setting the interest rate path allows responding swiftly to any potential changes in the inflation outlook, including those that may result from shifting financial conditions or fiscal policy settings (T46-47).

26. Policy rates should remain the primary monetary policy tool, with quantitative tightening (QT) aiming to reduce the Eurosystem’s footprint in financial markets. The accommodation provided by the ECB’s bond holdings is no longer needed. However, the tightening in the monetary policy stance should be primarily achieved through the key policy rates rather than a reduction of the Eurosystem’s bond holdings as the former makes a return to the effective lower bound—which can constrain policy in a downside scenario—less likely. Moreover, the transmission of policy rates to financial conditions and economic activity are better understood, and their changes are easier to communicate. At the same time, there is scope to use the current tightening cycle to reduce the Eurosystem’s footprint in financial markets and ensure that issuer limits do not become binding should the need to restart large scale asset purchases arise once more. Temporary accounting losses for the Eurosystem coming from higher policy rates should have no bearing on monetary policy decision making (Annex II).¹²

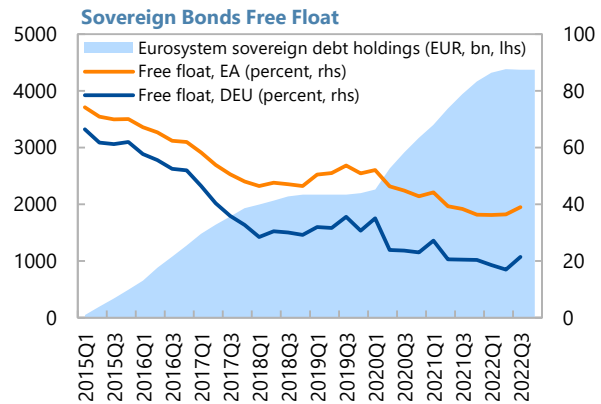
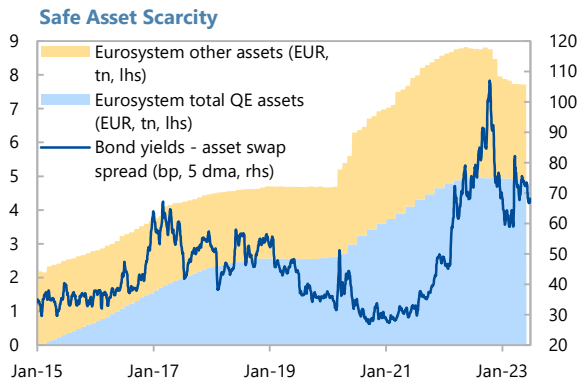
27. QT should stay gradual and cautious, consistent with a learning-by-doing approach. A gradual and predictable path for QT allows market participants to adjust their expectations for the additional supply of bonds that need to be absorbed, thereby facilitating a smooth adjustment in bond prices and minimizing adverse impacts on financial stability (Box 3). In this regard, the ECB’s decision to stop reinvesting all APP maturing assets as of July 2023 while continue to reinvest the principal payments from maturing securities purchased under the PEPP at least until end-2024, is appropriate. Going forward, a state-contingent approach would formally provide the flexibility to adjust course if financial conditions change sharply.

¹¹ Historically, high inflation was often persistent, especially in the aftermath of large terms-of-trade shocks, such as the 1970s oil price shock. “Premature celebrations” were also prevalent, which were characterized by a decline in inflation as the initial terms-of-trade shock dissipates, only to reemerge or plateau at an elevated rate (Ari et al., forthcoming).

¹² See forthcoming IMF Working Paper by Belhocine, Bhatia, and Frie (2023) “Raising Rates with a Large Balance Sheet: The Eurosystem’s Net Income and its Fiscal Implications.”

Box 3. Euro Area: The Potential Impact of Quantitative Tightening

The Eurosystem's large asset holdings dramatically increased its footprint in financial markets. The side effects of a large balance sheet include a reduction in the availability of safe securities for collateralized lending. The share of sovereign free float—securities held by entities other than central banks, insurance, and pension funds—was cut in half since the start of QE, reaching 40 percent out of the €10.3 trillion in outstanding euro area sovereign bonds by end 2022. The fall in the Bunds' free float was even more dramatic, dropping threefold during the same period to 20 percent of the issued stock by end 2022. In addition, Eurosystem refinancing operations (including TLTROs) also contributed to pressure on the availability of public sector collateral which needs to be pledged to the ECB to access this borrowing. A measure of scarcity based on the difference between the yield of an asset and the similar asset swap rate, confirms increased scarcity, particularly with the introduction of the PEPP during 2020-22. However, TLTRO repayments—by which banks take back their pledged collateral—along with lower risk aversion by investors have likely eased scarcity in recent months (the asset swap spread has declined but remains almost double the pre-QE average).



Estimates suggest that fully unwinding the ECB's asset purchase programs would likely have significant effects on long-term yields. Work by [Eser and others \(2019\)](#) and [Altavilla and others \(2021\)](#) suggest yields fall, on average, 3.6 to 5.4bp per €100bn of asset purchases by the ECB. Applying these elasticities to the stock of QE purchases, which amounted to €4.9 trillion, the level of accommodation provided to the 10-year GDP-weighted zero-coupon yields of the four largest euro area jurisdictions is on average between 176 and 265bp. Such effects are, however, highly state contingent and can be much higher in periods of market stress than when markets are tranquil ([D'Amico and King, 2013](#)).

A gradual and predictable QT path is likely to have a small impact on the monetary stance while reducing the footprint in financial markets over time. The reduction of the APP portfolio by €15 billion a month until June 2023, followed by the full redemption of maturing APP assets, will reduce the total portfolio by about €334 billion between June 2023 and May 2024 or around 2.3 percent of euro area GDP in 2023. This will translate into a 12-18bp increase in the term premia and long-term bond yields, roughly equivalent to an annual increase in the policy rates of 15-22bps. This is a small fraction of the 400bp increase in the ECB's deposit facility rate since July 2022, in line with the notion of maintaining the policy rate as the primary monetary stance tool.

Authorities' Views

28. The ECB agreed that it was crucial for the monetary policy stance to remain sufficiently restrictive territory for as long as necessary. However, they noted that risks of being insufficiently restrictive or overly restrictive are now more symmetric in light of uncertainties regarding both inflation persistence and policy transmission. The monetary policy stance was viewed as restrictive at the time of the mission and transmitting fast to financing conditions, while its transmission to real activity and inflation was also starting to materialize. The ECB emphasized a meeting-by-meeting (data-dependent) approach with a clear reaction function to setting policy rates and determining the appropriate level and duration of restriction, without pre-committing to a particular interest rate path in the near term, given the elevated level of uncertainty.

29. The current pace of balance sheet reduction was viewed as appropriate. The ECB documented a smooth absorption by the market during March and April when only about half of the maturing assets on the APP portfolio were reinvested. On this basis, the ECB felt that discontinuing all APP reinvestments is likely to have a small impact on the monetary stance. Overall, the ECB agreed that a measured and predictable approach to balance sheet reduction was appropriate and saw scope for it to continue for an extended period, even if the endpoint was yet to be determined. The ECB emphasized that financial fragmentation, if it materialized, would be dealt with the flexible reinvestment of PEPP's maturing assets and, if needed, through TPI, but did not rule out in principle the possibility of altering the speed of balance sheet reduction (or using other instruments at its disposal) in a hypothetical severe scenario.

Maintaining Financial Stability

30. The banking sector as a whole appears resilient to a further tightening of financial conditions, but pockets of vulnerability in the financial system cannot be ruled out. Close monitoring, public disclosures, and contingency planning, including in the more heterogeneous and less regulated NBFIs sector, will be key to limiting financial stability concerns.

31. Supervisors should continue to monitor and assess banks' interest-rate risk and the appropriateness of banks' risk management strategies. Bank interest-rate-risk stress tests can both alleviate uncertainty over the valuation of bank assets held to maturity and establish the degree of bank resilience to potential further interest rate increases, especially in member states where flexible-rate loans are more prevalent. Supervisors should also monitor and more frequently stress test bank and market wide liquidity conditions, to ensure that higher interest rates, TLTRO repayments (which may affect banks unevenly), and QT do not trigger systemic liquidity events. Such monitoring should extend also to less significant institutions, as the recent turbulence in the United States underscores the potential for a systemic loss in confidence even from stress in medium to small sized banks. The authorities should stand ready to provide liquidity to solvent banks via existing or new liquidity facilities to prevent liquidity problems from morphing into solvency ones.

32. As financial conditions are likely to tighten further, banks need to proactively increase their buffers for higher credit and market risk. Corporate insolvencies and NPLs will likely rise with slowing growth. Residential real estate prices, which have on average appreciated by more than 20 percent since the beginning of the pandemic (and by close to 40 to 50 percent in several countries), are correcting, and commercial real estate (CRE) markets exhibit declining liquidity as transaction volumes have fallen. CRE price corrections may affect banks directly as highly leveraged borrowers could choose to default over repaying the banks, and indirectly by softening the demand for credit as collateral values fall. The exposure of banks to RRE prices is cushioned by still-low unemployment and recourse clauses in mortgages, but in a scenario where households, especially those with variable rate mortgages, fall into financial distress, banks would be affected. Hence, the authorities should continue to monitor conditions in real estate markets, interest coverage ratios in the corporate sector, and households' debt service capacity, and run frequent stress tests with up-to-date information on these factors.

33. Although European banks have comfortable buffers against credit losses, there should be no complacency regarding bank capital. Under the WEO baseline scenario, staff estimates suggest that the aggregate common equity tier 1 capital (CET1) ratio of euro area banks would increase from 14.6 percent in 2023 to 15.5 percent in 2025. In a moderate downturn, however, the aggregate CET1 ratio could fall by as much as 1.9 percentage points to 12.7 percent in 2023 but would partially recover to 13.4 percent in 2025 on the back of better economic activity. The performance of some banks under the adverse scenario, however, is somewhat more negative, with the capital ratio of those at the bottom 20 percent showing a decline in the CET1 ratio of almost 2.7 percentage points to 11.5 percent in 2024. Moreover, six banks would breach the bank-specific threshold for the Maximum Distributable Amount in 2024, which would trigger restrictions on dividend payouts (see Annex III),¹³ although only one bank could see a capital shortfall relative to the combined pillar 1 and conservation requirement of 7 percent. The capital erosion in the downturn scenario underscores the need to conserve and build further bank capital to avert strains. Supervisory action to prevent instances of extraordinary high dividend payments are more efficient approaches to ensuring bank capital accumulation compared to across-the-board dividend restrictions (which avoid bank-level stigma but may impede banks' future access to capital markets) or windfall taxes on bank profits (which are undesirable from a prudential perspective as they hinder bank capital accumulation).

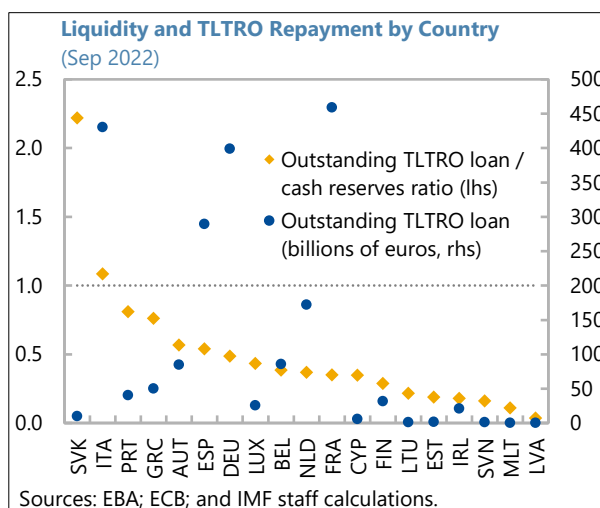
34. Macroprudential policy could have a useful role to play by ensuring that banks experiencing temporarily high profits buttress their buffers against risks before the financial tightening peaks. While supervisory pressure is the first line of defense, it is also advisable to tighten countercyclical capital buffers (CCyBs), as a step toward positive neutral rates for the CCyB, in jurisdictions where banks are experiencing temporarily high profits. Maintaining borrower-based measures can help preserve resilience in leverage-prone markets. When national regulators do not

¹³ The stress test covers 75 significant institutions directly supervised by the ECB, which represent a large share of the total euro area banking system assets. The solvency risk arises from a worsening in the corporate and retail sectors' credit risk under a baseline and an adverse scenario.

have such measures at their disposal,¹⁴ policymakers should work to expand the macroprudential toolkit. In the meantime, supervisors should require banks to stress-test the credit risk of new mortgages (at origination) to higher interest rates and lower disposable incomes.

35. Vulnerabilities in the NBFIs sector also require continued monitoring.

While life insurers have benefited from rising interest rates and have shown robust profitability and solvency, nonlife insurers have been adversely affected by valuation losses in fixed income assets and higher inflation while other segments of the NBFIs sector, including investment funds, experienced significant outflows. In the absence of liquidity management tools, redemption or liquidity pressures in the NBFIs sector can affect the wider financial system and the real economy through funding links to banks and their effect on commercial and residential real estate prices. A wider implementation of macroprudential tools that limit leverage and liquidity mismatches in such entities—including robust liquidity management tools—while closely monitoring and reducing the risk that activity migrates to less-regulated parts of the sector, would therefore be a welcome step. Furthermore, given the significant cross-border activities of NBFIs entities within the EU and the scope for cross-border regulatory arbitrage, enhanced cooperation between national authorities, and the strengthening of the EU agencies that can enhance such coordination, are key (Annex IV). Finally, closing data gaps on the NBFIs sector is essential to enable effective regulation and supervision and to prevent activities from migrating to the less-regulated parts of the sector.



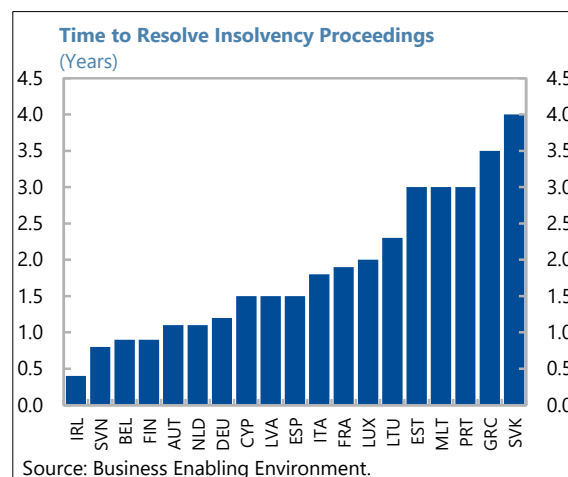
36. The recent turbulence in financial markets and heightened focus on vulnerabilities also underscores the urgent need for progress in strengthening the EU's financial architecture (even if results may take time). Despite the progress observed so far in implementing the recommendations from the 2018 Financial Stability Assessment (FSAP; Annex V), there is scope for continued improvements to financial sector oversight.

- *Crisis management arrangements* need to be strengthened further. Recent banking system stress elsewhere underscored the criticality of rapid interventions in problem banks. Appropriately, the recent European Commission proposal on crisis management and deposit insurance aims to broaden the applicability of central resolution powers to midsized and smaller banks, while improving resolution funding arrangements, including by facilitating more-flexible use of national deposit guarantee funds. However, the proposal does not address key rigidities in the current framework, including on bail-in requirements, especially in systemic situations. More substantive reforms, including introducing a systemic risk exemption from minimum bail-in requirements, would add needed flexibility. Progress is also needed on the ratification of the

¹⁴ For example, the ability to impose caps on DTI/DSTI ratios is absent in 10 out of 20 euro area member states See [European Systemic Risk Board \(ESRB\), 2023, "Overview of national macroprudential measures."](#)

amended European Stability Mechanism (ESM) treaty (which would operationalize the ESM's financial backstop to the Single Resolution Fund (SRF) and thus make crisis management arrangements more credible), and on a pooled European Deposit Insurance Fund (which would delink the ability to provide deposit insurance from the creditworthiness of the sovereign, thus limiting divergence in financial conditions).

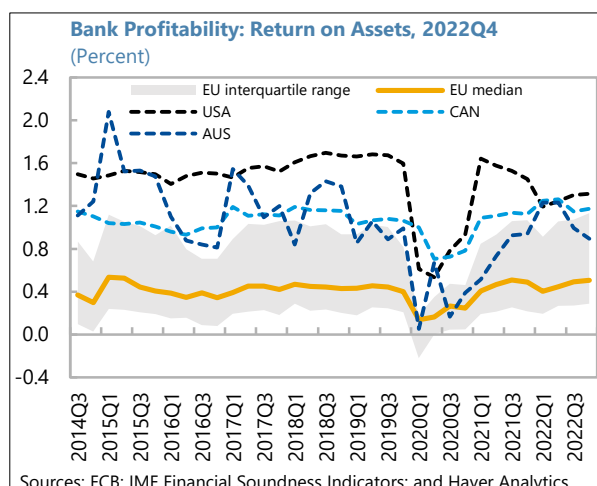
- *Meaningful progress on the BU and CMU* would enhance cross-border risk sharing and financial resilience, and deepen access to finance for households and firms, and improve risk-sharing, supporting macroeconomic stability, growth, and convergence in the euro area. The Commission's recent CMU legislative package includes important steps toward harmonizing insolvency processes across member states. Stronger insolvency frameworks would expand firms' access to credit, help banks resolve NPLs, promote entrepreneurship, and deepen Europe's debt markets.



37. A full implementation of the capital requirements envisaged under Basel III is essential. The EU's provisional agreement on the implementation of Basel III contains multiple deviations from this accord. According to previous EBA estimates, these would reduce the expected increase in EU banks' Tier 1 aggregate capital requirements by about 3 percentage points compared to a faithful implementation of Basel III. Diluting macroprudential standards for banks is not desirable, especially in view of the recent events in other jurisdictions, which have clearly illustrated the dangers of selective implementation of banking regulation.

38. Strengthening the EU's AML/CFT regime will also help safeguard financial integrity against emerging risks (including from virtual assets) and prevent regulatory arbitrage. Key priorities include: improving information sharing between prudential and AML/CFT supervisors, which is critical for overlapping supervised entities and enforcement of sanctions; establishing a single AML/CFT rulebook and supervisory authority (in strong cooperation with the SSM) to ensure consistency of financial integrity oversight in the euro area; and maintaining the transparency of beneficial ownership to mitigate risks from cross-border tax crimes, corruption, sanctions evasion and money laundering. The latter objective urgently needs to be reconciled with the 2022 ruling by the Court of Justice of the European Union which found that the 2018 EU Anti-Money Laundering Directive interfered with personal data protection rights of beneficial owners. In addition, the adoption of the Regulation on Markets in Crypto-Assets (MiCA) will help ensure that crypto-asset service providers have robust AML/CFT controls.

39. Finally, the EU should tackle overbanking. Europe’s banking system has a long-standing problem of low profitability due to too many banks and branches. The authorities can ameliorate this problem by ensuring that the largest banks have sound business models that are conducive to consistent return on assets and equity, encouraging banks to improve cost efficiency and trim the branch network, and facilitating the exit of less efficient banks. This would permit a more dynamic banking sector and enhance financial stability.



Authorities’ Views

40. The authorities emphasized that bank capital, liquidity, and profitability remain strong and were confident that the banking system will be able to withstand the ongoing tightening cycle. The authorities noted that banks benefited from the so far limited pass-through of higher policy rates to deposit rates. While NPLs continue to decline thanks to NPL reduction strategies adopted in the aftermath of the Global Financial Crisis and Euro Area sovereign debt crisis, credit risk related to tighter credit conditions may materialize with a delay, as consumer, CRE, and SME loans could be exposed to an economic slowdown. The authorities noted that forthcoming TLTRO repayments would, overall, not lead to excessive pressure on banks’ funding because banks have had enough time to prepare and have in aggregate comfortable excess liquidity and ability to tap into bond markets. They also assessed that valuation losses from banks’ HTM portfolios are modest and would be largely absorbed by higher bank profits arising from higher net interest income.

41. The authorities agreed that vulnerabilities associated with tighter financial conditions nevertheless warrant continued monitoring. They noted that banks’ capital and liquidity are robust and that the ongoing EBA-ECB bank stress test (which considers an adverse scenario with low growth and high inflation and interest rates) will be testing bank resilience. Furthermore, the authorities monitor banks’ interest rate and liquidity risks building on the SSM’s 2017 stress test exercise and 2019 thematic reviews, scrutinize banks’ interest rate risk management with quarterly reviews with a focus on outliers, and analyze banks’ funding profiles, including deposit stickiness and interest rate assumptions and forward liquidity plans. The authorities agreed with the need to rebuild regulatory capital buffers to sufficient levels—including through a positive-neutral rate for the CCyB—so that they can be released when needed, provided the buildup does not have a procyclical effect on credit growth.

42. The authorities anticipate that the Basel III implementation will be fully legislated by end-2023. The European Commission expressed commitment to the faithful implementation of Basel III, where any deviations are strictly temporary. The authorities noted that, in contrast to several other jurisdictions, the EU’s Basel III implementation also covers smaller banks with very different business models which require some adjustment in capital requirements. In the authorities’

view, only the deviation related to counterparty risk appears material, whereas the deviations related to unrated corporates and mortgages are expected to have a minor effect on required capital.

43. The authorities viewed the Commission’s CDMI proposal as an integral part of the BU architecture. The authorities assigned high importance to a more flexible and effective use of DGS funds possible once creditor hierarchy is changed, and a greater backstop to the SRF once the ESM treaty is ratified by all member states. They noted that the CDMI proposal was designed as a coherent package, with its individual elements working in concert with the others. The authorities saw some value but limited political scope for a systemic exemption for smaller banks in distress and expected that this issue could be solved by transferring assets and liabilities to another bank rather than by standalone resolution.

44. The authorities agreed that more work needs to be done regarding the regulation of the NBFi sector. This work could clarify the use of regulatory tools for investment funds for macroprudential purposes and reflect the fact that more centralized coordination of such macroprudential tools in the EU may be desirable. Work on a legislative proposal on money market funds is also planned. The authorities also noted that ESMA is currently reviewing the AIMF and UCITS directives to refine liquidity requirements on funds that may meet large redemptions.

45. The authorities agree that strengthening AML/CFT supervision remains a priority. In recent years, the ECB has significantly enhanced its channels for collaboration with national AML/CFT authorities in the EU regarding ML/TF issues of banks under its supervision. The creation of the Anti-Money-Laundering Authority (AMLA), which is now undergoing the triologue process, will allow AML/CFT supervision of banks, financial institutions, and likely crypto-asset service providers at the European level.

A Restrictive Fiscal Policy Stance

46. Under the baseline, fiscal policy is projected to tighten moderately in 2023 and further in 2024 (Text Table 2). The euro area aggregated cyclically-adjusted primary balance (CAPB) as a share of potential GDP is projected to improve by 0.4 percentage points in 2023—largely explained by the expiration of the “Super-bonus” program in Italy (with most other countries maintaining a neutral fiscal stance). For 2024, under existing policies, the CAPB would improve by an additional 1 percent of potential GDP, of which around one-third is in high-debt countries.

47. A tight fiscal policy stance in 2024 will help avoid additional inflation pressures and rebuild fiscal space. At the aggregate level, staff analysis suggests that an improvement in the CAPB of around 1 percent of potential GDP in 2024—which would be achieved under current policies—would bring the targeted benefits. In particular, country authorities should allow temporary energy support programs to expire and avoid extending or replacing these with other spending programs. This will require that any new expansionary policy measures introduced during the preparation of the 2024 budget are offset by other discretionary policy changes. Temporary

revenue windfalls from higher-than-expected inflation should also be saved.¹⁵ While an aggregate euro area fiscal tightening of 1 percent is broadly appropriate, individual countries may need more tightening than currently in the baseline to contain fiscal risk and build fiscal space. Specifically, a restrictive fiscal policy stance would:

- Allow less monetary policy tightening and thus help reduce the risk of financial market disruptions. However, given heterogeneous country conditions, fiscal adjustment would differ across countries, with more effort appropriate where inflation is high.¹⁶
- Support debt reduction and restoration of fiscal space against future shocks and longer-term spending pressures, including pensions, health, energy security and the green transition. Ambitious consolidation is particularly essential in high debt countries—many of which have seen a persistent increase in their fiscal deficits (¶155).

Clear communication of the rationale for fiscal consolidation is necessary to secure broad support. For high-debt countries with a larger need for fiscal consolidation, it is important that it is accompanied by strong growth-enhancing reforms (see ¶74-79).

Text Table 2. Euro Area: Public Finance Indicators, 2021-2028 (Percent of GDP)

	2021	2022	Projections					
			2023	2024	2025	2026	2027	2028
Overall fiscal balance	-5.3	-3.6	-3.5	-2.7	-2.3	-2.1	-2.0	-2.0
Primary balance	-4.0	-2.1	-2.0	-1.0	-0.5	-0.2	-0.1	-0.1
Structural balance 1/	-3.5	-2.4	-2.8	-2.3	-2.2	-2.1	-2.1	-2.1
Structural primary balance 1/	-2.2	-0.9	-1.2	-0.7	-0.4	-0.2	-0.1	-0.1
Cyclically adjusted primary balance 1/	-2.8	-2.1	-1.7	-0.7	-0.4	-0.2	-0.1	-0.1
Gross public debt	95.1	91.2	89.4	88.2	87.1	86.3	85.6	85.1

Source: IMF staff estimates.

1/ Percent of potential GDP.

48. Better-targeted energy support programs could support fiscal consolidation and help achieve climate and equity goals. European countries acted quickly in response to the surge in energy prices in 2022 to introduce a variety of energy support packages. On average, euro area countries announced the equivalent of 2.6 percent of GDP in energy support measures for 2022 and 2023, of which more than two thirds are untargeted. The cost is substantially larger than that of fully compensating the bottom 40 percent of households for the increase in the cost of living coming from the energy price shock. Bonuses or rebates on energy bills (that are not linked to the current

¹⁵ Staff's advice of tightening the CAPB by 1 percent of GDP in 2024 is in line with a euro area aggregation of the European Commission's Country Specific Recommendations.

¹⁶ Staff estimates that a reduction of government consumption (relative to the January 2023 WEO baseline) by 1 percent of GDP annually in 2023 and 2024, and by ½ percent in 2025 would lower inflation by 0.2 percentage points during the first two years and consequently, lower the interest rate path by around 40-50 basis points in 2023-25 (See "Shared Problem, Shared Solution: Benefits from Fiscal-Monetary Interactions in the Euro Area", forthcoming IMF Working Paper).

volume of consumption) or block tariffs are simple options which would improve on the current policy design in many countries. Better targeting of energy support measures would strengthen the incentives for energy conservation and help in reducing inflation. Reclaiming the relief from the better-off through income taxation would also make support more progressive (Arregui and others, 2022).

49. Relieving supply constraints will also ease policy tradeoffs.

The fast expansion of LNG import capacity, including through floating terminals in Germany, was an important step in tackling the surge in natural gas prices. Continued efforts to close remaining European infrastructure bottlenecks in line with the REPowerEU plan are important, while avoiding a buildup in medium-term excess capacity. Policies which encourage labor supply, while less likely to deliver results in the very short term, are another crucial aspect of expanding supply amid tight labor markets (178).

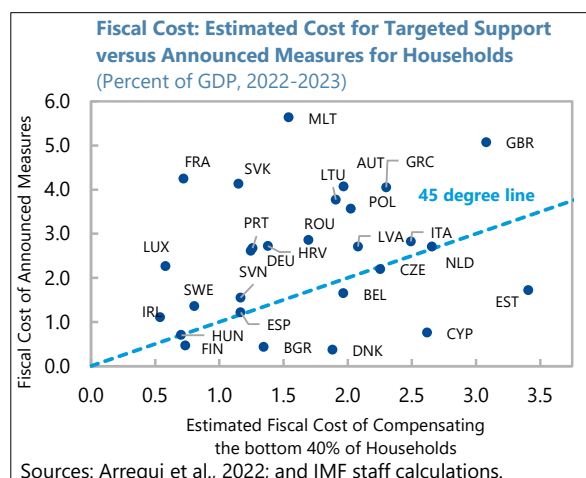
Authorities' Views

50. The authorities argued that the aggregate fiscal stance projected for 2023 and 2024 is broadly appropriate, although there is high heterogeneity across countries. They also emphasized the importance of phasing out energy support measures by the end of 2023 as energy prices continue to decline and initiating an improvement in the underlying fiscal positions that would help enhance fiscal sustainability in the medium term. The authorities noted that conditions for fiscal consolidation are currently favorable also because of windfall revenue gains created by unanticipated inflation and argued for the importance of using them to further improve fiscal balances. A potential return of higher energy prices is a risk but, according to the authorities, its negative impact can be offset by targeted energy support measures. According to the authorities, the introduction of a minimum corporate profit tax could also help toward fiscal consolidation in some member states.

Policy Response in Adverse Scenarios

51. A downside scenario of intensified financial instability could take different forms. For instance, it could manifest as a weakening of banks' asset quality and credit provision on the back of higher corporate insolvencies or a sharp correction in real estate prices. It could also take the form of a loss of confidence in banks, or a sharp increase in borrowing costs of high debt countries due to a sharp change in market sentiment or solvency concerns. Regardless of the initial source of instability, localized or more systemic liquidity stress could act as an amplifier.

- **Financial sector policies.** Authorities would need to promptly address banking weaknesses by early interventions in troubled institutions, orderly resolution of any unviable institutions, and



use liquidity support tools to avoid contagion and unwarranted insolvencies. The latter could take the form of emergency liquidity assistance to specific banks or new broadly available facilities if needed; they should be temporary and targeted to the extent possible to reduce moral hazard. In a downside scenario, the authorities should also release the CCyB.

- **Monetary policy.** In a financial instability scenario such as those in ¶118, the authorities should aim to maintain the separation principle and continue to use monetary policy to fight inflation and liquidity tools to ensure financial stability. To the extent that financial system distress tightens credit and has disinflationary effects, the monetary policy stance would need to be adjusted. In a severe stress scenario, a temporary halt to QT or a postponement of TLTRO repayments may be needed. If sovereign markets are disrupted, the ECB could flexibly reinvest maturing assets under PEPP or activate the TPI. Sovereign solvency-related concerns should be addressed through the ECB's Outright Monetary Transactions and the ESM's macro-adjustment programs.
- **Fiscal policy.** Given weaker growth, automatic stabilizers should be allowed to operate. Discretionary support should be reserved for a severe scenario and be well targeted.

52. Further adverse supply shocks, or more persistent inflation than expected, would require tighter monetary policy even if policy tradeoffs would worsen. Renewed gas price spikes due to a full shutoff of Russian gas combined with a harsh winter, for example, could keep inflation elevated for longer and imperil the anchoring of inflation expectations. In such a scenario, the monetary policy stance would need to be even tighter than under the baseline, implying more aggressive policy rate hikes during 2023 and 2024 barring a sharp reduction in medium-term expected inflation. With tighter monetary policy, closely monitoring and addressing any financial stability risks would be critical. Should systemic financial stress arise in a scenario of higher-than-expected inflation, clear communication on the separation of tools, targeted liquidity support and a cautious approach to adjusting the monetary policy stance—only once disinflationary effects are becoming more certain—would be warranted. While automatic fiscal stabilizers should be allowed to operate, large increases in the structural deficits should be avoided to maintain a coherent monetary-fiscal policy mix. Countries with limited fiscal space should restrict their overall fiscal balances, including through measures to offset spending increases.

Authorities' Views

53. The authorities argued that they have the appropriate tools to respond to an adverse scenario. They agreed that the two main downside scenarios highlighted by Fund staff—one driven by financial sector stress caused by either rising insolvencies and sharp real estate price corrections or by a loss of confidence in banks, possibly due to contagion from abroad, and another by further adverse supply shocks or persistent inflation—could in principle be envisaged. ECB staff were of the view that the ECB's current toolkit would allow an adequate response and, in particular, noted that existing open market operations facilities (MRO and LTROs) provide an ongoing effective instrument to meet short-term liquidity needs. The ECB emphasized that any fragmentation in the transmission of monetary policy due to divergent movements in sovereign spreads unwarranted by fundamentals

could be tackled through a flexible reinvestment of maturing bonds in the PEPP portfolio or through the TPI. ECB staff did not rule out completely the possibility of altering the speed of balance sheet reduction in a highly severe scenario but reiterated the primacy of key interest rates for setting the monetary policy stance, and that the balance-sheet rundown would occur passively in a measured and predictable way. If financial turbulence were to stem from nonbank financial institutions, the ECB could consider appropriate responses to stem financial contagion but did not see a need for a dedicated standing liquidity facility for nonbanks. The authorities also agreed that, in a severe downside scenario, well-targeted discretionary fiscal support could be deployed.

B. Building Resilience and Countering Fragmentation

54. The permanent shifts caused by the pandemic and energy shock, as well as the uncertain global environment, add to the urgency of bolstering resilience by addressing long-lasting and interlinked structural challenges. This includes strengthening fiscal sustainability by adopting a revamped fiscal governance framework, raising potential output through structural reforms, and delivering on the ambitious green transition targets.

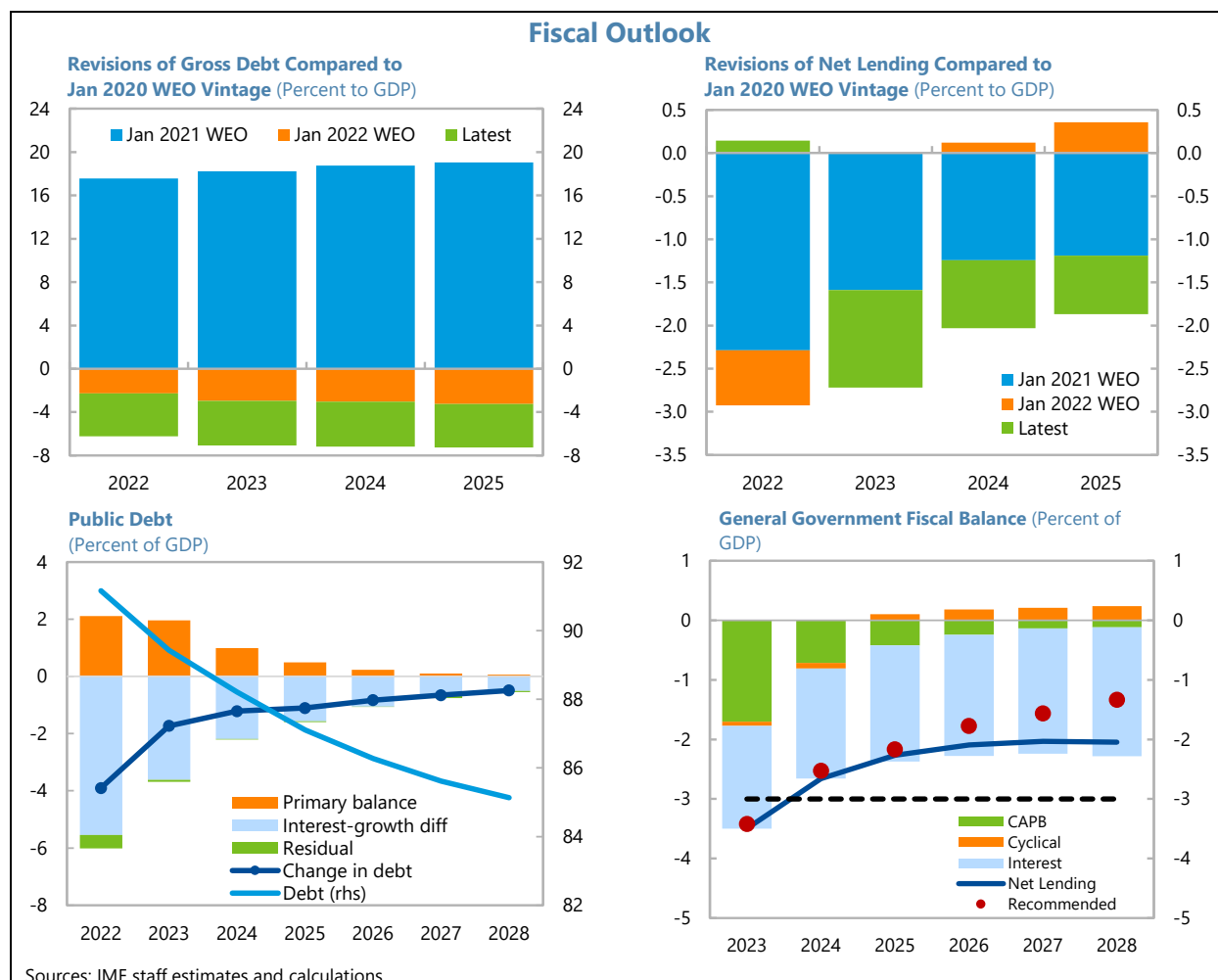
Safeguarding Fiscal Sustainability

55. The fiscal outlook is weaker than prior to the pandemic and buffers have been eroded. Euro area public debt increased sharply in 2020 and, despite strong nominal GDP growth, is about 6 percentage points of GDP above 2019 levels at present. Though currently declining, its level in 2025 is projected to be 12 percentage points of GDP higher than the pre-pandemic projection for that year. The consolidated euro area fiscal deficit has been revised up because of persistently higher spending-to-GDP ratios—average euro area medium term fiscal deficits are now more than 1½ percent of GDP higher than projected prior to the pandemic, with slightly less than half reflecting higher debt service costs.

56. Fiscal space in the euro area should be rebuilt over the medium term, with more ambitious and front-loaded adjustment in high-debt countries. Higher debt and deficits imply that euro area countries need to intensify their efforts to rebuild fiscal space through a sustained and growth-friendly improvement in the primary fiscal balances, which should reach a surplus by 2026 and improve further at least until 2028. For some high-debt and deficit countries, this implies decisive (but not without historical precedent) improvements in the overall balance of between 0.5 and 1.0 percent of GDP annually for several years to put debt on a firmly downward path over the medium term. Such fiscal consolidation efforts are more likely to be successful if they curb expenditure growth while safeguarding growth-enhancing public investment. Countries with medium-to-low debt and strong fiscal balances have more flexibility and should ensure that sufficient resources are allocated to growth-enhancing public investments and support to vulnerable households.

57. The ongoing reform of the EU economic governance framework is an opportunity to promote sustainable public finances, enhance macro-economic stabilization, and secure the provision of common public goods. The current fiscal framework is complex (with operational

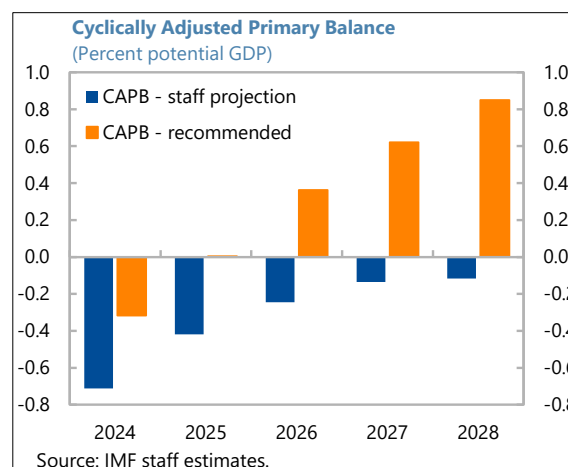
targets dependent on unobservable variables), unable to properly account for country-specific circumstances, and offers limited scope for managing tradeoffs between containing fiscal risks and output stabilization. Compliance with the rules has been uneven, and they have not generated sufficient debt reduction in relatively good times. The key objective of the reform is to remedy these shortcomings, including by setting ambitious, but realistic, fiscal plans with well-defined escape clauses for severe shocks, and facilitating countercyclical policies. The new framework should also strengthen national ownership, raise the status of fiscal rules in the national policy debate, and increase compliance, which would lead to durable reductions in deficit and debt ratios over time.



58. In late April, the European Commission tabled a legislative proposal to reform the EU's economic governance framework. In line with Fund staff's [view](#), the proposal calls for a risk-based approach to determining consolidation paths with a focus on medium-term fiscal plans, operationalized through multi-year net primary expenditure paths.¹⁷ Such paths are expected to deliver with a high probability (according to a debt-sustainability analysis; DSA) declining debt-to-GDP ratios after four years for countries with debt above 60 percent of GDP. The adjustment period can be extended from four to seven years for countries that commit to reforms or public

¹⁷ National net primary expenditure is defined as expenditure minus interest expenditure, minus cyclical unemployment expenditure, minus expenditure financed with EU grants, minus discretionary revenue increases.

investments. As a safeguard, the debt-to-GDP ratio is required to be below its initial level at the end of the adjustment period. During the adjustment period, countries are also required to keep net primary expenditure growth below medium-term GDP growth, on average. In addition, the Commission's proposal calls for an expanded role for national fiscal councils in fiscal policy making and surveillance. During the adjustment period, a minimum annual reduction in the deficit of 0.5 percent of GDP must be maintained if the general government deficit exceeds the reference value of 3 percent of GDP.



59. The proposal is welcome as it would facilitate a risk-based fiscal adjustment path for countries with high debt levels, while avoiding procyclicality. The use of DSA to set the adjustments paths for high-debt countries allows the consideration of country characteristics, including country-specific initial conditions and risks, which should foster ownership. Moreover, net primary expenditures as operational targets eliminate incentives to substitute expenditure programs with tax expenditure, allow for changes in the size of government (overall spending and revenues as a share of GDP), and let automatic stabilizers operate, thus embedding countercyclicality into the framework. At the same time, some aspects of the proposal require cautious implementation. The possibility of extending the adjustment period can provide incentives for reforms that increase long-term growth (and thereby support consolidation), but longer adjustment periods also raise the risk that fiscal targets are ultimately not met. Moreover, predicting the impact of investments and reforms on output is challenging in practice, and estimates can prove optimistic ex-post. To mitigate these risks, it will be crucial to establish and enforce clear criteria for extending the adjustment period and to rely on conservative estimates of the GDP effects. In addition, complete transparency on key technical aspects, including on how cyclical unemployment expenditure and discretionary revenue measures will be calculated, will be essential. It is vital that an agreement is reached soon so the new framework can anchor fiscal policies in 2025 and beyond.

60. The current proposal could be further strengthened by an EU-wide fiscal capacity and by introducing an independent European fiscal council (EFC). The war in Ukraine reinforces common and imminent needs to enhance EU's energy security and accelerate the green transition. A central fiscal capacity in the EU, absent in the current reform proposal, could improve the provision of such common public goods and strengthen macroeconomic stabilization. Moreover, an EFC could help establishing the credibility and impartiality of the new framework, since the latter relies on relatively complex DSA analysis to set the 'technical trajectory' for fiscal aggregates. National fiscal councils (NFCs) would also benefit from an independent EFC, which could serve as a node in a network of NFCs, helping promote good practices and standards, and provide an independent voice regarding risks and the execution of the framework.

61. The introduction of a minimum corporate profit tax will support the needed fiscal consolidation across the euro area while ensuring a level playing field. The adoption in November 2022 of the Council Directive on a minimum level of taxation for multinational enterprises is a welcome step in meeting the commitments under Pillar II of the OECD/G20's Inclusive Framework Agreement. The Directive—which commits member states to introduce by 2024 a minimum corporate profit tax of 15 percent for enterprise groups—will mitigate incentives to compete through low corporate tax rates and preferential tax regimes. By mitigating incentives for tax competition between countries, the minimum tax can also improve tax collections, which will help with fiscal consolidation. The Directive also reduces profit-shifting opportunities for companies within the EU.

Authorities' Views

62. The authorities agreed with the need for ambitious and differentiated medium-term fiscal consolidation, aiming to build fiscal space and improve long-term fiscal sustainability. They pointed out the deterioration in debt dynamics created by higher debt to GDP ratios and less favorable interest-growth differentials. In this context, they stressed the importance of a swift adoption and implementation of the proposed economic governance reform, which would base the fiscal framework on country-specific and risk-based adjustment paths with medium-term net primary expenditure paths as the primary operational target. They agreed that the implementation of the rules could pose some challenges, including the difficulty with the assessment of the long-term growth impact of public investments and structural reforms, which must be prudent. They argued that a qualitative evaluation based on established methodology was feasible, and that the framework contained sufficient safeguards to preserve the integrity of fiscal adjustment paths. The authorities noted that should the member states not reach an agreement on the legislative reform proposal by the end of 2023, a transitional arrangement—consistent with the current EU legislation—should guide member states fiscal position to ensure that fiscal risks remain contained.

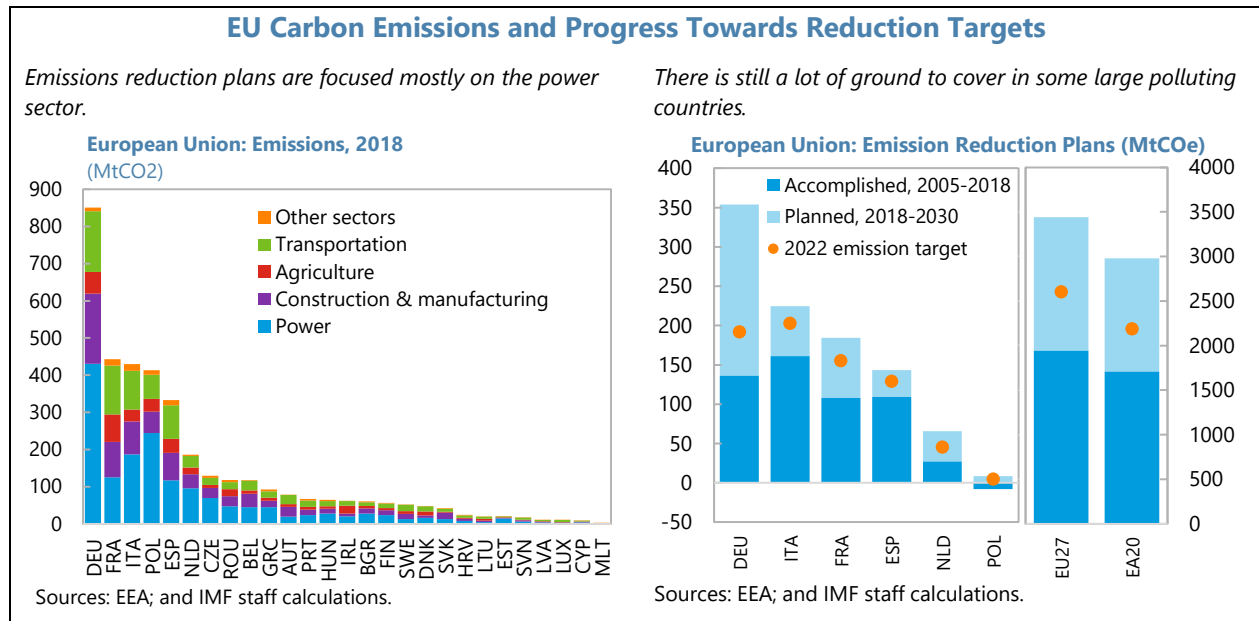
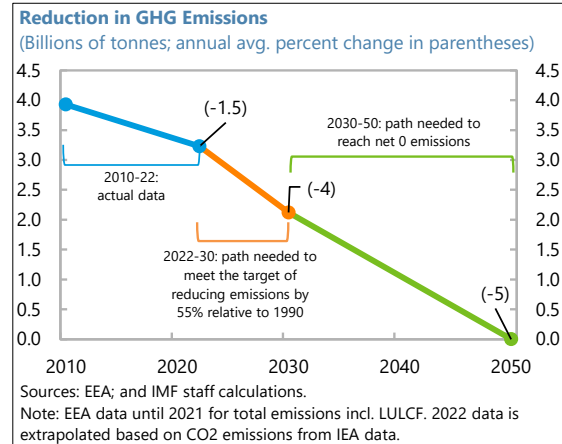
Delivering the Green Transition and Energy Security while Strengthening Trade

63. The Russian invasion of Ukraine has made it more important to accelerate the transition to reliable low-carbon energy sources. The Fit for 55 package details the specific commitments EU countries have made to reduce emissions by 55 percent by 2030 (relative to 1990 levels). Many of these envision shifting from coal to gas as a bridge fuel during the period when renewable energy sources and related technologies are developed and installed. As gas prices are set to remain substantially higher than historical levels over the medium term, it is critical to ramp up green energy generation and related investments (e.g., upgrading power grids) to avoid a durable return to coal power generation. This has been estimated to require substantial *additional* investments of around €400 billion per year between 2021 and 2030, a figure that has surely risen with inflation.

64. Initial fears of a sharp tension between the green transition and energy security concerns due to the energy crisis have not played out.

While the usage of coal and oil increased last year, leading to higher emissions in the power sector, renewable capacity (especially wind and energy) expanded at a record pace and important efficiency gains were made in both residential housing and industry, contributing to an estimated reduction of 2.5 percent in total EU carbon emissions in 2022 (IEA, 2023). Overall, the energy shock is likely to be favorable for the green transition as energy

efficiency got a boost (Box 2), renewable electricity production became more cost-attractive, and policy initiatives accelerated. The latter includes REPowerEU, the extension of the Carbon Border Adjustment Mechanism (CBAM) and of the Emission Trading System (ETS) to more goods and sectors (see below), and the introduction of the Green Deal Industrial Plan (GDIP), which aims at achieving the EU’s green and energy security goals, while ensuring the competitiveness of EU clean tech industries. EU carbon prices have settled at over €90 per ton of CO₂, a level compatible with spurring further efficiency gains even as energy prices ease somewhat. At the same time, some EU countries remain far from achieving their carbon commitments, highlighting the importance of maintaining policy momentum.



65. An EU Climate Investment Fund (CIF) would help to ensure that the EU’s emissions reduction goals are achieved in a cost-effective manner. Part of the additional investments needed for the EU to reach its emission reduction goals will be borne by the public sector or require public sector incentives/assistance to get the private sector to move quickly enough. An EU CIF could better internalize cross-border externalities from carbon emissions, and seek to reduce

emissions more cost-effectively, including by allocating funds to countries and sectors with the highest rate of return on carbon abatement. It could also be used to help preserve the EU single market amidst potentially growing subsidies for clean technologies in the context of the temporary relaxation of state-aid rules (through 2025, through the Temporary Crisis and Transition Framework) and uneven fiscal space. Moreover, it could help relieve constraints due to limited fiscal space in some countries, even if it is designed to avoid permanent cross-country transfers.

66. The recent agreement on the ETS reform is expected to strengthen EU’s climate policy instruments and is an important step toward achieving the EU’s climate goals. The reform sets an ambitious emission reduction goal of 62 percent by 2030 (relative to 2005 levels) for the ETS-covered sectors—a significant increase compared with the current objective of a 43 percent reduction target. The agreement also envisioned establishment of a new social Fund, which will support vulnerable households in the energy transition, and a separate emissions trading system (ETS II)—expected to be implemented in 2027—to fossil fuels used in buildings, road transport, and certain industrial sectors. Aligning the two emissions trading systems over the longer run would help reduce potential distortions in emission reduction incentives across EU sectors.

67. As part of the EU Green Deal, in December 2022, the EU institutions agreed on a wider scope for the CBAM. The mechanism will cover a broader set of goods than earlier envisaged and will apply to imports from non-EU countries except countries covered by the EU ETS. Third countries will be able to apply for exemptions from the CBAM if they have an equivalent domestic carbon pricing mechanism in place. The CBAM, which is planned to permanently enter into force in 2026, will be phased in gradually from 2023 as free allowance allocations for industries are progressively phased out. The CBAM would help equalize the price on the carbon emitted during the production of carbon intensive goods that are entering the EU with the internal EU price and thus help to encourage cleaner industrial production in non-EU countries. Nevertheless, it should be implemented in line with WTO, and—to the extent possible given the administrative difficulties—be based on actual embodied carbon content of traded products rather than benchmarks. The EU should also step up its efforts to ensure that least developed countries can adjust to its policies on environmental sustainability.

68. The EU’s GDIP includes some welcome steps to advance the EU’s green transition, but some of its elements could have distortionary effects. The plan complements ongoing initiatives to reduce emissions, such as streamlining regulatory and permitting processes, enhancing training to upgrade skills, and fostering the conditions for green innovation, including by creating regulatory sandboxes. However, it also extends and expands the relaxation of state-aid rules, including by allowing member states to grant subsidies or tax incentives to match what is being offered by other countries and design country-specific schemes to support investment in the production of critical materials and green products. While such subsidies can play a role in accelerating the green transition and address some supply chain-related security concerns in the context of growing geo-economic fragmentation risks, they could potentially lead to higher fiscal costs and potential inefficiencies and distortions, including to the EU single market. Moreover, protectionist provisions that include domestic content requirements, or otherwise discriminate between foreign and domestically produced goods and services, if introduced, could disrupt global supply relationships

with adverse effects on trade and investment. Any subsidies given under the relaxed state aid rules should thus be limited in scope, duration, and size. Coordinating fiscal support for clean tech sectors across member states, including under an EU-wide facility, could help to limit potential distortions to the EU single market. A common multilateral approach—consistent with the WTO rules—on the appropriate use and design of subsidies, underpinned by thorough analysis of the cumulative effects of various countries’ subsidy packages on climate and economic effects, would be an important achievement.

69. In this period of weakening trade policies and high trade tensions, the EU should remain open and minimize trade distortions. In responding to discriminatory trade measures and potentially distortive subsidies, the EU has avoided excessive responses that would have further harmed the European economy and escalated international tensions. It has implemented or is developing several new tools, including the Foreign Subsidy Regulation, the EU FDI Screening Regulation, the upgraded Export Control Regulation, the Chips Act, the Anti-Coercion Instrument, and a possible outbound investment mechanism. Applications of these tools should be narrowly targeted to specific objectives and the authorities should resist calls to use such tools to provide a competitive advantage to domestic industries.

70. The EU should also increase efforts to strengthen the WTO. Amid high trade tensions and the uncertain commitment of some major players, EU leadership is paramount in completing new WTO-based agreements and reforming the WTO. Priorities could include the strong implementation of the recent plurilateral agreement on Services Domestic Regulation, the conclusion of strong plurilateral agreements on Investment Facilitation and E-Commerce, improving policy predictability by fully restoring the WTO dispute settlement, and stronger efforts on agricultural and industrial subsidy practices. In this vein, a February 2023 EU paper presented constructive ideas for improving the WTO’s “deliberative function” and shed further light on the subsidy issues that were recently examined by several institutions ([IMF, OECD, WB, and WTO, 2022](#)).

Authorities’ Views

71. The authorities reiterated the need to accelerate the green transition by investing in renewables and improving energy efficiency. They noted that RePowerEU, the reformed ETS, and the GDIP are key to achieve energy security, reduce dependencies, and mitigate emissions. While noting that an EU Climate Investment Fund could be valuable to help finance public investments with cross-border spillovers, they highlighted the political hurdles associated with establishing such mechanism and argued that, at present, the focus should be on the implementation and absorption of the existing instruments and on the financing from various initiatives toward the implementation of the 2030 objectives in the Fit for 55 package.

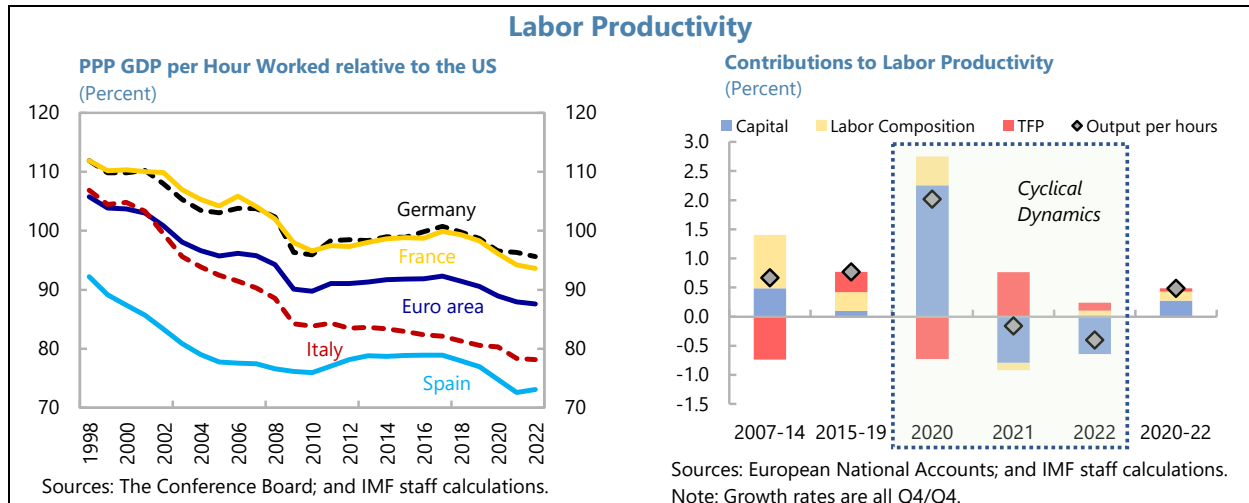
72. The importance of the GDIP in enhancing the competitiveness of Europe’s green industry and in accelerating the transition to climate neutrality was stressed by the authorities. They noted that steps taken by the EU in response to key trading partners initiatives to accelerate the green transition and to remedy supply chain issues will be in line with EU’s international obligations. They recognized that the temporary relaxation of state aid rules may

adversely affect the level playing field within the EU given the uneven fiscal space but noted that granting higher aid to match the aid received for similar projects by competitors located outside of the EU is subject to enhanced scrutiny and is given only after providing evidence of material relocation risks. They also pointed out that the proposed European sovereignty fund could potentially provide greater flexibility in using existing resources to EU countries with less fiscal space.

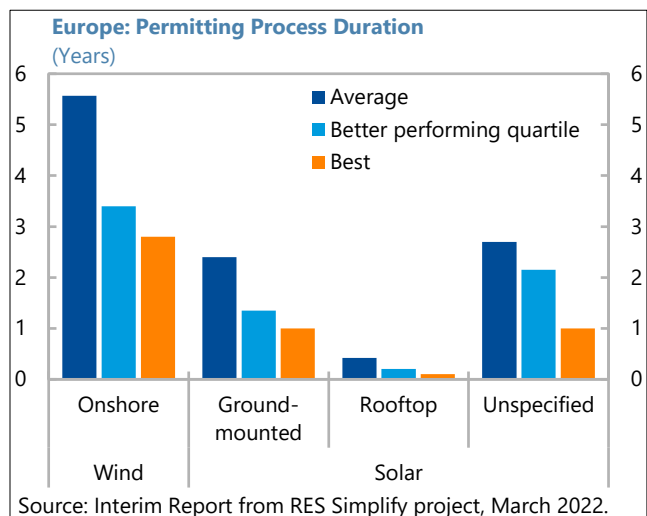
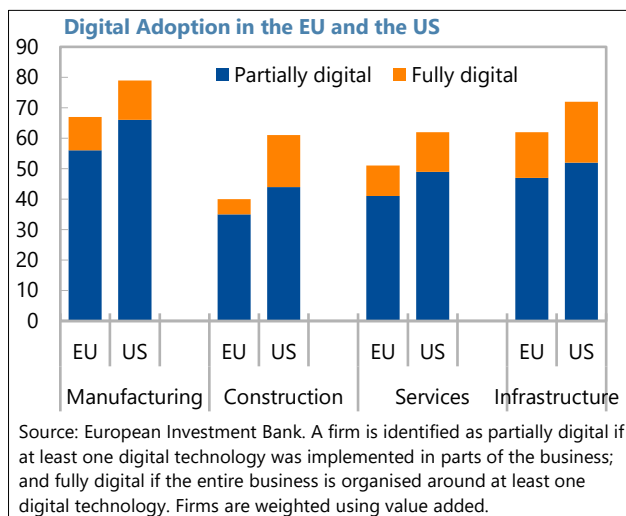
73. Openness and a multilateralism are seen as essential elements of the authorities' Open Strategic Autonomy agenda and of their trade policy. The authorities argued that trade openness is key to create opportunities for the domestic industry and to provide access to important inputs. At the same time, they noted that de-risking supply chains through diversification is an important policy objective as it would strengthen resilience. The authorities also noted that CBAM will be phased-in gradually during 2023-34, as free allowances are phased out and while the EU helps its trading partners prepare for the new regime. Moreover, the authorities consider WTO reform a key element in overall trade policy and see the next WTO Ministerial Conference as a critical opportunity to advance the WTO reform agenda with a view to restoring a fully functioning WTO dispute settlement system. It is also important to make progress on multilateral negotiations on fisheries subsidies and the reduction of trade-distorting agricultural support, as well as concluding the plurilateral negotiations on e-commerce and investment facilitation, and initiating a work program on industrial subsidies. The authorities are actively engaging in efforts to restore an effective WTO dispute settlement system which they see as urgent.

Boosting Productivity and Growth

74. In aggregate, the EU's long-standing productivity challenges remain unresolved and possibly accentuated by the recent shocks. Productivity growth had been subdued for several decades now, and while this has been a phenomenon across advanced economies, euro area labor productivity has been on a long downward trend relative to the United States. This trend may have accelerated since the onset of the pandemic, with significant heterogeneity across member states. In absolute terms, labor productivity grew broadly at the pre-pandemic rate over 2020-2022. However, this masks a near standstill in total factor productivity (TFP) and a smaller positive contribution of labor composition relative to the pre-pandemic years (as lower skilled workers were pulled into employment amid record low unemployment rates), which was offset by a slightly larger contribution of capital.



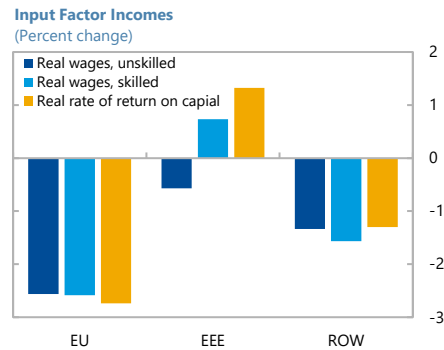
75. Next Generation EU (NGEU) could help boost growth by delivering much needed structural reforms and investments. With an equivalent amount of 6 percent of 2020 GDP, NGEU offers financial support to member states conditional on the implementation of investment and reform projects. The largest share of investment is dedicated to climate change (around 40 percent), followed by digitalization (around 20 percent), where the EU continues to lag the US. [IMF staff estimates](#) suggest that if implemented as planned, overall European GDP would be boosted by around 1.5 percent by the end of the program in 2026. The RePowerEU plan, which was recently incorporated into National Recovery and Resilience Plans (NRRPs) and allows for additional reforms and investments to phase-out Russian energy imports, could also boost efforts to accelerate the transition to the green economy. The shorter permitting times agreed in REPowerEU are welcome given the delays to wind and solar deployment in some regions.



Box 4. Euro Area: The Long-term Impact of the Energy Price Shock on Output and Income Divergence

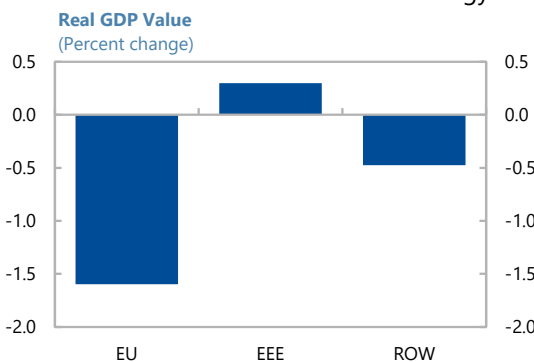
The recent energy price shock has a substantial impact on EU’s energy use and generation. The increase in energy prices following Russia’s invasion of Ukraine—has been larger for Europe than for the rest of the world. Although recently declining, energy prices in Europe are projected to remain elevated relative to the pre-pandemic levels, resulting in a permanent change in terms of trade with implications for factor incomes, aggregate output, and income divergence within the EU.

Model simulations¹ show that a permanent shock to oil and gas prices in the EU will result in a loss of income for all factors of production. As the EU imports most of its energy, an increase in oil and gas prices will lead to an increase in the cost of production—especially in sectors that are energy intensive (manufacturing of chemical, transportation, metal, petroleum products)—and will lead to lower returns on factors of production. Real wages and return on capital will decline, albeit, not uniformly across sectors. Services sectors, which mostly rely on domestic demand, will likely be hurt more given that they will gain less from the real exchange rate depreciation. Conversely, unskilled workers and capital owners in energy exporting economies (EEE) would on average benefit from the price shock, while input factor incomes in other parts of the world (ROW) would decline, although to a lesser extent than in the EU.

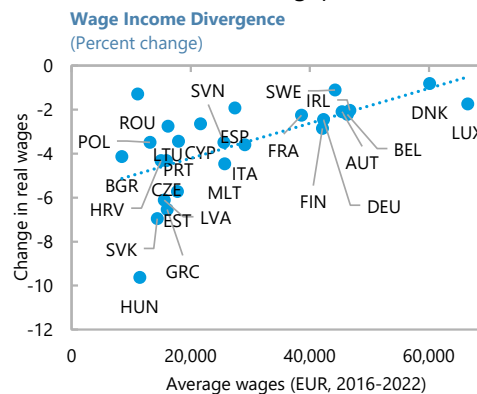


Source: IMF staff calculations.

A permanent global realignment of energy prices will likely lead to a sizable decline in the aggregate EU output with further increase in income divergence. While energy exporters see an improvement in their terms of trade and a real exchange rate appreciation, with the size depending on their energy exports, the EU—a large energy importer—will see a deterioration in the terms of trade and a long-term decline of real GDP level by about 1.5 percent—threefold the impact on the rest of the world. Moreover, given the different energy mix and sectoral composition across EU countries, the impact is likely to vary significantly, widening income gaps. In this regard, countries with lower real wages would experience larger decline, partly because of their heavier reliance on fossil fuels. Accelerating the green transition would thus help member states reduce vulnerabilities in energy intensive sectors and close income gaps.



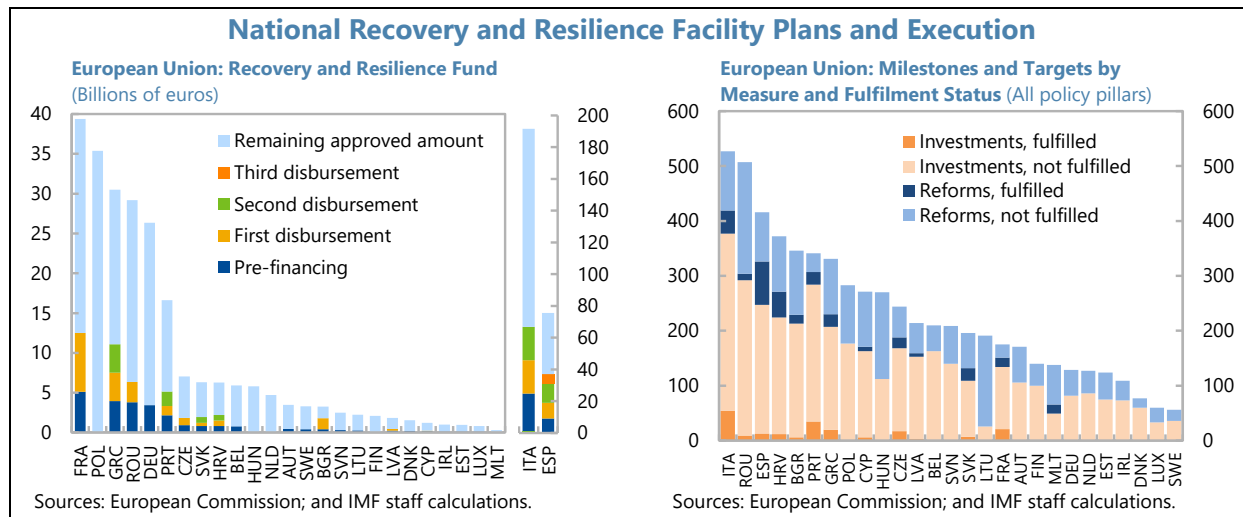
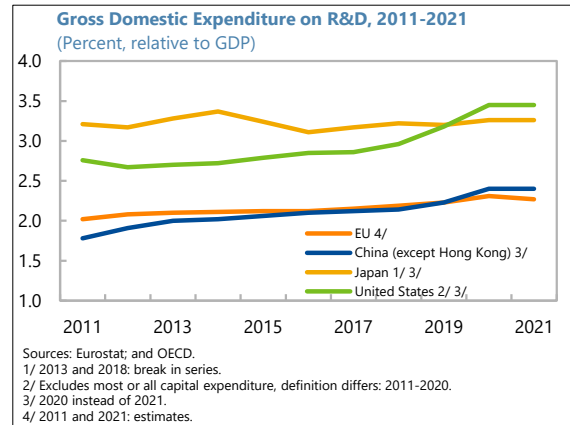
Source: IMF staff calculations.
EEE: Energy Producing Economies. ROW: Rest of the World.



Source: IMF staff calculations.

¹ See “Geoeconomic Fragmentation: What’s at Stake for the EU”, EUR departmental paper (forthcoming). Results are based on simulations using a Global Computable General Equilibrium model, of a stylized energy price shock entailing EU increases of about 160 percent in gas prices (55 percent in the rest of the world) and 30 percent increase in oil prices (same in the rest of the world) compared to 2017 price levels. Gas and oil exports from Russia to the EU are assumed to be cut by 90 percent, compared to 2017 levels.

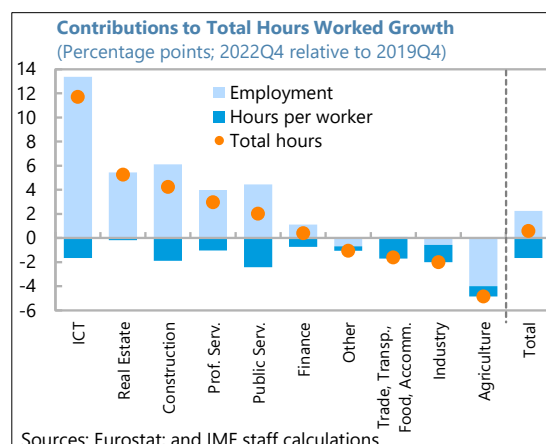
76. A concerted effort to execute the NRRPs is warranted. As of early June, around €153 billion out of a total of about €500 billion has been disbursed. Only a small number of countries have received their second payments, with Spain being the only member state to receive a third payment. About one-third of member states are facing delays on planned reforms and investments, including due to the tight economy and attendant labor shortages. To reap maximum benefit from the NGEU initiative, member states should accelerate efforts in meeting the targets and milestones set in their NRRPs. Although the EU has strong public financial management and anticorruption frameworks in place, the NGEU funds should adhere to the highest standards of transparency and accountability (e.g., disclosure of beneficial ownership information for awarded companies). In this regard, the roles of the European Anti-Fraud Office and European Public Prosecutor Office in investigating any misuse of NGEU funds are critical.



77. A renewed emphasis on innovation is important to durably lift growth. Europe has lagged most other major economies in R&D spending over the past decade. In addition, while spending of large corporations is highly concentrated in the automotive and pharmaceutical sectors, with software, technology hardware and electronics lagging, several initiatives at the European level could help. Progress on digitalization—in terms of training and skills, and connectivity—could foster collaboration across the EU, overcoming some of the local skills shortages which can be major obstacles to innovation.¹⁸ In addition, increasing incentives for R&D, for example through policies that promote innovation hubs and thus allow for network externalities, would be welcome. Progress on the capital markets union (136) is key to deepen capital markets and allow young firms access to the capital they need to grow.

¹⁸ According to the European Investment Bank’s 2018 [investment report](#), a skills shortage is the main obstacle to investing more in R&D and innovation.

78. The euro area economy is facing accelerating sectoral shifts because of digitalization, automation, and the green transition. The pre-pandemic baseline envisaged a sectoral shift away from agriculture and industry toward services, which broadly continued long-term trends. [The pandemic accelerated these developments](#) with the strong job growth of the past quarters concentrated in services, especially in Information and Communication Technology (ICT), real estate, and professional and public services. These trends are likely to continue with the green and digital transition altering the demand for skills and requiring the labor market to absorb workers from shrinking sectors.¹⁹ For instance, between 2015 and 2020, the transition from internal combustion engines to electric vehicles, the production of which is less labor intensive, increased the unemployment rate in regions of Germany relying more heavily on the auto sector.²⁰



79. Further policy initiatives to facilitate sectoral reallocation and enhance reskilling and upskilling are thus warranted. As always, high degrees of labor and product market flexibility and sound macroeconomic policies are essential to facilitate reallocation. Temporary and targeted hiring subsidies can be used to incentivize workers to move to other areas with better labor prospects, addressing a well-documented information failure. Although challenging (as suggested by previous experiences), policies should also seek to address the likely rise in skill-mismatches by ensuring efficient reskilling and upskilling of the workforce, with a strong focus on digital skills. Recent related initiatives as part of the GDIP are welcome. Providing educational and vocational programs to those who may find it difficult to transition to new jobs or enter the labor market would help them meet changing labor market demand. Finally, policies to better integrate immigrants across the EU could help them to deploy their human capital productively and alleviate some of the fiscal pressure caused by an aging European population.

Authorities' Views

80. The authorities agreed on the need to raise potential growth through structural reforms and investment. They pointed to the key role of the national recovery and resilience plans in that respect, and considered their implementation to be broadly on track, albeit with some differences across countries. Hours worked per person are now back at the declining pre-pandemic trend, with every recession in Europe having led to fewer hours worked per person. While a strong increase of the labor force participation rate supported potential growth, this might not last. In terms of sectoral reallocation, the authorities saw relatively little impact so far from the pandemic and energy shock but acknowledged that the green and digital transitions may entail labor

¹⁹ An open question is whether the energy shock will accelerate these trends or not. While high energy prices into the medium-term could hurt energy-intensive industry, the depreciation in the REER could also boost the competitiveness of industry, especially that of less energy-intensive sectors.

²⁰ See IMF Working Paper ([WP/23/116](#)).

reallocation both within and between sectors. They agreed on the need for training and reskilling and pointed to several policy initiatives but argued that temporary hiring subsidies must be used with caution, especially in an environment of already strong labor demand.

STAFF APPRAISAL

81. Growth in the euro area is expected to pick up gradually following a significant loss of momentum, with inflation likely to take some time to return to target. The euro area economy has shown remarkable resilience in the aftermath of Russia's invasion of Ukraine and the largest terms of trade shock in several decades, thanks to strong policy response. However, economic activity has weakened significantly and inflation—while starting to decline from historically high levels—remains well above the target. Going forward, growth is expected to pick up modestly throughout 2023 and 2024, even as financial conditions tighten further, but output is likely to remain below the pre-war trend for an extended period. Inflation is projected to decline further as tight financial conditions restrain demand and supply shocks dissipate further, but converge to target only in mid-2025. The euro area current account is expected to increase over the forecast horizon as the impact of the energy shock gradually dissipates. Staff assesses the external position to be broadly in line with medium-term fundamentals and desirable policies in 2022.

82. The outlook is highly uncertain, with risks to growth tilted to the downside and risks to inflation to the upside. Various forces can lead outcomes to differ from those in the baseline scenario. The reemergence of financial turbulence—possibly caused by distress in global markets—could weigh on economic recovery through a contraction in credit or heightened risk aversion. Weaker demand from key trading partners or possibility of sovereign stress would also pose headwinds to growth. A more persistent inflation path, including from renewed supply shocks or intensification of geoeconomic fragmentation, would require a tight policy stance for longer, holding back domestic demand. Upward pressures on inflation could also result from stronger-than-expected wage growth—in particular if profit shares do not adjust—and a potential de-anchoring of inflation expectations. On the upside for both growth and inflation, the economy could again prove more resilient than expected, especially since the stock of excess savings accumulated since the start of the pandemic are still high.

83. Monetary policy should tighten further and keep a tightening bias. The upside risks to the projected path of inflation imply that a more restrictive stance than at present, maintained over a sustained period, will be needed to ensure that inflation expectations remain anchored and inflation returns to target in a timely manner. However, a continued flexible and data-dependent approach to monetary policy decisions remains appropriate as it provides the flexibility to change course should incoming data indicate a need. The ECB Governing Council's decision to reduce the Eurosystem's bond holdings in a predictable manner during the current monetary policy tightening cycle is welcome. Plans to further trim securities holdings should proceed gradually and cautiously, consistent with a learning by doing approach, with the policy rate serving as the primary policy tool.

84. The euro area's banking system has proven resilient but risks in the financial sector, including among NBFIs, increased last year due to tightening financial conditions. At the

aggregate, euro area banks have strong capital and liquidity positions and have benefitted from higher profits as the return on their assets have risen faster than the cost of their liabilities. However, funding costs are expected to increase with upcoming repayments of the ECB's TLTROs and as the competition for deposits potentially rise. Deteriorating credit quality could reduce bank profits, and potentially capital. In jurisdictions where banks have temporarily high profits, capital buffers should be increased. And given the tightening in financial conditions, supervisors should continue to monitor and assess banks' risk exposures and the appropriateness of banks' risk management strategies. In the NBFIs sector, deleveraging has so far been orderly, but increased volatility in financial markets has led to increased liquidity demand by some entities with large positions in financial derivatives, highlighting vulnerabilities. Expanding macroprudential tools that limit leverage and liquidity mismatches in the sector and improving cooperation between national regulatory authorities would help reduce systemic risk.

85. The recent turbulence in financial markets underscores the need to further strengthen the EU's financial architecture.

The Commission's proposal for a review of CMDI is welcome as it extends the EU's resolution framework to more banks and improves resolution funding arrangements. However, more flexibility in deploying resolution funds would help authorities better handle bank failures and contain systemic risk. Fully ratifying the ESM treaty to create a backstop to the SRF and agreeing on a European deposit insurance scheme would also pave the way for a deeper, more resilient BU, and further delink the ability to counter bank stress from the creditworthiness of the sovereign (thus weakening any potential adverse feedback loops between sovereigns and banks). Progress toward the CMU would diversify the EU's financial system, improve access to finance for firms and savings options for households, support real sector innovation, and make financing available for the green transition. Finally, a full implementation of Basel III is essential, as recent events outside Europe point to the danger of selective implementation of banking regulation. The financial integrity in the region should also be enhanced through the single AML/CFT rulebook and establishing of the AML supervisory authority.

86. Economic conditions call for a tighter fiscal policy stance.

A tightening in the euro area fiscal policy stance in 2024 compared to 2023—by about 1 percent of GDP, as current policies imply—would help reduce the risk of additional inflation pressures, lessening the upward pressure on interest rates. Lower fiscal deficits are particularly critical in high debt and deficit countries, which need to rebuild fiscal space. In this context, it is important to save any revenue windfalls and to let the energy support measures introduced over the past year to expire. Should energy prices rise significantly again, any new support should be targeted to the most vulnerable to maintain consolidation efforts and strengthen the incentives for energy efficiency.

87. A swift agreement on the EU economic governance reform is a priority given medium-term fiscal challenges.

The European Commission's legislative proposal for an economic governance reform appropriately promotes a differentiated, risk-based, medium-term fiscal adjustment. Relying on net primary expenditure as the operational target simplifies the framework and allows countercyclical automatic stabilizers to operate. At the same time, a cautious implementation of the framework would be critical. In addition, transparency on key technical aspects of the framework, including on how cyclical unemployment expenditure and discretionary

revenue measures will be calculated, is essential. The possibility to extend adjustment periods in return for growth-enhancing reforms and investment is a positive step but relying on overly optimistic growth estimates of the reforms and investments must be avoided. In this context, an independent European fiscal council could add credibility to the process and help promote good practices and standards among NFCs. An EU-wide fiscal capacity for macroeconomic stabilization and provision of public goods would also strengthen the framework. It is vital that an agreement is reached soon so that the new framework can anchor fiscal policies in 2025 and beyond.

88. The energy crisis is likely to be favorable for the green transition. European solidarity, diversification of supply, and demand adjustment—both due to greater energy efficiency and a mild winter—have significantly reduced short-term energy security risks and accelerated green policy initiatives. The expansion of EU’s ETS is positive, but over the longer run it will be important to align carbon prices across sectors to reduce potential distortions in emission reduction incentives. Widening the scope of CBAM will also help support global emission reduction. It will be critical to implement the CBAM in line with WTO rules and based it on actual carbon content in traded products rather than benchmarks.

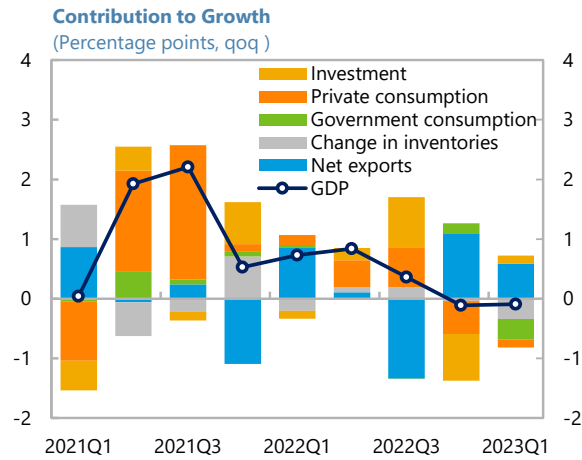
89. The GDIP can complement ongoing efforts to achieve climate neutrality. The Plan includes important measures to streamline regulatory and permitting processes, enhance skills, and foster green innovation. However, the relaxation of state-aid rules could potentially lead to high fiscal costs, as well as economic inefficiencies and distortions, including to the EU Single Market. This underscores the value of a common WTO-consistent approach to subsidies across key players, including Europe, and that subsidies should be limited in scope, duration, and size. An EU Climate Investment Fund could play a role in improving the provision of common public goods related to energy security and the green transition. Foreign subsidies, investment screening, and export controls should be narrowly targeted to specific objectives, and the authorities should resist calls to use such tools to provide a competitive advantage to domestic industries.

90. Ambitious actions to boost productivity are needed to increase growth in the euro area. The NRRPs have the potential to boost growth by delivering much needed structural reforms and investments, but greater flexibility in their implementation may be needed if countries have capacity constraints. Reskilling and upskilling the workforce—focusing on digital skills—and improving labor market flexibility can promote a dynamic labor market. Policies to better integrate immigrants can help alleviate fiscal pressure caused by an aging European population.

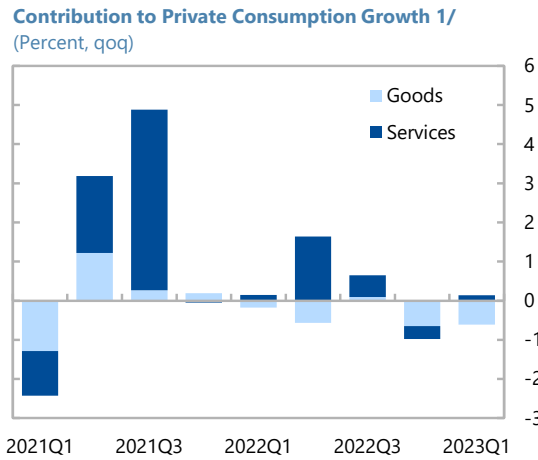
91. It is proposed that the next consultation on euro area polices in the context of the Article IV obligations of member countries follow standard 12-month cycle.

Figure 2. Euro Area: Real Sector Developments

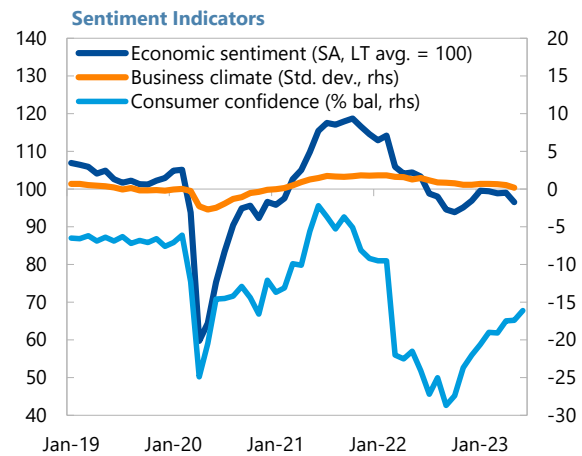
The euro area economy contracted by 0.1 percent in both Q4 2022 and Q1 2023 due to weak domestic demand...



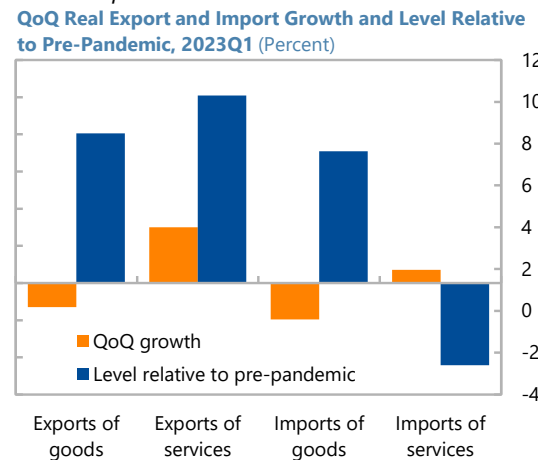
...with goods consumption contracting notably...



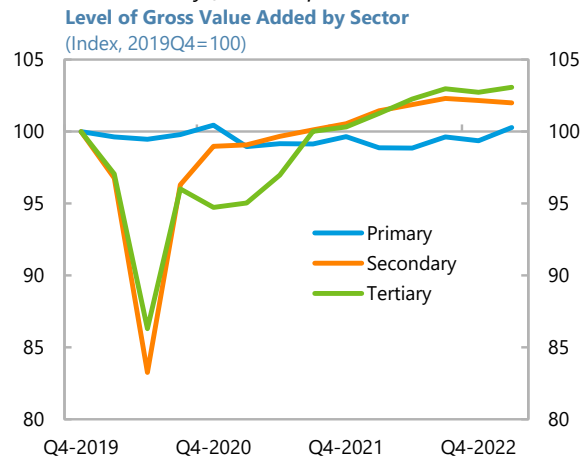
...as sentiment had reached a trough in Q4 of 2022.



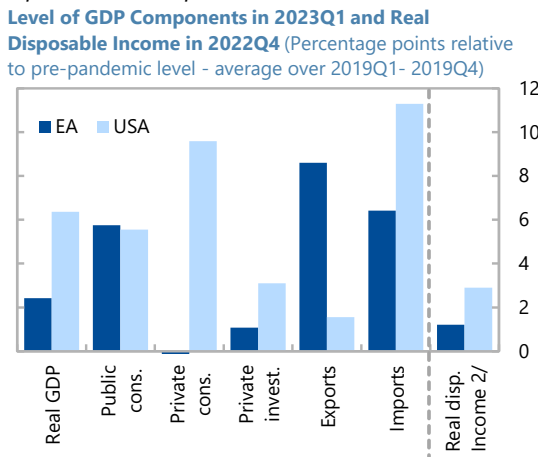
Imports and exports remained at high levels in historical comparison.



After lagging in 2021, the services sector rebounded more than industry from the pandemic shock.



While GDP stands 2.5 percent above the pre-pandemic level, private consumption is still at 2019 level.



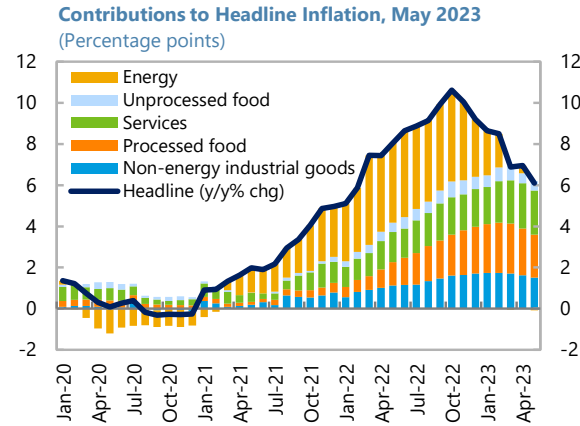
Sources: Bureau of Economic Analysis; European Commission; Eurostat; Haver Analytics; and IMF staff estimates and calculations.

1/ Euro area is proxied by the sum of the countries which publish disaggregated quarterly consumption data.

2/ Disposable income is deflated using the personal consumption deflator.

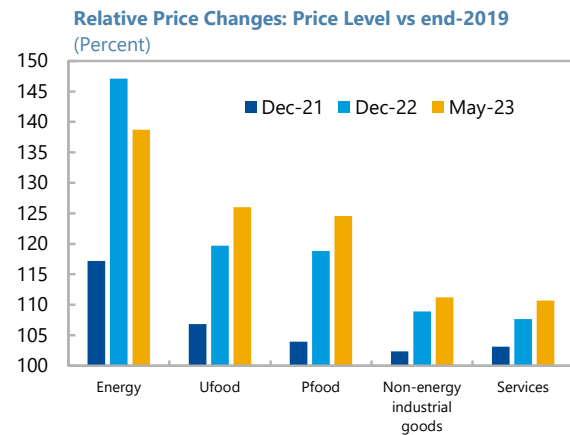
Figure 3. Euro Area: Inflation Developments

Headline inflation peaked in 2022Q4 and has fallen sharply in recent months ...

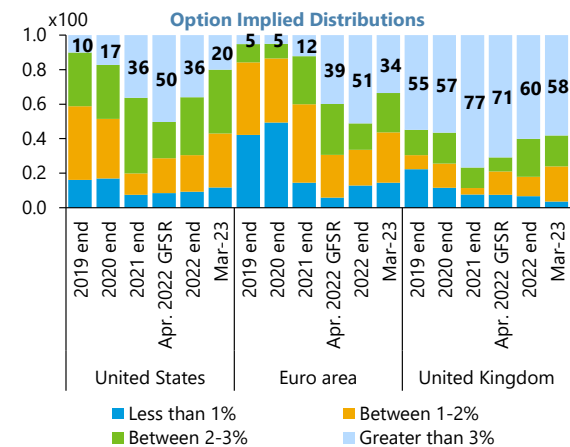


Sources: Eurostat; Haver Analytics; and IMF staff calculations.

Even with the easing of energy prices, relative price changes from the pre-pandemic period are large.



The share of investors expecting above-target inflation declined sharply for the US and the euro area in early 2023....

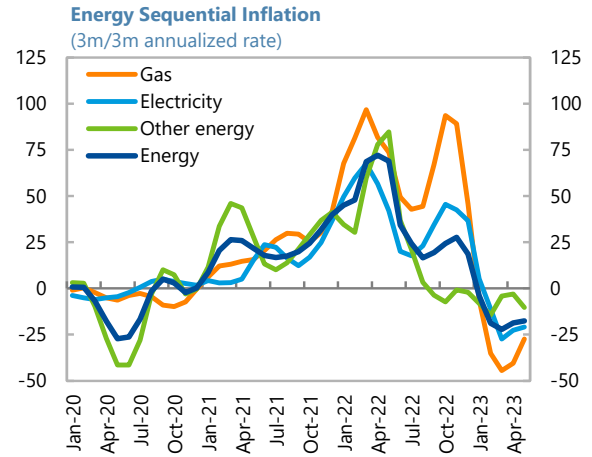


Sources: Eurostat; Haver Analytics; and IMF staff calculations.

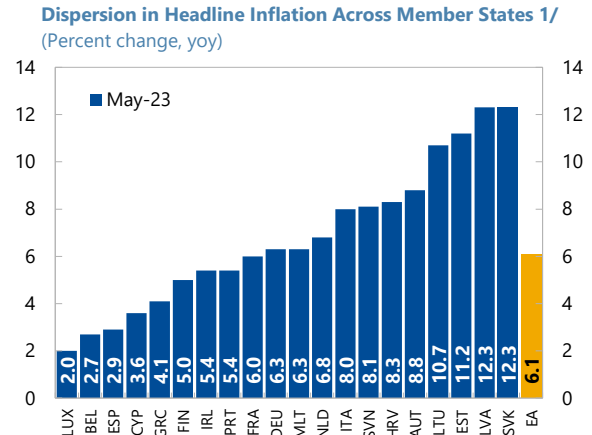
1/ Numbers inside the bars of dispersion in headline inflation are the latest flash inflation.

2/ Weighted estimates for inflation expectations over the next 12 months and the 12 month period 2-3 years from the survey month. The median is computed on the basis of a symmetric linear interpolation that accounts for rounding of responses.

... as all components of energy inflation turned negative.



Dispersion in inflation rates within the euro area is also high.

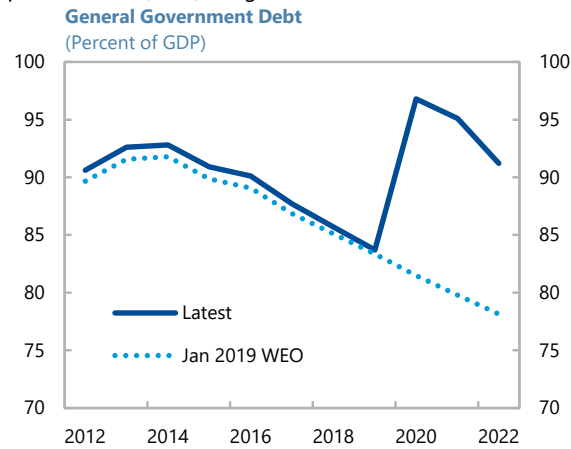


...and consumer expectations have fallen from their peak in late 2022 in line with the drop in headline inflation.

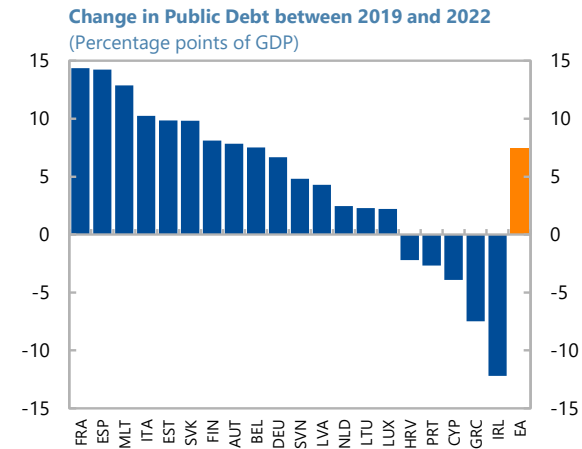


Figure 4. Euro Area: Public Sector Accounts

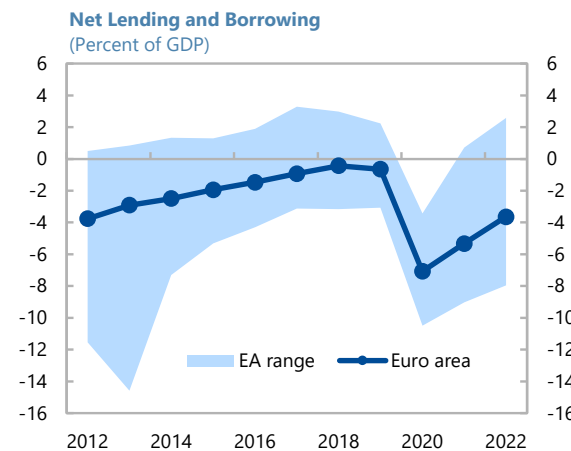
Public sector debt increased sharply at the onset of the pandemic, before falling somewhat in 2021-22.



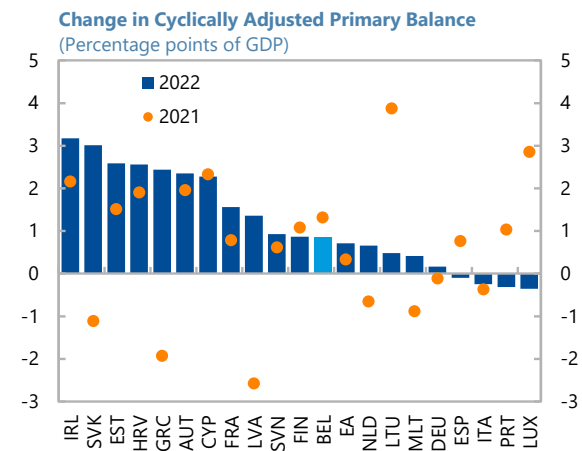
But there are large differences in debt accumulation across countries.



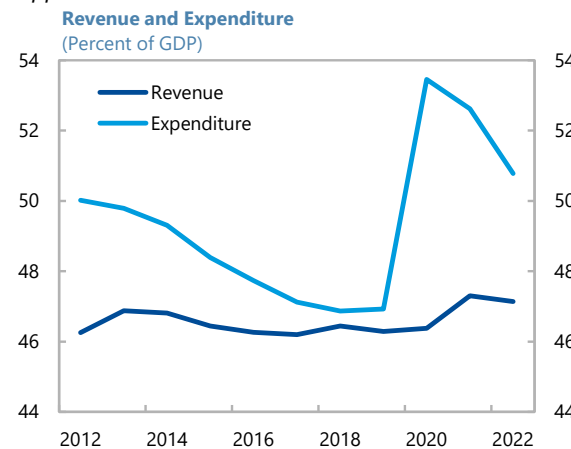
The increase in debt was driven both by a drop in nominal GDP, and the fiscal support programs that were launched.



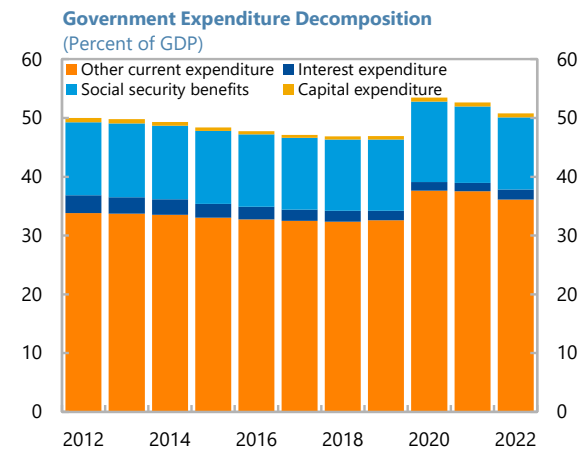
With many countries providing substantial discretionary fiscal support.



While much of the pandemic-era support has been rolled back, it has been partly replaced by energy support.



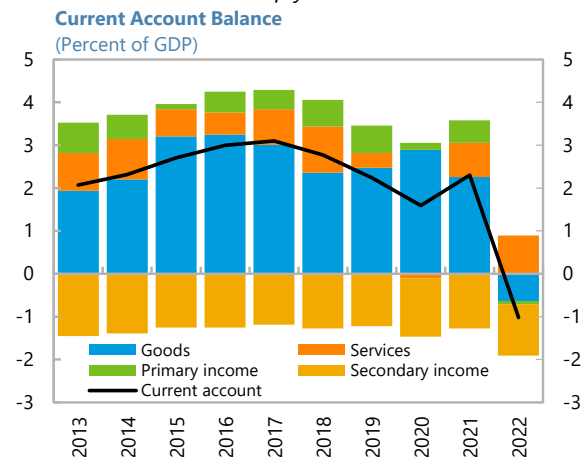
Leaving countries with a challenge to bring current expenditure back to pre-pandemic levels.



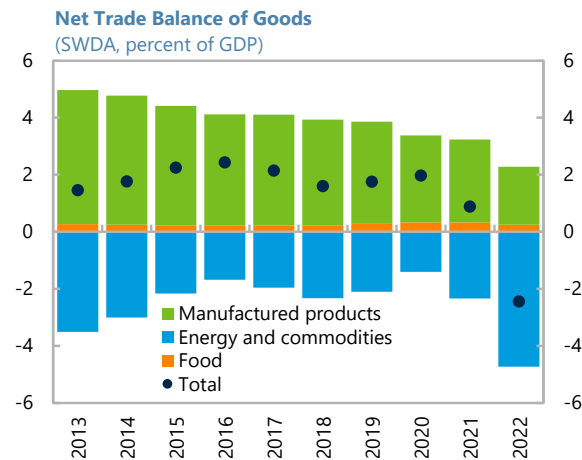
Sources: IMF staff estimates and calculations.

Figure 5. Euro Area: External Sector Developments

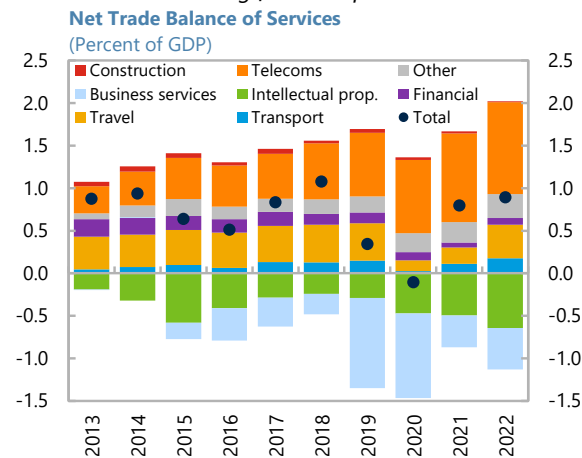
The current account fell into deficit in 2022 as the trade balance deteriorated sharply...



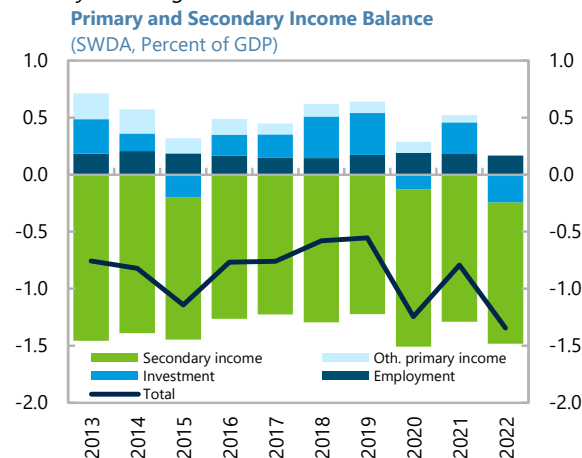
...driven by the energy balance.



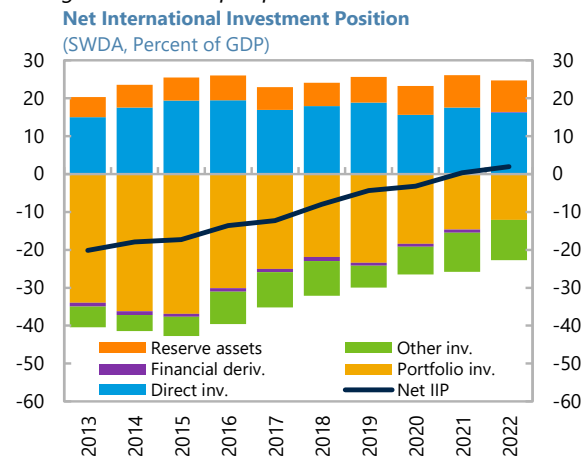
Net trade in services strengthened relative to 2021, with travel normalizing from the pandemic shock.



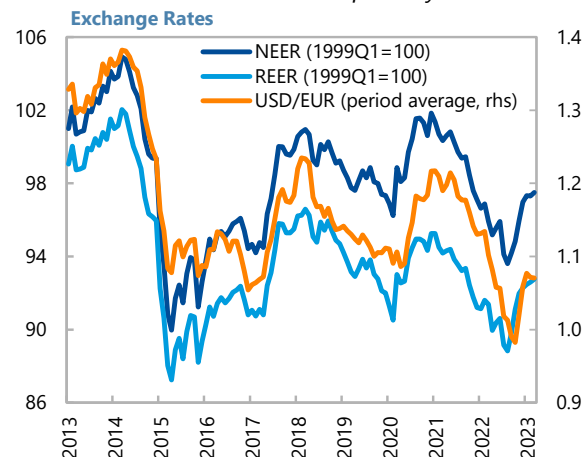
The primary and secondary income balances were broadly unchanged.



The net international investment position continued to strengthen as it has pre-pandemic.



The exchange rate depreciated to its weakest reading since 2015 in 2022 but has since partially recovered.



Sources: European Central Bank, Eurostat; Haver Analytics; and IMF staff calculations.

Table 1. Euro Area: Main Economic Indicators

	2019	2020	2021	2022	Projections 1/					
					2023	2024	2025	2026	2027	2028
Demand and Supply (y/y percent change, unless otherwise specified)										
Real GDP	1.6	-6.1	5.3	3.5	0.9	1.5	1.8	1.7	1.4	1.3
Private consumption	1.4	-7.7	3.7	4.5	0.5	2.1	2.0	1.8	1.4	1.3
Public consumption	1.7	1.0	4.3	1.4	0.0	0.8	0.7	0.9	1.1	1.1
Gross fixed investment	6.9	-6.2	3.9	3.7	1.5	1.3	2.3	2.4	1.9	1.8
Final domestic demand	2.7	-5.5	3.9	3.6	0.6	1.6	1.8	1.7	1.4	1.4
Stockbuilding 2/	-0.2	-0.3	0.3	0.3	-0.1	-0.1	0.0	0.0	0.0	0.0
Domestic demand	2.4	-5.7	4.1	3.8	0.6	1.6	1.8	1.7	1.4	1.4
Foreign balance 2/	-0.7	-0.5	1.3	-0.2	0.4	0.0	0.1	0.1	0.1	0.0
Exports 3/	2.9	-9.0	10.7	7.2	3.4	3.9	3.5	3.4	3.2	3.1
Imports 3/	4.8	-8.5	8.4	8.3	2.7	4.2	3.6	3.5	3.3	3.3
Resource Utilization										
Potential GDP	1.4	-1.4	2.5	1.2	1.4	1.5	1.5	1.5	1.4	1.3
Output gap	-0.1	-4.7	-2.1	0.0	-0.4	-0.5	-0.2	0.0	0.1	0.1
Employment growth 4/	1.3	-1.4	1.5	2.3	0.5	0.2	0.3	0.2	0.1	0.1
Unemployment rate 4/	7.6	8.0	7.7	6.7	6.8	6.7	6.6	6.5	6.5	6.5
Prices										
GDP deflator	1.7	1.8	2.1	4.6	5.3	3.2	2.3	1.9	1.9	1.9
Consumer prices	1.2	0.3	2.6	8.4	5.2	2.8	2.1	2.0	1.9	1.9
Public Finance (percent of GDP)										
Overall fiscal balance	-0.6	-7.1	-5.3	-3.6	-3.5	-2.7	-2.3	-2.1	-2.0	-2.0
Primary balance	0.8	-5.7	-4.0	-2.1	-2.0	-1.0	-0.5	-0.2	-0.1	-0.1
Structural balance 5/	-0.4	-4.0	-3.5	-2.4	-2.8	-2.3	-2.2	-2.1	-2.1	-2.1
Structural primary balance 5/	1.0	-2.7	-2.2	-0.9	-1.2	-0.7	-0.4	-0.2	-0.1	-0.1
Gross public debt	83.7	96.8	95.1	91.2	89.4	88.2	87.1	86.3	85.6	85.1
External Sector 6/, 7/										
Current account balance	2.2	1.6	2.3	-1.0	0.9	1.1	1.4	1.6	1.7	1.7
Interest Rates (end of period) 4/ 8/										
Euro short-term rate (€STR)	-0.5	-0.6	-0.6	1.6	3.1	...	...	...	...	...
10-year government benchmark bond yield	0.4	-0.1	0.3	3.0	3.2	...	...	...	...	...
Exchange Rates (end of period) 8/										
U.S. dollar per euro	1.11	1.22	1.13	1.06	1.09	...	...	...	...	...
Nominal effective rate (2005=100)	106.0	114.5	110.8	111.1	112.7	...	...	...	...	...
Real effective rate (2005=100, ULC based)	83.7	87.4	82.1	81.1	82.0	...	...	...	...	...

Sources: IMF staff estimates; Eurostat; Global Data Source; and Refinitiv.

1/ Projections are based on aggregation of the latest projections by IMF country teams.

2/ Contribution to growth.

3/ Includes intra-euro area trade.

4/ In percent.

5/ In percent of potential GDP.

6/ In percent of GDP.

7/ Projections are based on member countries' current account aggregations excluding intra-euro flows and corrected for aggregation discrepancy over the projection period.

8/ Latest monthly available data for 2023.

Table 2. Euro Area: External Sector Assessment

<p>Overall Assessment: The external position in 2022 was broadly in line with the level implied by medium-term fundamentals and desirable policies. The CA balance decreased to –1.0 percent of GDP in 2022 from 2.3 percent of GDP in 2021, falling into deficit for the first time in more than a decade largely due to a sharp increase in energy import prices and the associated deterioration in the goods balance. Over the medium term, the euro area's CA balance is projected to recover gradually to a positive territory but remain below its historical average as energy prices are projected to remain elevated. National external imbalances are expected to remain sizable.</p> <p>Potential Policy Responses: With energy prices projected to remain elevated over the medium term, policies aimed at protecting vulnerable households and firms should become increasingly targeted, while efforts to facilitate the green transition should be stepped up. Avoiding trade-distorting subsidy race and other trade-distorting measures, which would undermine resource allocation and productivity, and preserving the integrity of the EU Single Market are critical. Trade and investment disagreements with other countries should be resolved in a manner that supports an open, stable, and transparent global trading system. As historical policy gaps at the national level in the EU are projected to persist, countries with excess CA surpluses should increase investment, while countries with weak external positions should undertake reforms to raise productivity, reduce structural and youth unemployment, and commence growth-friendly fiscal consolidation. Euro-area-wide initiatives to make the currency union more resilient (for example, completing the banking and capital markets unions and establishing the central fiscal capacity for macroeconomic stabilization) would deepen public and private sector risk sharing, supporting external stability of high-debt countries.</p>							
<p>Foreign Asset and Liability Position and Trajectory</p>	<p>Background. After falling to –20.5 percent of GDP in 2009, the NIIP of the euro area rose substantially to 2.0 percent of GDP by the end of 2022, reflecting accumulated CA surpluses. Relative to 2021, the NIIP increased in 2022 by 1.7 percentage points of GDP, primarily reflecting valuation effects from the weaker euro. Gross portfolio investment assets and liabilities have both declined sharply, reflecting further valuation effects from higher interest rates and financial market repricing. Direct investment assets and liabilities have similarly declined but more moderately. The gross values of derivative positions have increased, in line with higher financial market volatility. Gross foreign assets were 250.7 percent of GDP and liabilities 248.7 percent of GDP as of the end of 2022. Net external assets (including those vis-a-vis other euro area member states) remain elevated in external creditor countries such as Germany, whereas net external liabilities remain high in countries such as Portugal and Spain.</p> <p>Assessment. Projections of continued CA surpluses over the medium term suggest that the NIIP-to-GDP ratio will rise further, at a moderate pace. While the region's overall NIIP financing vulnerabilities appear low in aggregate, large net external debtor countries bear an elevated risk of a sudden stop of gross inflows.</p>						
2022 (% GDP)	NIIP: 2.0	Gross Assets: 250.7	Debt Assets: 92.0	Gross Liab.: 248.7	Debt Liab.: 92.5		
<p>Current Account</p>	<p>Background. The CA balance for the euro area decreased to –1.0 percent of GDP in 2022 from 2.3 percent of GDP in 2021, largely due to a sharp increase in energy import prices and associated deterioration in the goods balance. The latter was also driven by a modest decline in the net export of non-energy goods on the back of continued supply chain disruptions and Covid restrictions in China. The balances of services and secondary incomes remained broadly stable, but the primary balance declined due to lower investment income. The compression of the euro area current account was the strongest in Q2 and especially Q3, with the balance returning into surplus in Q4 as energy prices and trade disruptions moderated. Although declining, large creditor countries, such as Germany and the Netherlands, continued to have sizable surpluses, reflecting high corporate and household saving and weak investment.</p> <p>Assessment. The EBA model estimates a CA norm of –0.3 percent of GDP, against a cyclically adjusted CA of 0.1 percent of GDP. This implies a gap of 0.5 percent of GDP. IMF staff analysis indicates a 0.1 percent of GDP higher CA norm than that estimated by the EBA model, reflecting policy commitments to reduce the large net external liability positions in Spain and Portugal. In addition, adjustments of –0.5 percent of GDP were made to the underlying CA reflecting CA measurement issues in Ireland and the Netherlands. The country-level adjustments for the transitory impact of the COVID-19 crisis on transportation and travel services (including tourism) have largely offset each other at the euro area level. Considering these factors and uncertainties in the estimates, including the cyclical adjustment, the IMF staff assesses the CA gap to be –0.1 percent of GDP in 2021, with a range of –0.7 to 0.6 percent of GDP.</p>						
2022 (% GDP)	CA: –1.0	Cycl. Adj. CA: 0.1	EBA Norm: –0.4	EBA Gap: 0.5	COVID-19 Adj.: 0.1	Other Adj.: –0.6	Staff Gap: –0.1
<p>Real Exchange Rate</p>	<p>Background. The euro area CPI-based REER appreciating by 4.5 percent between 2015 and 2021 following a depreciation of nearly 20 percent in the post global financial crisis period. In 2022, the CPI-based REER depreciated by 3.0 percent in 2022 compared to 2021, reflecting a nominal depreciation of 4.2 percent and a somewhat stronger euro area inflation relative to its trading partners. The ULC-based REER depreciated by 5.3 percent. As of April 2023, the CPI-based REER was 5 percent above the 2022 average.</p> <p>Assessment. Consistent with the IMF staff CA gap, the IMF staff assesses the REER gap to be 0.0 percent in 2022, with a range of –1.6 to 2.0 percent, based on the estimated CA-REER elasticity of –0.35.¹ As with the CA gap, the aggregate REER gap masks a large degree of heterogeneity in REER gaps across euro area member states, ranging from an undervaluation of 8 percent in Germany to an overvaluation of about 10 percent in Finland and Italy. The EBA REER index and level models suggest overvaluations of 7.6 percent and 8.0 percent, respectively.</p>						
<p>Capital and Financial Accounts: Flows and Policy Measures</p>	<p>Background. The euro area experienced a capital account surplus of 1.0 percent of GDP and a financial account surplus of 0.1 percent of GDP in 2022, mirroring the CA deficit.</p> <p>Assessment. Gross external indebtedness of euro area residents decreased by 11 percentage points of GDP in 2022 as lower external debt of governments, the Eurosystem, and the nonfinancial sector has offset higher debt of deposit-taking institutions.</p>						
<p>FX Intervention and Reserves Level</p>	<p>Background. The euro has the status of a global reserve currency.</p> <p>Assessment. Reserves held by euro area economies are typically low relative to standard metrics, but the currency is free floating.</p>						
<p>^{1/} The export and import elasticities are obtained as the average of estimates from Consultative Group on Exchange Rate Issues (CGER)-inspired export and import equations using REERs relevant for the euro area with an ADL (2,2,2) model on quarterly data 2000–19. The trade balance elasticity is calculated using the share of exports and imports in extra-EU trade in GDP.</p>							

Table 3. Euro Area: Risk Assessment Matrix¹

Sources of Risk	Likelihood of Risk (High, Medium, Low)	Expected Impact of Risk (High, Medium, Low)	Policy Responses
Global Risks			
Intensification of Regional Conflict	<p style="text-align: center;">High</p> <p>Escalation of Russia's war in Ukraine and resulting economic sanctions disrupt trade (e.g., energy, food, tourism, and/or critical supply chain components), remittances, refugee flows, FDI and financial flows, and payment systems.</p>	<p style="text-align: center;">High</p> <p>Sanctions on Russia (and Belarus) increase, remaining (limited) energy exports from Russia to Europe stop, driving up energy prices, and the purchasing power of vulnerable households.</p>	<ul style="list-style-type: none"> Accelerate energy transition. Extend energy subsidies, but improve targeting.
Abrupt Global Slowdown or Recession	<p style="text-align: center;">Medium</p> <p>Global and idiosyncratic risk factors combine to cause a synchronized sharp growth downturn, with recessions in some countries, adverse spillovers through trade and financial channels, and markets fragmentation.</p> <p style="text-align: center;">High</p> <p>In Europe, intensifying fallout from the war in Ukraine, worsening energy crisis and supply disruptions, and monetary tightening exacerbate economic downturns and housing market corrections.</p>	<p style="text-align: center;">High</p> <p>Lower trading partner growth will affect the euro area through trade and financial channels. While direct financial linkages are limited, slower export growth, combined with weaker consumer and business confidence, will weigh on the corporate sector and result in lower investment and higher unemployment. Lower growth in the euro area will lead to a further deterioration in public debt sustainability in some high-debt countries.</p>	<ul style="list-style-type: none"> Slow or pause monetary policy tightening depending on the prospects for aggregate demand and price pressures. Allow automatic stabilizers to operate and provide fiscal support to vulnerable households. Promote high quality public investment in infrastructure and advance structural reforms. Enhance liquidity support to financial institutions and markets with strong coordination between the ECB and the national authorities on financial stability risks.
Commodity Price Volatility	<p style="text-align: center;">Medium</p> <p>A succession of supply disruptions (e.g., due to conflicts and export restrictions) and demand fluctuations (e.g. reflecting China reopening) cause recurrent commodity price volatility, external and fiscal pressures, and social and economic instability.</p>	<p style="text-align: center;">Medium</p> <p>Higher price for key commodity imports fuels inflation pressure and generate spikes in energy prices. Export competitiveness of European firms is adversely affected, which slows down activity. High energy prices have an adverse impact on already stretched vulnerable households, leading to lower domestic demand.</p>	<ul style="list-style-type: none"> Maintain a flexible and data dependent monetary policy. Allow automatic stabilizers to operate and provide fiscal support to vulnerable households. Safeguard energy security by accelerating the green transition.

Table 3. Euro Area: Risk Assessment Matrix (Continued)			
Sources of Risk	Likelihood of Risk (High, Medium, Low)	Expected Impact of Risk (High, Medium, Low)	Policy Responses
Deepening Geo-economic Fragmentation	High Broader and deeper conflict(s) and weakened international cooperation lead to a more rapid reconfiguration of trade and FDI, supply disruptions, technological and payments systems fragmentation, rising input costs, financial instability, a fracturing of international monetary and financial systems, and lower potential growth.	Medium Trade barriers and supply disruptions lead to shortages in crucial inputs, higher inflation and production bottlenecks that reduce economic activity—albeit with uneven sectoral effects—and weaker confidence.	<ul style="list-style-type: none"> • Diversify energy production and secure supply chains to avoid shortages of critical raw materials. • Tighten monetary policy stance as necessary to bring inflation to target. • Allow automatic stabilizers to operate and provide fiscal support to vulnerable households.
Systemic Financial Instability	Medium Sharp swings in real interest rates, risk premia, and assets repricing amid economic slowdowns and policy shifts trigger insolvencies in countries with weak banks or non-bank financial institutions, causing markets dislocations and adverse cross-border spillovers.	High Higher funding costs and a shift in risk sentiment lead to bond repricing and financial tightening, a reduction of credit growth and further strains on leveraged corporates and households. Insolvencies increase, resulting in rapid deterioration of bank balance sheets and profitability. Tightening of financial conditions lead to housing market corrections. Sovereign spreads increase, straining fiscal sustainability in high-debt countries.	<ul style="list-style-type: none"> • Enhance liquidity support to financial institutions and markets to avoid contagion and prevent liquidity shortages morph into insolvencies. • Ensure strong coordination between the ECB and the national authorities on financial stability risks. • Rely on bank resolution systems to address unsound banks. • Activate EU support lines for high-debt countries under stress. • Maintain tight monetary stance until inflation is firmly on a downward trajectory toward target. • Allow automatic stabilizers to operate and provide temporary support to vulnerable households.

Table 3. Euro Area: Risk Assessment Matrix (Continued)			
Sources of Risk	Likelihood of Risk (High, Medium, Low)	Expected Impact of Risk (High, Medium, Low)	Policy Responses
Social Discontent	High Supply shocks, high inflation, and real wage drops worsen inequality, trigger social unrest and give rise to financing pressures and damaging populist policies.	Medium Social tensions around economic adjustments cause disruptions and erode trust in policy makers. The resulting political instability complicates reaching political consensus on policies, including to fight inflation.	<ul style="list-style-type: none"> • Expand support to most vulnerable households • Active labor market policies can be used to facilitate reallocation of workers toward expanding sectors and limit labor market hysteresis.
Euro Area Risks			
Realization of Financial Sector Vulnerabilities	Medium Monetary tightening leads to deterioration in asset quality and valuation, and liquidity shortfalls. A shift in market perception undermines high-debt countries' ability to roll over and service debt, re-igniting financial fragmentation and adversely affecting the banking system.	High Higher funding costs and a shift in risk sentiment lead to bond repricing and financial tightening, a reduction of credit growth and further strains on leveraged corporates and households. Insolvencies increase, resulting in rapid deterioration of bank balance sheets and profitability. Monetary tightening leading to housing market corrections. Sovereign spreads increase, straining fiscal sustainability in high-debt countries.	<ul style="list-style-type: none"> • Enhance liquidity support to financial institutions and markets to avoid contagion and prevent liquidity shortages morph into insolvencies. Ensure strong coordination between the ECB and the national authorities on financial stability risks. • Use countercyclical financial policy to support viable financial institutions. • Rely on bank resolution systems to address unsound banks. • Maintain tight monetary stance until inflation is firmly on a downward trajectory toward target. • Allow automatic stabilizers to operate and provide temporary support to vulnerable households. • Activate EU support lines for high-debt countries under stress.

Table 3. Euro Area: Risk Assessment Matrix (Concluded)			
Sources of Risk	Likelihood of Risk (High, Medium, Low)	Expected Impact of Risk (High, Medium, Low)	Policy Responses
More Persistent Inflation	High Full Russian gas shutoff combined with increased Chinese demand and a cold 2023/24 winter leading to an increase in energy prices. Reduction of Ukrainian grain exports due to a blockade of Black Sea shipping routes, or low harvest due to the war in Ukraine or bad weather.	High There could be a vicious cycle of higher inflation feeding into higher inflation expectations which then feeds back to higher inflation. Equity markets could be affected as expectations suddenly shift, and inflation risk premia would rise.	<ul style="list-style-type: none"> • Tighten monetary policy further to keep expectations anchored and prevent wage-price spirals. • Allow automatic stabilizers to operate and provide fiscal support to vulnerable households.
A Shift in Market Sentiment Against some High-debt Euro Area Countries	Medium Sharper-than-expected ECB monetary tightening and policy slippages with weak growth outturns in some high-debt euro area countries could raise concerns over debt sustainability in high debt countries.	High Sharp increases in funding costs strain high debt countries' ability to service their debt resulting in adverse real-financial feedback loops and financial fragmentation that weighs on economic activity and impairs monetary policy transmission.	<ul style="list-style-type: none"> • Activate EU support lines for high-debt countries under stress. • Maintain tight monetary stance until inflation is firmly on a downward trajectory toward target. • Enhance liquidity support to financial institutions and markets with strong coordination between the ECB and the national authorities on financial stability risks.
Extreme Climate Events	High Extreme climate events cause more severe than expected damage to infrastructure (especially in smaller vulnerable economies) and loss of human lives and livelihoods, amplifying supply chain disruptions and inflationary pressures, causing water and food shortages, and reducing growth.	High Large and costly destruction of or disruptions to food production, transportation or infrastructure. Productivity declines or shortages leading to price increases. EU members may receive migrants from economies facing severe climate disruptions.	<ul style="list-style-type: none"> • Build fiscal space that can be activated to alleviate large discrete climate shocks. • Establish a Central Fiscal Capacity with the remit to finance mitigation of extreme climate events.
<p>¹ The Risk Assessment Matrix shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of staff). The relative likelihood of risks is listed in staff's subjective assessment of the risks surrounding the baseline. "Low" is meant to indicate a probability below 10 percent, "Medium" a probability between 10 and 30 percent, and "High" a probability higher than 30 percent.</p>			

Annex I. A Roadmap for Monetary Policy

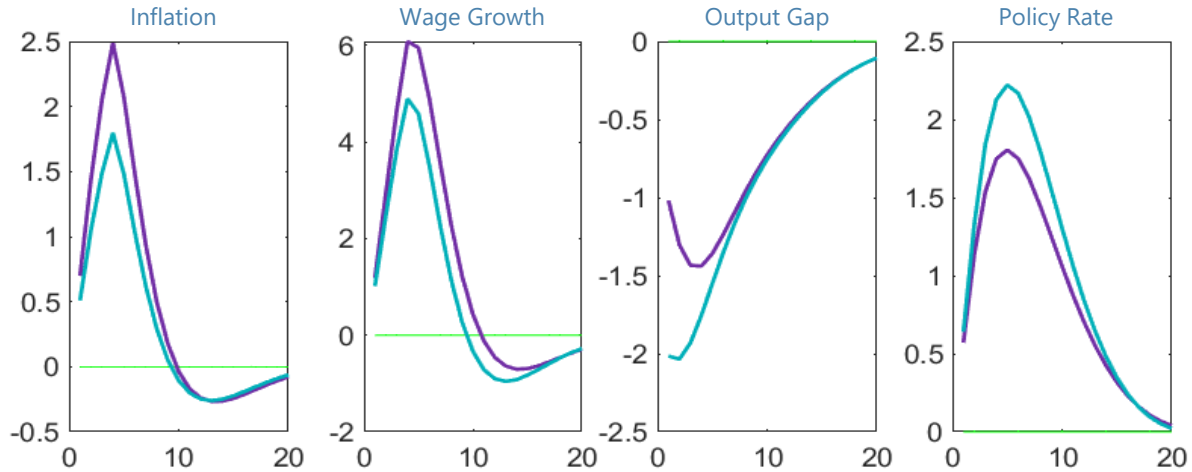
1. The information set central banks use to decide on policy rates also includes models with specific assumptions about how backward or forward-looking wage and price setting can be, recognizing that these aspects are uncertain. During the Great Moderation and the Global Financial Crisis–Covid Crisis interlude, the formation of prices and wages were fairly forward-looking, which resulted in low persistence (Benati, [2008](#)). *However*, in the face of regime shifts (e.g., as economies transition from low to high inflation regimes), inflation expectations can become more backward looking or persistent ([Estrella and Fuhrer 2003](#)). Moreover, during such regime shifts, the uncertainty about the persistence of inflation and inflation expectations also increases. In the current inflation episode, a lagged response of wages to higher prices is likely to prolong the period of above-target inflation, even if a wage-price spiral is avoided.

2. Given the uncertainty about the persistence of wage and price inflation, ex-post policy mistakes are possible, and there is a case for buying insurance against policy turning out to be too tight or too loose. According to a robust approach, a central banker needs to consider different possible structures of the economy (i.e., different versions of its models) and compare the “worst case” with what would be optimal policy under a reference model. For illustration, the exercise in this Annex considers [Laureys, Meeks, and Wanengkirtyo’s \(2021\)](#) medium-scale New Keynesian dynamic-stochastic general equilibrium (DSGE) model with financial frictions and introduces a single source of uncertainty about the degree to which wage and price inflation is persistent (see Brandao-Marques, Meeks, and Nguyen, forthcoming). The model is estimated using data for the euro area economy and the optimized monetary policy responses to an ad hoc adverse shock to labor supply reflecting intensified wage bargaining (i.e., a positive wage-markup shock which causes an exogenous increase in wages) assuming alternative degrees of wage and price inflation persistence. It is assumed that the central bank does not observe the true degree of persistence. Following an increase in inflation, it faces a choice: it can assume inflation persistence remains low as in the past, providing the “reference” policy rule, or it can assume that it has increased, providing a more forceful policy tightening. If wage and price inflation persistence is low, using a more forceful policy tightening instead of the “reference” policy which assumes the central bank is right about inflation persistence being low) yields less of a deviation between actual and targeted inflation and a more negative output gap. However, if inflation turns out to be persistent, the mistake of using a reference policy (which would be appropriate if expectations were sure to stay anchored) can be costly: inflation is higher under the low-persistence optimal rule than under the alternative high-persistence rule, with a small gain in terms of output gap (see Figure AI.1).

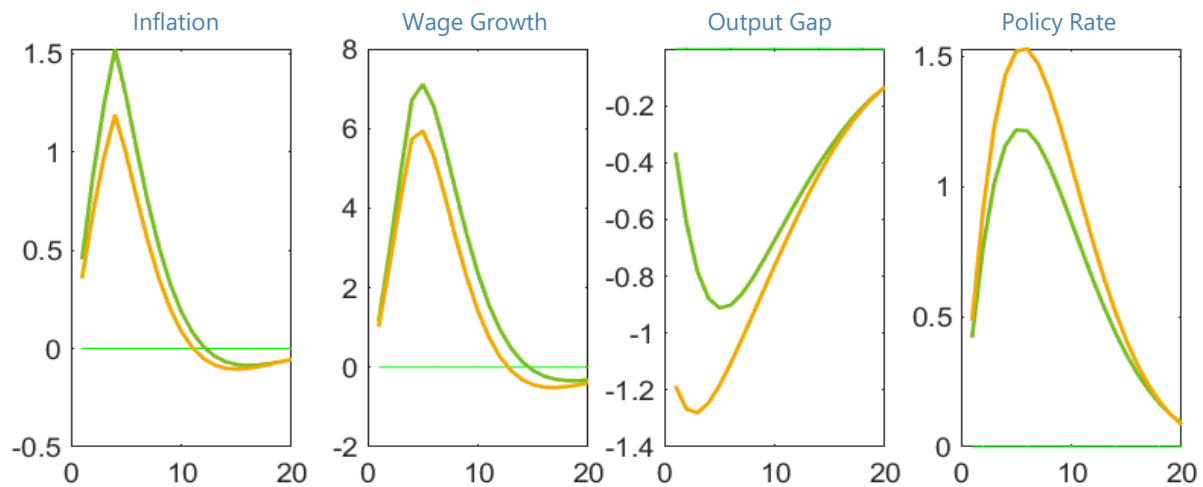
Central Bank's Working Assumption			
<i>Inflation persistence</i>		Low	High
		Truth	Low	High
	Low	Reference	Robust
	High	Worst case	Alternative

Figure AI.1. A Robust Approach to Monetary Policy

When wage and price inflation persistence turn out to be high, a policy mistake (in the form of assuming persistence is low, purple) leads to a significant overshoot in inflation compared to the optimal policy rule for the high persistence case (blue).



Mistakenly using the optimal policy assuming high inflation persistence when persistence is actually low (orange) yields lower inflation and a larger output gap compared to the optimal simple rule under correctly assumed low wage and price inflation persistence (green).

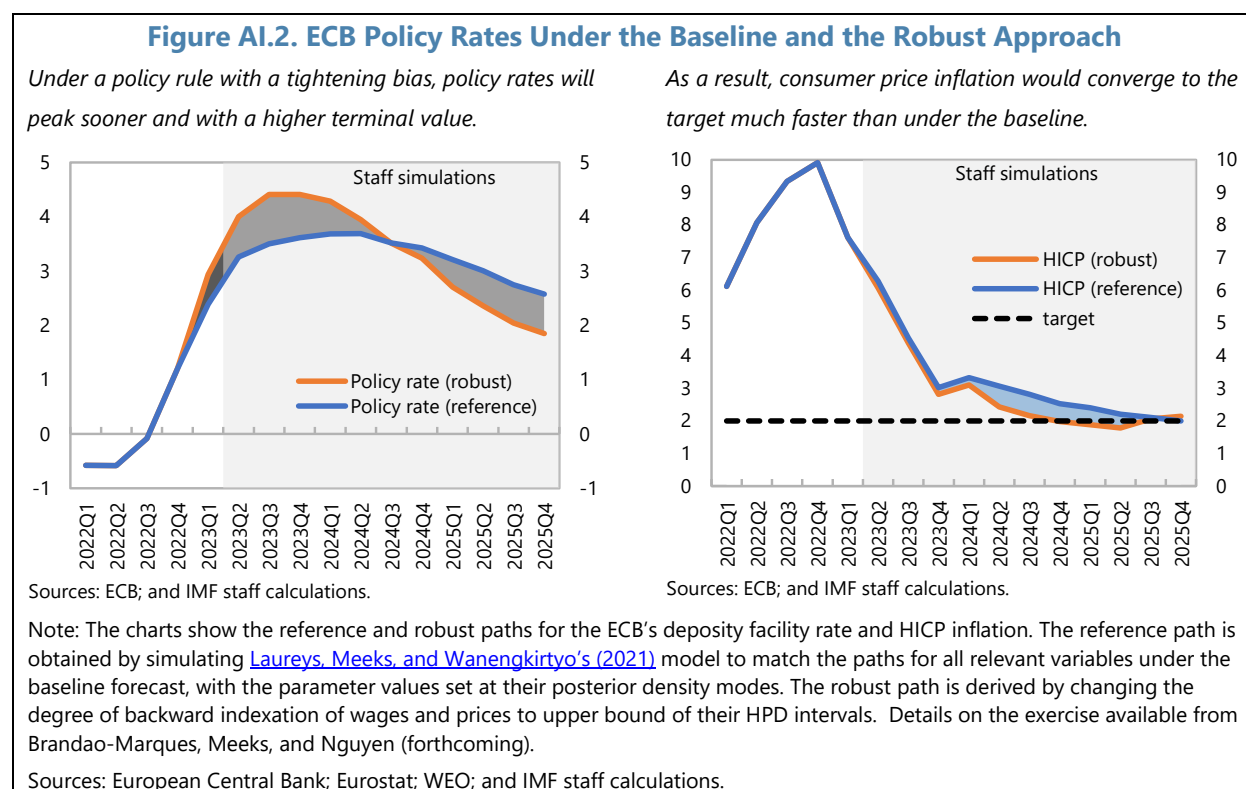


Note: The charts show the responses of inflation, wage growth, output gap, and the real policy rate to a wage markup shock under: alternative (high persistence assumed and observed; blue) and worst case policy rules (low persistence assumed and high persistence observed; purple)—top panel; and reference (low persistence assumed and observed; green) and robust monetary policy rules (high persistence assumed and low persistence observed; orange)—bottom panel. The responses come from [Laureys, Meeks, and Wanengkirtyo's \(2021\)](#) medium-scale DSGE model estimated for the euro area using Bayesian maximum likelihood. The values for low and high persistence correspond to posterior mode and upper bound of the highest posterior density (HPD) interval of the parameters in the model which capture the degree of backward indexation in wages and prices, respectively. To confirm that the high-persistence case corresponds to a “worst case”, a grid search over all persistence parameter values covered by the HPD interval is performed. Details on the exercise available from Brandao-Marques, Meeks, and Nguyen (forthcoming).

Sources: European Central Bank; Eurostat; and IMF staff calculations.

3. The cost of buying insurance against a policy mistake driven by a wrong assumption about the persistence of inflation is estimated to be small while the benefit can be large. The exercise uses a quadratic loss function with equal weights for the output gap and inflation to allow for a comparison between the “reference” and the “robust” cases. The total central bank loss based on that function (also a proxy for the total welfare loss) is only 4.4 percent (1.04 times) higher when the central bank uses the policy rule with tightening bias instead of the reference one. However, in the worst-case scenario (i.e., when the central bank assumes persistence stays low when in fact it is high), losses associated with using the reference rule are 1.5 times as high as the losses experienced when using the robust rule. Moreover, introducing financial stress (in the form of higher lending spreads) does not change the results qualitatively as the benefit of a robust monetary policy response remains larger than its cost.

4. Under a “robust” approach, policy rates would be somewhat higher than the policy rate path assumed for the baseline forecast. To derive the “robust” policy path for the ECB’s policy rate, the model is simulated using a large combination of shocks to match the policy path under the reference case (wage and price inflation correctly assumed to be low) with the interest policy path assumed in in staff’s baseline projections, which peaks at about 3¾ percent in 2024Q1 (¶14). Under the policy rule with a tightening bias to account for higher possible persistence in wage and price inflation, the range of the policy interest rate paths could be higher than under the baseline (Figure AI.2). Under the robust policy, inflation would come down faster and reach the ECB’s target of 2 percent before the end of 2024.



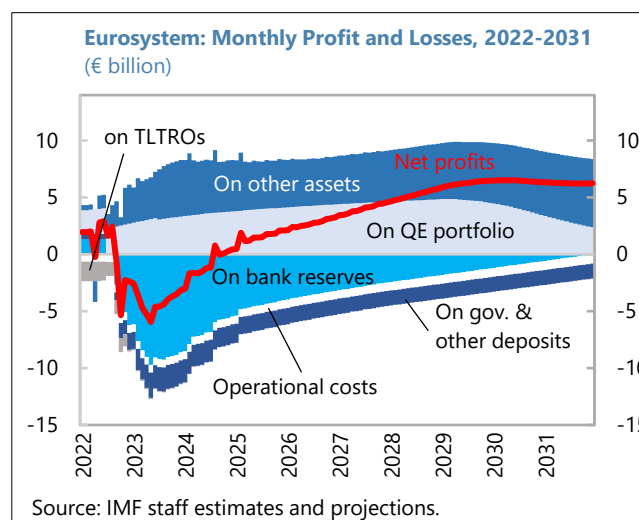
Annex II. Raising Rates with a Large Balance Sheet: The Eurosystem's Net Income and its Fiscal Implications

1. The Eurosystem, having expanded its footprint significantly in recent years, confronts a period of loss-making as rising policy rates lift the remuneration of bank reserves while assets churn more slowly. Quantitative easing removed duration risk from the private sector's balance sheet to induce portfolio rebalancing. On the liability side, it created bank reserves. In effect, the ECB executed a fixed-for-floating rate swap, leaving the Eurosystem with a large interest rate exposure in the current tightening cycle. This was not an unexpected outcome, but rather a feature of balance sheet policies shaped by the inflation objective.

2. Staff's analysis of the net income of the Eurosystem and its "top-five" national central banks (NCBs) suggests that losses, while large, will be temporary and recoupable.¹ The baseline scenario, which uses market rate paths and announced policies, indicates two years of loss-making for the Eurosystem, and 0–5 years for the NCBs of Germany, France, Italy, Spain and the Netherlands. Given the home bias in NCBs' bond holdings—itsself an outcome of mutually agreed Eurosystem safeguards—NCBs whose sovereigns enjoy lower market funding costs generally see larger and more persistent

losses. Asset churn into higher-yielding securities is found to have a strong positive effect, so much so that faster quantitative tightening reduces cumulative net income (as savings on the swifter reduction of reserves are exceeded by lost interest income from lower reinvestments). Parallel upward shifts in yield curves are profit enhancing. Lower banknote demand has the opposite effect.

3. The policy conclusions are fourfold. First, the temporary nature of the loss-making obviates any need for capital contributions from the state, instead suggesting losses can be offset against future net income following the US Federal Reserve's approach. Second, even without capital injections, fiscal impacts will be material, at about 0.1–0.2 percent of GDP per annum (text table). Third, more-conservative profit distributions in future cycles could help mitigate the on-off pattern of dividends. Finally—and most importantly—the loss-making must remain orthogonal to monetary policy decision-making, as indeed it is at the ECB. Ultimately, credibility will rest on performance in delivering on the price stability mandate.



¹ See forthcoming IMF Working Paper by Belhocine, Bhatia, and Frie (2023) "Raising Rates with a Large Balance Sheet: The Eurosystem's Net Income and its Fiscal Implications."

Table AII.1. Selected NCBs: Average Annual Tax Payments and Transfers to State, 2008–31
(Percent of GDP unless otherwise indicated)

	Old steady state 2008-22	Period of loss-making 2023-24 1/	Replenishment & resumption 2025-31 1/	No. of yrs. without tax or transfer
Bundesbank	0.08	0.00	0.03	11
Banque de France	0.17	0.00	0.19	3
Banca d'Italia	0.23	0.12	0.41	0
Banco de España	0.21	0.00	0.26	2
De Nederlandsche Bank	0.09	0.00	0.18	3

Source: IMF staff estimates and projections.
1/ P&L periods as applicable to Eurosystem as a whole; periods for individual NCBs vary.

Annex III. Stress Testing of Euro Area Banks

1. The objective of this analysis is to assess the sensitivity of euro area banks' capital buffers to macroeconomic conditions. The analysis estimates the evolution of bank capital under the baseline scenario and an adverse scenario based on the April 2023 WEO projections and the Global Financial Model ([Vitek, 2018](#)), respectively.

Euro Area: Stress Test Assumptions				
	2022	2023	2024	2025
Baseline Scenario				
GDP growth (April 2023 WEO, percent)	3.47	0.79	1.37	1.88
Unemployment rate (April 2023 WEO, percent)	6.79	6.82	6.80	6.62
Long-term interest rate 1/	1.79	2.43	2.53	2.63
Adverse Scenario				
GDP growth 1/	3.42	-3.02	-0.27	2.10
Unemployment rate 1/	6.73	7.11	7.98	8.07
Long-term interest rate 1/	1.79	6.10	4.92	2.69
Note:				
1/ Unpublished projections (as of March, 2023).				

2. The assessment relies on a stylized top-down macroeconomic stress test and follows the approach outlined in [Aiyar and others. \(2021\)](#) with some modifications and adjustments. The approach consists of initially projecting the net income components of banks after taxes and dividends. This channel directly affects retained earnings as a source of organic capital. Coupled with parameters characterizing credit risk management at the banks, probabilities of default are then projected and translated into risk weights, affecting banks' capital ratios, following the Basel Fundamental Internal Ratings Based (F-IRB)-approach.

3. The exercise uses publicly available data on banks' balance sheets, income statements, and regulatory disclosures. First, aggregated data on risk parameters are extracted from about 88 systemically important euro area banks' pillar 3 disclosures.¹ The dataset includes each bank's aggregated exposures at default (EADs) to the public sector, financial institutions, corporates and households, their associated risk-weighted assets (RWAs), probabilities of default (PDs), loss given default (LGD), expected losses, and provisions. Second, these data are combined with bank-specific performance data over 1995–2022 from FitchConnect and S&P Market Intelligence—such as, Tier 1 capital levels, profitability (net income, net interest income, net non-interest income, loan loss provisions (LLPs) and reserves (LLRs), and nonperforming loans (NPLs). These data are used to estimate empirical panel data models linking bank performance, and NPLs to macroeconomic factors, namely real GDP growth, the unemployment rate, the long-term interest rate, the CPI inflation, and bank financial indicators. To project the key financial indicators, macroeconomic projections for GDP growth, the unemployment rate, the long-term interest rate,

¹ For banks with missing financial statements for 2022 as a whole, it is assumed that past quarterly data would provide a good proxy of the 2022Q4 financial disclosures.

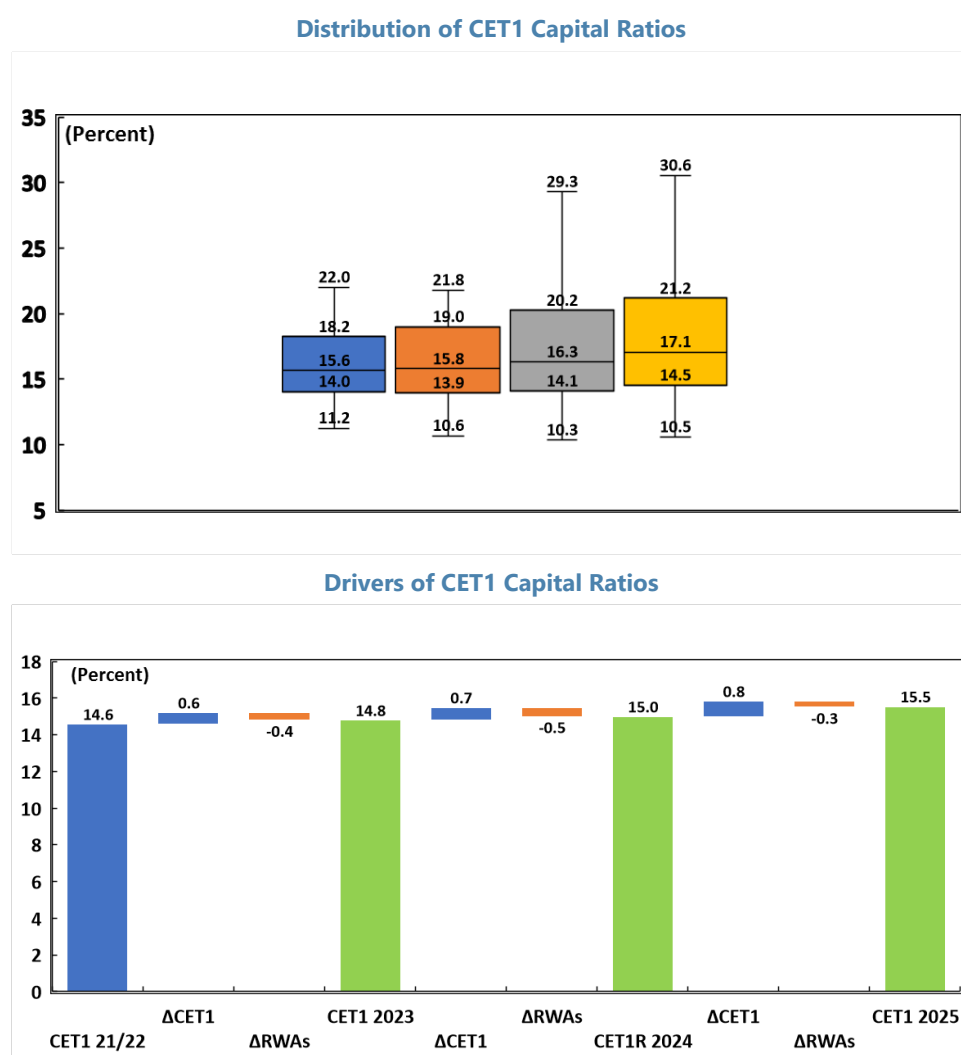
and the CPI inflation are taken from the April 2023 WEO database for the baseline scenario, and from the Global Financial Model ([Vitek, 2018](#)) for the interest rate under the adverse scenario.

4. Regulatory bank capital is driven by profitability and risk weights. A constant balance sheet assumption implies that loan or asset growth will not affect bank capital. In response to worsening macroeconomic conditions, banks are likely to face a deterioration in credit quality and higher default rates, which affect both the profitability and risk weights across different portfolios, products, securities, and business (lending and nonlending activities) lines.

5. The profitability channel captures the impact of macroeconomic conditions and bank-specific variables on the operating ROAA and its components. The empirical “satellite model” uses bank-by-bank panel data for about 88 banks in the euro area over 1995–2022 at a consolidated level. The effects on the operating ROAA can be further broken down into its components—net interest margin to average assets, net noninterest income to average assets, loan-loss provisions to average assets, and other income to average assets. Retained earnings is net of: (i) taxes, which are calculated according to the 2022 effective tax rate if the projected net operating income is positive or at zero otherwise, with a cap of 30 percent; and (ii) dividend payouts, which are assumed to be 50 percent throughout the period if the projected net operating income is positive, or zero otherwise.

6. Changes to credit risk weights are a function of probabilities of default, loss given default, and exposures at default. This follows the Basel credit risk framework. The end-year 2022 (2021 for banks without 2022 data) exposures at default, probabilities of default, and losses given default are directly extracted from banks’ pillar 3 disclosures in the case of Basel’s Fundamental and Advanced Internal Ratings Based (F-IRB, A-IRB) approaches. For risk-weighted assets based on the Standardized approach, they are assumed to remain constant throughout the period. A scaling factor to account for the bias from the weighted average probability of default, the use of the F-IRB approach formula, and the effects of supporting factors that reduce RWAs, is obtained by plugging in the weighted average probability of default and loss given default, and the total exposure at default in the IRB approach formula to estimate the theoretical risk weighted assets and by dividing them by the reported ones.

7. The satellite models strongly associate bank performance with macroeconomic factors. The macro and bank-specific determinants of profitability are estimated with dynamic panel models. The results of the satellite models indicate that: (i) the net interest income to average assets and NPLs have a strong persistence component; and (ii) the ROAA, its components, and NPLs are also determined by real GDP growth, the unemployment rate, and the long-term interest rate, along with the past ratio of NPLs to gross loans. For instance, every one percentage point increase in the long-term interest rates improves the net interest margin of systemically important euro area banks by about 22 basis points.

Figure AIII.1. Euro Area Banks: CET1 Capital Ratios Under the April 2023 Baseline Scenario

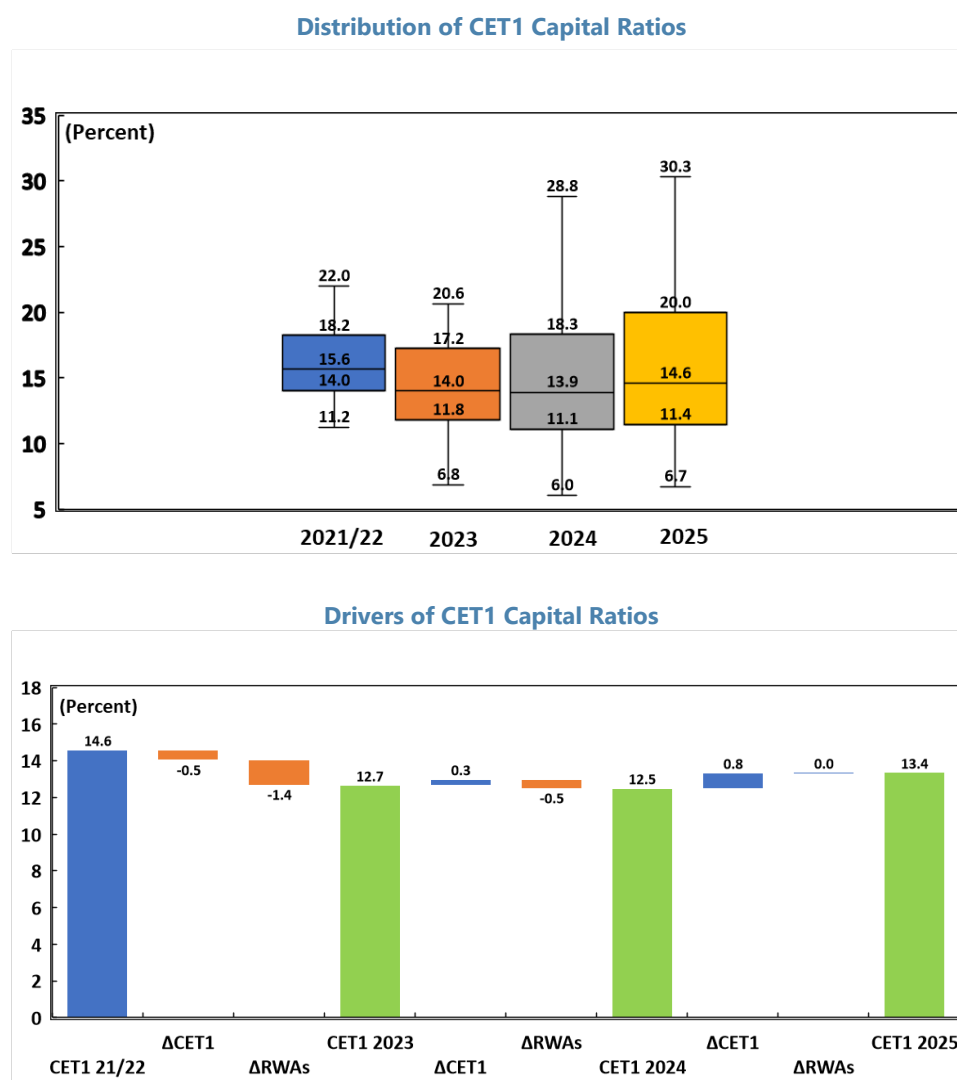
Sources: FitchConnect; S&P Market Intelligence; banks' pillar 3 disclosures; and staff's calculations.

8. Overall, the stress test results suggest that banks are likely to remain resilient under the baseline scenario. Under the baseline scenario, the aggregate CET1 capital ratio for large euro area banks in the sample increase from 14.6 in 2021-22 to 15.5 percent by end-2025 (Figure A.3.1, panel A). The positive contribution from increasing positive ROAA offsets the higher risk-weighted assets during 2023-25 (Figure AIII.1, Panel B).

9. The findings under the baseline scenario are the result of benign macroeconomic conditions over the forecast horizon and healthier bank balance sheets in 2021-22. Banks that benefited from these two years to improve their asset quality, profitability, and capital ratios experience smaller reductions in their CET1 ratios. While there would be no capital shortfall relative to the 4.5 percent pillar 1 requirement under the baseline, one bank would be slightly above its threshold for the Maximum Distributable Amount (MDA) in 2023. With an improvement in the economy in 2024 and 2025, no banks would breach the MDA threshold. If this bank close to the

MDA threshold cannot raise equity and its CET1 capital ratio further falls below its MDA threshold, it would be forced to stop dividends and suspend coupon payments to hybrid capital, resulting in a significant funding shock while also triggering negative credit rating actions. With some variation in the initial credit quality, profitability, and solvency conditions of banks, the shock to bank capital varies across countries, leading to some dispersion in CET1 ratios among countries.

Figure AIII.2. Euro Area Banks: CET1 Capital Ratios Under the EBA-NCA's Adverse Scenario



Sources: FitchConnect; Orbis; banks' pillar 3 disclosures; and staff's calculations.

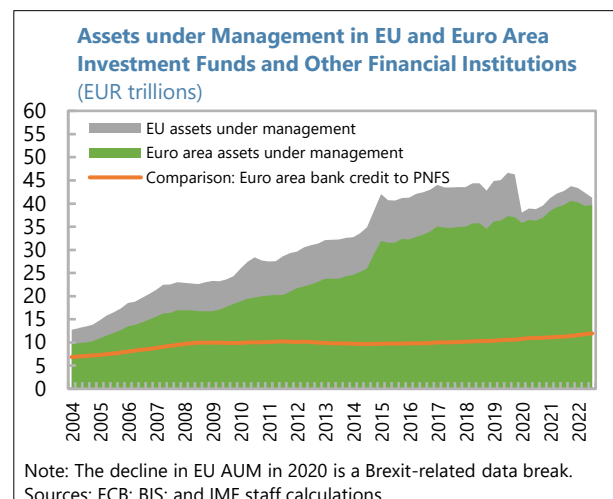
10. While the capital impact in the baseline is likely to be manageable, the adverse scenario entails moderate capital pressures. The adverse scenario consists of cumulative GDP contraction of 1.2 percent over 2023–25. The average CET1 capital ratio would decline by 1.9 percentage points to 12.7 percent in 2023 but would partially recover to 13.4 percent by the end-2025 in this adverse scenario (Figure AIII.2, Panel A). Higher risk-weighted assets and negative ROAA would explain the capital depletion in 2023 (Figure AIII.2, Panel B). This decline in the average

CET1 ratio would be partially offset by the positive contribution from increasingly positive ROAA during 2024–25. The banks in the bottom fourth of sample in terms of capitalization would fare worse, with their CET1 ratios falling by as much as 2.7 percentage points to 11.5 percent, in 2024. One bank would experience a capital shortfall relative to the combined pillar 1 and conservation requirement of 7 percent. However, 5 banks would see their CET1 capital ratio drop below the average 9.6 percent MDA threshold in 2023, while 6 banks would breach it in 2024 and, thus, come under intense capital market pressure. However, improved economic conditions in 2025 would help banks restore capital buffers, with 5 banks breaching the average 9.6 percent MDA threshold in 2025. That said, the projected capital erosion in the downturn scenario underscores the need to conserve capital and, going forward, build further bank capital organically by having prudent dividend distributions.

Annex IV. Macroprudential Policy for Nonbanks in the EU: The Case of Investment Funds

1. **Macroprudential policy aims to address “systemic risk” – the risk of widespread financial distress that may spill over to the real economy.** The macroprudential emphasis in financial sector policy is relatively new, having become mainstream after the global financial crisis (GFC). It complements more traditional micro-prudential regulation (which focuses on the stability of individual entities) and consumer protection policy. Macroprudential approach to regulation ensures an extra level of resilience in cases when the risk assessed at the level of individual entities does not fully capture the potential for systemic spillovers or widespread simultaneous failures.
2. **For traditional banks, much progress has already been made in identifying, calibrating, and implementing the macroprudential policy tools.** For example, in the EU, countercyclical capital buffers, which add an extra layer to banks’ capital to enhance their resiliency to the realization of credit and market risks, are an integral part of the European Commission’s Capital Requirements Directive (CRD). Furthermore, most member states are implementing structural borrower-based measures (BBMs) that limit leverage in residential real estate markets, in line with the ESRB recommendations.
3. **Nonbanks may also pose systemic risk.** The sector comprises heterogenous segments, including investment, pension, and money market funds, and insurers. During the GFC, widespread distress was amplified by the near-failure of some major insurance companies, including notably the U.S.-based AIG that required a record government bailout to avoid widespread contagion to the banking system. In 2021, distress in a U.S. family office Archegos induced material counterparty spillovers ([Bouveret and Haverkorn, 2021](#)), including a \$5 billion prime brokerage loss in a non-EU European GSIB, Credit Suisse, that wiped out a fifth of the bank’s equity value.
4. **The risk of systemic instability in the nonbank space was prominent in 2022.** In September, rapid monetary policy tightening after a period of monetary accommodation triggered widespread margin calls on UK defined-benefit pension funds related to their “liabilities-driven investment” strategies (LDIs) that used financial or derivatives-based synthetic leverage to boost returns. This forced the Bank of England into multi-billion-pound asset purchases to stabilize the gilt market and prevent widespread pension fund collapse. Interestingly, many margin calls originated in EU-domiciled funds used by UK pension funds ([CBI, 2022](#); [CSSF, 2022](#)). Derivative and margin call-related liquidity shortfalls occurred also in EU pension funds ([Joint Committee, 2023](#)). While orderly, these have nevertheless triggered a degree of market uncertainty. Also recently, historic energy price volatility induced extreme margin calls on routine hedging positions of EU energy firms, inducing liquidity distress and necessitating a temporary change to CCP collateral quality requirements in the EU. While a normalization of energy prices and the ESMA-proposed temporary changes to CCP collateral quality requirements have eased the liquidity pressures, the future sustainability of energy hedging markets in the EU still likely requires deeper reforms.

5. Macroprudential policy for nonbanks remains less developed and less tested than that for banks, despite rapid growth in the EU nonbank space. For example, assets under management in EU investment funds have more than doubled from 18 trillion euro around the GFC to 42 trillion euro in 2022 (ESRB, 2022). This contrasts sharply, for example, with bank credit to the nonfinancial sector which increased by a mere 20 percent (from 10 to 12 trillion euro) over the same period. Objective difficulties in implementing macroprudential regulation of nonbanks stem from the complexity, opacity, and institutional heterogeneity of the sector, which calls for a differentiated set of tools tailored to different entities and market segments. Furthermore, there is less experience in the calibration and implementation of macroprudential policy tools for nonbanks, so their efficiency and side effects may need to be assessed in real time.



6. Investment funds can become distressed due to liquidity mismatch and the use of leverage and derivatives. Liquidity mismatch arises when investment fund liabilities are liquid (relatively easily withdrawable, as in open-ended funds) while their assets are relatively illiquid. Examples of investment funds with relatively illiquid assets include bond funds, private equity funds, and real estate investment funds (REIFs). The effects of liquidity mismatch are amplified when such investment funds use financial or derivatives-based synthetic leverage to enhance their returns. One reason for this is that leveraged investment funds may need to liquidate more than one unit of assets to satisfy one unit of withdrawals to maintain stable leverage ratios. Another reason is that leverage magnifies the effect of liquidations on fund share values, which may undermine confidence and induce further withdrawals. Derivatives may magnify the challenges associated with liquidity mismatches because then the fluctuations in asset values can induce margin calls that necessitate liquidations of illiquid assets.

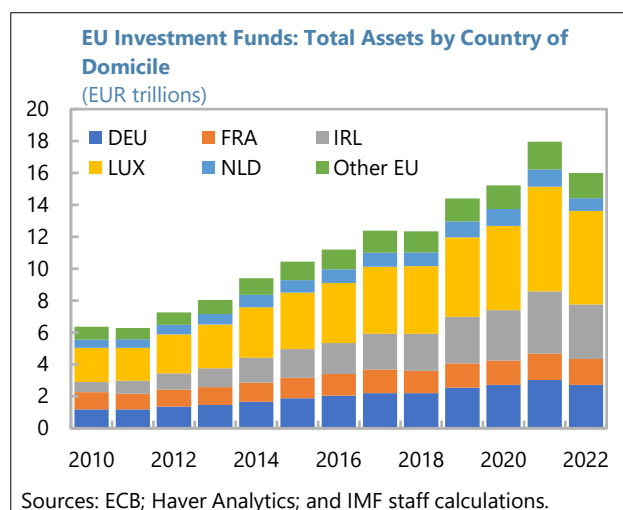
7. Widespread liquidity pressures and forced asset liquidations in investment funds can spill over to the wider financial system and the real economy, representing a source of systemic risk. Liquidations in one fund can induce price swings that affect balance sheet positions of other investors, pushing them into distress too. During investment fund failures, losses can spread to fund investors (which could be other financial sector entities, such as insurance companies or pension funds) and banks, especially through their prime brokerage operations. Furthermore, deteriorating asset and collateral valuations and tighter liquidity may have real spillovers. For example, firms that used bond-based financing may face disrupted access to finance that, in extreme, could push them into corporate distress. Similarly, real estate price declines can affect real estate lenders (including banks), borrowers that use real estate as collateral, and the construction sector, with potential additional second-round macroeconomic implications.

8. Several macroprudential tools can help manage systemic risk in investment funds.

Notably, leverage restrictions in line with Article 25 of AIFMD, restrictions on the use of derivatives, and liquidity rules that lengthen withdrawal notice periods can help investment funds stagger their liquidity needs and thus ameliorate the risk of forced liquidations. Liquidity buffers help address short-term liquidity needs, but would have more limited benefits under persistent liquidity pressures as they become exhausted. Ex-post “liquidity management tools” that rely on suspensions of withdrawals or swing (penalty) pricing of withdrawals can be useful in crisis management but should not be relied upon exclusively, as crises are usually easier to prevent than to resolve. The considerations for these tools have been articulated, for example, in [ECB \(2018\)](#).

9. Extant examples of macroprudential policies for investment funds in the EU cover real estate funds.

Belgium, Italy, the Netherlands, and Poland permit only “closed-ended” real estate funds, where capital is not redeemable until the fund’s end of life. Germany, Hungary, and Portugal require minimum notification periods to manage liquidity in real estate funds ([ESRB, 2022](#)). Most recently, at end-2022, Ireland has introduced a 60 percent leverage limit in open-ended AIF funds that invest in Irish commercial real estate—the first example in



the EU of macroprudential leverage limits on investment funds under the AIFMD ([CBI, 2022](#)).

Nevertheless, evidence of distress redemption spikes in investment funds during periods of market volatility—well documented for example in relation to the early stages of the COVID crisis in 2020 ([Falato and others, 2021](#); [Cappiello and others, 2021](#))—calls for a wider implementation of macroprudential policy tools for this sector.

10. Wider implementation of macroprudential tools for investment funds in the EU faces several challenges. At the country level, the national competent authorities (NCAs) in charge of financial market regulation have historically focused on consumer protection and micro-prudential supervision. They may have limited macro-prudential orientation and mandates, and often limited track record of macroprudential expertise. This calls for a careful review of the NCAs’ objectives and mandates to ensure that they incorporate macroprudential policy responsibilities and equipped with necessary tools, which should be harmonized on the EU level. Additional investment in macroprudential analytical and applied expertise in NCAs may be appropriate.

11. Potential coordination challenges across member states may need to be addressed at the EU level. While the funds are disproportionately domiciled in only several jurisdictions (60 percent of total assets are in Ireland and Luxembourg, with another 30 percent in France, Germany, and the Netherlands), they tend to attract funds and invest across the EU. In principle, the concentrated domiciliation of investment funds can create the welcome benefits of specialization in

the corresponding NCAs. However, it also implies that the supervising NCAs may have limited ability to assess cross-border financial stability risks or to devise appropriate macroprudential measures without close consultation with the NCAs of the jurisdictions where the funds operate.

12. A useful benchmark is to compare the cross-border macroprudential policy coordination challenges for EU investment funds with those for EU banks. For banks, most cross-border macroprudential spillovers would be induced by the largest institutions that benefit from single direct SSM supervision. No similar single direct supervision exists for investment funds. While macroprudential policies, including those related to CCyB and BBMs, remain largely national competence, the ESRB has extensive track record in fostering the consistency of macroprudential policy stance across the EU. Nonbank macroprudential policy coordination across the EU remains less tested.

13. Resolving the coordination challenges on the EU level may require progress on several dimensions. It seems essential to deepen the role of European Securities and Markets Authority (ESMA) as the EU-level coordinating body and center of expertise for nonbank financial stability policy, operating in tandem with the ESRB. As part of the coordination function, ESMA needs to ensure robust communication channels on nonbank financial stability issues between the NCAs of jurisdictions where nonbanks are domiciled and the NCAs of jurisdictions where nonbanks operate. Furthermore, given the global nature of the nonbank space, coordination between EU bodies and non-EU jurisdictions (notably UK and US) and agencies such as IOSCO is key. Deeper progress on improving macroprudential regulation of nonbanks would be in line with the priority item of enhancing financial stability, including by developing the relevant macroprudential framework, incorporated in the Commission's 2015 Capital Markets Union Action Plan.

Annex V. Progress Against IMF FSAP Recommendations

Recommendation*	Timing**	Actions
Supervision		
Reduce the fragmentation of national legal frameworks for bank supervision (EU)	MT	<p>The Banking Package includes measures designed to ensure more consistent supervision across the EU. The transposition of the Capital Requirements Directive (CRD) V is ongoing: all member states have completed transposition; the Commission will soon start the conformity assessments.</p> <p>In the context of the Capital Requirements Regulation (CRR) CRD6 currently under discussion at the European level, the ECB has issued an opinion calling for: (i) harmonized provisions for the assessment of banks' directors and key function holders (fit and proper assessments); (ii) a common set of rules for branches of third-country banking groups operating in Member States will replace heterogeneous national approaches and strengthen the single market; (iii) further harmonization of national powers related to the acquisition of qualifying holdings, transfers of assets or liabilities, mergers or divisions, as well as to the sanctioning regime, to ensure the consistency and robustness of the framework.</p> <p>In the area of suitability assessments, the ECB adopted a single Fit and Proper questionnaire for all banks under its supervision to ensure that a standard set of information is provided in all SSM countries. The ECB also published a Guide to fit and proper assessments to provide the industry with further clarity on fit and proper assessments while sharing its expectations on this supervisory matter.</p> <p>Furthermore, the ECB implemented the IMAS Portal—the IT tool allowing banks to submit standardized fit and proper applications—and Heimdall—an IT tool to automatically identify inconsistencies with the ECB methodology and flag them to the supervisors—to enhance consistency across fit and proper assessments of banks supervised by the SSM.</p> <p>To provide clarity to the market, the ECB has already published a guide on banking consolidation and will publish this year a guide on qualifying holdings. A guide on licensing is currently under preparation and will be published next year.</p>
Revise legal provisions to close regulatory gaps with international standards (EU)	MT	<p>Addressed in the review of the CRD/CRR concluded in 2019 and in related additional regulatory legal texts (technical standards).</p> <p>Some examples include interest rate risk in the banking book (Basel Core Principle BCP23), capital adequacy (BCP 16), and liquidity risk (BCP 24), especially the 2018 amendments to the Liquidity Coverage Ratio to bring it in line with international standards.</p> <p>A more recent example regards Interest Rate Risk in the Banking Book (IRRBB): the EBA published two regulatory technical standards (RTS) and one set of guidelines (GLs) on IRRBB in October 2022 that complete the onboarding into EU law of the Basel standards on IRRBB.¹</p> <p>The final elements of Basel 3 will be implemented in the ongoing review of the CRD/CRR that is expected to be concluded in Summer 2023 and in the related additional regulatory legal texts (technical standards).</p>

Recommendation*	Timing**	Actions
<p>Improve planning of supervisory resources (SSM)</p>	<p>ST</p>	<p>ECB Banking Supervision was reorganized in October 2020. The reorganization aimed at making the structure more agile and integrated. The reorganization brought the creation of one new business area (D-SSR) with a focus on strategy, risk analysis, and a second line of defense.</p> <p>The D-SSR/Strategic Planning Office is responsible for the set-up, implementation, and continuous improvement of the SSM planning process and its monitoring, as well as for the development of a comprehensive overview of activities and resources vis-à-vis priorities. It is also in charge of ensuring that the SSM strategy and processes are embedded in the ECB strategic planning process, while promoting a coordinated operationalization of SSM priorities. It also conducts the organizational readiness exercise for implementing SSM priorities and proposes the allocation of the SSM resource pool.</p> <p>The resources used for the ECB's supervisory tasks are financed via supervisory fees borne by the supervised entities (banking groups or stand-alone entities). The calculation of the fees is based on the total costs of the supervisory function which are separately identifiable within the ECB's budget. For the determination of the supervisory cost (and consequently the income from supervisory fees), a cost calculation model is used based on the Eurosystem's common cost methodology. The latter is based on the actual expenses of the financial year, not on the planned supervisory resources. The cost allocation is based on the actual direct cost and the allocation of the actual indirect costs using cost metrics (allocation of the cost based on Eurosystem Functions Grid, ESFG).</p> <p>Nevertheless, the ECB in its annual budget planning exercise applies a lean process to cost allocation and provides an early estimation of the supervisory fees using a number of assumptions, including the full consumption of the allocated budget, while the cost metric types applied are based on latest available information (year-end metrics of the previous year).</p> <p>Furthermore, several other actions have been taken:</p> <ul style="list-style-type: none"> • Increasing the focus on risk-based supervision in the Supervisory Examination Program (SEP) and by means of a risk tolerance framework. • Increasing the Supervisory Board Steering Committee's focus on digitalization, integration and simplification of SSM processes in dedicated meetings. A dedicated group comprising ECB and national country authority (NCA) staff has been set up. • Implementing an array of successful simplification and digitalization of processes, which have allowed the release of staff. Some examples include applying a risk-based supervisory approach to supervisory tasks and processes, streamlining several work modules on the supervisory IT system and simplifying day-to-day access rights management. • Promoting a common SSM culture, enhancing mobility opportunities across the organizations (i.e., national authorities and ECB), fostering close collaboration on horizontal topics to increase efficiencies, and pursuing a more coordinated planning through the SSM Integration Project. • Starting a new form of collaboration between the ECB and NCAs via the SSM-Hub on securitization assists the ECB in its supervision. • Fostering closer collaboration with the NCAs by revamping the supervisory planning process, which now provides for stronger links with NCAs. In n-site inspections, a pilot scheme has been developed

Recommendation*	Timing**	Actions
		<p>consisting of two centers of competence for business models and profitability and interest rate risk in the banking book.</p> <ul style="list-style-type: none"> Increasing internal resources for on-site inspections (while the cost is offset by a reduction in consultancy expenditures) to achieve significant internalization of consultancy costs associated with on-site and internal model investigations. The internalization of resources fosters the SSM on-site community by increasing the use of internal resources to the detriment of external ones and reducing the risks related to an excessive reliance on external consultants. Setting up a dedicated SupTech function and a rich (and growing) portfolio of IT- and AI-driven tools offering efficiency gains and supporting supervisors' judgement in the assessment of complex risks, while also freeing up resources otherwise spent on manual and repetitive tasks. <p>As regards staffing the NCA leg of Joint Supervisory Teams, several improvements have been introduced in the annual staffing process, such as:</p> <p>A better alignment of resources in both the NCA and ECB leg of the JST with the individual supervisory complexity of the supervised institution.</p> <p>A refinement of quantitative criteria for identifying staffing shortages in JSTs.</p> <p>An annual dialogue for each JST on identified NCA staffing shortages based on quantitative criteria and further qualitative input with NCA team leads; and the development of a targeted quantitative and qualitative team profile, and the comparison with the actual situation, in line with recommendation #7 of the European Court of Auditors (ECA) Special Report 12/2023.</p> <p>An escalation process related to NCA staffing shortages involving senior management of ECB vertical DGs and NCAs. If necessary, NCA staffing issues are addressed to NCA leadership by SSM leadership in dialogue with NCA or via written communication.</p> <p>As part of the supervisory planning process, several tools have been introduced to support the organization's readiness for the implementation of priorities:</p> <p>Organizational readiness assesses whether appropriate skills and number of FTEs are commensurate with the implementation of supervisory priorities.</p> <p>Capability building responds to critical areas identified by the organizational readiness analysis via dedicated action plans e.g., training and development.</p> <p>Overview of resources presents an opportunity to monitor and report on the utilization of resources in JSTs and on-site inspections.</p>
Raise standards for handling of loan classification and provisioning (SSM)	ST	<p>There were improvements in supervisory expectations on loan loss provisioning through: (i) the publication of the Addendum for new NPEs as of April 1, 2018; (ii) the SREP recommendations for the stock of NPEs as of March 31, 2018; and (iii) a new automatic Pillar 1 backstop for NPEs from newly originated loans as part of the EU Banking Reform package approved in 2019.</p> <p>In addition, at the onset of Covid-19 pandemic, a set of "dear CEO" letters was published communicating supervisory expectations among others on classification and provisioning aspects, which was followed by extensive assessment of compliance at an individual bank level, issuance of specific recommendations to banks, and follow-up by off-site supervisory teams to ensure any gaps to supervisory expectations are closed. Moreover, deep</p>

Recommendation*	Timing**	Actions
		<p>dives in the areas of forbearance, UTP and IFRS9 implementation have been conducted over the last two years and will also continue going forward. Lastly, training on these topics was provided to JSTs and dashboards for the monitoring of asset quality and provisioning were enhanced.</p>
<p>Improve coordination and information sharing regarding AML/CFT (ECB, national authorities)</p>	<p>ST</p>	<p>At the end of 2018, ECB/SSM set up an AML Coordination Function (ALMCO) with responsibilities to: (i) act as a central point of contact for SIs; (ii) set up a network for achieving consistent SSM-wide prudential approach; and (iii) act as an internal center of expertise on prudential issues. In January 2019, the ECB also signed an agreement for information exchange with nearly 50 national AML/CFT, as mandated by the 5th review of the AML Directive. Following the ESA review, the EBA is playing a coordinating role on AML/CFT supervision issues across sectors and the EU.</p> <p>The ECB/SSM have taken steps to streamline the information exchange process with AML/CFT authorities, including more delegations, and the participation of JSTs as observers in the AML/CFT colleges (for around 65 significant institutions). ECB/SSM have also implemented the changes coming from the EBA regulatory framework (EBA cooperation Guidelines, EBA database on material weaknesses). Based on recent external assessments (ECA report, SSM review by the EC), the information exchange process works well overall.</p> <p>Finally, the ECB/SSM has also enhanced the way ML/TF risks are reflected in prudential supervision for the SREP (implementation of the SREP Guidelines), authorizations, and fit and proper assessments.</p>
<p>Transfer supervision of systemic investment firms and third country branches to the SSM (EU)</p>	<p>ST</p>	<p>As regards systemic investment firms, the Investment Firms Regulation (IFR, Regulation (EU) 2019/2033) and the Investment Firms Directive (IFD, Directive (EU) 2019/2034) have been adopted by the European co-legislators on November 27, 2019. Both texts are in application since June 26, 2021.</p> <p>The new Investment Firm Regulation (IFR) and Directive (IFD) have introduced a multi-tiered regulatory regime for investment firms. Among other things, they require that the largest and more systemic investment firms (above €30 billion at solo- or group-level) and engaging in specific activities (dealing on own account or underwriting or placing financial instruments on a firm commitment basis) are authorized as credit institutions and, if the criteria for significance are met, fall under the direct supervision of the ECB. The new regulation entered into application in June 2021. Class 1 investment firms that have been authorized as credit institutions since then can be found in the list of supervised entities published on the ECB Banking Supervision website. A dedicated section for ECB's new permanent tasks in relation to the supervision of investment firms has been established within the Directorate General Systemic and International Banks.</p> <p>As regards third country branches (TCBs), a multilateral memorandum of cooperation between the ECB and NCAs of SSM participating Member States on the supervision of TCBs is being finalized, and it is expected to be applied from the second half of 2023. It will allow supervisors to exchange information on TCBs and credit institution subsidiaries of third country groups that are active in more than one SSM participating Member State and/or whose entities are supervised by different supervisors.</p> <p>The ongoing review of the CRD/CRR (CRD6)—expected to be concluded in the summer of 2023—will introduce a common set of rules for branches of third</p>

Recommendation*	Timing**	Actions
		country banking groups operating in Member States to replace the heterogeneous national approaches and to strengthen the single market. Supervision of branches will remain the responsibility of national competent authorities as branches can only operate in the Member States where they are registered. It is also envisaged that CRD6 will further enhance supervisory cooperation by including those TCBs with a larger EU footprint under EU supervisory colleges. CRD6 may also allow supervisors to require systemic TCBs to become subsidiaries, following a case-by-case assessment.
Ensure the availability of a full set of borrower-based macroprudential instruments (EC, ESRB)	MT	<p>The ESRB has recently amended its recommendation on closing real estate data gaps. It aims at establishing a more harmonized framework for monitoring developments in real estate markets in EU countries through the adoption of harmonized definitions and methods for measuring indicators related to both residential and commercial real estate markets. It has also done a detailed survey on the availability and usability of borrower-based tools in the EU countries.</p> <p>The Commission continues to research options to ensure the availability of a sufficient set of borrower-based instruments in all member states via amendments to either CRD/CRR or the Mortgage Credit Directive. However, Member States have insisted that activation and calibration must stay in national hands and exclude potential ECB action, which is difficult to align with the EU legal framework. A potential legislative proposal following the macroprudential review (CRD/CRR) in 2022 was postponed.</p>
Preparations for the U.K. Exit from the EU		
Accelerate discussions on action to ensure continuity of service and data access (ECB, ESAs, SSM)	I	<p>Conditional recognition to U.K.-based CCPs until June 2025.; The ESMA has reduced regulatory costs of moving uncleared derivative contracts to EU-27 counterparts. It has also specified the EU-27 dual-listed stocks that would need to trade in an EU-27 trading venue to meet the share-trading obligation requirements under MiFID II.</p> <p>Regarding clearing in the UK, cliff edge effects from derecognition of UK CCPs were avoided. UK CCPs were (temporarily) recognized for the purposes of providing clearing services in the EU. Cooperative arrangements between the Eurosystem/ECB, the Bank of England and the relevant UK CCPs were adapted due to the UK's withdrawal from the EU. Currently, there are ongoing regulatory initiatives in the EU in order to reduce excessive reliance on UK CCPs.</p> <p>In March 2019, the ECB and the BoE announced the activation of the currency swap arrangement for the possible provision of euro to U.K. banks and of GBP to euro area banks.</p> <p>ECB Banking Supervision cooperates and exchanges confidential supervisory information with the UK prudential authorities on the basis of the MoU concluded in 2019 for the period after Brexit.</p>
NPL Resolution		
Prescribe rules for valuation of immovable loan collateral, including	MT	The 2017 EBA guidelines on PD and LGD estimation require some level of prudence for the purpose of LGD estimation, to reflect that the value of repossession does not always reflect accurately the market value of the asset.

Recommendation*	Timing**	Actions
repossessed collateral (EU)		<p>Banks are required to address this uncertainty by applying an appropriate haircut to the value of repossession.</p> <p>The Banking Package, proposed by the Commission in October 2021, contains requirements for determining the property value, a concept which is more prudent than the market value, and which should remove the divergence between jurisdictions using either market value or mortgage lending value.</p>
Set consistent NPL definitions and reporting standards (EC, EBA, SSM)	ST	Regulation (EU) No 630/2019 amended Regulation (EU) No 575/2013 and introduced a clear set of conditions for the classification of NPEs, leveraging on the EBA work on the Implementing Technical Standards on reporting and forbearance.
Establish minimum standards for insolvency and creditor rights regimes (EU)	MT	<p>The June 2019 Directive on Preventive Restructuring established minimum standards in certain areas, including for preventive debt restructuring mechanisms and debt discharge for entrepreneurs.</p> <p>In December 2022, the Commission proposed a Directive harmonizing certain aspects of insolvency law. It covers rules on transaction avoidance, asset tracing, pre-packs, directors' duties, micro enterprises, creditors' committees, and measures to enhance transparency.</p>
Crisis Management and Financial Safety Nets		
Strengthen the early action framework and advance resolution preparation (SRB, SSM, EC, NRAs)	I	<p>The ECB crisis management framework is regularly revisited and continuously improved. For example: (i) in 2018, by refining the escalation procedures with a set of qualitative and quantitative indicators of deterioration of bank conditions; and (ii) in 2021, by incorporating the lessons learned from the application of the EAP and the COVID-19 experience, by adjusting to new regulatory requirements (e.g., LR, MREL/TLAC) and by reflecting changes through the reorganization of the ECB banking supervision. So far, the EAP has been proven as an effective tool for ensuring a risk-based escalation process (including the need for an assessment of early intervention when triggered) and a timely preparation of a failing-or-likely-to-fail (FOLTF) determination while ensuring all necessary coordination needs, internally and externally (namely with the SRB).</p> <p>In addition to the legislative improvements, the Single Resolution Mechanism (SRM) has also continued improving the cooperation at institutional level. The cooperation between SRB and SSM is set up on the MoU, which was signed in 2015 and revised in 2018 and 2022. The 2022 revision (December 16, 2022) enhanced the cooperation before and in crisis on different aspects:</p> <ol style="list-style-type: none"> 1. Early intervention (assessment on EI conditions and measures shared at the same time of the ECB SB). 2. Moratorium (ECB and SRB should agree on a consultation period on a case-by-case basis prior to the consultation).

Recommendation*	Timing**	Actions
		<p>3. Cooperation between JSTs and IRTs (formal and informal interactions in the recovery and resolution planning phase and sufficiently in advance in crisis).</p> <p>4. FOLTF (ahead of a crisis and at the time of a specific crisis case, the ECB and SRB agree on timelines and steps for the ECB/SRB FOLTF assessment).</p> <p>5. Cooperation in resolution (especially when the bridge institution is chosen and on the business reorganization plan).</p> <p>The cooperation with the NRAs is set in line with the Cooperation Framework (/1), according to which the NRAs are invited to pro-actively notify the SRB on any Less Significant Institutions under their direct responsibility that show early signs of financial distress or demonstrate suspicious behavior (e.g., money laundering suspicion, negative media publicity).</p> <p>Finally, the CMDI reform proposed by the Commission in April 2023 will further enhance crisis preparedness, in particular as regards the use of early intervention measures and cooperation between supervisors and resolution authorities in the run-up to a potential resolution.</p> <p>1/ Decision of the Single Resolution Board (SRB) of 17 December 2018 establishing the framework for the practical arrangements for the cooperation within the SRM between the Single Resolution Board and National Resolution Authorities, amending the SRB Decision of 28 June 2016. The text is published on the SRB website.</p>
Proceed quickly with the buildup of MREL and internal MREL, prioritizing large banks (SRB)	I	<p>The regulatory framework for MREL has been significantly revised in 2019 through amendments to the EU Bank Recovery and Resolution Directive (BRRD), the CRR, and the CRD. The SRB has applied the new regulatory package from 2020 (the policy is published on the SRB website) by setting for all banks in its remit intermediate MREL targets to be complied with from 1 January 2022, and final MREL targets from 1 January 2024.</p> <p>As of 2022Q4, 30 out of 80 resolution entities in the sample were in shortfall against their final MREL targets (when considering the Combined Buffer Requirement). However, 15 out of the 30 banks have a longer transitional period to meet their final target, ending, in most cases, in 2024-25. All EU GSIs still comply with TLAC.</p>
Ensure availability of liquidity in resolution (SRB, EC, Eurosystem)	ST	<p>In December 2018, the Eurogroup mandated the Eurogroup Working Group (EWG) and the Task Force on Coordinated Action (TFCA) to work on solutions for the limitations in the current framework. The TFCA discussed various solutions (SRB issuing debt, SRB guarantees to ECB, public guarantees) but the work is currently suspended. However, tailored improvements in requirements for monitoring of liquidity in recovery planning and resolvability guidance were introduced.</p> <p>The SRB has put the liquidity in resolution as a priority for SRB banks (banks' own capabilities). This is to ensure they can estimate liquidity needs, identify and mobilise collateral, measure and report their liquidity situation in resolution.</p> <p>As concerns other sources, EU Institutions acknowledge limitations in the current framework regarding "liquidity in resolution" (LiR).</p> <p>The SRB has repeatedly stated publicly that the SRF can contribute to liquidity provisioning to institutions in resolution, but it should not be deemed as the only solution considering its capacity in case of liquidity needs post resolution</p>

Recommendation*	Timing**	Actions
		<p>concerning large banks (based on the target size of the SRF – even with the Common Backstop by the ESM (after its final ratification)). Recent crisis cases in other jurisdictions have shown the importance of appropriate funding in resolution.</p> <p>The knowledge of additional funding would facilitate the resolution outcome, and does not necessarily implies that funding would be used, as it would strengthen market confidence.</p>
Crisis Management and Financial Safety Nets		
Designate and make operational the SRF backstop (such as the ESM) (EU, SRB, ESM)	ST	<p>At the December 2018 summit, EU leaders agreed that the ESM will serve as the SRF backstop. In November 2020 the Eurogroup agreed on the introduction of the backstop by the beginning of 2022 (instead of 2024), based on its assessment that risk reduction in the banking union banking system had been sufficient for this purpose. All the various necessary operational steps have been taken and the legal documents necessary to introduce the backstop have been prepared; however, the establishment of the backstop is legally embedded in the revised ESM Treaty, with its entry into force currently pending ratification by all signatories. The backstop will have the form of a revolving credit facility initially amounting to €68 billion.</p>
Establish an EDIS with a backstop (EU)	ST	<p>The Eurogroup noted in 2022 that, as an immediate step, work on the Banking Union should focus on strengthening the common framework for bank crisis management and national deposit guarantee schemes. Setting up EDIS remains to be addressed.</p> <p>The review of the crisis management and deposit insurance (CMDI) reform in the short term has been given priority, ideally during this legislative cycle. In their Euro Summit meeting statement of March 24, 2023, Heads of State called for continued efforts to complete the Banking Union in line with the Eurogroup statement of June 16, 2022, in which the Eurogroup committed to—following the adoption of the CMDI review—review the state of the Banking Union and identify possible further measures regarding the other outstanding elements to strengthen and complete the Banking Union.</p>
Ensure consistency of triggers for action such as resolution, liquidity assistance, and precautionary recapitalization (EC, ECB, SRB)	ST	<p>In 2018 the ECB Banking Supervision has adopted a new definition of solvency to be used in the context of: (i) precautionary recapitalisation; (ii) state guarantees on newly issue liabilities; and (iii) state guarantees to back central bank liquidity facilities. The new methodology is based on a forward-looking assessment of compliance with Pillar 1 and Pillar 2 capital requirements. It ensures alignment with the FOLTF assessment (which is one of the three conditions for resolution).</p> <p>The proposed CMDI reform clarifies the continuum of possible crisis management tools, including precautionary recapitalization, preventive measures, and resolution.</p>
Align the relevant state-aid loss-sharing requirements (in resolution) with the BRRD/SRMR, while introducing flexibility through a financial stability exemption	ST	<p>The Commission is carrying out an evaluation of its state-aid framework for banks, which is expected to be completed in the first quarter of 2024.</p> <p>The outcome of this evaluation will inform a subsequent potential review of the state-aid framework for banks.</p> <p>Given the interlinkages between the CMDI framework and the state-aid framework for banks, such potential review would aim at ensuring consistency</p>

Recommendation*	Timing**	Actions
subject to strict criteria (EU)		between the two frameworks, taking into account the regulatory scenarios that will be set out in the renewed CMDI framework.
Further harmonize the hierarchy of creditor claims in bank insolvency (EU)	MT	The proposed CMDI reform includes further harmonization of creditor claims as regards the ranking of depositors in insolvency (all depositors ranking in a single tier).
Introduce an administrative liquidation tool for the SRB (EU)	ST	The approach taken with the proposed CMDI review is to extend the application of the already harmonized resolution framework to small and med-size banks. As a longer-term project, The Commission is also following and contributing to the work of expert fora, such as UNIDROIT, where the design of a possible administrative liquidation tool is being discussed.
Pare back state-aid oversight of the use of the SRF and deposit insurance funding on a least-cost basis (EC)	ST	<p>The Commission's CMDI proposal envisages a targeted simplification of the process to be followed by the Commission and the SRB in case of use of Fund or State aid in resolution while maintaining the assessment of compatibility of such aid with the single market.</p> <p>For the time being DGS funds remain national and any further changes to the state-aid oversight and a more streamlined or centralized process for use of SRF and other industry-funded safety nets in resolution will only be possible once a European Deposit Insurance Scheme (EDIS) is in place.</p>
Buttress SRB independence and powers (for example, by granting permanent observer status at the SSM Supervisory Board) (SSM, EC)	I	<p>The revised version of the SSM-SRB MoU signed in 2022 sets forth that <i>"the Supervisory Board will invite the Chair of the SRB to participate as an observer in its meetings for items relating to the tasks and responsibilities of the SRB."</i></p> <p>The MoU lists such tasks and includes that such items could entail <i>"upon agreement between the ECB and the SRB, any other item necessary for the performance of the tasks and responsibilities of the SRB."</i></p> <p>In practice, an SRB Board member is already being invited to attend the SSM Supervisory Board meetings as an observer if a topic is discussed that is relevant for SRB tasks.</p>
Liquidity Management		
Articulate an explicit financial stability mandate for the ECB/Eurosystem (ECB)	MT	<p>The ECB/Eurosystem already has a financial stability mandate under the EU Treaties, insofar as Article 127(5) TFEU already provides that: <i>"The ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system."</i> See also Article 25 of the ESCB Statute.</p> <p>The primary objective of the ECB is to maintain price stability. Following the latest Strategy Review, the ECB has taken decisive steps to integrate the financial stability analysis into the monetary policy-making process. Current arrangements ensure preserving the focus on the primary objective to maintain price stability while duly taking into account any spillovers or interactions with financial stability matters.</p>
Intensify "horizon scanning" involving supervisory and	I	The ECB had taken note of the recommendation regarding the 'horizon scanning' arrangements to better detect emerging liquidity strains. Elements of horizon scanning are, however, already built into processes on the

Recommendation*	Timing**	Actions
operational functions (ECB, SSM)		<p>supervisory and monetary policy sides of the ECB. Additional elements will need to be considered in future work.</p> <p>With respect to the <i>euro area</i> CCPs' access to the Eurosystem facilities, there is ongoing work regarding the TARGET emergency credit facility, which covers, to the extent feasible, the possible harmonization of conditions across various credit facilities available to CCPs (with and without a banking license) as well as considering potential safeguards and enhancements of cooperation/information-exchanges (with relevant CCP supervisors).</p> <p>With respect to <i>non-euro area</i> CCPs, the internationally agreed "No Technical Obstacle" principles are considered to provide sufficient basis for possible establishment of arrangements between the ECB and non-euro area central banks.</p>
Further harmonize and ultimately centralize ELA arrangements (ECB)	ST	<p>The ECB regularly reviews the rules and procedures surrounding the provision of ELA, as laid down in the ELA agreement (driven by transparency considerations, the ELA agreement was first published in June 2017; the last ELA review was finalized in Q4 2020). The ELA framework has evolved and expanded over the last years with more elements being covered by the ELA agreement to ensure that the provision of ELA by NCBs does not interfere with the Eurosystem monetary policy.</p> <p>Moreover, and with a view towards a consistent approach within the euro area, topics related to communication and disclosure, solvency definition, or provision of foreign currency are also being looked at in the context of regular ELA reviews. Whether centralization should be the ultimate goal needs to be carefully assessed in view of the legal competences of the Eurosystem.</p>
Manage the transition from crisis-related policy settings and develop the future operational framework to reflect regulatory and market developments (ECB)	MT	<p>The Eurosystem is continuously engaged in work on its future monetary policy implementation framework, reflecting on issues such as whether its framework should eventually again return to a pre-crisis status quo, or whether some of the innovative tools that have been introduced to respond to the crisis should become a permanent feature, or even whether its monetary policy implementation framework should undergo a more complete overhaul.</p> <p>Regarding the latter, the ECB will review its operational framework for steering short-term interest rates by the end of 2023. The future operational framework will be based on the assessment of the optimal range of excess liquidity, its corresponding size of the Eurosystem balance sheet and its composition. This assessment will also provide information relevant to the endpoint of the balance sheet normalization process.</p> <p>The ECB wants to ensure that the framework is robust to different monetary policy configurations and environments (e.g., away from the effective lower bound (ELB) as well as in the vicinity of the ELB) and reflects the Monetary Policy Strategy Review's confirmation of the role of ECB policy rates as its primary policy instruments.</p>
<p>¹ The RTS specify (i) the criteria to evaluate the risks arising from potential changes in interest rates and (ii) the modelling and parametric assumptions and the supervisory shock scenarios complemented by an Implementing technical standards (ITS) on Pillar 3 disclosure of banks' exposure to IRRBB, which is applicable since June 2022. The GLs provide criteria for the identification, evaluation, management and mitigation of IRRBB in banks' internal systems.</p>		
<p>* In this table, EU will refer to the Council of the EU, the European Parliament, and the European Commission.</p>		
<p>**I: Immediate, within one year; ST: short term, within 1 to 2 years; MT: medium term, within 2 to 5 years.</p>		

Annex VI. EU's Economic Sanctions on Russia

1. In response to the Russia's war in Ukraine, the EU adopted a range of economic restrictive measures on Russia. These include:

- Prohibition on exports of arms and a range of dual technology goods, including those related to quantum computing, advanced semiconductors, sensitive machinery, transportation, chemicals.
- Prohibition on exports of goods for use in the oil industry; prohibition on new investments in the energy sector; prohibition on certain operations in the aviation sector; prohibition on certain freight and transportation operations; prohibition of exports of goods contributing to the enhancement of Russian industrial capacities.
- Prohibition on imports of coal, iron and steel, cement, rubber products, wood, spirits, liquor, high-end seafood; prohibition on imports of seaborne crude oil and on providing oil transport services; prohibition on imports of gold.
- Prohibition on public financing or financial assistance for trade with, or investment in Russia; prohibition on the financing of the Russian government and Central Bank as well as banning all those transactions related to the management of the Central Bank's reserves and assets.
- Prohibitions on a range of financial interactions, financial rating services and transactions with Russia, as well as prohibitions on the provision of banknotes and sale of securities; decoupling of certain Russian banks from the SWIFT messaging system; prohibition on providing high-value crypto services and trust services; prohibition on providing trusts and on accepting deposits.
- Sanctions against individual persons and entities.

2. Sanctions were also imposed on Belarus. Some of these restrictive measures constitute capital flow management measures introduced for reasons of national or international security

Annex VII. Statistical Issues¹

European statistics are developed, produced, and disseminated within their respective spheres of competence by the European Statistical System (ESS) and the European System of Central Banks (ESCB). The ESS, composed of Eurostat and the national statistical institutes (NSIs), and the ESCB, composed of the European Central Bank (ECB) and the national central banks (NCBs), operate under separate legal frameworks and cooperate closely.²

1. European statisticians have responded flexibly to Covid-19, the war in Ukraine and euro area inflation unprecedented since the introduction of the euro.

- In July 2022, the ECB published an analysis concerning euro area linkages with Russia, based on balance of payments statistics.³ In October 2022 the ECB started publishing a subset of bilateral external statistics of euro area's countries vis-à-vis Russia.⁴ This additional granularity at quarterly frequency provides useful statistical detail for the topical analysis of cross-border transactions and positions between euro area countries and Russia.
- Eurostat published a number of methodological guidance notes and clarifications to provide guidance to national compilers and to help users to understand the possible statistical effects of measures taken by governments to mitigate the effects of high energy prices.
- Furthermore, the European Statistical System developed a template to identify the impact of energy related government policy measures on government revenue, expenditure and debt. Eurostat has developed guidance on the statistical treatment of these measures. The GFS data provided by countries is being closely monitored in order to ensure sound and comparable statistical treatments. In its data assessment, Eurostat is using the EU Recovery and Resilience Fund associated flows reporting template.
- For the period between 2020Q1 and 2022Q3 reference quarter, Eurostat collected and published metadata on the timing and severity of the COVID-19 impact on economy, estimation techniques used, as well as on the quality and reliability of the estimates. Explanatory metadata on government measures to alleviate the impact of high energy prices is progressively being published.
- On October 27, 2022, the ECB Governing Council decided⁵ to recalibrate targeted lending operations to help restore price stability over the medium term. The third series of targeted

¹ Prepared in consultation with Eurostat and the ECB.

² The ESS is defined by Article 4 of Regulation (EC) No. 223/2009 of the European Parliament and of the Council on European statistics. The ESCB's statistical function is based on Article 5 of the Statute of the ESCB and of the ECB.

³ See [box](#) part of the ECB Economic Bulletin, [Issue 7/2022](#).

⁴ An additional Tab "Focus on Russia" is also available in the dashboard of the [Balance of payments and international investment position](#).

⁵ https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr221027_1~c8005660b0.en.html

longer-term refinancing operations (TLTRO III) continue to be accompanied by additional data collection measures from the banking sector.

All Member States should ensure full and timely data transmissions under the European System of National and Regional Accounts (ESA) 2010 at the legal deadlines - Eurostat continuously monitors progress and prepares an annual Quality report on national and regional accounts⁶.

2. Eurostat and the ECB actively contributed to the discussions on the recommendations for the new G20 Data Gaps Initiative (DGI-3), as members of the Inter-Agency Group on Economic and Financial Statistics, and are cooperating closely on the continuation of the work in specific priority areas.

3. Eurostat and the ECB jointly support the Special Data Dissemination Standard Plus (SDDS Plus), the third and highest tier of the IMF's Data Standards Initiatives. By March 2023, 15 euro area countries (and 21 EU member states overall) had already adhered to the SDDS Plus.

4. Eurostat and the ECB continued their efforts to ensure the quality of statistics underlying the Macroeconomic Imbalance Procedure (MIP). According to the June 2022 ESS – ESCB quality assessment report on statistics underlying the MIP, while the COVID-19 outbreak had a certain impact on the ability of statistical authorities to collect and process data in the traditional manner, the ESS and the ESCB managed statistical production and dissemination according to schedule and with sufficient quality standards. Country visits resumed, with one virtual visit taking place in 2022 and two on-site visits planned for 2023.

5. In various areas of statistics, both the ESS and the ESCB are working to achieve further improvements in timeliness, coverage, and quality.

- *Climate change*
 - On 24 January 2023, the ECB published⁷ a first set of new climate-related statistical indicators to better assess the impact of climate-related risks on the financial sector and to monitor the development of sustainable and green finance, fulfilling another of the commitments of its climate action plan (announced in July 2021). Experimental indicators on sustainable finance provide an overview of debt instruments labelled as “green”, “social”, “sustainability” or “sustainability-linked” by the issuer that are issued or held in the euro area. Analytical indicators on carbon emissions financed by financial institutions provide information on the carbon intensity of the securities and loan portfolios of financial institutions, and on the financial sector’s exposure to counterparties with carbon-intensive business models. Analytical indicators on climate-related physical risks analyse the impact of natural hazards, such as floods, wildfires or storms, on the performance of loans, bonds and equities portfolios.

⁶ <https://ec.europa.eu/eurostat/web/esa-2010/esa-2010-implementation-and-data-quality>

⁷ <https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.pr230124~c83dbef220.en.html>

- The ESCB Statistics Committee's (STC) *Expert Group on the Climate-Change and Statistics* continues into its third phase, to further develop and enhance indicators on (1) exposure of financial institutions to climate-related physical risks, and (2) carbon footprints of the portfolios of financial institutions that are comparable across countries and over time.
- The European Commission has put forward a proposal to expand the coverage of European Environmental Economic Accounts, by adding new modules for forest accounts, environmental subsidies and ecosystem accounts.
- *National accounts*
 - Both Eurostat and the ECB are very active participants in the ongoing update of the System of National Accounts (SNA) and the Balance of Payments manual (BPM), as part of the joint international effort to complete these updates by 2025. Digitalisation, globalisation, non-bank intermediation and sustainable finance are emerging phenomena that are already posing challenges for the analysis of European economies.
 - Following the introduction of the preliminary (T+30) GDP flash estimates for the EU and the euro area in April 2016, and of the European employment flash estimates in November 2018, Eurostat and NSIs continued to work on advancing the first releases of these indicators. National GDP estimates are included in the preliminary flash GDP as more countries have advanced their publication.
 - The regular reporting exercise on the quality of ESA 2010 data transmitted by EU member states to Eurostat continued. Eurostat's assessment report on 2020 transmissions took into consideration the data coverage after all derogations for EU member states data transmissions expired.
 - To fully exploit the data available under ESA 2010 Transmission Programme, Eurostat and some EU member states extended the production and the publication of data. Notably, supported by task force with NSIs assessing additional indicators for labour, capital and multifactor productivity, Eurostat published additional productivity indicators by the end of 2021. Eurostat and some member states continued to work on regional investment for the general government sector, and a task force on fixed assets and estimation of consumption of fixed capital under ESA 2010 completed its review of assumptions underlying country estimates and recommendations for further harmonisation.
 - Following a first release in April 2018, the EU inter-country supply, use and input-output tables (FIGARO) for 2010-2020 were released in spring 2022 in current prices, according to the annual regular production.
 - Recommendations to improve the vertical consistency between the financial and non-financial sector accounts were developed by ECB, Eurostat and national experts and published in March 2022.⁸ Their implementation is planned by the time of the next coordinated benchmark revision in national accounts in autumn 2024. Eurostat is offering

⁸ "[Report on developing a common approach to improve vertical consistency](#)", ECB and Eurostat, March 2022, updated in July 2022.

financial support, in the form of grants, to countries for their work to reduce vertical discrepancies.

- In the autumn of 2021, Eurostat launched a new data collection round for experimental results for EU Member States regarding the distribution for income and consumption, inviting Member States to send their own estimates, and refined the methodology and extended the time scope of the centralised exercise. The most recent centralised and national estimates were published in June 2022. Moreover, in June 2022 a new Task Force was launched by Eurostat with the purpose to support European countries on the practical aspects of the compilation of household distributional accounts. Around 14 Member States are participating in the Task Force meetings, as well as OECD and ECB and DG EMPL and DG ECFIN are following the work. Finally, Eurostat is offering grants to support the countries' work on household distributional accounts.
- *Price statistics*
 - In 2022, Eurostat issued guidelines on the treatment in the HICP of measures taken by many governments to compensate households for high energy prices, with the aim to ensure a harmonised approach across Member States.
 - Eurostat plans to publish a statistical working paper on the inclusion of owner-occupied housing in the HICP, in response to recommendations issued by the ECB on this subject.
 - In October 2020, the first dissemination of quarterly house sales indices took place. Data on the value of house sales as well as the number of sales transactions are now available for a majority of EU countries.
- *Government finance statistics (GFS)*
 - Further progress has been made to enhance fiscal surveillance. Annual and quarterly GFS time series are available for all countries and data mapped to the GFSM 2014 are regularly provided to the IMF. European GFS are consistent with the data supplied under the Excessive Deficit Procedure, which undergoes strong verification. Progress in data availability was made on Classification of the Functions of Government (COFOG) data, as well as on more detailed annual non-financial data, financial instruments and breakdowns of government debt. Eurostat continues to publish data on contingent liabilities and non-performing loans of the government. The availability of GFS data is expected to increase following the implementation of the revised ESA 2010 transmission programme.
- *Financial accounts*
 - As part of the mid-term review of the ESA 2010 transmission programme, countries will be obliged to partially transmit annual financial accounts data 4 months after the reference year, starting from 2025.

- As part of the implementation of the medium-term strategy for quarterly financial accounts, the ESCB is improving the availability of data for the non-bank financial sector, to better capture the effects of globalization, on the distribution of household wealth and indirect holdings of assets, as well as the debt issuance of non-financial corporations via financing conduits.
 - The quarterly financial accounts published by the ECB include a new breakdown of other financial institutions into its subsectors other financial intermediaries, financial auxiliaries and captive financial Institutions and money lenders since October 2022. The sub-sectors data is available for the euro area and the national data of EU countries.⁹
 - ESCB users received first experimental results for the distributional wealth accounts for the euro area and selected countries at end-2021. Since then, the ECB has been disseminating the data every quarter at T+5 months, and the compilation has been extended to include six additional euro area countries (i.e. 17 euro area countries in total). Work is progressing toward external publication by end-2023.
 - Work on households' indirect holdings via investment funds and on the linking of securities issuance data of financing conduits which are wholly owned by non-financial corporations is progressing and scheduled to be finalised by 2023/2024.
- *External sector statistics*
 - As of May 2022, statistical information on Special Purpose Entities (SPEs) is included in the amended ECB Guideline on External Statistics (ECB/2011/13) for collection and transmission. The amendments reflect SPEs' increased relevance in international accounts in the last years and the need to meet demands for analysis in monetary policy and financial stability stemming from the consequences of globalisation and financial innovation. The first transmission of data relating to cross-border transactions and positions of euro area SPEs took place in March 2023 based on data for the fourth quarter of 2022. The back data from the first quarter of 2020 will be transmitted by September 2023.
 - The ESS and the ESCB have also continued their efforts to reduce asymmetries, particularly intra EU asymmetries on foreign direct investment (FDI). Quarterly "Asymmetry Resolution meetings" are taking place between those countries responsible for major bilateral EU FDI asymmetries. Countries are encouraged to use a dedicated tool (FDI network) to exchange relevant information about the major bilateral asymmetries.
 - With regard to Intra-EU trade in goods statistics, the exchange of micro-data on intra-EU exports between the EU Member States started in 2022. The NSIs can now use an additional data source to compile intra-EU trade in goods statistics. This data exchange will help to meet the end goals of modernization of intra-EU trade in goods statistics: reduction of the reporting burden while maintaining quality in international trade in goods statistics. Ongoing work addresses the asymmetries between intra-EU exports and imports statistics.

⁹ For further details see: "[Other financial institutions explained](#)".

- With regard to Extra-EU trade in goods statistics, the exchange of customs data between the EU Member States also started in 2022. EU customs rules allow traders to lodge a customs declaration in another Member State than where the goods are located. In such cases, customs data are exchanged so that the Member State where goods are located has access to customs data. This helps to improve quality of extra-EU trade in goods statistics.
- *Monetary and financial statistics*
 - In October 2022, the ECB finalised its review of the ECB Regulation on infringement procedures in cases of non-compliance with statistical reporting requirements. The reviewed Regulation establishes a harmonised framework for monitoring compliance with statistical reporting requirements, across different statistical domains and reporting frequencies and assessing procedures for alleged infringements in cases of non-compliance. It also clearly defines the roles of all stakeholders involved in the process and the responsibilities among competent authorities when assessing an infringement procedure.
 - The ESCB's long-term approach to banks' data reporting is to increase the efficiency of data collection from banks and to reduce their reporting burden, while continuing to provide policy makers and analysts with high-quality data. This approach consists of two elements (i) the Integrated Reporting Framework (IReF)¹⁰ seeks to integrate the Eurosystem's statistical reporting requirements addressed to banks. (ii) the Banks Integrated Reporting Dictionary (BIRD)¹¹ helps banks to efficiently organise information stored in their internal systems and to fulfil their reporting requirements. The Eurosystem had already conducted two cost-benefit assessments in relation to the IReF, with results published December 2021 and September 2022. An additional exercise will follow by end-July 2023, to allow for a comprehensive matching of costs and benefits based on the feedback received from all stakeholders.
 - In December 2021, the ECB Governing Council approved the launching of the Design Phase of the IReF, the start of the Investigation Phase is expected in 2023, to be followed by the Realisation Phase in 2025. Subject to the adoption of the IReF Regulation by the Governing Council in 2025, the IReF is expected to go live in 2027 (BIRD remains voluntary and will not be legislated).
 - The IReF is also a first step toward a broader initiative for an integrated reporting system for statistical, prudential and resolution data in the EU, as requested by the European banking industry and solicited by the European Parliament and the Council. The European Banking Authority (EBA), ECB, Single Resolution Board (SRB) and the European Commission have started cooperating in an Informal Coordination Group to further such integration. The cooperation among authorities is expected to be formalised through the creation of a Joint Bank Reporting Committee (JBRC) – involving the ESCB, the EBA, Single Supervisory Mechanism (SSM) and non-SSM national competent authorities, the SRB, national resolution

¹⁰ https://www.ecb.europa.eu/stats/ecb_statistics/co-operation_and_standards/reporting/html/index.en.html#IReF

¹¹ https://www.ecb.europa.eu/stats/ecb_statistics/co-operation_and_standards/reporting/html/index.en.html#BIRD

authorities and the European Commission, as outlined in the EBA feasibility study published in December 2021.¹²

- The IMF Statistics Department (STA) has been collaborating with the ECB since 1998 on the sharing, transformation, and dissemination of granular MFS data for the Euro area and individual EU countries, as part of the “Data Gateway” protocol. STA currently transforms the source data received from ECB to standardized report forms (SRFs) –1SR for central banks and 2SR for other depository corporations and disseminates the data via the *International Financial Statistics*. In the September 2021 meeting of the ECB’s Working Group on Monetary and Financial Statistics (WG MFS), STA and ECB agreed that ECB will start reporting the new SRFs aggregates to STA including the SRF-4SR for other financial corporations. The transmission of SRF aggregates by the ECB will start after the finalization of mapping of the new SRFs by the ECB, and in collaboration with the IMF and WG MFS.
- More than 130,000 multinational enterprise groups active in the EU are now part of the EuroGroups Register (EGR)—the central European register for multinational enterprise groups managed by Eurostat. The number of active entities maintained in the ESCB’s Register of Institutions and Affiliates Data (RIAD) is over 10 million.
- *Financial Soundness Indicators (FSIs)*
 - For the majority of Euro area and EU countries, FSIs are calculated based on the underlying data reported in standard FSI forms, using the EBA Guidance Note on compiling IMF FSIs using EBA’s Implementing Technical Standards (ITS) data. During 2022 STA has been collaborating with the EBA to review and update the mapping in the Guidance Note and ensure consistency with the methodology in the IMF’s *2019 FSIs Compilation Guide*. The updated Guidance Note will be used by the authorities in Euro area and EU countries as guidance for the FSIs reporting to IMF.

6. The ECB continued several projects to enhance the availability and quality of statistics based on new granular databases to support policy decisions.

- *Money Market Statistical Reporting (MMSR)*. The ECB started publishing new statistics on the overnight index swaps (OIS) in the euro money market based on MMSR data collected from 47 euro area banks. The data series include information on the OIS spot and forward markets about the total and daily average nominal amount and the weighted average rate. The new statistics complement data on the unsecured and secured money market segments, which have been published regularly since November 2017 and January 2019 respectively. The publication of the new statistics serves to enhance market transparency and therefore improve money market functioning.
- *Centralised Securities Database (CSDB)*. The new ECB Guideline on the CSDB and the production of securities issues statistics defines amended requirements for CSDB data quality management

¹² See “The ESCB input into the EBA feasibility report under Article 430c of the Capital Requirements Regulation (CRR 2)”, ECB, September 2020.

new requirements to produce securities issues statistics based on CSDB data. Following the adoption of the Guideline, the ECB started publishing new breakdowns for securities issues statistics by valuation method, maturity and interest rate type for all EU Member States. This is the first ESCB micro-to-macro dataset, whereby CSDB micro data are used to compile official macro statistics in line with international statistical standards. The data are available at a significantly enhanced timeliness.

- *Securities holdings statistics.* The ECB significantly extended the publication of securities holdings statistics with new breakdowns by individual euro area country, as well as by holder and issuer sectors. The new data provide a more timely and complete picture of the financial markets, allowing better monitoring of primary and secondary market activities.

7. Analytical credit datasets (AnaCredit Project). In October 2021, based on the experience after more than two years of AnaCredit data reporting, the ECB amended the Guideline on the procedures for the collection of granular credit and credit risk data. A concrete revision policy framework was established, as well as clarifications provided regarding the practical implementation of the AnaCredit feedback loop framework. This framework allows participant Eurosystem NCBs to share with their reporting agents sub-sets of AnaCredit data collected by other participant NCBs in order to enhance national credit register data, which would not cover loans granted by banks resident abroad. This allows reporting agents to obtain a more complete overview of the indebtedness of a debtor or prospective debtor.

8. Technical work by Eurostat is also ongoing toward modernizing and harmonizing public sector accounting in the context of the European Public Sector Accounting Standards (EPSAS). Ongoing technical work has focused on EPSAS reporting entity, potential future EPSAS structure and innovation in public sector financial reporting. The work continues toward laying the ground for a potential future proposal on EPSAS under the next Commission.

Statement by Mr. Buissé on Euro Area July 12, 2023

In my capacity as President of EURIMF, I submit this Buff statement on the euro area consultation on Common Euro Area Policies. It reflects the common view of the Member States of the euro area and the relevant European Union Institutions in their fields of competence.

The authorities of the euro area Member States and the EU Institutions are grateful for the open and fruitful consultations with staff and their constructive policy advice. The authorities are in broad agreement regarding new and existing risks and the high level of uncertainty surrounding the current outlook and the need for prudent fiscal policies aiming at medium-term debt sustainability, while continuing the efforts towards the green transition, energy security and boosting productivity and growth, including through reforms and investments.

More specifically, the authorities have the following comments on the Staff Report:

Economic outlook and risks

The authorities share staff's overall assessment of the euro area's economic outlook, with the economy showing remarkable resilience in a challenging global context. Europe's robust and timely, coordinated policy response has managed to contain the impact of the energy crisis triggered by Russia's war of aggression against Ukraine, in part thanks to a rapid diversification of supply and a sizeable fall in gas consumption. A record-strong labour market is bolstering the resilience of the EU economy, with the unemployment rate hitting historical lows, while participation and employment rates are at record highs. In light of the resilience of the labour market, the effects on long-term unemployment may be less pronounced than experienced in past shocks, leading to lower permanent output losses. Markedly lower energy prices are now working their way through the economy, albeit unevenly, reducing firms' input costs from their peak levels. Consumers are also seeing their energy bills fall, although private consumption is set to remain subdued as household incomes lag inflation.

The authorities agree with the Fund's assessment of the euro area's external position and concur that the deterioration in the current account balance in 2022 is likely to be temporary. A gradual increase in the current account balance is expected over the forecast horizon, as terms of trade improve, external demand strengthens, and the services sectors, particularly tourism, fully normalize. The euro area aggregate current account is likely to stay somewhat below pre-pandemic levels over the forecast horizon and some of the dispersion in external positions of Member States will persist although there is high uncertainty around the assessment.

Still, a slowdown is materialising, with prominent downside risks, in particular linked to geopolitical tensions, resurgence of inflation and renewed financial stress. Uncertainty surrounding the economic outlook has diminished, but remains elevated. More persistent core inflation could continue restraining the purchasing power of households and could require a more

restrictive monetary policy trajectory. Moreover, renewed episodes of financial stress could lead to a further surge in risk aversion, leading to stress in debt markets and a further tightening of lending standards. An expansionary fiscal policy stance might fuel inflation further, conflicting with monetary policy action. In addition, new challenges may arise for the global economy, related to wider geopolitical tensions. On the positive side, more benign developments in energy prices would lead to a faster decline in headline inflation, with positive spillovers to domestic demand.

Monetary policy and inflation outlook

The authorities share the Fund’s overall assessment of recent inflation dynamics. Euro area headline inflation has declined from its peak in October 2022 but is projected to remain too high for too long. The decline thus far reflected the easing of the shocks behind the surge in inflation, in particular supply bottlenecks and global commodity prices – particularly for energy. Indicators of underlying price pressure remain strong, although some show tentative signs of softening. Headline inflation is expected to continue its downward path, driven by unwinding energy and food inflation. In contrast, core inflation is expected to decline gradually as diminishing pipeline pressures are partly countered by increasing labour cost pressures. There is some heterogeneity of inflation across the euro area. Nominal wage growth is expected to remain above historical averages, gradually compensating for the loss in purchasing power. However, there is no sign of a self-sustaining price-wage loop at this stage and, going forward, firms’ profits may, in many cases, offer a buffer for wages to increase with limited or partially dampened second-round effects. Inflation expectations have remained well-anchored. Well-anchored inflation expectations are crucial for economic agents, notably to underpin well-ordered wage-formation processes and wage-price dynamics compatible with maintaining high employment over the medium term.

The ECB is determined to ensure that inflation returns to the two percent medium-term target in a timely manner. To that end, it has raised its key interest rates by 400 basis points since last July. A forceful transmission of monetary policy tightening to financing conditions can already be observed, while a considerable part of the impact on the economy and inflation is still in the pipeline. In parallel, reinvestments under the Eurosystem’s asset purchase programme (APP) have been discontinued as of July this year.

The ECB’s future decisions will ensure that its key interest rates will be brought to levels sufficiently restrictive to achieve a timely return of inflation to target and will be kept at those levels for as long as necessary. The ECB will continue to follow a data-dependent approach to determining the appropriate level and duration of restriction. In particular, interest rate decisions will continue to be based on the assessment of the inflation outlook, the dynamics of underlying inflation and the strength of monetary policy transmission. Barring a material change to the outlook, it is very likely that the ECB will continue to increase rates in July.

Fiscal policy

The authorities broadly agree with the Fund's views on fiscal policy in the euro area. Consistent fiscal and monetary policies will facilitate the task of taming inflation and will allow Member States to rebuild fiscal buffers. Member States should adopt prudent fiscal policies in 2023-24 to ensure medium-term fiscal sustainability and, considering the inflation challenges present in their economies, to support the task of monetary policy. Euro area Member States will achieve the necessary overall restrictive fiscal stance in the euro area for 2024 by the implementation of the fiscal recommendations. Emergency energy support measures should be wound down, using the related savings to reduce government deficits, as soon as possible in 2023-24. At the same time, fiscal policy must adapt to changing economic circumstances. Member States should also support potential growth through preserving investment financed by national budgets and ensuring the effective absorption of RRF grants and other EU funds, in particular given common priorities such as the green and digital transitions and defence capabilities. If a renewed shock were to cause energy prices to increase to very high levels again, any support measures taken in response should be targeted and preserve an overall prudent fiscal policy. They should also preserve incentives for energy savings.

Economic Governance Review

On 26 April 2023, the Commission presented legislative proposals to implement a comprehensive reform of the EU's economic governance rules. The Council of the EU has resolved to process possible next steps with a view to concluding legislative work in 2023. The Commission proposals aim to ensure sound public finances and prepare the EU for future challenges. A transparent and clear application would be key for a successful implementation. The Commission proposals also address the role of the national IFIs, and the Commission remains open to exploring how to strengthen the role of the independent European Fiscal Board while preserving the surveillance role conferred on the Commission. The authorities note the Fund's support for the swift adoption of reformed fiscal rules. The various elements are encompassed in ongoing discussions in the context of the legislative process. The fiscal guidance proposed by the Commission in May 2023 already reflects elements of its legislative proposals it has assessed as consistent with the existing legislation.

Structural reforms

The authorities agree with the Fund on the need to accelerate the green transition and for growth-enhancing structural reforms and investment. In this respect, progress has been made in the implementation of the RRP, albeit with uneven progress across Member States. It is very important that Member States accelerate the implementation of the RRP where needed, including by ensuring effective governance and adequate administrative capacity. The REPowerEU, the reformed ETS, and the Green Deal Industrial Plan (GDIP) are key to achieve energy security, reduce dependencies, and mitigate greenhouse gas emissions. An EU Climate Investment Fund could be valuable to help finance public investments with cross-border spillovers but, given possible political hurdles associated with establishing such a mechanism, the focus should be on implementation and absorption of the existing

instruments from various initiatives towards the implementation of the 2030 objectives in the Fit-for-55 package.

The GDIP Communication of the Commission sets out ambitious actions to accelerate the green transition and protect the competitiveness of the European clean tech industry. The Plan is based on four pillars: a predictable and simplified regulatory environment, speeding up access to finance, enhancing skills, and open trade for resilient supply chains. The Temporary Crisis and Transition Framework for state aid adopted in the context of the GDIP allow Member States to use flexibility foreseen under State aid rules to help speed up investment and financing for clean tech production in Europe. There is a risk that, given the uneven fiscal space in the various Member States, these flexibilities may adversely affect the level playing field within the EU. On the other hand, granting aid to match that received for similar projects by competitors located outside of the EU is subject to enhanced scrutiny and is given only after providing evidence of material relocation risks, consistent with the EU's commitment to a rule-based international trading system and to the WTO. In this context, the Commission has also proposed a Strategic Technologies for Europe Platform (STEP).

Openness and rules-based multilateralism are essential elements of trade policy. Trade openness is important to create opportunities for domestic and foreign industry providing access to important inputs. At the same time, to ensure sustainability of supply chains, de-risking through diversification is an important policy objective to strengthening resilience. To ensure the climate viability in the EU's trade, Carbon-border Adjustment Mechanism (CBAM) will be implemented gradually with a two-year transitional period from October 2023-26 where only reporting requirements will apply and a gradual phase-in from 2026-34, as free allowances under the EU ETS are phased out. The EU will continue engaging and helping its trading partners preparing to comply with the new regime. The CBAM will support global emission reduction efforts by encouraging cleaner industrial production. In addition, for the EU, WTO reform is a core element in our overall trade policy and the next WTO Ministerial Conference is a critical opportunity to advance the WTO reform agenda, in particular with a view to restoring a fully functioning WTO dispute settlement system.

Financial sector

Bank capital, liquidity, and profitability remain resilient. Banks have benefited from the so far limited pass-through of higher policy rates to deposit rates leading to higher profits from net interest income. Unrealised valuation losses from banks' securities portfolios at amortised cost, due to higher interest rates, are modest at aggregate level. The ongoing EBA-ECB bank stress test will be assessing bank resilience under an adverse scenario which considers a hypothetical aggravation of geopolitical tensions leading to stagflation.

While the banking system should be able to withstand the ongoing tightening cycle, vulnerabilities associated with tighter financial conditions nevertheless warrant continued monitoring. NPLs continue to decline thanks to NPL reduction strategies adopted over the last decade, but credit risk related to tighter financial conditions may materialize with a delay, as consumer, corporate and real estate loans could be exposed to an economic slowdown. As to the latter,

supervisors and macroprudential authorities are making considerable efforts to address vulnerabilities in real estate markets.

On 27 June 2023, EU co-legislators reached a provisional agreement on implementation of the final set of international Basel III standards. It will make EU banks even more resilient to possible economic shocks, while contributing to Europe's transition to climate neutrality. We recall that the EU applies Basel standards also to small- and medium-sized banks. Beyond the implementation of Basel III standards, the package also contains a number of measures to keep the EU prudential framework fit for purpose in terms of sustainability risks and in terms of supervision, including regarding third-country branches. It also provides stronger tools for supervisors overseeing EU banks.

The CMDI proposal is intended as an integral part of the Banking Union architecture, aimed at building a crisis management framework suited for all types of banks, including for small and medium-sized banks. The proposal is a response to the Eurogroup agreement of June 2022 which identified strengthening the common framework for bank crisis management and national deposit guarantee schemes as the immediate next step in its work on completing the Banking Union. Successful completion of the CMDI review could pave the way for possible further measures towards strengthening and completing the Banking Union. We note the Fund's assessment on the need for a European Deposit Insurance Scheme.

We share the Fund's assessment that non-bank financial intermediation (NBFi) requires close monitoring. Further work may clarify the use of regulatory tools for investment funds for macroprudential purposes and whether there is a case for more centralized coordination of such macroprudential tools in the EU. A report on the functioning of the EU money market fund regulation is being prepared by the Commission based on ESMA input.

In June, the Commission put forward a two-proposal 'single currency package' including a draft enabling framework for a possible future 'digital euro' and a proposal on legal tender and the availability of physical euro cash. A digital euro would operate as an additional form of currency – physical euro cash would continue to circulate in the economy. It would be provided by banks and other payment service providers, cheaply available and seamlessly usable throughout the euro area. Security, privacy, and inclusiveness would be key features. The legislative process is ongoing, and the ECB is continuing its investigation and development work. This work is still expected to take a few years before a decision can be taken on issuing the digital euro, based on the legal framework being in place. The EU will keep exchanging with the Fund and international partners on this important issue.

Since a strong European financial architecture is instrumental in attracting sustained investment, supporting innovation and job creation, and fast-forwarding the green and digital transitions, the EU is committed to deepen the Capital Markets Union. The Commission has reported on all elements included in its 2020 CMU action plan. The European Parliament, the current and incoming Presidencies of the Council of the EU, and the Commission pledged to finalise work on the legislative proposals in this area before the European Parliament elections in 2024. Five legislative proposals have already been agreed. The new rules on European long-term investment funds will apply

from January 2024 and the European Single Access Point platform is expected to be operational from summer 2027. Political agreement has been reached on CSDR, CRR/D and MIFIR recently, albeit some technical work is still required to finalise the agreement.

Strengthening AML/CFT supervision remains a priority. The AML package contains three pending acts to establish a single EU rulebook and to set up an EU AML Authority, while the regulation providing for the travel rule for Crypto Assets Service Providers has been published in the Official Journal on 9 June 2023.