Economic and Budgetary Outlook for the European Union 2022

Offering an overview of the economic and budgetary situation in the EU and beyond, and summarising the main economic indicators in the EU and euro area and their two-year trends, this study is the sixth in an annual series of ‘Outlooks’ produced by the European Parliamentary Research Service (EPRS). In seven chapters, the authors of the publication explain and analyse the EU annual budget and give an overview of its headings for 2022, all within the wider budgetary context of the EU’s post-2020 Multiannual Financial Framework (MFF) and the Next Generation EU (NGEU) recovery fund. This year’s special ‘economic focus’ puts the spotlight on some aspects of the ongoing economic recovery—namely, fiscal and monetary matters, labour issues and environmental choices—and aims to give a flavour of the discussion expected in the coming months.
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LINGUISTIC VERSIONS
Original: EN
Translations: DE, FR

Manuscript completed in January 2022.

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Executive summary

According to preliminary figures for 2021, gross domestic product (GDP) rebounded significantly in all EU Member States (by 5 per cent), and even exceeded last year’s more modest expectations. The European Commission expects euro-area and EU GDP growth to continue in 2022, but becoming more muted. This forecast depends on several variables, however, including whether the pandemic finally subsides, supply bottlenecks and/or material shortages, and inflation, which – against expectations – could remain high or increase further. Other risks identified could stem from the international environment (in particular China and Russia) or climate change (with extreme weather events likely to occur more frequently).

When it comes to employment, the national and EU measures, such as the temporary ‘Support to Mitigate Unemployment Risks in an Emergency’ (SURE) instrument, put in place early in the Covid-19 crisis helped to dampen its effects to a greater degree than expected in 2021. Moreover, unemployment is projected to decline further in the coming months. As was the case last year, this rebound in GDP and the diminishing unemployment figures are common to most major economies, although the rates vary slightly. In the course of 2022, the unemployment rate will depend on the timing and pace of the withdrawal of policy support schemes and on whether the economic recovery continues. Taking these factors into consideration, unemployment is expected to fall in the coming years.

As a result of the various measures put in place, general government deficits grew significantly in 2021. While these deficits are thought to have peaked, the debt-to-GDP ratio is expected to remain high, with levels in 14 Member States still higher than the Maastricht Treaty limit of 60 % in 2023. Therefore, it is expected that deficit and debt will be at the centre of discussions in the immediate future, as application of the general escape clause comes to an end, and also in the context of the review of the EU economic governance framework.

Similarly, in 2021, the European Central Bank (ECB) significantly expanded its holdings under the Asset Purchase Programmes and the Pandemic Emergency Purchase Programme. Following its Governing Council meeting in December 2021, the ECB is expected to ease off on these purchases, but the future pathway is not yet clear, as it depends on elements such as complete recovery from the crisis and the course of inflation. Indeed, following several years of low inflation, the strong resumption of economic activity in the EU has been accompanied by a swift pick-up in prices, with average inflation for the euro area in October 2021 at 4.1 % and strong variations between Member States. Inflation – as estimated in November 2021 – was expected to reach 2.4 % in 2021 in the euro area and 2.6 % in the EU as a whole, with similar trends in other major economies. This has led to a discussion regarding the nature of the current inflationary pressures and whether these transitory price pressures will become more persistent.

The pandemic has had a major impact on the design of the medium-term structure for EU finances, resulting in the adoption of an unprecedented budgetary package that combines the €1 210.9 billion multiannual financial framework (MFF) for the years 2021 to 2027 with the €806.9 billion Next Generation EU (NGEU) instrument. This new financial architecture has brought new momentum to the EU budget, assigning it a major role in the Union’s strategy to relaunch the economy. In addition, on the revenue side, the European Commission has proposed a package of new own resources that could generate an average total of up to €17 billion annually (in 2018 prices) for the EU budget over the years 2026 to 2030. This sum would help to repay the funds raised by the EU to finance the grant component of Next Generation EU.
The 2022 budget is designed to support the EU's recovery through investments, in addition to its other objectives. Although it is limited to €169.5 billion in commitments (1.14 % of EU-27 gross national income – GNI), it represents an important stimulus for public investment in several Member States, all the more so when considered in conjunction with NGEU, which is expected to provide an additional €143.5 billion. The EU budget includes a €1.6 billion reinforcement of flagship EU priorities, as negotiated and secured by the European Parliament. In this second year of both the 2021-2027 MFF and NGEU, the implementation of the new generation of EU actions and programmes is expected to gain momentum, while the programmes from the previous financing period, 2014 to 2020, approach closure. The green transition is an integral part of the recovery. It is estimated that, in 2022, the EU budget and NGEU will jointly contribute €165.3 billion to this objective. Other priorities supported by EU resources include cohesion and agriculture, the digital transformation, security and defence, migration and border management, and the EU's role in the world.

The focus of this year's edition of the Economic and Budgetary Outlook is recovery. Given the importance of the subject, two chapters are devoted to it (Chapters 6 and 7). The first deals with economic aspects of the recovery, while the second focuses on the Next Generation EU instrument and the Recovery and Resilience Facility.

The response provided by Member States and the EU to the pandemic, as well as the economic support provided to cushion the effects of lay-offs, preserve incomes and protect businesses, are the subject of this year's 'economic focus'. The fiscal and monetary reaction has been unprecedented, in terms of both approaches and volumes. It is described in detail, from the EU's recovery package (MFF and NGEU) of €2 018 billion, to the ECB's new Pandemic Emergency Purchase Programme of €1 850 billion. This leads on to a topical debate on the fiscal rules, on whether (and to what extent) debt-financed government spending should be kept in check, and on some of the proposals available. Furthermore, as governments shift from the 'rescue' to the 'recovery' phase, some possible ways to harness this phase, to support the transition towards sustainable economies, are explored.

The Covid-19 pandemic has caused significant labour market dislocation, with effects varying between countries, sectors and social groups, exacerbating the pre-existing inequalities and accelerating the transition towards automation and digitalisation. The EU's immediate 'rescue' policy response included job retention schemes, while – as economies have begun to recover – Member States have started to move towards long-term recovery measures. The recovery is expected to be unequal across sectors, and reallocation and other active labour market policies will play an important role. The Commission's recommendation on 'effective, active support to employment' (EASE) offers a strategy for a gradual transition towards a job-rich recovery, supporting job creation and job-to-job transition, for instance to the green and digital sectors.

Lastly, the EU's recovery response steers the transition towards climate neutrality, in line with the European Green Deal. To this end, an unprecedented volume of resources has been earmarked: 30 % of the EU's long-term budget and NGEU taken together has been allocated to addressing climate change and biodiversity protection. Moreover, all investments must uphold the 'do no significant harm' principle. The EU's green recovery areas are labelled 'Power up' (clean technologies and renewables), 'Renovate' (improvement of energy efficiency of public and private buildings) and 'Recharge and refuel' (sustainable, accessible and smart transport, charging and refuelling stations, and extension of public transport).

Overall, Next Generation EU – the recovery instrument financed through resources borrowed on the markets by the European Commission on behalf of the Union – represents a major innovation in EU
finances. Complementing ECB action and national stimulus packages, with a coordinated common fiscal response, NGEU significantly reinforces the resources channelled through EU budgetary instruments up until 2026. Its main expenditure tool, the Recovery and Resilience Facility (RRF), is implemented through national plans that comprise a coherent package of reforms and investments aimed at making the EU economy more sustainable, innovative and inclusive. To this end, the RRF focuses its action on six policy areas of European relevance identified as vital for strengthening the EU’s resilience, including the green transition (at least 37% of each national plan) and the digital transformation (at least 20%). The grant component of NGEU (up to €338 billion) is projected to be used entirely, whereas Member States have so far requested less than half of the available loan component (€166 billion out of €385.8 billion). While the RRF is already contributing to the EU recovery, 2022 is the first year of its full deployment, putting the focus on the importance of RRF implementation and monitoring, as underlined by the European Parliament. Lessons learnt from the RRF are likely to feed into the ongoing debate on the review of the EU’s economic governance framework.
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1. Introduction

According to preliminary figures for 2021, gross domestic product (GDP) rebounded in all Member States, exceeding previous more modest expectations. Overall, the increase in GDP in the euro area and the EU-27 in 2021 is projected to have increased by 5%. The European Commission expects euro-area and EU GDP growth to continue, hovering at around 4.3% in 2022, and 2.4 to 2.5% in 2023. When it comes to employment, two positive points are that (i) the measures put in place during the Covid-19 crisis helped to lessen the effects of the crisis to a greater degree than expected in 2021, and (ii) that it looks as though unemployment will continue to fall. This rebound in GDP and diminishing unemployment are common to most major economies, although the rates vary.

To protect the Member States’ economies from the economic crisis caused by the pandemic, Member States, the EU institutions and central banks in the EU have taken significant support measures. Fiscal measures are reflected in an increased deficit in the forecast, while government debt is on a similar path. The deficit and debt will probably be at the centre of discussions in the immediate future, as application of the general escape clause comes to an end, and in the context of the review of the EU economic governance framework. Similarly, the European Central Bank has expanded its holdings significantly under the Asset Purchase Programmes and the Pandemic Emergency Purchase Programme. In coming months, the Bank is expected to slow down its purchases, but the future course is not yet known, as it depends on elements such as complete recovery from the crisis and inflationary trends.

The main figures reflecting the economic situation in the EU and the euro area, and the two-year projections for the main economic indicators, are further developed in Chapter 2.

As in last year’s edition, the study goes on to present the EU budget, its nature and its role (Chapter 3), before providing an overview of the 2022 budget (Chapter 4) and the design of EU finances after 2022 (Chapter 5).

The 2022 budget represents 1.14% of EU gross national income (GNI) – the €170.6 billion in total payments agreed represents 10% of annual public expenditure of Germany (in 2020). The commitments adopted for 2022 total €169.5 billion. However, the Next Generation EU (NGEU) temporary recovery instrument significantly increases the resources channelled through the 2022 EU budget, adding an estimated €143.5 billion in commitments and €78.0 billion in payments. For both the EU budget and NGEU, the major priority is to support the economy in its recovery by mobilising investments in areas crucial for the EU’s resilience. At the same time, the EU budget will continue contributing to the achievement of other objectives, both traditional and new, in such areas as the green and digital transition, cohesion and agriculture, security and defence, migration and border management, and the EU’s role in the world.

The focus of this year’s edition is recovery. Given the importance of the subject, two chapters are devoted to it (Chapters 6 and 7). Chapter 6 focuses on four main areas of the recovery – fiscal and monetary matters, labour issues and environmental choices – and aims to give a flavour of the discussion expected in the coming months. Chapter 7 focuses on a key new instrument for the recovery, Next Generation EU and its Recovery and Resilience Facility, presenting their features, uptake so far and possible implications for the future.
2. EU economy

2.1. Temporary rebound or lasting recovery?

Following the *annus horribilis* that was 2020, tentative results for 2021 indicate that the EU enjoyed a strong economic rebound based on the vaccination programme and the reopening of the economy. A quick comparison of the main economic variables between the Commission’s autumn 2020 Economic Forecast¹ and the recent autumn 2021 Economic Forecast² (see Table 1 below) could indeed be cause for moderate optimism: compared with last year’s projections, the updated estimates are more encouraging, except for a slight increase in the expected deficit and inflation rates for 2021.

<table>
<thead>
<tr>
<th>Estimates for EU-27</th>
<th>Up to date for 2020</th>
<th>2020 estimates for 2021</th>
<th>Updated estimates for 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>-5.9 %</td>
<td>4.1 %</td>
<td>5.0 %</td>
</tr>
<tr>
<td>Unemployment</td>
<td>7.1 %</td>
<td>8.6 %</td>
<td>7.1 %</td>
</tr>
<tr>
<td>Deficit</td>
<td>6.9 %</td>
<td>6.1 %</td>
<td>6.6 %</td>
</tr>
<tr>
<td>Debt</td>
<td>91.8 %</td>
<td>94.6 %</td>
<td>92.1 %</td>
</tr>
<tr>
<td>Inflation</td>
<td>0.7 %</td>
<td>1.3 %</td>
<td>2.6 %</td>
</tr>
</tbody>
</table>


The Commission is projecting significant growth for the European Union (EU) and euro-area economies in 2021, with year-end gross domestic product (GDP) estimates at 5.0 % for both the euro area and the EU-27. The rebound should continue in 2022, (4.3 % for both the euro area and the EU), and be slightly muted in 2023 (2.4 % for the euro area and 2.5 % for the EU).³

When it comes to employment, the measures put in place in the EU sufficed to dampen the effects of the crisis to a greater degree than had been projected (see also chapter 6). Unemployment in 2021 is expected to be 7.1 % for the EU (the November 2020 estimate for 2021 was 8.6 %) and 7.9 % for the euro area (November 2020 estimate: 9.4 %). The numbers are expected to further decrease in the coming years, with 6.7 % (EU) and 7.5 % (euro area) for 2022 and 6.5 % and 7.3 % respectively in 2023.

Another major consequence of the pandemic-induced economic crisis are the extraordinary fiscal interventions at national (and EU) level, resulting in one of the few indicators where numbers for 2021 exceed the 2020 projections for the same period: the general government deficit is expected to reach 7.1 % in the euro area and 6.6 % in the EU for the year. Going forward, however, the general government deficit is expected to decrease significantly, with projections at 3.9 % in the euro area and 3.6 % in the EU for 2021; and 2.4 % and 2.3 % respectively for 2022.

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Despite the aforementioned greater than expected deficit for 2021, the debt-to-GDP ratio is projected to increase very moderately, reaching 100% for 2021 in the euro area (versus 99.3% in 2020) and 92.1% for the EU (versus 91.8% in 2020). It is then expected to decrease (albeit very slowly) to 97.9% and 90.0% respectively in 2022, and further to 97.0% and 89.1% in 2022.

Another indicator that might be surprising, both based on November 2020 projections and when set against general trends, is inflation. For the euro area, inflation is projected to reach 2.4% in 2021, before decreasing slightly to 2.2% in 2022 and 1.4% in 2023. Similarly, for the EU inflation should hover around 2.6% for 2021, before decreasing slightly to 2.5% in 2022 and 1.6% in 2023.

2.2. Main indicators

2.2.1. Gross domestic product

As mentioned in the introduction to this chapter, the EU enjoyed a strong economic rebound in 2021, based on the vaccination programme and the reopening of the economy. The reopening of the economy was underpinned, in turn, mainly by an increase in private consumption (3.5% compared with -7.3% the previous year) and investment (5.5% compared with -6.3% in 2020) as well as by a positive contribution from net exports, which itself is the result of growth among the EU’s major trading partners, as well as in global trade. The figures for the euro were somewhat less pronounced, with 3.2% for private consumption and 5.2% for investment.

Going forward, private consumption is set to further increase by 5.5% in 2022 and 2.3% in 2023 in the EU while increasing at a similar pace in the euro area (5.5% in 2022 and 2.2% in 2023). Investment should be supported by the accommodative monetary policy of the European Central Bank (ECB) and projects implemented in the context of the Next Generation EU (NGEU) instrument and the Recovery and Resilience Facility (RRF). At the same time, firms’ weaker financial positions (e.g. debt burdens) induced by the crisis, and a possible increase in corporate insolvencies, will dampen corporate investment. As a result, investment is projected to grow a bit less, i.e. by 4.8% in 2022 (4.4% in the euro area) and 4.1% in 2023 (3.9% in

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5 Companies were prevented from going through with existing spending plans in light of the sudden halt in activity. Moreover, in a similar way to what happened with private consumption, uncertainty led to a ‘wait-and-see’ approach.
6 European Commission, ibid.
7 For more information on Next Generation EU, see chapter 7.
the euro area). Lastly, exports in the EU are forecast to increase by 7.2% (7.3% in the euro area) in 2022 and 5.3% (5.2%) in 2023.

The importance of investment

Unlike in the case of the great financial crisis, recovery from the Covid-19 pandemic is expected to be supported by expanding public investment. According to the 2021 stability programmes, the vast majority of euro area countries are planning to enhance the resources available for government investment, which the economic literature tends to view as a particularly growth-friendly category of government expenditure. The share of public investment in GDP is expected to increase from its pre-crisis level, from 2.8% in 2019 to 3.3% in 2023. This is in stark contrast to the years following the great financial crisis when many euro area countries pursued fiscal consolidation measures that focused largely on cutting government investment: over the 2009-2013 period the share of government expenditure on government gross fixed capital formation in GDP dropped from 3.7% to 2.9% in the euro area, with some of the largest reductions being recorded in those countries in greatest need of fiscal consolidation. By contrast, the increase in investment planned for the coming years will come mainly from NGEU, and principally the RRF, thus providing euro area countries with an ideal opportunity to support their recovery with policies that increase the growth potential of their economies (see Chapter 7).9

2.2.2. Labour market

In 2020, the coronavirus crisis led to a decline in the labour force, a fall in employment and an increase in unemployment, with the impact on men and women differing over time.10 The decline in employment was strongest for temporary employees, the young, and workers with low levels of education. To cushion the blow, Member States’ governments introduced policies to support the labour market, with a particular focus on job retention schemes in the form of short-time work and temporary lay-offs.11 Those schemes helped to reduce firms’ liquidity needs, while allowing them to resume activity more swiftly after the lockdown by keeping employment relationships intact. These policy

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11 Some Member States introduced new short-time work schemes and others overhauled existing schemes by increasing the relevant amounts, broadening eligibility and reducing the administrative burden of accessing the schemes.
measures were supported by the new EU Instrument for Temporary Support to Mitigate Unemployment Risks in an Emergency (SURE).12

As a result, EU unemployment rose only slowly,13 in sharp contrast to developments in the United States (US) where part of the adjustment occurred via the temporary laying-off of workers.14 It must be noted, however, that a contributing factor for the more gradual rise in EU unemployment rates is the high number of workers transitioning into inactivity.15 16

In 2021, labour market conditions in the EU improved markedly: both headcount employment and hours worked increased. At the same time, the number of workers benefiting from job retention schemes fell and the unemployment rate decreased further, albeit slowly. Tentative numbers for 2021 indicate an unemployment rate of 7.9 % for the euro area and 7.1 % for the EU as a whole. Nevertheless the recovery is progressing unevenly, across sectors and Member States alike.17 The crisis is still affecting the young and those with a lower educational attainment more intensely.18

Going forward, the Commission expects unemployment to fall further, albeit at a moderate rate, reaching 7.5 % in the euro area and 6.7 % in the EU in 2022, before further retreating to 7.3 % and 6.5 % respectively in 2023.19

### 2.2.3. Public finances

National authorities have deployed unprecedented fiscal support to protect workers and businesses from the crisis caused by the pandemic. Measures taken to protect employment and support workers have included expanding health spending, providing direct income assistance, expanding job-retention programmes and strengthening unemployment insurance. To support corporations, governments have approved tax deferrals, loan guarantees and

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12 SURE has a support fund of up to €100 billion. At the time of writing, the Council has approved a total of €90.3 billion in financial support for 18 Member States.
13 The unemployment rate reached 7.7 % in August 2020 and thereafter declined.
14 These workers are considered unemployed in the US, whereas in the euro area, in most cases, those affected by short-time work schemes or temporary lay-offs remain on the payroll and are not therefore considered unemployed.
15 Lockdowns and other containment measures suppressed demand for labour and discouraged the search efforts of some workers who lost their jobs and transited directly into inactivity.
17 By way of example, Poland and the Netherlands have unemployment rates hovering around 3 to 3.5 %, whereas the figures for Greece and Spain are closer to 15 %.
direct equity injections. These measures were taken following the unprecedented activation of the general escape clause for the stability and growth pact (SGP) in March 2020. As a result, in 2021, most Member States’ fiscal deficits are projected to exceed the 3% annual budget deficit limit prescribed by the SGP (the numbers are -7.1% for the euro area and -6.6% for the EU). Going forward, the deficits are expected to decrease significantly to -3.9% in 2022 and -2.4% 2023 for the euro area and -3.6% and -2.3% respectively for the EU as a whole. However, by the end of the forecast horizon, under a no-policy change assumption, 10 countries are still forecast to have an annual deficit above 3% of GDP.

This decrease in projected deficits reflects the resumption of economic activity, the winding down of pandemic-related emergency measures, and measures that are expected to be financed under NGEU and the RRF.

The aggregate general government debt-to-GDP ratio was on a declining path between 2014 and 2019, when it reached 85.5% of GDP in the euro area and 78.8% in the EU. As a result of the significant measures taken to counter the pandemic in 2020, the debt-to-GDP ratio rose significantly and reached 99.3% in the euro area and 91.8% in the EU. It is forecast to increase marginally to 100.0% in the euro area and 92.1% in the EU as a whole for 2021. Going forward, it is expected to decrease to 97.9% in the euro area and 90% in the EU in 2022 and, eventually, to 97% in the euro area and 89.1% in the EU in 2023. By then, six Member States will have debt exceeding 100% of GDP, while fourteen Member States will have debt exceeding the Maastricht debt criterion of 60% of GDP.

2.2.4. Trade

Following a slowdown in growth at the end of 2019, global trade contracted sharply in 2020 as a result of measures taken around the world to contain the pandemic and the resulting drop in demand. World merchandise trade volumes (excluding the EU) decreased by 8.9% in 2020, in marked contrast with previous years (0.8% decrease in 2019, 4.2% increase the year before).

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21 The only exceptions are Denmark, Luxembourg and Sweden, with deficits around or below 1% of GDP. Several Member States are set to show very high deficits, with Malta expected to run the highest deficit (11.1% of GDP).


23 Belgium, Greece, Spain, France, Italy, Portugal.

24 Belgium, Germany, Greece, Spain, France, Italy, Cyprus, Malta, Austria, Portugal, Slovenia, Finland, Croatia and Hungary.

Following a resumption of trade activity, they are projected to rebound strongly by 9.3 % in 2021, and more moderately by 6.1 % in 2022 and 4.5 % in 2023.26

Similarly, after gradually slowing down in 2018 (4 %) and 2019 (2.4 %), the EU export market growth crashed (-8.8 %) in 2020. With the resumption of trade activity, it is expected to rebound to 8.9 % in 2021, before moderating at 6.8 % in 2022 and 4.7 % in 2023.

After reaching pre-pandemic levels in the last quarter of 2020, global trade in goods continued to grow faster than expected in the first half of 2021, with consumer demand for goods holding up as pandemic restrictions limited the scope for spending on services. Recent data suggest a slowdown in merchandise trade growth, hampered by transport and supply-chain disruptions and a reorientation of spending towards services. In addition, shipping costs surged on the back of strong demand and pandemic-related closures of factories, ports and labour shortages.27

Global trade in services is still below pre-pandemic levels, in particular due to travel services remaining depressed. An increase in global vaccination rates and a reduction in travel restrictions are set to support global service trade growth, which is, however, not expected to reach annual pre-pandemic levels over the forecast horizon.28

2.2.5. Developments at global level

After falling by 2.9 % in 2020, the Commission expects global GDP growth (excluding the EU) to reach 5.8 % (virtually unchanged from the 5.9 % spring forecast) in 2021 as a result of the gradual reopening of the economies. This aggregate picture, however, masks a highly differentiated picture both between and across advanced and emerging market economies.29

The international environment is also changing quickly. Vaccination programmes and the reopening of the economy are only part of the story. To begin with, many countries do not have enough vaccines to protect a significant part of their population and, therefore, remain vulnerable to lockdowns. Others, such as China, are pursuing a zero-Covid policy despite a high vaccination rate; this continues to prompt localised interruptions in economic activity in cases of clusters. Given the economic interconnections between various countries, such differences mean that there is not one recovery for all, and that recoveries do not take place at the same pace.30

In its autumn 2021 forecast, the Commission projected that the global economy (excluding the EU) would grow by 4.5 % in 2022 and by 3.7 % in 2023.31 These forecasts however need to be read in conjunction with the possibility of new Covid variants such as Omicron having an impact on the reopening of local economies as well as on global trade.

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29 European Economic Forecast – Autumn 2021, op. cit., p. 11.
United States

The US economy is expected to grow by 5.8% in 2021. The main drivers of GDP growth were private consumption and investment, partially helped by the rolling out of vaccines and the adoption of the American Rescue Plan. Growth is forecast to slow to 4.5% in 2022, and then to 2.4% in 2023.

After jumping from around 4% to 8% in 2020, the unemployment rate is expected to fall steadily, reaching 5.4% in 2021, and 3.8% in late 2022, before dropping even further in 2023 to 3.4%.

Similar to the EU, headline Consumer Price Index (CPI) inflation increased significantly in 2021 to around 5% in the summer and autumn, driven by high energy prices and supply constraints, as well as rising housing rents and wage pressures in some sectors (leisure and hospitality). Inflation was expected to remain elevated for a few months and then level off in 2022, going back towards 2% by 2023. In this context, there is a discussion in academic and policy-making circles about the divergence in EU-US inflation trends and the extent to which these trends are temporary or perennial. While the divergence between EU and US inflation trends seems clear, the question as to whether inflation is temporary or entrenched is still open to debate.

The Federal Reserve’s new monetary policy framework allows for some temporary overshoot of the 2% personal consumption expenditures (PCE) inflation target. In this context, at its November 2021 meeting, the Federal Open Market Committee of the US Federal Reserve decided to keep the target range for the federal funds rate at 0 to 0.25%. It also decided to begin reducing the monthly pace of its net asset purchases by US$10 billion for Treasury securities and US$5 billion for agency mortgage-backed securities.

On the fiscal front, the general government deficit-to-GDP ratio is set to fall from 15.8% of GDP in 2020 to 11.4% in 2021 and then to around 7.9% in 2022 and 6.8% in 2023. Similarly, general...
government debt, which jumped from 108.5 % in 2019 to 127 % in 2020, was set to hover around 129.3 % in 2021, and 128.6 % and 129 % of GDP in the following three years.42

United Kingdom

United Kingdom (UK) GDP is forecast to grow by 6.9 % in 2021, driven by private and public consumption.43 Going forward, business investment is expected to increase strongly, but private and government consumption are set to slow and imports will exceed exports. At the same time, public investment is projected to rise over the course of the next two years, reflecting planned spending increases on infrastructure and climate.44 Taking into account the aforementioned factors, growth is projected to slow to 4.8 % in 2022, in the context of supply disruptions and high inflation, and to 1.7 % in 2023.45 The unemployment rate in 2021 is projected to increase to 4.9 % (from 4.5 % in 2020), before falling to 4.7 % in 2022 and 4.4 % in 2023.

The general government deficit was expected to remain close to 10 % in 2021, as government support remained high.46 As the economy recovers and fiscal support is scaled back, the deficit is projected to fall to 5.5 % in 2022 and 4.5 % in 2023. As for the general government debt-to-GDP ratio, it is projected to increase to 103 % in 2021 (from 102.3 % in 2020), 103.9 % in 2022 and 104.9 % in 2023.47

Consumer price inflation is forecast to hover around 2.4 % in 2021, owing, in particular, to the increase in energy prices. This inflation is expected to reach 3.2 % in 2022 before falling back to 2.2 % in 2023, as energy prices are expected to fall and supply pressures ease.

The Bank of England lowered its official Bank Rate to 0.1 % in March 2020 and increased the total target stock of asset purchases to £895 billion (£875 billion for government bond purchases and £20 billion for corporate bond purchases – about 44 % of GDP in 2020)48 to support the economy during the pandemic.49 At its meeting ending on 2 November 2021, the Monetary Policy Committee judged that the existing stance of monetary policy remained appropriate and thus maintained the Bank Rate at 0.1 % and quantitative easing at £895 billion.50

Japan

In Japan, real GDP growth for 2021 was forecast at 2.4 %, in the context of sustained fiscal support and recovering global demand, but also virus outbreaks and the extension of containment measures that delayed the full reopening of the economy. A variety of measures supported households and businesses affected by the pandemic, notably the 'employment adjustment subsidy', cash benefits for SMEs and concessional loans.51 These measures successfully kept

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44 United Kingdom Economic Forecast Summary, OECD, December 2021.
46 The UK government supported the economy during the pandemic with fiscal measures amounting to about 19 % of GDP, including income support for employees, self-employed workers and businesses.
49 For more information, see the dedicated Bank of England website page on quantitative easing.
50 Monetary Policy Summary and minutes of the Monetary Policy Committee meeting, Bank of England, November 2021.
unemployment low and prevented widespread business failure.\textsuperscript{52} Going forward, GDP growth is set to slow down slightly to 2.3 % in 2022 and more to 1.1 % in 2023.\textsuperscript{53} This is happening in the context of scaled-back fiscal support as authorities plan to limit deficits\textsuperscript{54} in order to tackle ever-increasing public debt, which stood at a record 257 % of GDP in 2021.

During the crisis, the Bank of Japan provided ample liquidity to stabilise the markets, sustain lending to corporations and support the economy. However, going forward, space for additional monetary policy support might be constrained given the negative interest rates\textsuperscript{55} and sizable direct involvement of the Bank of Japan in domestic asset markets. At the same time, the annual consumer inflation rate is expected to turn negative in 2021, reflecting the impact of the pandemic and one-off price reductions and subsidies. Inflation is set to inch up gradually over the forecast horizon but to remain below the Bank of Japan target of 2 % for the foreseeable future.\textsuperscript{56} In this context, at its most recent meeting, the Bank decided\textsuperscript{57} to continue with the monetary easing under quantitative and qualitative monetary easing with yield curve control.

China

In China, real GDP growth in 2021 was forecast at 7.9 %, despite the expected slowdown in the second half of the year. GDP growth is expected to level off to 5.3 % in 2022 and 2023 in line with its pre-pandemic trend, weighed down by declining productivity growth, an excessively leveraged corporate sector, geopolitical tensions and the increasing policy prioritisation of longer-term economic and social objectives over short-term growth.\textsuperscript{58}

Investment growth, which helped sustain economic growth in 2020,\textsuperscript{59} is showing mixed signals. On the one hand, strategic industries (e.g. semiconductors) are expected to benefit from strong government investment support, and access to finance may also ease private investment. On the other, both real estate and infrastructure investment are starting to face increasing challenges. Indeed, housing demand is showing signs of levelling off, on account of demographic change, tighter financing conditions for mortgages, and very high housing prices in higher-tier cities. In addition, the regulations adopted to rein in real estate investment (the so-called three red lines relating to financial ratios and caps on real estate lending by bank type), and to deflate the bubble that was forming, have tightened liquidity conditions for property companies and even pushed some large ones to default on their debt.\textsuperscript{60} Moreover, a slowdown in property sector growth is projected to impact local government capacity to maintain high infrastructure investment.\textsuperscript{61}

China’s policy focus recently shifted towards tighter managing of corporate indebtedness, (corporate debt has stabilised at around 160 % of GDP),\textsuperscript{62} delivering on the ambitious goal of carbon
neutrality by 2060, stricter regulation of the internet economy, and addressing high wealth disparities in the country through ‘common prosperity’. Fiscal policy is accommodative, with a public sector deficit estimated at above 15% of GDP and total-debt-to-GDP at around 290% of GDP.\textsuperscript{63} Going forward, fiscal spending is likely to become subdued, as local governments face tighter financing conditions. The Commission is of the view that such measures will probably slow down growth in the short term, but could help to rebalance the economy.\textsuperscript{64} Lastly, monetary policy is expected to balance the need to reduce financial market risk and indebtedness against the need to maintain macroeconomic stability and ensure that firms can service their debts. In this context, policy rates remained unchanged in 2021 and, in the short-term, no anti-inflation measures are expected.\textsuperscript{65}

**Russian Federation**

Russian GDP was expected to rise by around 3.7% in 2021 on the back of increased private consumption and fixed investment,\textsuperscript{66} helped by global economic growth, lighter restrictions compared with 2020 (despite a major Covid-19 wave in summer 2021), and higher export volumes and oil prices\textsuperscript{67} supported by the relaxation of production ceilings under the OPEC+ agreement.\textsuperscript{68}

At the same time, until October 2021, consumer price index (CPI) inflation rose to 8.1%, as the Russian economy had to cope with high consumer demand, rising commodity prices and ongoing supply bottlenecks. As a result, the Central Bank of Russia began tightening monetary policy, raising the policy rate six times from March 2021, to 7.5% by the end of October 2021. Going forward, continued high commodity prices are expected to support increased domestic expenditure in 2022. Nevertheless, continued Covid-19 controls are likely to weigh on growth next year, as vaccination continues relatively slowly, and the tighter interest rates needed to control inflation will also limit demand. GDP is forecast to be 2.4% in 2022 and to fall to 1.8% by 2023.\textsuperscript{69}

**India**

Prospects of an economic rebound in India are firming up as GDP is set to expand by 9.4% in 2021 and 8.1% in 2022, before levelling off to 5.5% the following year. Activity is supported by the increasing pace of vaccination, which is boosting consumer confidence, and the inflation slowdown,\textsuperscript{70} which is protecting purchasing power.\textsuperscript{71} Going forward, however, growth should slow down, given the negative impact that the pandemic has had on growth drivers, such as business investment in new machinery. In addition, an acceleration in the CPI, caused by rising commodity prices and supply disruptions, could weigh on growth and increase inequalities.

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\textsuperscript{63} **BOFIT Forecast for China**, Bank of Finland Institute for Emerging Economies, September 2021.

\textsuperscript{64} **European Economic Forecast – Autumn 2021**, European Commission, Institutional Paper 160, November 2021, pp. 142-143.

\textsuperscript{65} **BOFIT Forecast for China**, Bank of Finland Institute for Emerging Economies, September 2021.

\textsuperscript{66} **BOFIT Forecast for Russia**, Bank of Finland Institute for Emerging Economies, September 2021.

\textsuperscript{67} Oil prices rose in 2021, about 60% higher than a year earlier in September 2021.

\textsuperscript{68} The Organization of Petroleum Exporting Countries (\textit{OPEC}) was founded in Baghdad, Iraq, in September 1960. Currently, the Organization has a total of 13 member countries, namely: Angola, Congo, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, United Arab Emirates and Venezuela. The OPEC+ alliance is a loosely affiliated entity consisting of the 13 OPEC members and 10 of the world’s major non-OPEC oil-exporting nations, which include Russia, Sudan and Kazakhstan.


\textsuperscript{70} Consumer price inflation stood at 4.5% in October 2021, a significant decline from a year ago, where it stood at 7.6%.

\textsuperscript{71} **India Economic Snapshot**, Economic Forecast Summary, OECD, December 2021.
Brazil

GDP growth was projected to reach 5% in 2021, but to slow down to 1.4% in 2022 and 2.1% in 2023. The vaccination campaign has accelerated and economic activity, underpinned by private consumption and investment, restarted as restrictions were lifted. Exports have benefited from the global recovery, robust demand for commodities and a weak exchange rate. However, supply bottlenecks, lower purchasing power, higher interest rates and policy uncertainty have slowed the pace of the recovery. The labour market is recovering with some delay and unemployment is still above pre-pandemic levels.

Inflation has risen significantly in recent months. It was expected to hover around 7.8% in 2021, more than double the previous year. Among the contributing factors were the increase in logistical and transportation costs, global value chain bottlenecks, the country’s hydro-power crisis, policy uncertainty and increasing fiscal risk. The rise in inflation prompted the central bank to increase policy rates from 2% in March 2021 to 7.75% in October.

2.3. Inflation and monetary policy

2.3.1. Inflation

Following several years of low inflation, the strong resumption of economic activity in the EU has been accompanied by a swift pick-up in the harmonised index of consumer prices (HICP), with the average for the euro area in October 2021 at 4.1% and strong variations between Member States. Inflation was expected to reach 2.4% in 2021 in the euro area and 2.6 in the EU. While an increase was expected, recent inflation numbers have repeatedly exceeded expectations. Those readings have led many observers to re-assess the nature of the current inflationary pressures and ask whether those transitory price pressures will prove more lasting (see below). However, as of November 2021, both the ECB and the Commission were of the view that, going forward, inflation should slow, reaching 2.2% in the euro area and 2.5% in the EU in 2022 and 1.4% and 1.6% respectively in 2022.

The strong pick-up in inflation since early 2021 is to some extent a mechanical response to the fading out of the deflationary forces that pushed inflation down during the early stages of the pandemic. At the current juncture, however, prices are not just reverting to the long-term trend, but registering increases that go beyond that trend.

For the EU at least, the current upswing in inflation is due mainly to a surge in energy prices (>50%). Factors that have contributed to the extraordinary surge in gas prices in Europe include strong demand as the economies reopened, reduced stocks after a cold winter, limited supply from Russia and exceptionally weak wind- and hydropower production. Supplies of shippable liquefied natural

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72 Brazil relies on hydropower for two thirds of its electricity supply.
74 According to Eurostat, the harmonised index of consumer prices, abbreviated as HICP, is ‘the consumer price index as it is calculated in the European Union (EU), according to a harmonised approach and a single set of definitions. It is mainly used to measure inflation’.
75 Aggregate rates continue to conceal significant disparities between Member States. For example, in October 2021, the euro area Member State with the lowest inflation was Malta (1.4%) and the one with the highest rate was Lithuania (8.2%).
gas (LNG) have also been tight, amid rising demand from Asia. Finally, the impact of rising carbon emission prices have also played a (smaller) role. As a result, the price of natural gas rose from just above €7 per megawatt hour (MWh) in April 2020 to around €90/MWh by the cut-off date. In turn, higher gas prices spilled over to wholesale electricity prices.\textsuperscript{79} Wholesale electricity prices rose from just below €20/MWh in April 2020 to around €150 by the cut-off date for the Commission outlook, and are only expected to come down to around half that by early spring 2022.\textsuperscript{80}

Other important factors in current inflation include supply bottlenecks (>10 %); the rebound in contact services (hotels, restaurants >10 %) and temporary changes in taxation (e.g. value added tax in Germany). Given that the aforementioned factors should be temporary, for the moment the ECB and the Commission share the view that inflation dynamics should ease in the short term and slowly revert to their previous trends. Possible inflation risks going forward may be general, e.g. a deceleration – or even reversal – of globalisation, and cross-border fragmentation of production.\textsuperscript{81} They may also be specific, e.g. the impact on food prices of bad harvests,\textsuperscript{82} or, more generally, that of climate change on available agricultural land and food production.\textsuperscript{83}

\subsection{2.3.2. Monetary policy}

The ECB has maintained an accommodative monetary policy stance in recent months in order to preserve favourable financing conditions for the real economy. In July, the ECB revised its forward guidance on policy rates in light of its new monetary policy strategy adopted the same month.\textsuperscript{84} The revised forward guidance indicates in particular that the ECB will keep its main interest rates at their present level or lower until it sees inflation reaching 2 % well ahead of the end of its projection horizon. It also judges that developments in underlying inflation are consistent with inflation stabilising at 2 % over the medium term.

In September and December 2021, the ECB left its main monetary policy instruments unchanged. Refinancing operations, notably the third series of the targeted longer-term refinancing operations (TLTRO III),\textsuperscript{85} will continue to provide liquidity for euro area banks to support the flow of credit to households and firms. The ECB confirmed these policies at its latest meeting on 28 October 2021.\textsuperscript{86}

\begin{footnotesize}
\begin{enumerate}
\item[79] The link between gas and electricity prices is a consequence of the interplay between available technologies and current market structure. Indeed, on the one hand, supply of energy from renewable sources is highly volatile (it depends on climatic conditions) and cannot be easily stored. On the other, nuclear energy (and to a certain extent coal) cannot accommodate short-term fluctuations in demand. As a result, the more flexible (but also more expensive) gas is best placed to adjust production to clear the market. For more information, see European Commission, \textit{EU Energy prices}.
\item[84] The key element in the new monetary policy strategy is the adoption of a symmetric inflation target of 2 % over the medium term. The ECB has also committed to forceful or persistent monetary policy measures when the economy is close to the lower bound, in order to prevent persistent negative deviations from the inflation target from becoming entrenched.
\item[85] Targeted longer-term refinancing operations (TLTROs) play a key role in preserving favourable bank financing conditions for households and firms, by providing ample liquidity at attractive rates to address their emergency liquidity needs induced by the pandemic. See F. Barbiero, M. Boucinha and L. Burlon, \textit{TLTRO III and bank lending conditions}, ECB Economic Bulletin, September 2021. The magnitude of the pandemic shock, the broad-based policy response and the attractive design of TLTROs (after the various recalibrations) resulted in one of the largest-ever liquidity injections by the ECB directly into the euro area banking sector, bringing the total uptake to €2.2 trillion as of June 2021, thereby providing the euro area with substantial support throughout the entire pandemic period.
\end{enumerate}
\end{footnotesize}
According to the latest available data, Eurosystem holdings under the asset purchase programme amount to €2.464 billion for the public sector purchase programme (up from €2.309 billion in 2020), €297.6 billion for the covered bond purchase programme (up from €285.8 billion), €301.9 billion for the corporate sector purchase programme (up from €243.3 billion) and €27.7 billion for the asset-backed securities purchase programme (down from €29.4 billion), for total holdings of €3.091 billion. Going forward, the ECB decided in December 2021 that net purchases under the asset purchase programme would continue at a monthly pace of €40 billion in the second quarter and €30 billion in the third quarter of 2022. Starting in October 2022 and onwards, they will lower further at €20 billion. By doing this, the ECB is aiming to strike a balance between its monetary policy stance – consistent with inflation stabilising over the medium term – and its policy rates – with their accommodative impact.

The monthly pace of net asset purchases under the pandemic emergency purchase programme (PEPP) averaged €62 billion in the first three months of 2021, €80 billion the following quarter and €76 billion in the three months ending in September 2021. By the end of December 2021, holdings under the programme totalled €1.581 trillion. At its December 2021 meeting, the ECB Governing Council decided to slow down the pace of PEPP purchases in the first quarter of 2022, and discontinue net asset purchases at the end of March 2022. It also decided to reinvest the principal payments from maturing securities purchased under the PEPP until at least the end of 2024.

As a result of monetary conditions in the euro area being more accommodative compared with other major currencies, the euro has depreciated against other currencies used as safe-havens, such as the US dollar and the Swiss franc. The euro also depreciated against other currencies of major trading partners, such as the Russian ruble and the Chinese renminbi, which continued to be supported by a strong export performance. At the same time, the euro strengthened against the currencies of some EU Member States (e.g. the Hungarian forint and the Polish zloty) as well as the currencies of some other emerging countries (e.g. the Brazilian real and the Turkish lira) that have experienced significant increases in inflation in recent months.

2.4. Going forward and suggestions

Going forward, the Commission identifies several risks that could hamper the recovery. The first and most important risk is the pandemic. While the vaccine creation and roll-out was impressive, the battle with Covid-19 is far from over. Despite the availability of vaccines, vaccination rates in various Member States have remained lower than expected. In addition, the Delta variant showed that, despite vaccination, a resumption of life as it was before Covid is not yet possible, given the major rise in transmissibility (although the vaccines have succeeded in reducing hospitalisation and death rates significantly). In addition to this, and despite the EU’s efforts in the context of COVAX, many countries still do not have access to enough vaccines to protect their population. Perhaps because of this, new variants such as Omicron have emerged. At the time of writing, the

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87 October 2021 data.
88 See the dedicated European Central Bank webpage.
89 Monetary policy decisions, ECB press release, 16 December 2021.
90 Pandemic emergency purchase programme (PEPP), ECB webpage.
91 The total PEPP envelope is €1.85 trillion.
92 Monetary policy decisions, ECB press release, 16 December 2021.
transmissibility and severity of this variant, and immunity against it, are still not well understood. It is therefore possible that some or many Member States may decide to reintroduce restrictions to protect their citizens, which will impact economic activity.

Another risk may come from supply bottlenecks and/or material shortages, which could in turn impact other industries, in a way similar to what happened in the 2020 to 2021 period with semiconductors and the automobile and electronics industries.

A further risk may come from inflation, which –against expectations– could remain high or increase further. This could happen if, for example, the aforementioned disruptions in supply chains persist. If, in addition, demand remains high, price increases may be passed on to consumer prices.

Other risks identified by the Commission could stem from the international environment (e.g. the US-China trade conflict, the debt crisis in China’s real estate sector), potentially spilling over to the rest of the world. Lastly, the Commission noted that extreme weather events relating to climate change and the deterioration of the environment may start occurring at a frequency and scope that translates into economic risks.

As a result of the above, it is not possible for the moment to say whether the rebound will transform into a full-fledged recovery or be more muted. It is therefore critical for the EU to continue using all possible tools available to it to make sure that the rebound does indeed become a recovery and to choose what the nature of this recovery should be (green, job-rich, etc.). This is the focus of this year’s outlook (see below, Chapter 6).

In its April 2021 report ‘Economic Policy Reforms 2021’, the OECD notes that, in light of the Covid-19 crisis, the top immediate policy priority is to ensure efficient use of the Next Generation EU instrument, as its successful roll-out and implementation will be crucial to reinvigorate economic growth across the EU. In addition to – and complementary to – that, it notes the importance of (i) increasing investment in research and development and promoting the dissemination of new technologies; (ii) reducing the fragmentation in service and network sectors that stems from administrative barriers; (iii) accelerating the decarbonisation of the EU economy and green innovation; (iv) easing the recognition of qualifications at EU level and protect migrants’ rights; and lastly, (v) phasing out production-based payments under the common agricultural policy (CAP) and making direct support more focused on environmental and climate change mitigation objectives.

In its September 2021 interim report the OECD further advocated against premature stimulus withdrawal, acceleration of structural reforms to increase the resilience of economies, and efforts to improve the prospects for sustainable and equitable growth. Regarding the issue of debt sustainability, it noted that, given the current supportive conditions, this should not be an immediate priority, but only come once the recovery is well advanced and labour market conditions have returned fully to pre-pandemic levels.

95 In this context, it notes the importance of Next Generation EU in the context of which a significant portion of funds to Member States are to be used to mitigate climate change.
In its October 2021 Regional Economic Outlook, the International Monetary Fund (IMF) strikes a similar chord. Regarding fiscal policies, it notes that the major reduction in fiscal deficits expected for 2022 needs to be kept under review and that fiscal space should result partly from the resources freed up from pandemic support programmes, if and when the pandemic situation fundamentally improves. Regarding inflation and monetary policy, the IMF is of the view that, for the moment, inflation expectations in the euro area remain low. If they are revised upwards, or in the case of other EU Member States that have higher inflation, monetary authorities should signal or initiate gradual normalisation of policy rates and wind down asset purchase programmes, where these are still running. Lastly, with regard to structural policies, the IMF advocates in favour of improving bankruptcy and insolvency frameworks to improve the resilience of firms; addressing housing affordability issues to maintain social cohesion and address inequality; and increasing public investment in human capital, digital connectivity and green infrastructure, to mitigate the challenges of climate change and an ageing population.

3. The EU budget in perspective

The EU budget represents a small proportion of overall public spending in the European Union, but has features that enable it to punch above its weight. As the EU has responded to the challenges of recent years, not least with the Next Generation EU (NGEU) recovery instrument, the role of the EU budget has broadened, with innovative reforms, including the issuing of common debt and new EU own resources.

3.1. Size and role of the EU budget

Totalling €174.3 billion (in payment appropriations) in 2020, the EU budget has traditionally accounted for around 1% of EU gross national income (GNI). Member States' public spending represented, on average, 53% of their GNI in 2020, a share that increased in the context of the pandemic, owing to the resulting recession and increased public spending to mitigate its impact.

Before the outbreak of the pandemic and before NGEU implementation began, the EU budget represented some 2% of total public spending in the European Union (see Figure 5), reflecting the fact that spending competences and resources in most policy areas lie mainly at national and/or local levels. These data show a situation very different from that of federal entities, where federal spending usually represents some 50% at least of final public spending (or 15 to 20% of gross domestic product) in decentralised models, such as the United States (US).

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99 European Commission, Implementing decision establishing the framework for borrowing and debt management operations under Next Generation EU for 2021, June 2021.

100 A. D’Alfonso, Own resources of the European Union: Reforming the EU’s financing system, EPRS, European Parliament, June 2021.

101 The consolidated annual accounts of the EU for financial year 2021 are expected to be made available in June 2022.

102 As of 2021, this percentage is expected to rise above 1% of EU-27 gross national income (GNI), following the adoption of the new multiannual framework and the temporary recovery instrument as well as the withdrawal of the UK from the Union. In 2022, authorised EU budget payments represent 1.14% of EU GNI (See Chapter 4), excluding expenditure financed by the Next Generation EU recovery instrument.

103 C. Cottarelli and M. Guerguil (eds.), Designing a European Fiscal Union. Lessons from the experience of existing federations, Routledge, 2015. The authors examine the budgetary arrangements between central and subnational levels of government in a sample of 13 federations (all those with a nominal gross domestic product higher than US$400 billion in 2011).
Analysts note that, to date, the EU budget has played two of the three functions that economic theory traditionally attributes to public finance: the provision of public goods (e.g. promotion of research and innovation activities), and some redistribution of resources to reduce disparities. The latter is in line with the objectives of economic, social and territorial cohesion between EU regions enshrined in the Treaty on the Functioning of the European Union (TFEU). These two functions are not mutually exclusive, since a policy area with redistributive objectives, such as cohesion, can also provide public goods.

Studies often draw attention to the relatively small size of the EU budget, concluding that this and other features limit its overall capacity to provide public goods and to play a redistributive role. For example, one paper estimates that the annual redistribution of resources operated by the EU budget over the last 15 years corresponds to 0.2 % of the area’s GNI, as compared with 1.5 % for the federal budget in the US. In other words, in the EU, 80 % of resources are returned to the Member State that provided them.

In December 2020, the adoption of an unprecedented budgetary package for the years 2021 to 2027 brought new momentum to the EU budget. A major innovation was the launch of a temporary recovery instrument, Next Generation EU (NGEU), to be financed through resources borrowed on the markets by the Commission on behalf of the EU (see Section 3.2 and Chapter 7). This collective borrowing represented more than 5 % of EU GNI in 2019.

Therefore, NGEU is increasing significantly the resources channelled through EU budgetary instruments in the first part of the programming period, with a view to helping the EU and national economies recover and become more resilient. In this respect, the EU budget, from 2021, for the first time is contributing to a certain extent to macroeconomic stabilisation, although this role mainly remains with the monetary policy of the European Central Bank and national budgets.

In any case, irrespective of the temporary recovery instrument, the role that the EU budget can play in the economy, and the achievement of EU policy objectives on account of a number of its characteristics, should not be underestimated. Examples include the share of the EU budget devoted to investment (as compared with national budgets, where most resources are usually allocated for consumption and transfers), and its capacity to leverage complementary sources of financing (e.g. through innovative financial instruments) and to achieve advantages such as economies of scale in policy areas where the pooling of resources at EU level may help to meet objectives more effectively (e.g. in the field of development cooperation with third countries).

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105 The third function, which had not previously been covered by the EU budget on account of its size and limited flexibility in the context of multiannual planning, is macroeconomic stabilisation. The new temporary recovery instrument, Next Generation EU, has been playing this role to a certain extent since 2021.

106 Part Three, Title XVIII, TFEU.


108 In recent years, the figure has reached 0.3 % as a result of increasing diversity in the EU, determined on the one hand by the accession of 13 Member States with lower per capita income as of 2004, and on the other by growing divergence in economic performance and unemployment rates following the financial and economic crisis.


In some countries, the EU budget represents a significant source of resources for investment. For example, in 14 Member States, mainly among those that joined the Union after April 2004, the EU budget, as a share of total public spending, is significantly higher than 2%, with figures ranging between 4.36% for Slovenia and 12.22% in Latvia (Figure 6).

Figure 6 – EU budget as a share of public spending in individual Member States (2020)

Data source: European Commission (DG Budget and Eurostat). Eurostat data are provisional.

In addition, when focusing on investment only, the contribution of the EU budget to public investment in the EU is higher: according to the Commission, for the 2015-2017 period, cohesion policy alone represented 8.5% of government capital investment in the EU. On average, this share was estimated at 41% in the 13 Member States that joined after April 2004. As regards investment in research and innovation, Horizon 2020 (2014-2020) was the world’s largest transnational programme devoted to such activities: in October 2021, the largest recipients since the start of the programme were Germany, the United Kingdom, France, Spain, and Italy (in descending order according to the total sum beneficiaries located in those countries received from the programme).

From this perspective, the European Commission and the European Parliament stress that the EU budget is different in nature and function from national budgets, since it is mainly an investment budget with a focus on measures with European added value. The new multiannual financial framework (MFF), which defines the EU’s budgetary structure for the 2021 to 2027 period, seeks to further concentrate resources on such measures, in line with the debate that characterised the preparation of relevant proposals and brought about their adoption.

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111 While the European Commission publishes the allocation of expenditure to Member States, it underlines that this is only an accounting exercise, which does not provide a complete overview of the benefits that each Member State derives from EU membership: Annex 1 recapitulates this allocation for each major category of EU spending in 2019.

112 The group also includes some pre-2004 Member States. For example, the case of Luxembourg (7.69%) is mainly explained by the size of the country, its role as host to a number of EU institutions, and the administrative expenditure attributed to the country on this basis. As for the EU budget, the graph does not include either spending in countries outside the EU or spending that could not be attributed to individual Member States. In 2019, this figure totalled to €24.5 billion.

113 Seventh report on economic, social and territorial cohesion, European Commission, 9 October 2017, p. xxii.

Co-financing is a characteristic of the EU budget that can increase its impact on job creation and growth. This means that EU spending is normally used in conjunction with funding from other public and/or private sources, thus resulting in total investments higher than the EU contribution proper. To some extent, this is already the case for traditional grants. In response to the Covid-19 crisis, cohesion funds were however exceptionally made available at a 100% EU financing rate between 1 July 2020 and 30 June 2021, through the Coronavirus Response Investment Initiative Plus (CRII+)\(^\text{115}\). In addition, with a view to maximising the ‘multiplier effect’ of the EU budget, innovative financial instruments (triggering equity, quasi-equity, debt or guarantee funding) have been developed to support economically viable investments in line with EU objectives.

While innovative financial instruments are not appropriate for all kinds of public spending, they have features that make them attractive for some policy areas and objectives, notably by: attracting additional funding from other sources (leverage effect); and generating income through amounts repaid by funding beneficiaries to be used for new operations in line with the same policy objectives (revolving instruments). The leverage effect can vary significantly from one instrument to another.

When it comes to the 24 financial instruments covering internal policies, the Commission reports that, by the end of 2020, EU contributions worth over €10 billion, together with financing from other sources, had triggered just under €114 billion in total financing provided by financial intermediaries for final recipients. These data suggest average leverage close to a factor of more than 10, i.e. each euro invested by the EU has generated on average more than €10 of financial support for final beneficiaries. Over the 2014-2020 period, more than 766 000 small and medium-sized enterprises (SMEs) and small midcaps are reported to have received funding from these financial instruments.\(^\text{116}\)

The High-Level Group on Own Resources notes that, based on a study\(^\text{117}\), it commissioned, wealthier Member States have a comparative advantage when it comes to attracting resources linked to the main financial instruments.\(^\text{118}\) Therefore, the distribution of such resources differs from that in traditional EU spending areas (e.g. cohesion and agriculture). The leverage effect and evolving nature of these instruments mean that the standard representation of the allocation of EU expenditure to Member States (see Annex 1) provides only a partial picture of the overall benefits deriving from the EU budget and EU membership.

In some policy areas, the pooling of resources at EU level may bring advantages such as economies of scale and elimination of duplication, generating EU added value and enabling a more effective achievement of results. An EPRS study analysed budgetary benefits and cost savings (such as the additional provision of public goods, efficiency gains, and lower administrative costs) that Member States can realise by means of funding policies and programmes with EU added value at EU rather than national level. Applying a new methodology for assessing the ‘waste rate’ in overlapping national spending to four case studies (on health, climate change, social insurance and defence), the study concludes that €180 billion per year could be saved by Member States through improved


\(^{117}\) J. Núñez Ferrer, J. Le Cacheux, G. Benedetto and M. Saunier, *Study on the potential and limitations of reforming the financing of the EU Budget*, EPRS, 3 June 2016, CEP5, Université de Pau et des Pays de l’Adour, LSE Enterprise and Deloitte.

\(^{118}\) *Future financing of the EU: final report and recommendations*, High-Level Group on Own Resources, December 2016.
allocation of budgetary resources in these policy areas.\textsuperscript{119} Another example is development cooperation, in which the OECD deems EU programmes to have comparative advantages thanks to their geographic reach, scale and scope.\textsuperscript{120} The EU, with its Member States, is the world’s biggest development aid donor.\textsuperscript{121} However, in addition to EU programmes, Member States channel development assistance by means of other schemes. According to the mapping the cost of non-Europe exercise carried out for the European Parliament, improved coordination of EU donors could bring economic benefits worth between €3.6 billion and €14.5 billion per year – with a mid-point estimate of €9 billion – including both direct savings and better results in recipient countries.\textsuperscript{122} Other policy areas often deemed to have great potential for enhanced joint action include: digital infrastructure and its protection, external borders and asylum management.\textsuperscript{123}

In conclusion, the EU budget is relatively small in size, but has features that can reinforce its overall impact. It has changed over time, but its reform has advanced rather slowly due to the procedures for adopting its financing system and multiannual planning tool, which require unanimity in Council (see Section 3.3). The outbreak of the pandemic and its severe socio-economic consequences across the EU led to a change of pace in the negotiations on EU finances for 2021 to 2027. The result was the adoption of a package dubbed unprecedented by various analysts, who nevertheless see room for further reform.\textsuperscript{124}

3.2. Structure of the EU budget: Revenue, multiannual planning and recovery instrument

The ‘own resources’ system sets out how the EU budget is financed, while the structure of the expenditure side of the budget is determined, for a period of at least five years, by a multiannual planning tool – the multiannual financial framework (MFF).

Unlike national budgets, the EU budget cannot run a deficit. Its financing has so far been ensured\textsuperscript{125} by three main sources of revenue: traditional own resources (customs duties and sugar levies); an own resource based on a harmonised base of value added tax (VAT); and an own resource linked to Member States’ GNI, which plays the role of balancing the budget.\textsuperscript{126} The maximum level of resources available for the EU budget, is now set at 1.40 % of EU GNI (the ‘own resources ceiling’), after having remained virtually unchanged since the 1990s.

In December 2020, to enable the financing of NGEU, the Council adopted the new own resources decision.\textsuperscript{127} It was then ratified by all Member States, by the end of May 2021.\textsuperscript{128} It introduces a series

\textsuperscript{120} European Union – DAC Peer Review of Development Cooperation, OECD, 2012.
\textsuperscript{121} Recipients and results of EU aid, European Commission.
\textsuperscript{123} J. Pisany-Ferry, ‘Europe can take a bigger role in providing public goods’, Financial Times, 3 December 2019.
\textsuperscript{124} See, for example, F. Jones, Financing the European Union, EPRS Ideas Papers, European Parliament, December 2020; and J. Núñez Ferrer, Reading between the lines of Council agreement on the MFF and Next Generation EU, CEPS, Policy Insights 2020/18, July 2020.
\textsuperscript{126} Other revenue, which is not classified as own resources, includes tax on EU staff salaries, contributions from non-EU countries to certain programmes, and fines on companies for breaching competition law.
\textsuperscript{128} For more see A. D’Alfonso, National ratification of the Own Resources Decision, EPRS, European Parliament, June 2021.
of important changes to the system, applied retroactively as of 1 January 2021. More specifically, the decision raises the own-resources ceiling permanently from 1.20% to 1.40% of EU GNI, to take account of developments such as the smaller total GNI of the post-Brexit EU and the uncertain economic outlook owing to the pandemic. In addition, the Commission is allowed to borrow on the markets at favourable interest rates on behalf of the EU to finance NGEU. The sole purpose of the temporary recovery instrument is to address the consequences of the pandemic crisis. A further, temporary, increase in the own-resources ceiling, worth an additional 0.60% of EU GNI, is devoted exclusively to guaranteeing borrowing operations for NGEU and applies until December 2058 at the latest. A new own resource based on non-recycled plastic waste was introduced as of 2021, contributing €8.2 billion in its first year. For the 2022 budget, the plastic own-resource contribution is estimated at almost €6 billion.

Currently, the bulk of revenue is provided by a GNI-based resource and a VAT-based resource, which Member States perceive as national contributions rather than EU own resources. In 2020, these two resources accounted jointly for more than three quarters of EU financing (see Figure 7). According to a number of analysts and stakeholders, including the European Parliament, the predominant role of national contributions promotes a focus in budgetary negotiations on Member States’ net balances and programmes with geographically pre-allocated expenditure. In the MFF negotiations, Parliament managed to obtain a roadmap for the introduction of other new own resources in addition to the one linked to non-recycled plastic waste. The additional new own resources should cover at least the repayment costs of NGEU (see Section 5.2).

With the withdrawal of the UK from the EU, the permanent correction mechanism (the UK ‘rebate’) that reduced its contributions to the EU budget has been eliminated. Lump-sum corrections will continue to reduce the contributions of five Member States (Austria, Denmark, Germany, the Netherlands and Sweden) temporarily for the 2021-2027 period. Annex 2 recapitulates national contributions by Member State and traditional own resources collected on behalf of the EU in 2020.

As for the expenditure side of the budget, the 2021-2027 MFF set maximum levels of resources (‘ceiling’) for each major category (‘heading’) of EU spending for a period of seven years. The MFF resources for commitments over the entire 2021 to 2027 period amount to €1 074.3 billion in 2018 prices. Negotiated between 2018 and 2020, the new MFF is complemented by the NGEU recovery

129 Provisional amount based on Draft amending budget 4/2021: Update of revenue; revised forecast of own resources and other revenue.

130 Amending letter No 1 to the draft general budget 2022, European Commission, COM(2021)642 final, 12 October 2021.


instrument to address the consequences of the coronavirus pandemic (see Chapter 7). Worth €750 billion in 2018 prices, this major innovation in EU finances is providing a mix of grants (€390 billion) and loans (€360 billion) over the 2021-2023 period: the grants increase the size of the EU budget and represent external assigned revenue (see Chapter 4), while resources borrowed to finance loans are transferred directly to Member States through an EU budgetary instrument.

Figure 8 shows the distribution of MFF and NGEU resources among seven major categories of EU spending. The MFF details the annual ceilings for new commitments in each spending category and an overall ceiling for annual payments. In addition, it contains some special instruments outside the MFF ceilings (the European Globalisation Adjustment Fund, the Solidarity and Emergency Aid Reserve, the Brexit Adjustment Reserve, and the Flexibility Instrument) and flexibility provisions, to give some room for manoeuvre in case of unexpected events (see Section 5.1.4). The challenge is to strike the right balance between the predictability of investments and the capacity to address unforeseen events and new priorities that can emerge during a rather long programming period.

Figure 8 – 2021-2027 multiannual financial framework and NGEU by heading
€ billion, (2018 prices)

Source: EPRS.

134 Heading 2 ‘Cohesion, Resilience and Values’ has two subcategories or ‘subheadings’: 2a ‘Economic, social and territorial cohesion’ and 2b ‘Resilience and values’.

135 For more information on flexibility, see: M. Sapala, How flexible is the EU budget? Flexibility instruments and mechanisms in the multiannual financial framework, EPRS, European Parliament, January 2020.
3.3. Main institutional actors in two key budgetary cycle phases

The European Parliament and the Council of the European Union are the two arms of the EU budgetary authority. Their tasks regarding the annual budget include setting political guidelines for the year ahead – to be taken into account by the European Commission when presenting the draft budget proposal – and then establishing the annual EU budget and its amendments. Parliament and the Council then negotiate on the basis of a European Commission proposal (see Section 3.2).

The powers of Parliament and the Council differ depending on the issue at stake. For the annual budgetary procedure they enjoy an equal footing. The decision on the design of the own resources system requires unanimity among the Member States in Council, while Parliament is consulted. The Council also adopts the regulation establishing the MFF unanimously, but in this case needs to obtain Parliament’s consent beforehand.

This asymmetry in the powers of the two arms of the budgetary authority is said to sharpen the differences in their perspectives on budgetary issues. In addition, the unanimity requirement in Council for the adoption of own resources and the MFF is often seen as an obstacle to major EU budget reform. While the budget has been modified over the years, the veto power enshrined in the procedures is deemed to favour the continuation of the status quo, which has generally ensured an equilibrium between Member States that join forces in subgroups sharing the same interests. For instance, debates on budgetary negotiations often refer to groups as either net contributors or net beneficiaries; or ‘friends of cohesion’, ‘friends of better spending or correction mechanisms’, and ‘friends of agriculture’. The European Parliament has long pushed for EU budgetary reform, including in areas where its powers are more limited, such as own resources and the MFF, with the aim of shifting the focus of budgetary discussions to measures with EU added value. The impact of the pandemic, meanwhile, brought a new dynamic to the MFF negotiations, resulting in an unprecedented package with the launch of a temporary recovery instrument, NGEU. Involvement of both arms of the budgetary authority in NGEU governance was key in the negotiations. Parliament is involved through a regular, structured dialogue with the Commission and has the power to scrutinise NGEU implementation (see Section 7.6).

As regards the implementation stage, the European Commission is ultimately responsible for the execution of the EU budget. However, implementation involves a wide range of actors under the three different management modes set out in the EU Financial Regulation. In practice, Member States currently implement 74% of the MFF in ‘shared management’ with the European Commission, which in the 2021-2027 period applies to most expenditure under subheading 2a ‘Economic, social and territorial cohesion’ and heading 3 ‘Natural Resources and Environment’. As for the remaining MFF expenditure, 18% is currently implemented under ‘direct management’ (European Commission and EU executive agencies), while 8% is carried out under ‘indirect management’ (by other entities, such as third-country authorities, international organisations, EU decentralised agencies and the European Investment Bank).

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Designed to ensure that EU resources are used correctly and effectively, the Financial Regulation applicable to the EU budget details key principles that the entities entrusted with budget implementation must uphold. These include control and audit obligations for the various types of implementing methods. At political level, oversight of EU budget implementation is a key responsibility of the European Parliament (see Section 4.4). In the context of the forthcoming revision of this budget rulebook, Parliament expects 140 to play a greater part in the budgetary scrutiny of NGEU funds (see Chapter 4, Box 2).

4. EU budget for 2022

The EU budget for the year 2022 is central to the EU’s recovery from the pandemic. It is the second budget proposed by President Ursula von der Leyen’s Commission and, at the same time, the second under the new 2021-2027 multiannual financial framework (MFF). With the EU economy rebounding from the pandemic recession with a GDP growth rate of 2.1% in the third quarter of 2021,141 the 2022 budget aims to continue supporting recovery from the Covid-19 crisis, support investment and job creation and build a strong European ‘health union’. The 2022 budget also lays the foundations to make the EU more resilient to future crises and more sustainable, following the two-fold objective of an effective green and digital transition. It is the first budget to integrate additional allocations to the EU’s 10 flagship programmes, through new mechanisms defended by the European Parliament. This constituted a negotiating success for Parliament. Agreed in the context of the 2021-2027 MFF negotiations, the additional allocations reinforce key programmes by €15 billion in total.142 For 2022 the additional funds account for €1.6 billion (Article 5 of the MFF Regulation; see Table 2).

Together, the EU budget and the EU’s landmark Next Generation EU (NGEU) recovery instrument (see Chapters 6 and 7) have a key role to play in achieving the EU’s objectives. As a temporary recovery instrument, NGEU will run only for the years 2021 to 2023. The EU’s 2022 budget is therefore the second to be topped up by NGEU funds. Taking the form of non-repayable support,143 in 2022 this top-up totals €143.5 billion (Section 4.2), of which €118.4 billion from the NGEU’s Recovery and Resilience Facility (RRF).

Box 1 – Reinforcements to programmes

During the negotiations on the 2021-2027 MFF, the European Parliament secured an additional €15 billion to reinforce 10 EU flagship programmes, on top of the amounts agreed by the European Council in July 2020.

The new mechanism, based on Article 5 of the MFF Regulation (Council Regulation (EU, Euratom) 2020/2093) is linked to the proceeds from competition fines collected by the EU. It will be implemented in the annual budgets for 2022 to 2027, by increasing the MFF ceilings on a yearly basis, and will provide a total of €11 billion to seven specific programmes. Further reinforcements of €2.5 billion are provided from the margins that were left unallocated under the ceilings set by the European Council in July 2020: €1 billion from refloows from the ACP Investment Facility (European Development Fund); and €0.5 billion from de-committed appropriations in the area of research (based on Article 15(3) of the Financial Regulation). Parliament also secured an increase of €1 billion for the Flexibility Instrument.

In the 2022 budget, additional funds through the Article 5 mechanism account for €1.6 billion and correspond, overall, to an 8.6% increase. For individual programmes, the increases vary from +3.6% for the Horizon Europe programme, to +55% for the Citizens, Equality, Rights and Values programme. The EU4Health programme also receives an essential reinforcement with +51%. While under heading 4 on migration and border management, the Border Management and Visa Instrument (BMVI) is allocated additional €148 million (+22.1%) (see Table 2).

141 GDP and main components (output, expenditure and income), Eurostat, European Commission.

142 The EU flagship programmes supported by the European Parliament in the MFF negotiations cover the areas of climate change, research, energy, digital and transport interconnectivity, health, youth, culture, border management and external action. See European Parliament resolution of 24 September 2020 on conclusions of the extraordinary European Council meeting of 17-21 July 2020 (2020/2732(RSP)), European Parliament, 24 September 2020.

For details on the allocation of the additional €15 billion, see: M. Sapala, M. Pari and N. Kresnichka-Nikolchova, EU financing for 2021-2027, EPRS, European Parliament, December 2020.

143 The support provided by the RRF in the form of loans is not part of the EU budget. For the year 2022, it is estimated at €194.8 billion. See Working document on the Draft Budget 2022 (Section III), European Parliament, 30 June 2021.
The 2022 budget year is one when programmes from the previous MFF are still being completed, and the new programming period is still in the launch phase. This delay is due in particular to the late adoption of the 2021-2027 MFF and the relevant legal acts.\textsuperscript{144} Negotiations on the MFF took longer than expected, given that the relevant proposals were revised in order to integrate recovery measures to face the socio-economic impact of the pandemic. For programmes in areas such as cohesion policy and the common agricultural policy this could lead to important reprogramming exercises. The pace of implementation, especially of cohesion funds and of the national recovery plans are central to EU recovery.

The EU 2022 budget was prepared and negotiated during the on-going pandemic but as the economy was gradually reopening following the vaccine roll-out. The Council defended prudent and realistic budgeting, at a lower level than the Commission proposal, providing – in its view – sufficient resources for the priorities set but also leaving sufficient margins under the MFF ceilings to be able to face unexpected financing needs. Parliament, reversed the Council’s reductions and increased the financing for programmes and policies that would contribute to the recovery. It stuck to its long-standing position\textsuperscript{145} that new priorities must be financed by new appropriations, and therefore, if necessary, with revision of the relevant MFF ceilings.

Table 2 – Reinforcements in the 2022 budget from Article 5 of the MFF Regulation (commitment appropriations, in € million)

<table>
<thead>
<tr>
<th>EU programme / budget line</th>
<th>Budget 2022</th>
<th>Of which Article 5 reinforcement</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heading 1 Single market, innovation and digital</td>
<td>21 800.1</td>
<td>590.0</td>
<td>2.7%</td>
</tr>
<tr>
<td>Horizon Europe</td>
<td>12 239.2</td>
<td>442.5</td>
<td>3.6%</td>
</tr>
<tr>
<td>Invest EU Fund</td>
<td>11 966.6</td>
<td>147.5</td>
<td>12.3%</td>
</tr>
<tr>
<td>Heading 2 Cohesion, resilience and values</td>
<td>56 039.0</td>
<td>886.0</td>
<td>1.6%</td>
</tr>
<tr>
<td>EU4Health</td>
<td>839.7</td>
<td>428.3</td>
<td>51.0%</td>
</tr>
<tr>
<td>Erasmus+</td>
<td>3401.7</td>
<td>251.1</td>
<td>7.4%</td>
</tr>
<tr>
<td>Creative Europe</td>
<td>406.5</td>
<td>88.5</td>
<td>21.8%</td>
</tr>
<tr>
<td>Citizens, Equality, Rights and Values</td>
<td>214.9</td>
<td>118.1</td>
<td>55.0%</td>
</tr>
<tr>
<td>Heading 4 Migration and border management</td>
<td>3 091.2</td>
<td>148.0</td>
<td>4.8%</td>
</tr>
<tr>
<td>Integrated Border Management Fund (IBMF) - Border Management and Visa Instrument (BMVI)</td>
<td>671.1</td>
<td>148.0</td>
<td>22.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18 969.7</td>
<td>1 642.0</td>
<td>8.6%</td>
</tr>
</tbody>
</table>


The two arms of the budgetary authority entered the conciliation negotiations on the 2022 budget with these diverging positions. During the negotiations, some other issues were also central to the discussions, in particular the re-introduction in the budget of un-used research policy commitments (Article 15.3 of the Financial Regulation), the financing of the new European Health Emergency

\textsuperscript{144} Legislative Observatory and Legislative Train Schedule of the European Parliament.

\textsuperscript{145} European Parliament resolution of 21 October 2021 on the Council position on the draft general budget of the European Union for the financial year 2022 – all sections (2021/0227(BUD)).
Preparedness and Response Authority (HERA), financing for refugees from Syria, and the modalities for the cost of financing NGEU.

The Conciliation Committee had to prolong\textsuperscript{146} its meeting and could only reach agreement on the budget 2022 on the last day of the conciliation period, on 15 November 2021. The agreement was approved without amendments at the November plenary session and signed into law by David Sassoli, the President of the Parliament, on 24 November 2021.\textsuperscript{147}

The 2021-2027 MFF is divided into seven headings and two subheadings. Programmes and funds under these headings are grouped into 15 clusters, corresponding to different EU policy areas. The policy clusters are reflected in the annual budget headings.\textsuperscript{148} According to the Commission, this lay-out is more informative and clearer, and the synergies between the programmes are more apparent.

Furthermore, when delving into the details of the EU 2022 budget, it is important to remember that it is complemented by the EU's temporary recovery instrument, NGEU, which has a profound impact on the size, structure and organisation of the annual budget\textsuperscript{149} (see Section 4.2. and Chapter 7).

When it comes to the green transition, one of the EU's main priorities, at least 30 % of the EU budget and NGEU expenditure during the 2021-2027 period must support climate objectives.\textsuperscript{150} This target is built into various headings and monitored.\textsuperscript{151} The EU budget, together with NGEU funds, in particular the Recovery and Resilience Facility and the additional financing for the Just Transition Fund, will play an important role in achieving the green transition. 2022 is set to be the year with the highest ever share of climate-related EU expenditure yet: 53.88 %\textsuperscript{152} (€165.3 billion) of the EU budget and NGEU funds are set to contribute to this objective (see Annex 4).

\textsuperscript{146} EU Budget 2022 conciliation talks suspended, press release, European Parliament.

\textsuperscript{147} The approved budget for 2022 awaits final publication in the Official Journal of the European Union. For details on the procedure and the documents please see: European Parliament, Legislative Observatory, 2022 general budget: all sections,\textsuperscript{2021/0227(BUD)} and European Parliament press release EU budget 2022 approved: investing more for a stronger recovery.

\textsuperscript{148} As announced in the proposal for the 2021-2027 MFF, as of 2021 the Commission has broken with past practice and has reproduced the MFF structure when presenting the proposal for the annual budgets. For more detail on the structure of the budgets before 2021, see European Commission, European Union public finance, fifth edition, 2014.

\textsuperscript{149} Since 2020, the European Recovery Instrument (EURI) is the official name of the instrument used in the draft general budget. However, the other name – Next Generation EU (NGEU) – was introduced by the Commission in the documents published with the proposal establishing the instrument. For the purposes of this study, reference will be made to the latter, commonly used, name of the recovery instrument.

\textsuperscript{150} See Article 16 of the Interinstitutional Agreement of 16 December 2020 between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management, as well as on new own resources, including a roadmap towards the introduction of new own resources, 16 December 2020.

\textsuperscript{151} A. D’Alfonso, Mainstreaming of climate action in the EU budget: Impact of a political objective, EPRS, European Parliament, 2019.

\textsuperscript{152} This estimate is based on the Commission’s draft 2022 budget proposal. For more details on the breakdown by programme, see Section 4.5 of the Draft general budget of the European Union for the financial year 2022, General introduction, p. 127, 9 July 2021.
As provided for in the regulation establishing NGEU\textsuperscript{153}, the amount to be used for expenditure constitutes external assigned revenue (see Box 2) and is counted over and above the MFF ceilings. In the 2022 draft budget, the Commission has entered the non-repayable part of the NGEU as external assigned revenue, totalling €143.5 billion (see Section 4.2). Specific legal commitments in relation to the given programme are indicated in the budget remarks for the relevant budget lines\textsuperscript{154}. Furthermore, the entry into force of the new Own Resources Decision allowed the Commission to make the necessary arrangements and, in June 2021, it began the borrowing and lending operations to raise the necessary funds for NGEU-related payments (see Section 3.2).

Box 2 – External assigned revenue

Universality is one of the budgetary principles underpinning the EU budget, on the basis of the Financial Regulation (FR). It means that revenue finances all expenditure without distinction. External assigned revenue represents one exception to this principle, since it finances specific items of expenditure. The FR identifies various types of external assigned revenue, such as contributions from third countries to certain EU activities, and gives the legislative authority the possibility to establish other assigned revenue – internal or external – through a basic act. The Commission proposal for NGEU was based on the latter option. The allocations for external assigned revenue are not decided by the budgetary authority in the annual budgetary procedure, but stem automatically from the implementation of related acts and are detailed in the reporting phase at the closure of the annual accounts and with the presentation of the next draft budget.

Next Generation EU is expected to generate an unprecedented volume of external assigned revenue for the EU budget. While, under the 2014-2020 MFF, external assigned revenue has been used to finance on average 10-11\% of the total annual budget (with the biggest impact on heading 1b – Economic, social and territorial cohesion), the external assigned revenue based on the NGEU almost doubles the size of the 2022 budget (see Section 4.2).

During the MFF negotiations, the EU institutions agreed on the need to enhance the budgetary authority’s role in relation to external assigned revenue under NGEU. A special procedure for overseeing this revenue was stipulated in the Interinstitutional Agreement of 16 December 2020, linked to the 2021-2027 MFF.

Furthermore, given the sums involved, there have been suggestions for the budgetary treatment of external assigned revenue to be reconsidered. This approach would require an amendment to the FR, to be adopted by Parliament and Council under the ordinary legislative procedure. The Parliament\textsuperscript{1}, in anticipation of Commission’s proposal for a revision of the FR scheduled for the end of 2021, expressed its expectations for external assigned revenue to form an integral part of the budget and a stronger Parliamentary role in the budgetary scrutiny of Next Generation EU funds.


4.1. Outcome of the 2022 budgetary procedure

This second annual budget under the 2021-2027 MFF for the Union of 27 Member States, was set at €169.51 billion\textsuperscript{155} in commitments (1.14\% of EU-27 GNI) and at €170.60 billion in payments (1.14\% of EU-27 GNI). In absolute numbers, by comparison with the 2021 budget\textsuperscript{156} this represents an increase of 1.6\% in commitments, with 59.3\% of this increase the result of the mechanism under Article 5 of the MFF (see Box 1), and an increase of 1.5\% in payments (Figure 9). The level of


\textsuperscript{154} Draft general budget of the European Union for the financial year 2022, General introduction, 9 July 2021.

\textsuperscript{155} Unless otherwise stated, all amounts are expressed in current prices.

\textsuperscript{156} 2021 budget includes Amending Budgets 1 to 6.
payments stands for a second consecutive year above the level of commitments, reflecting the ongoing implementation of many spending programmes launched under the 2014-2020 MFF. The margin below the 2021-2027 MFF ceilings available for unexpected needs in 2022, amounts to €1.16 billion in commitment appropriations and €1.69 billion in payment appropriations (for detailed figures, see Annex 3).

Figure 9 – Total commitment and payment appropriations, EU budgets for 2021 and 2022.

Data source: European Commission, see Annex 3.

Already in April 2021, in a budgetary trilogue, Parliament, Council and the Commission agreed to a realistic or ‘pragmatic’ calendar\textsuperscript{157} for the 2022 budgetary procedure, reflecting the time needed by the two arms of the budgetary authority, the Parliament and the Council, to take positions on the proposed budget.\textsuperscript{158} They also discussed the political priorities for the forthcoming year. In accordance with Article 314 of the TFEU, the Commission then presented a draft budget\textsuperscript{159} on 9 July 2021 (see Box 3). The Commission based the draft budget on the 2021-2027 MFF, respecting the established ceilings, as technically adjusted in February 2021 (see Section 5.1). The draft budget for 2022 amounted to €167.8 billion in commitments (1.11 \% of EU-27 GNI) and €169.4 billion in payments. On top of this, in line with the EU’s NGEU recovery instrument, the Commission reinforced the relevant programmes in the 2022 budget through external assigned revenue, for a total amount of €143.5 billion in commitments (see Section 4.2).

The overarching priority of proposed spending in 2022 was the mobilisation of investments, the crisis response and support for economic recovery. At the same time, according to the Commission, the budget has been designed to reflect the EU’s priorities as set out in the MFF Regulation and, combined with the financial means of the NGEU, will reinforce programmes that contribute to the green transitions and support the implementation of the Green Deal, making the European economy fairer, more resilient and more sustainable for future generations. Increased security and defence, reinforced migration and border management, and a stronger Europe in the world were also among the priorities in the proposed 2022 budget.

\textsuperscript{157} For more on the role of the pragmatic calendar in the EU budgetary procedure, see S. Mazur, \textit{Annual EU budgetary procedure. An introduction to the steps in the EP}, EPRS, European Parliament, July 2019.

\textsuperscript{158} Council of the EU, Joint statement on the dates for the budgetary procedure and modalities for the functioning of the Conciliation Committee in 2021, Brussels, 15 April 2021.

\textsuperscript{159} European Commission, Draft general budget of the European Union for the financial year 2022, General introduction, 9 July 2021. For the complete set of documents see Budget online.
On 6 September 2021, in the next step of the procedure, the Council formally adopted its reading of the draft budget. It introduced the sum of €1.3 billion for the Brexit Adjustment Reserve (BAR), for which a political agreement had in the meantime been reached. This is a special instrument, set outside the MFF ceilings. At the same time, it reduced expenditure under the MFF ceilings by €1.4 billion in commitments. The reductions concerned notably Horizon Europe (-€316 million), the financing cost of the EU Recovery Instrument (-€300 million) and Neighbourhood, Development and International Cooperation (-€500 million). Overall, the Council proposed to reduce the Commission’s proposal by €131.3 million in commitment appropriations and increase payment appropriations by €574.5 million, as a result of the inclusion of the BAR.

The European Parliament adopted its reading of the draft 2022 budget on 21 October 2021. It reflected the priorities included in its resolution of 25 March 2020 on guidelines for the preparation of the 2022 budget. Parliament’s main concern was that the 2022 Union budget should play a stronger central role for a quick, fair and inclusive recovery from the damages caused by the pandemic, ensuring a positive impact on citizens' lives, while helping to rise to the challenges of climate change and digital transition and, in this way, build a more resilient and sustainable Union. To address these priorities, Parliament decided to reverse all the cuts to the draft budget included in the Council’s position. It proposed considerable increases to the Commission’s original proposal for the key priorities: investment with a particular focus on small and medium-sized enterprises (SMEs), the green and digital transitions, giving fresh opportunities to young people and protecting children, and a strong European health union (including the COVAX programme). It also enhanced the priorities in the fields of security, migration, asylum and integration, fundamental rights and Union values. Overall, it proposed an increase in the Commission’s initial proposal of over €4 billion (+2.4 %). The European Parliament agreed to the Council’s amendment to allocate €1.3 billion for the BAR. For payments, it proposed €172.47 billion, €2.5 billion above Council’s position.

Figure 10 – 2022 EU budget (commitments, € billion, current prices)

Data source: European Commission, see Annex 3.
On 12 October 2021, the Commission adopted Amending Letter 1/2022 (AL 1/2022) to the draft general budget for 2022. This increased the draft budget by €1.24 billion (+0.7 %) in commitment appropriations and by €1.23 billion (+0.7 %) in payment appropriations. Following the political agreement on the Brexit Adjustment Reserve, the Commission proposed to integrate its pre-financing (€1.3 billion) in the 2022 budget. It also proposed to continue supporting refugees from the Syria conflict in Turkey by reinforcing the Instrument for Pre-Accession assistance (IPA) with €71 million in additional commitments and €265 million in additional payments under humanitarian aid. It included, as usual, updated estimates for expenditure on the common agricultural policy (CAP) and for the sustainable fisheries partnership agreements, and adjusted the payments (-€216 million) for the 'digital Europe' programme to take into account delays in implementation. The contribution made by the Instrument for Pre-accession Assistance (IPA III) to Erasmus+ was reduced. The revenue side of the budget was updated regarding non-recycled plastic packaging waste, decreasing the contribution forecast by €2.3 million, to almost €6 billion. The European Parliament position, compared with the Commission’s updated proposal, was still €2.7 billion higher (Figure 10).

Box 3 – 2022 budgetary procedure milestones

16 February 2021: Council adopts its guidelines for the 2022 EU budget.
9 July 2021: European Commission tables the draft 2022 EU budget.
6 September 2021: Council adopts its position on the draft 2021 EU budget.
26 October – 15 November 2021: Conciliation Committee.
15 November 2021: Conciliation Committee reaches a common understanding on the 2022 EU budget and signs a joint text.
23 November 2021: Council endorses the joint text on the 2022 EU budget.
24 November 2021: European Parliament approves the joint text. On the same day, the 2022 EU budget is signed into law by European Parliament President, David Sassoli.

The 21-day conciliation period began on 26 October 2021, with a difference of €4.1 billion in commitments between the positions of the two arms of the budgetary authority. On 15 November 2021, the last day of the conciliation period, the negotiating parties succeeded in reaching a common understanding on the substance of the budget for 2022. In this agreement, reflected in the 'joint text', the negotiators set total commitments at €169.5 billion and total payments at €170.6 billion. The agreement was endorsed by both institutions involved: on 23 November 2021, Council approved the provisional agreement, and on 24 November 2021 the

163 European Commission, Amending letter No 1 to the draft general budget 2022, COM(2021)642 final, 12 October 2021.
164 The draft 2022 budget already provided for €120 million in commitments under the IPA in 2022, notably for migration management and border protection, and other socio-economic actions.
165 Common understanding reached in the conciliation committee, Council of the European Union, Brussels, 16 November 2021.
European Parliament voted the adoption at its plenary sitting (550 to 77, with 62 abstentions). On the same day, the EU’s 2022 budget was signed into law by Parliament President David Sassoli.

The agreed 2022 budget exceeded the Commission’s initial proposal by €1.7 billion in commitments and €1.2 billion in payments. The final agreement was €1.8 billion higher than stipulated in the Council reading and €2.3 billion lower than Parliament’s position (Figure 10). During the conciliation process, Parliament obtained €479.1 million to finance its main political priorities. In particular, Parliament obtained reinforcements to invest even more in a strong recovery, research and climate action, and to dedicate additional funds for young people and SMEs. The additional funds reinforce the Union’s action in the area of health, with financing for measures to fight the pandemic and support vaccination worldwide. The budget also builds in financing assistance for the Syrian refugees in Turkey and the region.

In 2022, these reinforcements (in commitments) on top of the Commission proposal as amended by AL1/2022, are notably allocated to Erasmus+ (+€35 million), EU4Health (+€51 million), and Horizon Europe (+€60 million and a frontloading of €40 million from unspent commitment appropriations under research, in line with Article 15(3) of the Financial Regulation). Additional resources were allocated for the Neighbourhood, Development and International Cooperation Instrument-Global Europe (+€190 million); humanitarian aid (+€211 million), the LIFE programme (+€47.5 million), the single market programme (+€30 million), 'creative Europe' (+€5.5 million), and the 'citizens' equality, rights and values' programme (+€5.5 million). The 2022 budget also includes the package of pilot projects and preparatory actions proposed by Parliament, for a sum total of €89.5 million in commitments.

As for every year of the 2014-2020 MFF, and in 2021, part of the reinforcements agreed by the budgetary authority will be financed from the flexibility tools (see Section 5.1.4). In the 2022 budget it is necessary to mobilise the flexibility instrument to cover expenditure under heading 6 – Neighbourhood and the world (Table 3).

Table 3 – Flexibility tools mobilised with the adoption of the 2022 EU budget

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Amount mobilised</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility Instrument</td>
<td>€368.4 million</td>
<td>To reinforce measures to fight the pandemic, including expenditure for vaccination worldwide under heading 6 ‘Neighbourhood and the world’.</td>
</tr>
</tbody>
</table>

Payments in 2022 are 1.5% higher than in 2021. Unusually, they are also 0.6% higher than commitment appropriations – for a second year in a row. This reflects the continued transition from the previous to the current MFF. The 2022 financial year therefore includes the amounts needed to pre-finance programmes under the new MFF, but also the necessary payments to meet needs linked...
to the closure of the 2014-2020 period. This has had the biggest effect on spending under subheading 2a Economic, social and territorial cohesion (see Figure 11).

Figure 11 – A comparison of EU budgets in 2021 and 2022 (commitment and payment appropriations, € billion)

<table>
<thead>
<tr>
<th>Commitment appropriations</th>
<th>Payment appropriations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single market, innovation and digital</td>
<td>20.8</td>
</tr>
<tr>
<td>Cohesion, resilience and values</td>
<td>53.1</td>
</tr>
<tr>
<td>Natural resources and environment</td>
<td>58.6</td>
</tr>
<tr>
<td>Migration and border management</td>
<td>2.3</td>
</tr>
<tr>
<td>Security and defence</td>
<td>1.7</td>
</tr>
<tr>
<td>Neighbourhood and the world</td>
<td>16.7</td>
</tr>
<tr>
<td>European public administration</td>
<td>10.4</td>
</tr>
</tbody>
</table>

Data source: European Commission and European Parliament, see Annex 3.

The final agreement on the 2022 EU budget includes nine statements. As in recent years, in one of the joint declarations attached to the budgetary agreement, the budgetary authority recalled the need for close monitoring of the implementation of the programmes of the current and the previous MFFs. It concerns, in particular, spending under subheading 2a – Economic, social and territorial cohesion, and spending on rural development under heading 3 – Natural resources and environment. Should the payment appropriations entered in the 2022 budget be insufficient to cover the estimated needs, the Commission is expected to present an appropriate solution as a matter of urgency to allow the budgetary authority to take the necessary decisions. Similarly, the Commission is invited to react should the payments be higher than needed.

In another joint statement, the European Parliament, Council and Commission committed to review the evolution of the pandemic by the end of June 2022, in particular, vaccination progress at international level and take action, if necessary. Concerned by the exceptional number of natural disasters that occurred in 2021, the institutions also agreed to reinforce humanitarian aid under heading 6 – Neighbourhood and the world – by €211 million. This will take pressure off the EU Solidarity Fund (EUSF) and provide leeway to be able to respond to external emergencies.

Two further statements address NGEU financing costs. In a joint statement, acknowledging the favourable interest rate environment, the institutions agreed to reduce for 2022 the funds for repayments (either interest payments or early repayments) by €90 million, integrated into 2027.
From this 'freed-up' amount, €51 million are to be used to increase, and advance in time, the financing of EU4Health programme. Unilaterally, the Commission indicated that, in the future, it could propose to the budgetary authority that amounts not used for interest payments be used for early repayments of the debt (see Box 4 for more on NGEU financing costs). It also stated that it would propose budgetary measures to ensure, if agreed by the budgetary authority, that the amount foreseen in the MFF for the financing of NGEU borrowing be fully used, either for the interest cost payment or early repayments of the debt. It also committed to report on the state of implementation concerning the financing and liquidity costs of NGEU borrowing each year, at the time of presenting the draft budget.

4.2. Impact of Next Generation EU on the 2022 budget

As soon as the Member States had approved the new own-resources decision, the borrowing process undertaken by the Commission could start, with an average volume of €160 billion per year between mid-2021 and 2026. The Commission conducted its first borrowing operation on 15 June 2021 (see Section 3.2), and additional resources were introduced to the EU budget as external assigned revenue, as from 2021.

According to European Commission data, the resources under the NGEU (grant component) introduced to the 2021 budget totalled €164.6 billion in commitments (Figure 12).\textsuperscript{170} The estimated annual NGEU instalment for 2022 is slightly smaller and totals €143.5 billion. This represents about 34% of total grants under the NGEU for the years 2021 to 2023 (€421 billion in current prices). The NGEU resources almost double the 2022 annual budget. The total commitments, both from the EU budget and from NGEU will reach €313 billion. In comparison with 2021, payment appropriations under both the annual budget and NGEU have increased, indicating that implementation is progressing.

As presented in Table 2, the bulk of resources under NGEU are being channelled to the Member States, through the RRF (€118.4 billion, representing 83%). The remaining 17% is reinforcing relevant MFF programmes, some of them significantly. The role of NGEU is particularly important in case of the InvestEU, rescEU, and the Just Transition Fund (for a detailed analysis see Chapter 7).

Figure 12 – Total commitment and payment appropriations under the EU budget and NGEU, in 2021 and 2022 (current prices, € billion).

Data source: European Commission and European Parliament, see Annex 3.


\textsuperscript{170} General introduction to the draft general budget of the European Union for the financial year 2022 (9 July 2021), p. 15, European Commission, 9 July 2021.
### Table 4 – Programmes within the 2022 budget that receive an NGEU contribution (in commitment appropriations and € billion, rounded figures)

<table>
<thead>
<tr>
<th>EU programmes / budget lines concerned</th>
<th>2022 budget</th>
<th>NGEU 2022 (grants)</th>
<th>Total funds EU budget + NGEU</th>
<th>Reinforcement by the NGEU (as a %)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heading 1 – Single market, innovation and digital</strong></td>
<td>13.4</td>
<td>3.6</td>
<td>17.0</td>
<td>26.8%</td>
</tr>
<tr>
<td></td>
<td>Horizon Europe</td>
<td>12.2</td>
<td>1.8</td>
<td>14.0</td>
</tr>
<tr>
<td></td>
<td>Invest EU Fund</td>
<td>1.2</td>
<td>1.8</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Heading 2 – Cohesion, resilience and values</strong></td>
<td>43.5</td>
<td>129.9</td>
<td>173.4</td>
<td>298.6%</td>
</tr>
<tr>
<td></td>
<td>REACT-EU total*</td>
<td>0.0</td>
<td>10.8</td>
<td>10.8</td>
</tr>
<tr>
<td></td>
<td>European Regional Development Fund (ERDF) – funding under REACT-EU</td>
<td>30.2</td>
<td>7.6</td>
<td>37.8</td>
</tr>
<tr>
<td></td>
<td>European Social Fund Plus (ESF+) – financing under REACT-EU</td>
<td>13.2</td>
<td>3.2</td>
<td>16.4</td>
</tr>
<tr>
<td></td>
<td>European Recovery and Resilience Facility</td>
<td>0.0</td>
<td>118.4</td>
<td>118.4</td>
</tr>
<tr>
<td></td>
<td>Union civil protection mechanism (RescEU)</td>
<td>0.1</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Heading 3 – Natural resources and environment</strong></td>
<td>13.9</td>
<td>10.0</td>
<td>23.9</td>
<td>72.1%</td>
</tr>
<tr>
<td></td>
<td>European Agricultural Fund for Rural Development (EAFRD)</td>
<td>12.7</td>
<td>5.7</td>
<td>18.4</td>
</tr>
<tr>
<td></td>
<td>Just Transition Fund</td>
<td>1.2</td>
<td>4.3</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>TOTAL of programmes/ budget lines concerned</strong></td>
<td>70.8</td>
<td>143.5</td>
<td>214.3</td>
<td>202.7%</td>
</tr>
<tr>
<td><strong>Loans under the RRF (outside the budget)</strong></td>
<td></td>
<td></td>
<td>194.8</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL from NGEU</strong></td>
<td></td>
<td></td>
<td></td>
<td>338.3</td>
</tr>
</tbody>
</table>

*REACT-EU is financed exclusively under NGEU, and implemented through ERDF and ESF+ measures.

Data source: European Commission, 9 July 2021.

### 4.3. Budget headings in detail

Figure 13 – Heading 1 Single market, innovation and digital, 2022 commitment appropriations

Data source: European Commission and European Parliament, see Annex 3.
Heading 1 – Single market, innovation and digital\textsuperscript{171} represents 12.8 % of the 2022 budget without the reinforcement from the NGEU instrument, and 8.1 % of the 2022 budget and NGEU combined.\textsuperscript{172} It concerns EU investments that contribute in the area of research and innovation, to the development of trans-European networks in transport, communication and energy, and in digital transformation, as well as single market and space policy. Examples of programmes and instruments supported include Horizon Europe, InvestEU, the Connecting Europe Facility (CEF), the Digital Europe programme, the single market programme, and the European space programme.

As compared with 2021, the total volume of commitments under this heading and its share in the 2022 budget remains at almost the same level (12.8 %). Two programmes under the heading – Horizon Europe and InvestEU, will be reinforced by resources from the NGEU for a total amount of €3.6 billion. The same programmes are also reinforced by €590 million, in line with the provisions made under Article 5 of the MFF (see Table 1).

The gap between the Council and Parliament positions on heading 1 was €1.1 billion. The agreement, compared with the Commission’s updated proposal, increased expenditure for Horizon Europe, in particular the health cluster (+€75 million of which €40 million from decommitments under research, in line with Article 15(3) of the Financial Regulation), and the single market programme, to support small businesses (+€30 million) to improve their competitiveness and access to markets, given that they have been particularly affected by the health crisis. This brings the allocation of the biggest programme under heading 1, Horizon Europe, to an increase of 6.4 % (from €11.5 billion in 2021 to €12.2 billion in 2022). NGEU contributes €1.8 billion to the Horizon Europe programme budget, increasing it by 14.5 % (see Table 2). The agreement on the budget also preserves the funds for InvestEU at the increased level proposed by the Commission for 2022 (+83.1 % compared with 2021 or +€543 million, of which €147.5 million from reinforcements through Article 5 of the MFF). The InvestEU guarantee is expected to mobilise more than €370 billion of support for investment and therefore contribute to the recovery strategy. It will also contribute to the Just Transition Mechanism through a dedicated scheme, as set out in the European Green Deal and the European Green Deal investment plan. Furthermore, it is topped-up by €1.8 billion (+152 %) from NGEU funds. The Digital Europe programme, dedicated to investments in the EU’s strategic digital capacities and the wide deployment of digital technologies, set at €1.2 billion, increases by 10.4 % compared with 2021. In contrast, the 2022 budget marks a decrease for the Euratom research and training programme (-17.8 %).

Figure 14 – Heading 2 Cohesion, resilience and values, 2022 commitment appropriations

Data source: European Commission and European Parliament, see Annex 3.

\textsuperscript{171} For details on Heading 1 see: M. Pari, Single market, innovation and digital, Heading 1 of the 2021-2027 MFF, EPRS, European Parliament, April 2021.

\textsuperscript{172} For detailed figures see Annex 3. See Chapter 7 for a detailed presentation of the programmes reinforced under the NGEU.
Heading 2 – Cohesion, resilience and values covers a wide range of EU programmes, channelling EU investment in three policy areas: regional development and cohesion; recovery and resilience; and investing in people, social cohesion and values. It represents 33.1% of the 2022 budget, on a par with heading 3 – Natural resources and environment (33.2%). It is however by far the biggest heading when combined with the NGEU grants component. NGEU more than doubles the funds under heading 2 by adding €129.9 billion, and brings the share of this heading to 59.4% when considering both the EU budget and NGEU funds.

Heading 2 is particularly important for the post-pandemic EU recovery. In total, more than 90% of the 2022 grants from the NGEU instrument will be implemented through four programmes under this heading. In order to secure the greatest benefit, however, it will be essential to generate synergies between cohesion policy and the RRF. Another element deserving of attention is the risk that Member States will prioritise RRF spending, which has tighter deadlines, leading further delays in implementation of cohesion programmes (see Chapter 7).

Payments under this heading are down by 6.5% overall compared with 2021, and stand at €62.0 billion. This is the result of a decrease in the financing of subheading 2a (-8.9%) balanced by an increase (+26.9%) in payments for subheading 2b – Resilience and values.

The budget under heading 2 is divided into two subheadings: 2a – Economic, social and territorial cohesion, with 89% of the heading’s funds, and 2b – Resilience and values, representing 11%. In this way the allocations for both areas are clearly ring-fenced, and appropriations and margins under one subheading cannot be used for expenditure in another subheading.

Figure 15 – Subheading 2a Economic, social and territorial cohesion, 2022 commitment appropriations

Data source: European Commission and European Parliament, see Annex 3.

Subheading 2a totals €49.7 billion in commitments and ring-fences the allocation known as the EU budget for cohesion policy, which supports the harmonious economic, social and territorial development of EU regions and cities. Most of the expenditure under this subheading is pre-allocated to the Member States and implemented through the European Regional Development Fund (ERDF), the European Social Fund Plus (ESF+) and the Cohesion Fund. The Common Provisions Regulation (CPR), sets out the rules for the cohesion funds for the 2021-2027 period. It was only adopted in June 2021, and even though the preparations for this financing period had started

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173 For details on Heading 2 see: M. Sapala, Cohesion, resilience and values, Heading 2 of the 2021-2027 MFF, EPRS, European Parliament, April 2021.
174 For more: EUreporter, The EU recovery will not be effective without a solid cohesion policy built in genuine partnership with European cities and regions, 13 September 2021 and V. Maksimov, COVID recovery euros slow down EU structural fund planning, Euractiv 18 November 2021.
175 Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the
earlier, the timing of the adoption of the 2021-2027 operational programmes was affected, and could lead to a reprogramming of the commitments that remained unused in 2021, in equal portions to the years 2022 to 2025 (Article 7 of the MFF regulation).

As part of the recovery plan for 2022, the ERDF and the ESF+ will be reinforced with an additional €10.8 billion for crisis repair measures in the regions (REACT-EU programme), financed by NGEU\(^\text{176}\) (see Table 2 and Chapter 7).

The level of payments, meanwhile, decreases slightly for both the European Regional Development Fund (-12.6 \%) and the European Social Fund Plus (-14.9 \%), following the accelerated implementation of the funds last year under the 2014-2020 MFF. This resulted in part from specific flexibility measures introduced to allow use of the cohesion funds to face the pandemic\(^\text{177}\). In this second year of the current MFF, 92 \% of the payments under this subheading cover financing needs for programmes from the previous planning period. On average, at the end of 2021, the level of executed payments reached 61 \% of total allocations.\(^\text{178}\) Implementation of the programmes initiated under the previous MFF will continue until the end of 2023 (N+3 rule) and may also put pressure on payments in the following years of the 2021-2027 programming period. In 2022, only 8 \% of payments account for the new period and this covers mostly annual pre-financing.

Figure 16 – Subheading 2b Resilience and values, 2022 commitment appropriations

Subheading 2b includes two main policy clusters: Recovery and resilience, and Investing in people, social cohesion and values. It is a relatively small part of the 2022 budget, but is the part of the budget that integrates the external assigned revenue for the financing of the Recovery and Resilience Facility (RRF), the main NGEU instrument for the Union’s main tool in support of economic and social recovery from the consequences of the pandemic (see Chapter 7). The 2022 allocation for

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\(^{178}\) Based on the European Commission’s webpage on the European structural and investment funds and cohesion data (accessed on 14 December 2021).
the RRF financed from NGEU totals €118.4 billion (grant component). This represents 83 % of the total NGEU tranche planned for 2022, with the rest allocated through other programmes (for an overview, see Table 2).

The Union civil protection mechanism (RescEU) is another programme under subheading 2b whose allocation is based largely on the NGEU contribution. It will comprise of €101.3 million from the regular budget and a €679.7 million contribution from NGEU. The cost of financing NGEU is also shown as part of subheading 2b. Following the budgetary negotiations, the amount provided was revised downwards by 37 % to €145.0 million in 2022 (see Box 4).

The most spectacular increase is, for a second consecutive year, in the EU4Health programme. Aimed at improving the EU’s capacity to react effectively to major health threats such as a pandemic, it will be endowed with a budget of €839.7 million (+156.4 % compared with its 2021 allocation). This includes a reinforcement of €428.3 million under Article 5 of the MFF (see Table 1 above) and €51.0 million added to the programme following the conciliation agreement between the European Parliament and Council (see Section 4.1. above). This programme will also contribute to the financing of the newly established Health Emergency Preparedness and Response Authority (HERA).179

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**Box 4 – Financing cost of NGEU**

Subheading 2b – Resilience and values, covers the financing cost of the non-repayable component of the Recovery and Resilience Facility under cluster 6 on Recovery and resilience (budget line 06 04 01). The EU budget covers the cost associated with the funds borrowed on the capital markets on behalf of the Union in the framework of the European Union Recovery Instrument (NGEU), as stipulated in Article 5(2) second subparagraph of the Own Resources Decision (Council Decision (EU, Euratom) 2020/2053 of 14 December 2020 on the system of own resources of the European Union and repealing Decision 2014/335/EU, Euratom, 14 December 2020). This decision also clarifies that repayments of the principal of the funds shall start before the end of the 2021-2027 MFF period, and limits the amount of annual repayments to 7.5 % of the total amount of the NGEU grants. All liabilities incurred by the borrowing of funds have to be fully repaid at the latest by the end of 2058.

The total amount of the NGEU financing cost for the 2021-2027 financial period, set in the MFF Regulation, is €14.9 billion. The European Council conclusions of 17-21 July 2020,1 specify (paragraph 74) that, any amounts not used for interest payments, should be used for early repayments before the end of the 2021-2027 MFF. The European Parliament has insisted1 that the introduction of new own resources should be sufficient to cover the repayment costs of the NGEU, both the principal and the interest. At the time of the agreement on the MFF, the European Parliament and the Council also agreed in a joint declaration1 that expenditure to cover the cost of NGEU should not affect other EU programmes and funds, and progress should be made towards introducing sufficient new own resources with a view to covering expenditure relating to repayment and interest costs.

The Commission conducted its first borrowing operation on 15 June 2021.1 The first annual payments of interests on borrowed funds are expected to take place in 2022. In the proposal for the draft 2022 budget, the Commission, taking into account both the favourable market conditions and the articulation of budgetary commitments and repayments, adjusted the originally planned NGEU financing cost in 2022 downwards, by €70 million to €389.7 million. At the budget conciliation stage, the amount for the financing cost was re-estimated and finally set at €145 million. €90 million were back-loaded and added to the last year of the MFF, in 2027. Simultaneously, it was agreed to adjust the profile of the repayments over the 2024-2027 period.

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Almost all EU programmes investing in people, social cohesion and values, will increase. For instance, compared with the 2021 budget, there is a significant increase in allocations for the

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'citizens, equality, rights and values' programme (+120.3 %), 'creative Europe' (+32.7 %) – to support the cultural sector hard hit by the Covid-19 crisis, Erasmus+ (+27.7 %) – which increased by €35 million at the budget conciliation stage, and the European Solidarity Corps (+4.2 %). The two latter will finance activities for the 2022 European Year of Youth. The allocation for the 'justice' programme has meanwhile been reduced (-6.0 %).

It is also worth noting that the Emergency Support Instrument (ESI)\(^{180}\) activated for the first period – February 2020 to 31 January 2022 – to help face the consequences of the pandemic is being phased out in 2022, and only a minimal amount is available in payments (€8 million). The measures that need to be continued will be followed-up under the EU4Health programme.

In terms of funding, heading 3\(^{181}\) has long been the biggest heading in the EU budget. In the 2022 budget it represents 33.2 % just above heading 2 – Cohesion, resilience and values (33.1 %). When NGEU funds are added, the heading share falls to 21.2 %, substantially below the share of Cohesion, resilience and values (59.4 %). It is dedicated to programmes supporting two main policy areas: agriculture and maritime policy (96.5 % of the allocation under heading), and environment and climate action (3.5 %).

The reformed common agricultural policy (CAP) consists of two pillars. The first, the European Agricultural Guarantee Fund (EAGF), finances market-related expenditure and direct payments. In comparison with the 2022 budget, the EAGF remains stable at €40.4 billion and remains the biggest fund under heading 3 (71.8 %) and the whole 2022 budget (23.8 %). The second pillar, the European Agricultural Fund for Rural Development (EAFRD), supports structural changes in rural areas. In 2022 its envelope decreases to €12.7 billion (-17.1 %). It will however be significantly reinforced by €5.7 billion from NGEU (+44.6 %).

The new CAP regulations are expected to come into force in January 2023. The CAP Transitional Regulation\(^{182}\) extended the provisions for support by the EAFRD and the EAGF to cover the financial


\(^{182}\) Regulation (EU) 2020/2220 of 23 December 2020 laying down certain transitional provisions for support from the European Agricultural Fund for Rural Development (EAFRD) and from the European Agricultural Guarantee Fund (EAGF) in the years 2021 and 2022 and amending Regulations (EU) No 1305/2013, (EU) No 1306/2013 and (EU) No
years 2021 and 2022. Spending will continue under the 2014-2020 rules, but respecting the ceilings of the new MFF. According to the Commission, the CAP Transitional Regulation requires Member States to ensure the same share dedicated to environment and climate change as under the previous MFF (‘non-regression principle’).

The allocation for the policy cluster ‘Environment and climate action’, accounts for 3.5 % of spending under this heading. The LIFE programme for environment and climate continues to support EU projects linked to the circular economy, biodiversity, protecting and improving quality of air and water, implementation of the 2030 energy and climate policy framework, and the achievement of the goals of the Paris Agreement. In addition, the programme will contribute to the realisation of the European Green Deal. At the budget conciliation stage, the budgetary authority agreed to provide a further €47.5 million, bringing commitments for LIFE to €755.5 million.

Since 2021, this heading has provided for a new fund contributing to the green transition, the Just Transition Fund (JTF). Aimed at supporting those EU regions worst affected by the transition to a low carbon economy, the JFT is part of the overall EU growth strategy. The European Parliament strongly supported the creation of the fund. Like the cohesion funds, the JTF is governed by the Common Provisions Regulation and implemented under shared management by the Member States and the Commission. Most of the relevant programmes are expected to be adopted in 2022. The JTF allocation in the 2022 budget amounts to €1.2 billion. A remarkable boost in 2022 from the NGEU instrument (+373.5 %) will give it a total value of €5.5 billion (Table 3).

Finally, heading 3 covers EU expenditure on the common fisheries policy. The Commission estimated that the delays in adopting the CPR would allow only half the programmes to be adopted in 2021, thus necessitating a reprogramming exercise for European Maritime, Fisheries and Aquaculture Fund (EMFAF) allocations. At the same time, implementation of the EMFAF of the 2014-2020 MFF just passes half the EU allocation. Therefore, a significant share of payments for EMFAF projects will fall in the first years of the current MFF.

Figure 18 – Heading 4 Migration and border management, 2022 commitment appropriations

€ 3 091.2 million
1.8 % of total EU 2022 budget

1 119.5
Asylum and Migration Fund (AMF)

153.7
Decentralised agencies — migration

809.3
Integrated Border Management Fund (IABM)

1 008.8
Decentralised agencies — borders

Data source: European Commission and European Parliament, see Annex 3.
Heading 4\textsuperscript{188} is the second smallest in the 2022 budget, but finances EU actions of high importance in the area of migration and asylum policy and border management. It is considerably reinforced for 2022 (+35.7\%) given that migration remains a long-term challenge and securing EU’s external borders is a condition for the integrity of the Schengen area. The two main funds under this heading are the Asylum, Migration and Integration Fund (AMIF), and the Integrated Border Management Fund (IBMF). Three EU decentralised agencies, the European Asylum Support Office (EASO), the European Border and Coast Guard Agency (Frontex) and the European Union Agency for the Operational Management of Large-Scale IT Systems in the area of Freedom, Security and Justice (eulISA) support these tasks. They account for more than one third of expenditure under this heading.

The AMIF supports national authorities in providing reception services for asylum seekers and migrants in the period immediately following their arrival on EU territory, for their integration into host societies. It also aims to develop a common asylum and migration policy and ensure effective returns. It also finances emergency assistance, resettlement and humanitarian admission, as well as relocation. The migration cluster, with 41.2\% of the heading’s budget, covers AMIF expenditure, with the commitments set at €1.1 billion (+28.2\% higher than in 2021). In addition, the Member States are assisted by the European Asylum Support Office (EASO) in the performance of the tasks relating to asylum procedures. The allocation for EASO in 2022 is €15.8 million higher than in 2021.

In the area of border management, based on common minimum standards for external border surveillance, Member States are supported in managing the various challenges and risks at borders. The border management cluster represents 52.8\% of the heading and the level of support is higher than in 2021 (+43.4\% in commitments). It covers the allocation to the IBMF, which increases considerably (+€273.1 million). This amount includes a top-up of €148.0 million, based on Article 5 of the MFF Regulation (see Table 1). The allocation for the fund is split between the instrument for border management and visas, increasing by 68.6\% (€671.1 million), and the instrument for customs control (€138.2 million with a 2\% increase).

The allocation for Frontex continues to grow to support the agency’s mandate to gradually establish a standing corps and provide Member States with enhanced support with returning third-country nationals. Between 2020 and 2021 the increase amounted to 20\%. For 2022, in the draft budget, the Commission proposed to allocate €757.8 million to Frontex. The budgetary conciliation agreed to a reduction of €65 million, allocating €692.8 million, but still increasing the budget of Frontex compared with 2021 by 37\%.

Under heading 4, €99.8 million (3.2\% of the spending) remains unallocated and can be used to cover unexpected expenditure. This margin under the MFF ceiling is almost half of the margin that was left in the 2021 budget (€188.2 million).

With regard to payments, the level is set at €3.1 billion. The Commission, in its political presentation of the draft budget\textsuperscript{189} stated that spending programmes accounted for 60.8\% of payments, of which 31.7\% was destined for new programmes and 29.1\% for programmes from 2014 to 2020 and earlier.

\textsuperscript{188} For details on heading 4 see: A. D’Alfonso, Migration and border management, Heading 4 of the 2021-2027 MFF, EPRS, European Parliament, April 2021.

\textsuperscript{189} General introduction to the draft general budget of the European Union for the financial year 2022, p. 84, 9 July 2021.
Figure 19 – Heading 5 Security and defence, 2022 commitment appropriations

Data source: European Commission and European Parliament, see Annex 3.

Heading 5 covers EU programmes in the area of security and defence. It is the newest heading, introduced with the 2021-2027 MFF, reflecting continuous pressure for EU action in this area. It is also, however, the smallest, representing 1.1 % of the total 2022 budget. It aims to address internal security challenges, support the competitiveness and innovation of the defence industry and provide for transport infrastructures fit for military mobility.

More than 37 % of the total €607.8 million allocation in the area of security will be spent through the Internal Security Fund (ISF). It will focus on ensuring a high level of security in the Union with common actions preventing and combating terrorism and radicalisation, organised crime and cybercrime and protecting victims of crime. In 2022, the ISF allocation increases both in commitments (+29.3 %) and payments (+33.3 %). The allocation for the decentralised agencies acting in the area of EU security increases by 9.3 %. Among them, the European Union Agency for Law Enforcement Cooperation (Europol) will have an allocation 10.3 % higher than in 2021.

The programmes in the area of EU defence will contribute to enhancing European cooperation in defence matters. The European Defence Fund (EDF) will develop research and development actions. Most of the approved €1.17 billion will be implemented through the European Defence Fund (€945.7 million). The remaining €231.7 million has been ring-fenced for projects supporting military mobility. They will help to develop EU strategic transport infrastructure fit for dual civil-military use and will be implemented through the Connecting Europe Facility.

A relatively high margin, amounting to 4.6 % of the allocation under heading 5, can be used for unexpected events in 2022.

Figure 20 – Heading 6 Neighbourhood and the world, 2022 commitment appropriations

Data source: European Commission and European Parliament, see Annex 3.

190 For details on Heading 5 see: S. Mazur, Security and defence, Heading 5 of the 2021-2027 MFF, EPRS, European Parliament, April 2021.

Heading 6 covers two policy clusters, external action and pre-accession assistance. In 2022, these policy priorities are affected by the Covid-19 crisis, and programmes will therefore focus on supporting partner countries in the area of public health, including vaccination, and on supporting their economic recovery. The instruments under this heading will promote development assistance, humanitarian aid, the EU’s common foreign and security policy, and support for EU candidate countries.\(^\text{192}\) They will also tackle issues such as climate change, migration, human rights, democracy and rule of law, and security, as well as the continuing crisis in Syria.

Under the 2022 budget, the external action cluster constitutes the bulk of the total allocation for heading 6 (91%), with €12.7 billion (74% of the heading) going to the Neighbourhood, Development and International Cooperation Instrument (NDICI).\(^\text{193}\) Since 2021, this instrument incorporates the European Development Fund (EDF).\(^\text{194}\) For 2022, NDICI’s priorities include action to counter the impact of the pandemic, and support vaccination and economic recovery. With this in mind, the conciliation committee agreed to reinforce the instrument with €190 million over Commission’s updated proposal (AL1/2022), specifying that €50 million would be dedicated to measures to fight the pandemic, including vaccines.

The other area included in the external action policy cluster is humanitarian aid (HUMA). With the allocation totalling €1.8 billion, it delivers EU assistance to save and preserve lives, prevent and alleviate human suffering, and safeguard the integrity and dignity of populations affected by natural disasters or human-caused crises. It also assists populations in need, following climate change crises or severe food insecurity. In the aftermath of the pandemic, it is expected that financing needs will rise. Taking into account the situation in Afghanistan and the neighbouring countries, and the need to continue offering humanitarian support to refugees in Turkey, the budget conciliation committee agreed to reinforce the humanitarian aid envelope by €211 million.

The pre-accession assistance cluster, with 11.7% of the heading’s total allocation, covers the Instrument for Pre-accession Assistance (IPA III) aiming to support reform in candidate and potential candidate countries. To fulfil these tasks, the budgetary authority set €2 billion aside for pre-accession assistance in the 2022 budget. This represents a 5.8% increase compared with 2021. The instrument will help to mitigate the consequences of Covid-19 in these countries. Payment appropriations under IPA increase by 26%, to cover growing needs linked to progress implementing measures that began during the 2014-2020 financial period.

The margin that was available under the MFF ceiling of this heading in the initial draft budget proposal, to cover additional financing needs, equalling €103.6 million, has been already used. The flexibility instrument was moreover mobilised for a further €368.4 million (see Table 2). The situation is therefore already tight and it will only be possible to cover any further financing needs under this heading through the special flexibility instruments (see Section 5.1.4).

\(^{192}\) For details on Heading 6 see: V. Lilyanova, Neighbourhood and the world, Heading 6 of the 2021-2027 MFF, EPRS, European Parliament, April 2021.

\(^{193}\) For details see: B. Immenkamp, A new neighbourhood, development and international cooperation instrument, EPRS, European Parliament, July 2021.


Scrutiny of the EU budget begins at the implementation stage with the Commission reporting to the budgetary authority regularly on the state of implementation. The interinstitutional agreement on budgetary discipline provides for dedicated interinstitutional meetings to assess the situation, with the aim of ensuring the necessary level of payment appropriations. Furthermore, the European Parliament and Council scrutinise adjustments made to the annual budget in the course of its implementation, through budgetary transfers or amending budgets.

Similarly, there are provisions increasing cooperation and oversight of the NGEU funds, notably through information submitted by the Commission, and regular dialogue with the European Commission on various aspects of NGEU implementation. These meetings are prepared inside the European Parliament in a specific standing working group on scrutiny of the RRF (see Sections 7.4 and 7.6).

In 2022, the European Parliament is expected to take a discharge decision on the 2020 financial year. In June 2021, the European Commission launched the procedure with the publication of the annual accounts for the year 2020. By the end of December 2021, the European Parliament’s Budgetary Control Committee (CONT) had closed the hearings stage with respective commissioners and

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195 For details on Heading 7 see: V. Lilynova, European public administration, Heading 7 of the 2021-2027 MFF, EPRS, European Parliament, April 2021.

196 General introduction to the draft general budget of the European Union for the financial year 2022, 9 July 2021.

197 Interinstitutional Agreement of 16 December 2020, between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management, as well as on new own resources, including a roadmap towards the introduction of new own resources, 22 December 2020. For details on budget implementation and payments see Annex 1, Part G and, for NGEU spending, Part H.

198 Integrated financial and accountability reporting 2020, European Commission, 8 June 2021.
representatives of EU institutions and bodies (stage C). In January 2022, CONT committee members will discuss the draft reports. Based on the reports, and after receiving Council’s recommendation on the discharge, the European Parliament will take its decision by 15 May 2021 at the latest (stage D). If the timetable for the procedure for the year 2020 is followed, the decision will most likely be taken at Parliament’s April 2022 plenary session.

In 2022, the European Parliament will also begin the discharge procedure for the 2021 budgetary year. Once the accounts are closed, in accordance with the discharge procedure for the EU annual budget, management and execution of the 2021 budget will be evaluated during the course of 2022 and 2023 (Figure 22). The 2021 discharge procedure will – for the first time – concern NGEU expenditure, which will be subject to European Parliament scrutiny. The process will begin in the middle of 2022, after adoption of the final accounts by the European Commission (stage A), and end with a decision of the European Parliament adopted before 15 May 2023 (stage D) or in October 2023 in the event of postponement (stage E).

The procedure will begin with publication of the accounts and series of budgetary reports and evaluations by the European Commission. Following this stage, the European Court of Auditors (ECA) will present its annual report with statement of assurance (DAS) on implementation of the 2021 financial year.

The possibility to accelerate the discharge procedure and close it within the year following the accounting year in question (n+1) is a longstanding CONT committee demand. However, the revision of the EU’s Financial Regulation adopted in July 2018 did not introduce any significant changes that could shorten the time between implementation of the budget and its political scrutiny.

Figure 22 – EU discharge procedure from the perspective of the European Parliament

Source: EPRS.

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199 See the timetable for the discharge procedure for the financial year 2020 as of September 2021, Secretariat of the Committee on Budgetary Control.

200 In recent years the institutions have managed to accelerate the procedures slightly. The decision on the 2017 discharge was voted in March 2019, one month earlier than usually. The decision on the discharge for the 2018 was tabled for a vote in the European Parliament plenary in March 2020. However, owing to the outbreak of the pandemic, it had to be postponed and was voted in May. The discharge procedure for the 2019 financial year was voted in April 2021. The discharge procedure for the 2020 financial year can be followed on the European Parliament’s Budgetary Control Committee website.


202 The statement of assurance (known as the DAS) is the official opinion issued by the ECA on the reliability of the accounts and on the legality and regularity of the underlying transactions (Article 287 TFEU and Article 148 Financial Regulation).
The European Parliament plays a crucial role in the democratic scrutiny and control of the implementation of the EU budget.\(^{203}\) Within the annual discharge procedure it not only signs off the financial year, but also makes recommendations for improving the financial management and implementation of the EU budget. After receiving a recommendation from the Council, it ascertains whether the European Commission upheld the principles of sound financial management and abided by the applicable rules and regulations when implementing the budget.\(^{204}\) Parliament grants separate discharge to the other EU institutions for the management of their sections of the general budget, and to the decentralised agencies and joint undertakings for their budgets. Starting from the year 2021, the European Court of Auditors will also produce a report on NGEU spending, to be scrutinised by the European Parliament.

**Box 5 – ECA publications in 2022**

The ECA has examined EU’s response to the Covid-19 crisis and the measures taken, and it has presented its views in a number of publications. Examples of particularly important reports published recently include an audit preview on the Resilience of the EU institutions during the COVID-19 crisis, and reviews of The EU’s initial contribution to the public health response to COVID-19, and Risks, challenges and opportunities in the EU’s economic policy response to the COVID-19 crisis.

Furthermore, in the course of 2022, the ECA will be publishing various special reports and other products on topics relating to EU recovery, for instance, a special report on the national recovery and resilience plans and on Covid-19 vaccine procurement and other health measures. In relation to EU budget responses, a special report will be presented on the ‘budget galaxy’, constituted by financing instruments set outside of the EU budget.

Source: European Court of Auditors, Work plan 2022.

In addition to scrutinising the regularity and legality of the budget’s implementation, the discharge procedure focuses increasingly on performance culture, performance information and achievement of goals. The principles of performance orientation have gradually permeated many aspects of the management, implementation and control of the EU budget. Since 2015, the principles have been included in the Commission’s ‘EU budget focused on results’ initiative. This wider approach to the assessment of EU spending is strongly supported by the European Parliament and the ECA. Many of the improvements introduced so far in this respect were triggered by opinions and demands expressed during the budgetary discharge procedure, for instance in the ECA’s annual and special reports and the European Parliament’s resolutions.\(^{205}\) NGEU funding is performance-based, through the setting and achievement of specific milestones and targets, making the performance aspect even more important.

One of the results of these developments is a new approach to the presentation of budgetary performance in the ECA’s annual report. Since the financial year 2019, the report is split into two parts: one on compliance and regularity of the EU accounts and transactions, as required by the Treaty, and the other on performance of spending programmes. Up until now the annual report has focused on legality and regularity, and the report on performance was included in one chapter of the document. A more in-depth analysis and assessment of performance and achievement of objectives was presented in other documents, such as the special reports and landscape reviews.

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\(^{204}\) For the methods of implementation of the EU budget please see Section 3.3.

\(^{205}\) For more on performance-based budgeting in the EU’s budget see: M. Sapala, Performance budgeting – A means to improve EU spending, EPRS, European Parliament, March 2018.
The performance report assesses how much relevant performance information is available and how well EU spending programmes have actually performed. It presents detailed analyses of performance indicators, of the impact of EU spending and of progress towards targets. The approach will be continued in future annual reports.
5. The EU budget beyond 2022

The current MFF sets out the structure for EU spending until the end of 2027, while the Next Generation EU (NGEU) recovery instrument significantly reinforces the resources channelled through EU budgetary instruments over the years 2021 to 2023. The withdrawal of the UK from the EU on 31 January 2020 and the end of the transition period on 31 December 2020 meant that the new MFF is the first budgetary framework in which the UK does not take part. In the new programming period, further reform of the financing system is envisaged, since the European Commission is expected to table proposals for new own resources.

5.1. Overview of the 2021-2027 MFF

5.1.1. Ceilings for commitments and payments

Table 5 recapitulates the maximum level of resources available for each major category of EU spending under the traditional MFF each year until 2027 taking into account the technical adjustment for 2022, in accordance with Article 4 of Council Regulation 2020/2093 laying down the MFF for 2021-2027. Total appropriations amount to €1 075.8 billion for commitments and €1 062.5 billion for payments (2018 prices). These figures also include the calculation, for the year 2022, of the additional allocations for specific programmes referred to in Annex II of the MFF Regulation. For the whole 2021-2027 period, a total increase of €11 billion is envisaged, thanks to upwards adjustments of the ceilings secured by Parliament during the MFF negotiations (see Section 5.1.3 below).

As for the year 2022, any margins left available between relevant ceilings and the appropriations authorised by the budgetary authority for the annual budget (see Chapter 4) represent resources that 2022 amending budgets could mobilise during the year to address new challenges and unexpected events.

Looking at the evolution of ceilings for commitments over time, it can be noted that the structure of the EU budget financed by the traditional MFF changes to a certain extent in the course of the programming period. Upward trends characterise the following headings: 2 – Cohesion, resilience and values; 4 – Migration and border management; 5 – Security and defence; and 7 – European public administration. The opposite is true for the remaining headings: 1 – Single market, innovation and digital; 3 – Natural resources and environment (and direct payments under the common agriculture policy); and 6 – Neighbourhood and the world.

With regard to payments, the ceilings are higher in the first two years of the programming period before stabilising at €149.9 billion as from 2023 (2018 figures). This feature may help to avoid a repeat of the issue of payments backlogs that afflicted the initial years of the 2014-2020 MFF.

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210 Council Regulation 2020/2093 of 17 December 2020 laying down the multiannual financial framework for the years 2021 to 2027.

211 It should be noted that the MFF Regulation presents ceilings in 2018 prices, while the annual budget is presented in current prices. For example, 2022 ceilings are set at €154 754 million for commitments and €156 322 million for payments (see Table 5). Expressed in current prices, the ceilings amount to €167 516 million for commitments and €169 209 million for payments. The 2022 budget adopted leaves margins below the ceiling of more than €1 222 million for commitments and more than €1 369 million for payments (current prices).

Payments needs tend to increase during the transition between programming periods, on account of the fact that many projects financed under the old generation of programmes come to completion.

The European Court of Auditors (ECA) reported a record level of outstanding commitments at the end of 2020, on the account of a number of factors, including delays in the implementation of the 2014-2020 European structural and investment (ESI) funds. The ECA pointed out that by the end of 2020, only 55 % of EU funding agreed for the 2014-2020 period had been paid out. According to the ECA, outstanding commitments were at €303.2 billion by the end of 2020.\(^\text{213}\)

Table 5 – MFF for the 2021-2027 period (€ million, 2018 prices, EU-27), including 2022 adjustment

<table>
<thead>
<tr>
<th>Commitments</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>Total 2021-2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Single market, innovation and digital</td>
<td>19 712</td>
<td>20 211</td>
<td>19 133</td>
<td>18 633</td>
<td>18 518</td>
<td>18 646</td>
<td>18 473</td>
<td>133 326</td>
</tr>
<tr>
<td>2. Cohesion, resilience and values</td>
<td>49 741</td>
<td>51 920</td>
<td>52 194</td>
<td>53 954</td>
<td>55 182</td>
<td>56 787</td>
<td>58 809</td>
<td>378 587</td>
</tr>
<tr>
<td>2a. Economic, social and territorial cohesion</td>
<td>45 411</td>
<td>45 951</td>
<td>46 493</td>
<td>47 130</td>
<td>47 770</td>
<td>48 414</td>
<td>49 066</td>
<td>330 235</td>
</tr>
<tr>
<td>2b. Resilience and values</td>
<td>4 330</td>
<td>5 969</td>
<td>5 701</td>
<td>6 824</td>
<td>7 412</td>
<td>8 373</td>
<td>9 743</td>
<td>48 352</td>
</tr>
<tr>
<td>3. Natural resources and environment</td>
<td>55 242</td>
<td>52 214</td>
<td>51 489</td>
<td>50 617</td>
<td>49 719</td>
<td>48 932</td>
<td>48 161</td>
<td>356 374</td>
</tr>
<tr>
<td>of which: market-related expenditure and direct payments</td>
<td>38 040</td>
<td>37 544</td>
<td>37 604</td>
<td>36 983</td>
<td>36 373</td>
<td>35 772</td>
<td>35 183</td>
<td>257 499</td>
</tr>
<tr>
<td>4. Migration and border management</td>
<td>2 324</td>
<td>2 947</td>
<td>3 164</td>
<td>3 282</td>
<td>3 672</td>
<td>3 682</td>
<td>3 736</td>
<td>22 807</td>
</tr>
<tr>
<td>5. Security and defence</td>
<td>1 700</td>
<td>1 725</td>
<td>1 737</td>
<td>1 754</td>
<td>1 928</td>
<td>2 078</td>
<td>2 263</td>
<td>13 185</td>
</tr>
<tr>
<td>7. European public administration</td>
<td>10 021</td>
<td>10 215</td>
<td>10 342</td>
<td>10 454</td>
<td>10 554</td>
<td>10 673</td>
<td>10 843</td>
<td>73 102</td>
</tr>
<tr>
<td>of which: administrative expenditure of the institutions</td>
<td>7 742</td>
<td>7 878</td>
<td>7 945</td>
<td>7 997</td>
<td>8 025</td>
<td>8 077</td>
<td>8 188</td>
<td>55 852</td>
</tr>
<tr>
<td>TOTAL COMMITMENTS</td>
<td>154 049</td>
<td>154 754</td>
<td>152 848</td>
<td>152 750</td>
<td>152 896</td>
<td>153 390</td>
<td>155 113</td>
<td>1 075 800</td>
</tr>
<tr>
<td>TOTAL PAYMENTS</td>
<td>156 557</td>
<td>156 322</td>
<td>149 936</td>
<td>149 936</td>
<td>149 936</td>
<td>149 936</td>
<td>149 936</td>
<td>1 062 558</td>
</tr>
</tbody>
</table>

Data source: Annex to the Communication from the Commission on the technical adjustment of the multiannual financial framework for 2022.\(^\text{214}\)

For these reasons, it is appropriate for the MFF to have payments ceilings commensurate with the high payments needs expected in the initial years of a new financial framework. In addition, as of 2022, unused resources under the payment ceiling from the previous year may be used to adjust

\(^{213}\) European Court of Auditors, Annual reports concerning the financial year 2020, October 2021.

\(^{214}\) COM(2021)365.
the payment ceiling of subsequent years upwards, by means of the Single Margin Instrument, which is designed to increase the flexibility of the framework (see Section 5.1.4. below).

On 22 December 2021, the Commission proposed an amendment of the regulation on the current 2021-2027 MFF\(^{215}\) in order to:

- increase the relevant MFF expenditure ceilings for 2025-2027 to provide the financial resources for the additional expenditure resulting from the proposed social climate fund.\(^{216}\) This fund would be aimed at addressing any social impacts that arise from the proposed revision of the EU emissions trading system.
- introduce an automatic adjustment of the MFF ceilings based on new own resources (see Section 5.2) which would allow for the repayment of NGEU borrowing.

The proposed amendment of the MFF Regulation will have to be adopted unanimously by the Council. The European Parliament must give its consent.

### 5.1.2. Changes to EU spending structure and priorities

The current framework implies a rebalancing of resources between broad categories of expenditure. Figure 23 shows that the shares of the MFF devoted to both traditional policies – agriculture and cohesion – decrease, while the resources for new and reinforced priorities rise. This development results in the three broad categories of expenditure having similar shares, each above 30% of the total.

![Figure 23 – Share of main policy areas in multiannual financial frameworks](data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAoAAAAHgCAYAAAAHjy0gAAAC9ElEQVR42u3dsf2hQAv///gAAAAABJRU5ErkJggg==)

Data source: European Commission website.

In the Commission proposals for the current MFF, the rebalancing was even more significant. Compared with the Commission proposal of May 2020, the European Council of July 2020 increased appropriations for cohesion policy and agriculture (by 2.2% and 0.9%), confirming Member States’ attention to funds with geographically pre-allocated expenditure. ‘Migration and border management’ and ‘Security and defence’, the two headings afflicted by the largest relative cuts, have higher allocations than in 2014-2020, but significantly lower than in the Commission proposals

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\(^{215}\) Proposal to amend the regulation laying down the multiannual financial framework for the years 2021 to 2027, 22 December 2021, COM(2021) 569.

\(^{216}\) Proposal for a regulation establishing a social climate fund, COM(2021)568.
and in Parliament’s position of November 2018. The same applies to programmes considered to be investments in EU common goods such as Horizon Europe (-6.2 % on the revised Commission proposal) and Erasmus+ (-13.8 %). Parliament criticised these cuts to the amounts proposed for programmes with high European added value and managed to obtain reinforcements for 10 flagship instruments in the MFF negotiations (see Section 5.1.3). The rebalancing of resources between traditional policies and reinforced priorities is even more significant when taking into account the resources that stem from NGEU (see Section 7.1).

Another feature that characterises the current MFF is the reduction in the number of its implementing programmes as part of an effort to simplify the EU budget and the rules that govern its implementation. One example of this strategy is the new InvestEU programme, a single investment support mechanism that is to bring together various EU financial instruments for internal policies, previously supported by different funds and programmes of the EU budget.217

In addition to the allocation of resources between headings, the current MFF and NGEU have horizontal priorities involving different headings. Climate mainstreaming218 is the incorporation of climate considerations and objectives across all major spending programmes. The political agreement reached by Parliament and Council on the current MFF includes an increase in the climate mainstreaming objective from 20 % of total resources in the past framework to 30 % in the years 2021 to 2027. This strengthened objective applies both to the new MFF and Next Generation EU, which could result in a €550 billion EU budget contribution to the broader European Green Deal investment plan219 by 2027.

As advocated by Parliament, the new interinstitutional agreement on budgetary matters220 includes provisions to strengthen climate mainstreaming methodology and to introduce corrective measures in the event of insufficient progress towards the 30 % objective. In addition, Parliament managed to obtain a commitment to the development of methodologies for a biodiversity spending target (7.5 % in 2024 and 10 % from 2026) and to measure the gender impact of expenditure.

5.1.3. Programme-specific reinforcements to ceilings as of 2022

During the years 2022 to 2027, the overall level of MFF resources gradually increases to €1 085.3 billion for commitments (i.e. €2 billion more than the 2014-2020 MFF without the UK and including the EDF) and €1 072.1 billion for payments (2018 prices), thanks to an article221 in the MFF Regulation negotiated by Parliament. This article introduces annual upwards adjustments in a programme-specific way, focusing on instruments with high European added value that Parliament has identified as deserving further resources as compared with the European Council’s settlement of July 2020. These ceiling ‘top-ups’ total €11 billion for the 2022-2027 period and are distributed as follows: +€6 billion (54.55 % of total top-ups) for subheading 2b – Resilience and values’, +€4 billion

220 Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management, as well as on new own resources, including a roadmap towards the introduction of new own resources, 22 December 2020.
221 Article 5, Council Regulation 2020/2093 of 17 December 2020, laying down the multiannual financial framework for the years 2021-2027.
(36.6 %) for heading 1 – Single market, innovation and digital, and +€1 billion (9.09 %) for heading 4 – Migration and border management. The top-ups will therefore go to flagship programmes providing EU common goods, such as research, health, Erasmus+ and border management. The budget for 2022 is the first annual budget for which such an upward adjustment of the ceilings applied. The financing of the total €11 billion reinforcement is linked to revenue stemming from competition fines, in line with Parliament’s long-standing call for such revenue to finance the EU budget.

In addition, some of these programmes as well as two other instruments (the Neighbourhood, Development and International Cooperation Instrument and humanitarian aid) and Frontex (the EU Border and Coast Guard Agency) receive a total of €4 billion up to 2027 from the re-use of de-committed funds for research (another recurrent demand from Parliament), reflows from predecessor instruments and unused margins (see Figure 24 for an overview of top-ups by instrument). These resources do not lead to upward revisions of the ceilings.

5.1.4. Special instruments

Given the long timespan covered by MFFs, the European Parliament is a strong advocate of flexibility tools to address unforeseen challenges. The MFF includes five special instruments with resources on top of the MFF ceilings. During the MFF negotiations, Parliament managed to reinforce these instruments and bring the total amounts available for them up to €21.1 billion for the 2021-2027 period, by ensuring a €1 billion increase for the Flexibility Instrument and broadening the possibilities for its use.

There are two types of special instrument:

- ‘thematic special instruments’ (the Solidarity and Emergency Aid Reserve, the European Globalisation Adjustment Fund, and the Brexit Adjustment Reserve), which provide for flexibility and additional means for specific events or budget lines; and
- ‘non-thematic special instruments’ (the Flexibility Instrument and the Single Margin Instrument), which offer the possibility to address more generally unforeseen circumstances or new/emerging priorities throughout the duration of the multiannual financial framework.

Four out of the five special instruments have annual or total amounts available set in the MFF Regulation, including the Brexit Adjustment Reserve, which is designed to counter unforeseen and adverse consequences in Member States and sectors worst affected by the UK withdrawal (see Section 5.1.). Table 6 recapitulates the amounts available for these four instruments.

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Table 6 – Four special instruments with specific (annual or total) amounts available outside the MFF ceilings (2018 prices, € million)

<table>
<thead>
<tr>
<th>Special instrument</th>
<th>Annual amount</th>
<th>Total amount</th>
<th>Total amounts for 2021 to 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Globalisation Adjustment Fund</td>
<td>186</td>
<td>1 302</td>
<td></td>
</tr>
<tr>
<td>Solidarity and Emergency Aid Reserve</td>
<td>1 200</td>
<td>8 400</td>
<td></td>
</tr>
<tr>
<td>Brexit Adjustment Reserve</td>
<td></td>
<td>5 000</td>
<td>5 000</td>
</tr>
<tr>
<td>Flexibility Instrument</td>
<td>915</td>
<td>6 405</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>21 107</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The fifth special instrument, the Single Margin Instrument, has no pre-fixed amounts, but makes it possible to increase ceilings in a given year by resorting to unused margins from previous years or to resources to be offset in subsequent years. Its annual use is capped at 0.04 % of EU gross national income (GNI) for commitments and 0.03 % of EU GNI for payments. Different rules apply to unused margins from previous years for payments, which are automatically transferred to the following year (see Section 5.1.1), and for commitments, which may be mobilised by Parliament and Council in the framework of the budgetary procedure.

5.1.5. United Kingdom: Past obligations and participation in a limited number of new programmes

The 2021-2027 MFF is the first budgetary framework in which the UK will not take part following its withdrawal from the European Union. Given the multiannual nature of many expenditure items in the EU budget, a number of the commitments that the EU, still including the UK, entered into during the previous MFF period 2014-2020 have only become payable after 2020. Moreover, relevant commitments concern not only the 2014-2020 MFF but also earlier ones; this is for example the case for liabilities linked to pensions and pension related benefits (e.g. Joint Sickness Insurance Scheme – JSIS) of retired EU staff. The settlement of the UK’s financial obligations towards the EU was therefore one of the priorities identified for the first phase of the negotiations on the withdrawal agreement.223 During the negotiations, the UK and the EU agreed to honour all financial obligations undertaken while the UK was a member of the EU. The Withdrawal Agreement224 entered into force on 1 February 2020, having been agreed on 17 October 2019. It translates the conclusions on the financial settlement reached during the negotiations into legal provisions. As for the 2021-2027 MFF, the EU-UK Trade and Cooperation Agreement,225 was signed on 30 December 2020, it was

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applied provisionally as of 1 January 2021 and it entered into force on 1 May 2021. It enables the UK’s continued participation in a number of EU programmes and activities for the 2021-2027 period. The relevant protocols list four programmes in the areas of research, innovation and space, namely: Horizon Europe; the Euratom research and training programme; the fusion test facility ITER; and the earth monitoring system Copernicus. However, the UK’s participation in the programmes is that of a third country and is therefore subject to a financial contribution to the EU budget, based on a contribution key linked to the EU and UK’s respective gross domestic product (GDP) at market prices. These provisions mean that key programmes receive additional resources from the UK, on top of those stemming from the MFF and, where applicable (i.e. Horizon Europe), from NGEU. The UK is expected to become an associated country to the EU’s research and innovation framework programme Horizon Europe.

Furthermore, the UK does not participate in but has access to the services of the EU’s satellite surveillance and tracking (SST) services, based on a number of conditions. In addition, already under the Withdrawal Agreement, both the EU and the UK committed to continued financing of peace, prosperity and reconciliation projects on the island of Ireland under the PEACE PLUS programme, which will be the subject of a separate financing agreement.

In the ECA annual reports for 2020 published in October 2021, the auditors noted that on 31 December 2020, the EU accounts showed an amount of €47.5 billion due from the United Kingdom based on mutual obligations set out in the withdrawal agreement.

As far as the 2022 Union budget is concerned, under Article 148 of the Withdrawal Agreement the United Kingdom will make payments to the Union to cover its share in the outstanding commitments prior to 2021 to be paid in 2022. This includes the UK’s share in the Union’s liabilities, such as staff pensions and other employment-related benefits for 2021, to be paid for the first time in 2022 as well as contingent financial liabilities. The UK’s overall contribution also includes payments to be made by the Union to the UK, or vice versa, relating to own resources corrections and adjustments for the financial years before 2021. The total provisional UK contribution to the EU’s 2022 budget amounts to more than €11 billion (€11 016 705 653).

5.2. Roadmap for further reform of the financing system

At the European Council meeting of July 2020, EU leaders agreed on the introduction of a new own resource as of 2021, a national contribution based on non-recycled plastic waste: this first new category of own resources has already been introduced by the Own Resources Decision as of 1 January 2021. The plastics own resource is calculated on the basis of Eurostat data, which Member States already collect and provide under existing reporting obligations. Furthermore Member States invited the Commission to make proposals for other new own resources (a border carbon adjustment mechanism and a digital levy, and a revised proposal linked to the EU’s emissions trading system – ETS).

Parliament, which had long pushed for a thorough reform of the own resources system, deemed the proposed modernisation insufficient and included additional progress on this aspect as an essential
element in its negotiations with the Council on the 2021-2027 MFF.\textsuperscript{229} The fact that the EU budget is currently financed mainly by own resources based on GNI and value added tax (VAT), which are seen by some as national contributions, is often deemed to hinder budgetary reform and exacerbate the focus of negotiations on budgetary balances. The adoption of new own resources could lead the way to considering avenues for broader reform of the EU budget.\textsuperscript{230}

The launch of NGEU was an additional reason for this position. In the absence of new own resources, other options would have to be considered for the repayment of the costs of NGEU grants when they became due: such as an increase in national contributions to the EU budget or cuts to existing MFF programmes in order to find resources to repay NGEU grants from within the MFF in the post-2027 framework. Parliament has repeatedly stressed that new own resources should cover at least the recovery instrument’s repayment costs.\textsuperscript{231}

On this basis, Parliament managed to obtain the inclusion of a roadmap for the introduction of new own resources (see Figure 25) in the interinstitutional agreement on budgetary matters with Council and the Commission.\textsuperscript{232} Under the agreed guiding principles for the reform set by the roadmap, new own resources should: raise enough revenue to repay the grant component of NGEU and its borrowing costs; be linked to EU policies and objectives,\textsuperscript{233} such as the fight against climate change, the circular economy, and ‘a Europe fit for the digital age’; and contribute to fair taxation and the fight against tax fraud and tax evasion.

The roadmap in the interinstitutional agreement includes a timetable for the envisaged introduction of new own resources, on top of the contribution based on plastic waste, by 2026. Although the Commission proposed a carbon border adjustment mechanism\textsuperscript{234} and a revised emissions trading system (ETS) on 14 July 2021,\textsuperscript{235} the new own resources proposal based on these legislative proposals was delayed compared with the timetable laid down in the above-mentioned roadmap. Furthermore, the adoption of the Commission proposal concerning a digital levy was delayed as well. It was only on 22 December 2021 that the European Commission put forward a package of proposals in order to ensure ‘the next generation of own resources for the EU budget’. At the same time, the Commission has proposed an amendment of the regulation on the current 2021-2027 MFF (see Section 5.1.1).

\textsuperscript{229} Resolution on the conclusions of the extraordinary European Council meeting of 17-21 July 2020, European Parliament, 23 July 2020.  
\textsuperscript{231} A. D’Alfonso, Own resources of the European Union: Reforming the EU’s financing system, EPRS, European Parliament, 2020.  
\textsuperscript{232} European Parliament, Decision on the conclusion of an Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management, as well as on new own resources, including a roadmap towards the introduction of new own resources, 16 December 2020.  
\textsuperscript{233} In line with High-Level Group on Own Resources’ recommendations that the revenue side of the budget should contribute to achieving EU policy objectives.  
\textsuperscript{234} Proposal for a regulation establishing a carbon border adjustment mechanism, 14 July 2021, COM S64(2021). The legislative procedure on this proposal is currently ongoing in the European Parliament.  
The Commission is proposing to amend the Own Resources Decision \(^{236}\) so that the following revenue would be allocated to the EU budget:

- 75\% of the revenue generated by the above-mentioned legislative proposal on a carbon border adjustment mechanism;
- 25\% of the revenue generated by the proposed revised emissions trading system; and
- 15\% of the share of the residual profits from multinationals that would be reallocated to EU Member States under the recent OECD/G20 agreement on a reallocation of taxing rights (Pillar One). \(^{237}^{238}\)

According to the Commission these three proposed new own resources could generate on average a total of up to €17 billion (in 2018 prices) annually for the EU budget in the years 2026 to 2030 \(^{239}\) and would thus help to repay the funds raised by the EU to finance the grant component of the Next Generation EU instrument.

The proposed revision of the Own Resources Decision has to be adopted unanimously in Council after consulting the European Parliament. It can only enter into force once it is approved by all EU Member States in accordance with their constitutional requirements. According to the roadmap agreed in the interinstitutional agreement, further proposals on own resources are expected from the Commission in 2024. This could include a financial transaction tax and a financial contribution linked to the corporate sector or a new common corporate tax base.

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\(^{237}\) On 8 October 2021, more than 130 countries that are members of the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting agreed on a reform of the international tax framework: a two-pillar solution to tackle tax avoidance.

\(^{238}\) The Commission has announced a legislative proposal on the reallocation of taxing rights in 2022, once the technical aspects of the multilateral convention are agreed. This proposal will complement the Commission proposal of 22 December 2021 for a directive on ensuring a global minimum level of taxation for multinational groups in the Union, COM(2021) 823 final (Pillar Two).

\(^{239}\) Statement of Commissioner Hahn on new own resources, 22 December 2021.
Figure 25 – Roadmap for the introduction of new own resources

2021
- 1 January 2021: New national contribution calculated on the basis of non-recycled plastic packaging waste*
- By June 2021: Commission proposals for own resources linked to:
  - a carbon border adjustment mechanism
  - a digital levy
  - a revised EU emissions trading system (ETS)

2022
- By 1 July 2022: Council’s deliberation on the 2021 proposals

2023
- 1 January 2023: Envisaged introduction of the own resources proposed in 2021

2024
- By June 2024: Commission to propose new own resources that could include:
  - a financial transaction tax
  - a financial contribution linked to the corporate sector or a new common corporate tax base

2025
- By 1 July 2025: Council’s deliberation on the 2024 proposals

2026
- 1 January 2026: Envisaged introduction of the own resources proposed in 2024

* As provided for in Council Decision (EU, Euratom) 2020/2053 of 14/12/2020

Data source: Interinstitutional Agreement on Budgetary Matters.
6. Focus – Recovery

6.1. Introduction

Even before the unprecedented economic shock wrought by the coronavirus pandemic, the EU economy was facing several long-term challenges, including a rapidly ageing population, translating into a reduced labour supply, increased income and wealth inequality, holding back economic growth, and the economic and social consequences of climate change. Nonetheless, these structural challenges were temporarily dwarfed by the need to provide economic support to cushion the effects of lay-offs, preserve incomes and protect businesses. Indeed, measures taken to fight the on-going coronavirus pandemic have had a severe impact on the functioning of the global economy: disrupting trade and investment channels, seriously constraining the movement of citizens, and forcing businesses to operate at reduced capacity or temporarily abandon their activities. Confidence levels have fallen markedly and unemployment has risen. In the European Union, the response to cushion the blow of the economic shock, given the separation of responsibilities in EU and national level, was two-pronged.

6.2. The EU response in detail – Member States

After an initial steep drop in economic activity in early 2020, governments stepped in and adopted liquidity measures (€2 553 billion),
240 taken under the flexibility arrangements of the EU budgetary rules (€524 billion), as well as policy measures to increase the capacity of their health systems and mitigate a more severe economic downturn through a strong fiscal policy response.

The fiscal interventions took account of the particular challenges posed by the pandemic. In the initial phase of the crisis, emergency packages consisting of both liquidity support and budgetary measures were announced to cope with the first phase of broad lockdowns in March 2020, when all EU countries introduced strict restrictions on businesses and the movement of people. Those measures were aimed at supporting firms and households particularly affected by the health crisis. Additional measures were gradually introduced during the interim phase that followed the phasing out of most lockdown measures in mid-2020, in order to support the recovery. In this phase, most businesses reopened, but some sectors were still impaired by ongoing health measures and local and targeted shutdowns, as well as changed consumer behaviour and preferences.

Stephan Haroutunian et al.241 place the measures taken by countries into two categories: (i) budgetary measures, which typically have an immediate effect on the budget balance, and (ii) liquidity measures, which typically do not immediately affect the budget balance in the year in which they are implemented, but imply contingent liabilities that may affect fiscal positions in the future.

An example of budgetary measures on the expenditure side were the short-time work schemes (see also Section 6.3),242 which played a very important role in stabilising employment during the Covid-19 crisis, especially during the period of broad lockdowns. An example of budgetary measures on

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240 Jobs and economy during the coronavirus pandemic, European Commission.


242 Such schemes aim to prevent the loss of human capital and stabilise consumption for those who would have become unemployed. Moreover, they can help the labour market recover faster, as they allow firms and workers to resume activity without the costly and lengthy searching and matching process that would have to occur if an employment relationship was lost.
the revenue side were the temporary cuts to value added tax (VAT) that several Member States introduced to stimulate consumption following strict lockdowns.243

As for liquidity measures on the expenditure side, examples include the loan guarantees that were the predominant instrument used to address firms’ liquidity shortages in the early phase of the pandemic. Finally, an example of liquidity measures on the revenue side were the various tax-related measures such as tax deferrals, reductions in corporate tax prepayments and speeding up of tax refunds and arrears,244 which strengthened the liquidity position of firms during the lockdowns.

The aforementioned measures were taken in the context of two major EU actions.

The first was the Temporary Framework for State Aid measures,245 adopted on 19 March 2020.246 The framework provided for five types of aid247 and allowed Member States to provide direct support to companies and small and medium-sized enterprises (SMEs), so as to ensure that businesses retain the means to keep operating, or to temporarily freeze their activity without closing down permanently. The Temporary Framework248 was first amended on 3 April 2020 to increase possibilities for public support to research, testing and production of products relevant to fight the coronavirus outbreak, to protect jobs and to further support the economy.249 It was further amended on 8 May to enable recapitalisation and subordinated debt measures,250 and on 29 June 2020 to further support micro, small and start-up companies and to incentivise private investments.251

On 13 October 2020, the Commission adopted a fourth amendment to prolong the Temporary Framework and to enable aid covering part of the uncovered fixed costs of companies affected by the crisis.252 On 28 January 2021,253 the Commission decided to prolong the Framework until 31 December 2021, as well as to expand its scope by increasing the ceilings for certain support measures and allowing the conversion of certain repayable instruments into direct grants until the end of 2022. Lastly, in November 2021, the Commission extended254 the Temporary Framework until 2024.

243 Most notably, Germany temporarily cut the standard VAT rate of 19% by 3 percentage points and the reduced VAT rate of 7% by 2 percentage points from July to December 2020, while Ireland cut its standard rate of 23% by 2 percentage points from September 2020 to February 2021.
244 Typically, such measures did not reduce the overall tax obligations of firms but shifted the payment dates from the time of the broad lockdowns in the first half of the year to later dates, thus providing firms with additional liquidity.
247 Those were (i) direct grants (or tax advantages); (ii) subsidised state guarantees on bank loans; (iii) public and private loans with subsidised interest rates; (iv) existing lending capacities, used as a channel for support for businesses – in particular to SMEs; and (v) additional flexibility to enable short-term export credit insurance to be provided by the state where needed.
248 State aid actions, European Commission website.
249 State aid: Commission extends Temporary Framework to enable Member States to accelerate research, testing and production of coronavirus relevant products, to protect jobs and to further support the economy in the coronavirus outbreak, press release, European Commission, 3 April 2020.
250 State aid: Commission expands Temporary Framework to recapitalisation and subordinated debt measures to further support the economy in the context of the coronavirus outbreak, press release, European Commission, 8 May 2020.
251 State aid: Commission expands Temporary Framework to further support micro, small and start-up companies and incentivise private investments, press release, European Commission, 29 June 2020.
30 June 2022, and introduced two new measures to create direct incentives for forward-looking private investment and solvency support measures, for an additional limited period.255

The second major action undertaken at EU level was the activation of the general escape clause of the stability and growth pact, for the first time since its adoption.256 The Commission and Council interpreted the clause as meaning that Member States can undertake the necessary policy coordination measures within the framework of the pact, while departing from the budgetary requirements that would normally apply. In other words, while the cycle of budgetary surveillance and coordination (European Semester) continued under the clause, some of the procedures were not engaged/finalised.257 This enabled Member States to react swiftly and adopt emergency measures to mitigate the economic and social impact of the pandemic while deviations from parts of the preventive258 or the corrective259 arm were allowed, i.e. for as long as the general escape clause was active.

One year later, the Commission published a communication to facilitate the coordination of fiscal policies and the preparation of Member States’ stability and convergence programmes (SCPs), provide general indications on overall fiscal policy for the medium term, and set out its considerations regarding the deactivation, or continued activation of the general escape clause.260 The communication laid out principles for the proper design and quality of fiscal measures, as well as general fiscal policy indications in 2022 and over the medium term, including the link with Recovery and Resilience Facility funds, and proposed to extend the application of the general escape clause until the end of 2022. On 3 June 2021, the European Commission confirmed its intention to keep the general escape clause in force throughout 2022 and revert back to the regular rules of the stability and growth pact only in 2023,261 based on the spring economic forecast.262 The Commission’s autumn 2021 economic forecast projected that, while growth rates would continue to vary across the EU, the EU economy as a whole regained its pre-pandemic output levels in the third quarter of 2021 and moved from recovery to expansion.263 The decision to keep the general escape clause deactivated throughout 2022 reflects the heterogeneous recovery trajectories of the individual Member States, as a few countries will only get to their pre-crisis output levels in 2022.

255 The State Aid Temporary Framework, European Commission competition policy website.
256 Coronavirus: Commission proposes to activate fiscal framework’s general escape clause to respond to pandemic, press release, European Commission, 20 March 2020.
257 For example, in May 2020, the Commission adopted reports under Article 126(3) of the TFEU (excessive deficit procedure) for all Member States except Romania, which was already under an EDP. These reports assessed Member States’ compliance with the deficit criterion in 2020 or the debt criterion in 2019. However, while the Commission noted that planned deficits exceeded the 3 % of GDP threshold, it concluded that a decision on whether to place Member States under an excessive deficit procedure should not be taken at that moment. As for the Council, while it asked for quantitative results from Romania (a nominal balance consistent with specific annual structural adjustments in the 2021-2022 period) it addressed only qualitative country-specific recommendations to the Member States (e.g. strengthen the resilience and capacity of the health system, in the areas of health workers, critical medical products and infrastructure/enhance coordination between national and regional authorities).
258 Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies.
259 Council Regulation (EC) No 1467/97 of 7 July 1997 on speeding up and clarifying the implementation of the excessive deficit procedure.
(e.g. Germany in the first quarter of 2022 and Italy in the second quarter of 2022) or even in 2023 (Spain, first quarter of 2023).264

6.3. The EU response in detail

6.3.1. Budgetary and fiscal policy

Direct EU budget support was provided through the Coronavirus Response Investment Initiative (CRII) and CRII Plus, which used unspent cohesion policy funds and allowed more flexibility and more up-front spending.265

Most importantly, later in the year, EU leaders agreed to a recovery package of €2.018 trillion (in current prices), combining the EU Multiannual Financial Framework for 2021 to 2027 and the Next Generation EU (NGEU) instrument.266 Agreed at the European Council in its July 2020 session,267 NGEU is a €806.9 billion recovery fund financed by the issuance of EU bonds. The centrepiece of NGEU is the €723.8 billion Recovery and Resilience Facility: a performance-based fund268 designed to stimulate economic convergence via an asymmetric allocation of grants and loans (see chapter 7). This means that those Member State economies that have a high rate of unemployment and that suffered a significant blow from the Covid-19 crisis will receive a relatively large amount of grants, while stronger economies with more robust growth records will receive comparatively less (see figures 7 and 8a in Section 7.3.1).269

NGEU has been designed to bring a coordinated fiscal expansion across the EU. A considerable part of the expected impact will be due to spillover effects, indicative of the benefits of joint action (see chapter 7.7). In addition to the direct benefits from their own national allocations of funding, countries will also benefit considerably from the effects of NGEU investments made in other Member States, mainly through trade flows, exchange rate movements, and cross-border projects. Spillover effects are central for small open economies with smaller grant allocations. In these cases, the positive effects of other Member States’ plans account for the bulk of the impact on gross domestic product (GDP). For some countries, such as Luxembourg and Ireland, positive spillover effects explain almost all of the total impact of NGEU in the simulations. However, even for larger economies with deep trade integration, such as Germany, spillover effects account for over half of the sizeable GDP effect. Governments’ fiscal positions should improve as the growth stimulus increases tax receipts and reduces the need to give financial support to businesses and the unemployed. This should reduce the national debt ratios in the longer term. Simultaneous

266 Overview of the Commission’s response, European Commission website.
267 Conclusions of the special meeting of the European Council (17, 18, 19, 20 and 21 July 2020). It should be noted that agreement between Council and Parliament on the centrepiece of NGEU (the Recovery and Resilience Facility) came only later, in December 2020.
268 In contrast to conventional EU instruments, which reimburse past costs incurred, the RRF provides financing via grants and loans for investments and reforms based on cost estimates. Following an initial pre-financing payment of up to 13 % of the total grant and loan envelope, the Facility will pay out only once agreed milestones and targets related to specific investments and reforms are met.
investment increases the effectiveness of this policy: since all countries are set to grow, this will generate an increase not only in imports but also in exports.\textsuperscript{270}

More generally, the implementation of the recovery plan for Europe (worth €2.018 trillion) is expected to have a major positive impact on the EU economy and help the Member States on the way to sustainable recovery.

6.3.2. Monetary policy

Compared with the ability of fiscal policy to activate discretionary measures to react to a crisis, the reaction function of central banks is much swifter. First, the European Central Bank (ECB) recalibrated its longer-term refinancing operations,\textsuperscript{271} a tool to provide credit institutions with financing by offering banks long-term funding at attractive conditions. Already on 12 March 2020\textsuperscript{272} the ECB amended\textsuperscript{273} its financing conditions in light of the pandemic to safeguard liquidity, as well as money market conditions, to further reinforce its current accommodative monetary policy stance throughout 2020 and 2021.

Second, on 7 April 2020\textsuperscript{274} the ECB adopted a package of temporary collateral\textsuperscript{275} easing measures\textsuperscript{276} to facilitate the availability of eligible collateral for Eurosystem counterparties to participate in liquidity providing operations, such as the targeted longer-term refinancing operations (TLTRO), as described above. An economic shock like a pandemic usually causes asset valuations to drop and ratings to be downgraded across economic sectors, thus resulting in a decline in eligible collateral, which, in turn, causes banks to further tighten their credit supply to the real economy. By acting swiftly, the ECB was able to interrupt such pro-cyclical feedback loops before they impaired funding conditions.

Third, and most notably, the ECB increased its purchases under existing asset purchase programmes and initiated a new ‘pandemic emergency purchase programme’ (PEPP) in March 2020, with an envelope of €750 billion until the end of the year.\textsuperscript{277} On 4 June, the ECB’s Governing Council decided to increase that initial envelope by €600 billion.\textsuperscript{278} On 10 December 2020, it increased it by a further €500 billion, bringing the total envelope to €1 850 billion.\textsuperscript{279,280}


\textsuperscript{271} Targeted longer-term refinancing operations (TLTROs) are Eurosystem operations that provide financing to credit institutions by offering banks long-term funding.

\textsuperscript{272} ECB announces measures to support bank liquidity conditions and money market activity, press release, ECB, 12 March 2020.


\textsuperscript{274} ECB announces package of temporary collateral easing measures, press release, ECB, 7 April 2020.

\textsuperscript{275} Collateral refers to marketable financial securities, such as bonds, or other types of assets, such as non-marketable assets or cash.

\textsuperscript{276} For a more detailed explanation of the ECB’s collateral easing measures, see The ECB Blog, 22 April 2020.


\textsuperscript{278} See Monetary policy decisions, press release, ECB, 4 June 2020.

\textsuperscript{279} See Monetary policy decisions, press release, ECB, 10 December 2020.

\textsuperscript{280} The ECB’s pandemic emergency purchase programme is a non-standard monetary policy measure in response to the coronavirus (COVID-19) outbreak.
By mid January 2021, the holdings under the PEPP programme stood at €1,614 billion. In total, therefore, ECB holdings under the APP and PEPP stood at €4,721 billion.281

All asset categories eligible under the existing asset purchase programme (APP) are also eligible under the PEPP. The PEPP is different from the APP in the following ways:

- contrary to the APP, a waiver of eligibility requirements has been granted for securities issued by the Greek Government under the PEPP;
- the eligibility of non-financial commercial paper under the corporate sector purchase programme (CSPP) was expanded to include securities with a remaining maturity of at least 28 days.282 These securities can be purchased under both the CSPP and the PEPP.

The ECB Governing Council will terminate net asset purchases under the PEPP as planned at the end of March 2022. The maturing principal payments from securities purchased under the PEPP will be reinvested until at least the end of 2023. In any case, the future roll-off of the PEPP portfolio will be managed to avoid interference with the appropriate monetary stance.

While a swift monetary policy intervention was crucial in the advent of the pandemic, the toolset available to the ECB had already been expanded in the previous couple of years. In order to recalibrate the new toolset with a forward-looking strategy, the ECB published a monetary strategy review in July 2021.283 The key change was a new interpretation of price stability (the ECB’s primary objective) as a symmetric inflation rate of 2% over the medium term. The aim of this review was to adapt monetary policy and central banking to broader macroeconomic trends, such as digitalisation, globalisation and demographic change, while also considering the implications of

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281 See Asset purchase programmes, ECB website.
282 Previously, only commercial paper with a remaining maturity of at least six months had been eligible for purchase under the CSPP.
283 The ECB’s monetary policy strategy statement, 2021.
climate change and the green/low-carbon transition, in line with the EU's climate goals and objectives. This has substantial implications for the primary objective (price stability), for the ECB's monetary policy assessment and for its monetary policy operational framework going forward.

To have an idea of the potential the ECB can put to use, it is necessary to consider the range of the operational framework of the Eurosystem. On the one hand, there is the lever of nominal interest rates (meaning the main refinancing operations, the rate on the deposit facility, and the marginal lending facility rate), which are used for the standard set of instruments such as open market operations, the standing facilities, and the minimum reserve requirements for credit institutions. On the other hand, since nominal interest rates have come close to their effective lower bound, the ECB has implemented several non-standard monetary policy measures, such as the asset purchase programme. Under this programme, the ECB has been buying a range of assets including government bonds, securities issued by European supranational institutions, corporate bonds, asset-backed securities and covered bonds at a rate ranging from €15 billion to €80 billion per month (the aforementioned purchase programmes – see Figure 26). Another tool, which gains significance in particular when nominal policy rates are close to the effective lower bound, is forward guidance, i.e. influencing market expectations of future levels of interest rates. Evidence suggests that the ECB’s forward guidance has helped to reduce yields significantly and to raise activity and inflation. This policy tool is therefore likely to be an integral part of the ECB toolset going forward.

In the short run there are two main factors that are warping the inflation trend: first, the increase in energy prices, which have a strong impact on headline inflation, and second, the base effect due to the temporary fall in prices on the advent of the Covid-19 recession. To account for these effects, it is possible to look at core inflation rates over a longer period (24 months), in order to account for the base effect and exclude volatile price elements. This shows that the annual inflation rate is at 1.4 %, noticeably above the average of 1 % between 2014 and 2021. Additional factors, partly one-off effects such as the changes in value-added tax rates, will only cause higher inflation rates

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284 The EU’s climate goals include, for instance, cutting greenhouse gas emissions by at least 55 % by 2030 to set Europe on a responsible path to becoming climate neutral by 2050.

285 For a detailed discussion see ECB monetary policy: Strategic review.

286 The main refinancing operations (MRO) rate is the interest rate banks pay when they borrow money from the ECB for one week.

287 The deposit facility rate defines the interest banks receive for depositing money with the central bank overnight.

288 The marginal lending facility rate is the interest rate banks pay when they borrow from the ECB overnight.

289 Open market operations consist of one-week liquidity-providing operations in euro as well as three-month liquidity-providing operations in euro.

290 The Eurosystem offers credit institutions two standing facilities: the marginal lending facility and the deposit facility.

291 Minimum reserve requirements are deposits on accounts with national central banks that credit institutions are required to hold.

292 Central banks cannot lower interest rates arbitrarily since a deeply negative nominal rate would lead to a flight from bank deposits and boost the demand for cash, which has a nominal interest rate of 0 %. This is referred to as the effective lower bound.

293 Forward guidance means the ECB is providing information about its future monetary policy intentions, based on its assessment of the outlook for price stability.


temporarily. In particular, increasing commodity prices\textsuperscript{297} and surging transportation costs\textsuperscript{298} are determinants that potentially contribute to rising price levels for longer than expected. Similarly, supply constraints are expected to persist\textsuperscript{299} in the near future as they have been aggravated by the attempts of supply chain participants to build buffers in already lean production networks – the so-called bullwhip effects.\textsuperscript{300}

While the above might cause more temporary inflation pressure until relative prices have adjusted, in the medium-term, an upward movement in wage growth and inflation expectations could lead to a more sustained inflationary effect. Even though there is yet no sign of wage pressure, the demand for higher wages can potentially feed into a wage-price spiral.\textsuperscript{301,302} Furthermore, forgone consumption might fuel pent-up consumption through excess savings. Increasing inflation expectations might lead to more persistent and higher inflation rates via second-round effects.\textsuperscript{303}

Against this backdrop, the ECB is facing a difficult trade off in the near future. If inflation rates prove to remain more persistently above the inflation target of 2\%, the ECB will be putting its primary objective and equally its credibility at stake unless it reacts to the price increases.\textsuperscript{304} Meanwhile, if the ECB decides to react to inflation pressure and decisively tighten its monetary policy stance, this in turn could place stress on financial markets and consequently also on sovereign bond markets.\textsuperscript{305}

The exit strategy from the accommodative monetary policy stance and the related pandemic crisis measures has been laid out in several steps. At the ECB Governing Council meeting in July 2021, the ECB specified that it would raise interest rates only if the inflation outlook by the projection horizon reaches 2\% and remains there.\textsuperscript{306} Later, in the September monetary policy decision, ECB president Christine Lagarde announced that the ECB would slow its purchases of government bonds, but highlighted that unwinding would happen gradually.\textsuperscript{307} As the PEPP will end, as planned, in March 2022, this would indicate that the ECB’s strategy is to end net asset purchases before raising rates.

Generally, the sequencing of the ECB exit strategy to normalise monetary policy, and thus to unwind asset purchases and subsequently recalibrate interest rates, is a tightrope walk that involves balancing several objectives at once. For instance, rising fiscal debt has been underpinned by favourable financing conditions for Member States. While the ECB is careful about withdrawing

\textsuperscript{297} World Bank Commodities Price data.
\textsuperscript{298} UNCTAD, Maritime Transport 2021.
\textsuperscript{300} Bottlenecks: causes and macroeconomic implications, BIS Bulletin No 48, Bank for International Settlement, November 2021.
\textsuperscript{302} Update on economic, financial and monetary developments, Economic Bulletin Issue 5, ECB, 2021.
\textsuperscript{303} K. Bernoth and G. Ider, Inflation on the Upswing – Just a Hiccup or a Trend Reversal After All?, Monetary Dialogue Papers, September 2021.
\textsuperscript{305} S. Pamies et al., Revisiting the link between government debt and sovereign interest rates in the euro area, SUERF Policy Brief No 202, October 2021.
\textsuperscript{306} Monetary policy decision, ECB, July 2021.
\textsuperscript{307} Monetary policy decision, ECB, September 2021.
6.3.3. Other tools

**SURE**

The aim of the SURE temporary instrument (Support to mitigate Unemployment Risks in an Emergency) was to help Member States manage sudden increases in public expenditure to preserve employment against the effects of the pandemic.

More specifically, the SURE instrument has provided financial assistance of up to €100 billion in the form of loans from the EU to the Member States affected. The loans were underpinned by a system of voluntary guarantees from Member States. The funds were used to support short-time work schemes and similar measures to help Member States protect employees and the self-employed against the risk of unemployment and loss of income (See also Section 2.2.2).

**European Investment Bank – European Investment Fund**

In May 2020, the Board of the European Investment Bank (EIB) approved a €25 billion pan-European Guarantee Fund in response to the Covid-19 crisis. The guarantee fund was designed to enable the EIB Group – in partnership with local lenders and national promotional institutions – to scale up its support to small and medium-sized enterprises (SMEs) and others in the real economy by mobilising up to €200 billion. The aim was to support EU businesses that were in trouble because of the economic downturn but that would have been strong enough to get a loan in the absence of the Covid-19 crisis.

At least 65 % of the financing was earmarked for SMEs. A maximum of 23 % was to go to companies with 250 or more employees, with restrictions applying to larger companies with more than 3 000 staff. A maximum of 5 % of the financing would go to public sector companies and entities active in the area of health or health-research or providing essential services relating to the health crisis. Another 7 % of European Guarantee Fund (EGF)-supported financing would be allocated to venture and growth capital and venture debt in support of SMEs and midcaps.

As of October 2021, the EGF had already approved €17.9 billion, with initiatives financed being expected to generate €134 billion in funding for the EU economy.

In addition to the above, the EIB Group also proposed a financing package that would go towards bridging loans, credit holidays and other measures designed to alleviate liquidity and working

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308 Keynote *speech* by Christine Lagarde, President of the ECB, at the 31st Frankfurt European Banking Congress 2021 'From Recovery to Strength', 19 November 2021.

309 *Fiscal dominance* is a special case of financial dominance in which monetary policy is constrained to keep interest rates low or to continue asset purchase programmes in accordance with current and future (national) fiscal policy choices.

310 Introductory *statement* by Christine Lagarde, President of the ECB, at the Hearing of the Committee on Economic and Monetary Affairs of the European Parliament, November 2021.

311 Each Member State’s contribution to the overall amount of the guarantee corresponds to its relative share in the total gross national income (GNI) of the European Union, based on the 2020 EU budget.


capital constraints for SMEs and mid-caps. The EIB Group, including the European Investment Fund, which specialises in support for SMEs, would implement the package through financial intermediaries in the Member States and in partnership with national promotional banks. The financing package consisted of dedicated (i) guarantee schemes based on existing programmes for immediate deployment, (ii) liquidity lines to banks to ensure additional working capital support for SMEs and mid-caps of €10 billion; and (iii) asset-backed securities (ABS) purchasing programmes to allow banks to transfer risk on portfolios of SME loans, mobilising another €10 billion in support.

European Stability Mechanism and balance of payments assistance facility

Last but not least, to address the coronavirus crisis, the European Stability Mechanism (ESM) established a pandemic crisis support (PCS) instrument, based on its enhanced conditions credit line (ECCL) available to all euro area countries. The instrument is available to all euro area member states, with standardised terms, agreed in advance by the ESM governing bodies to reflect the current challenges, on the basis of preliminary assessments by the European institutions.

Access granted is equal to 2% of the respective Member States’ GDP as of the end of 2019, as a benchmark. If all 19 euro-area countries draw from the credit line, this will amount to a combined volume of around €240 billion. Although support is available for all Member States of the euro area, it is up to each Member State to decide whether to apply for it or not. As of the time of writing, no EU Member State had asked to use this instrument, which could be interpreted as a sign that the package of measures and funds mentioned in this outlook are enough to ensure their resilience.

For Member States not in the euro area, medium-term conditional loans are callable through the Commission’s balance of payments assistance facility.

6.4. What sort of recovery?

6.4.1. High-debt or low-debt recovery?

In a context of elevated debt levels, the phasing out of support measures will eventually fuel a discussion around a recalibration or even a broader reform of EU fiscal rules and the introduction of

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314 The enhanced conditions credit line (ECCL) is one of two ESM precautionary credit lines, the other one being the precautionary conditioned credit line (PCCL). Both credit lines can be drawn via a loan or a primary market purchase, have an initial availability period of one year and are renewable. A PCCL is available to a euro area Member State whose economic and financial situation is fundamentally sound, as determined by a number of criteria. A beneficiary country would apply for an ECCL if it did not comply with the stricter PCCL criteria. Both types of credit lines require a memorandum of understanding (MoU) specifying policy conditionality. However, the policy conditions for an ECCL are wider-ranging. In addition, when an ECCL is approved, the beneficiary ESM Member would face enhanced surveillance. This would only apply to a PCCL if the country actually drew on the credit line.

315 The main differences between a ‘standard’ ECCL and the PCS can be summarised as follows (the next section presents some details):

- an ECCL implies a detailed and country-specific MoU, whereas the PCS has uniform policy conditions for all Member States;
- an ECCL results in enhanced surveillance in accordance to Regulation 2013/472, whereas in the case of the PCS, there is a ‘lighter’ version of enhanced surveillance (as detailed in the Commission’s letter of 7 May);
- the pricing conditions are different.

For more information, see C. S. Pacheco Dias and A. Zoppe, The ESM Pandemic Crisis Support, European Parliament EGOV Unit, August 2020.


317 EU assistance to non euro area EU countries that are experiencing difficulties regarding their balance of payments.
new own resources.  In the meantime, the European Commission has relaunched its review of the EU’s economic governance framework, a debate first launched in February 2020 but later suspended to focus on responding to the economic and social impact of the pandemic.

One particular strand of the debate revolves around the basic question of whether and to what extent debt-financed government spending should be kept in check. This debate is based on the observation that during the previous financial crisis, fiscal policy focused almost exclusively on constraining large deficits. Meanwhile, fiscal rules have ignored errors when public spending would have been crucial to cushion adverse economic effects. Therefore, several proposals are shifting away from the rigid debt-to-GDP ratio as the appropriate anchor for fiscal policy. Instead, fiscal policy should be focusing more on the demand-side since the long-term effects of insufficient demand (referred to as the hysteresis effect) have a much greater impact on sovereign debt sustainability than the interest paid on public deficits.

In a speech at the American Economic Association in 2019, Olivier Blanchard, former chief economist of the IMF, argued that the debt-to-GDP ratio will fall even without budget surpluses, given that economic growth exceeds the risk free interest rate ($r-g<0$). On this basis of this premise, he proposed a set of fiscal standards, as opposed to fiscal rules, and a random debt sustainability analysis. The fiscal standards would constrain fiscal debt inasmuch as a primary deficit is likely to increase the debt-to-GDP ratio (excessive debt) without specifying a clear threshold for the debt ratio.

Similarly, Furman and Summers highlight the importance of fiscal policy when considering employment figures, thus linking public spending with aggregated demand. While they criticise the general concept of the debt-to-GDP ratio, as it mixes stock (debt) and flow (GDP) measures, they propose to use a fiscal policy anchor related to government interest payments, therefore limiting the cost of public debt via a real interest payment to GDP ratio rather than comparing debt stock to one year’s GDP.

Other proposals, for instance from the European Fiscal Board, take into account the countries’ different starting positions in their debt levels and propose country-specific paths for debt reduction. The European Stability Mechanism, on the other hand, proposes to increase the debt

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319 Michele Chang argues that the pandemic could have longer-ranging effects on EU economic governance, advocating reform of the stability and growth pact prior to returning to its rules and creating a budget with a stabilisation capacity.
320 European Commission *Economic governance review*.
322 Interview with Jason Furman, Dezernat Zukunft, May 2021.
323 *When and how to deactivate the SGP general escape clause?*, Economic Governance Support Unit, European Parliament, January 2021.
325 O. Blanchard, *Public Debt and Low Interest rates*. Paulo Maruo and Jing Zhou show that $r-g<0$ is usually the case, *Can we sleep more soundly?*
ceiling to 100% since the current 60% public debt-to-GDP ratio is no longer relevant.\textsuperscript{329} Indeed, while gross government debt to GDP ratios have increased since the 2008-2009 financial crisis, overall debt servicing costs have been declining steadily since the mid 90s (Figure 27).

A different angle to fiscal rules, taking into account the additional public investment needs to meet the EU’s climate goals (0.5-1% of GDP annually between 2020 and 2030), has been proposed by Bruegel, a Brussels-based think tank. As increasing green public investment while consolidating deficits will be a major challenge, the think tank proposes a ‘green fiscal rule’, according which public investment spending could be exempt from fiscal constraints.\textsuperscript{330}

In the same vein, Grégory Claeys et al.\textsuperscript{331} note that the main tool for the Commission to use in order to build a sustainable investment strategy into the European Green Deal would be to amend the European fiscal framework with a ‘golden rule’ to allow appropriate investments. One option to introduce such a rule would be to allow for more flexibility for public investments that help Member States mitigate or adapt to climate change. To apply an investment clause into the fiscal rules would consequently mean, according to Claeys et al., modifying the current investment clause in order to allow for green investments. Importantly, the authors highlight that such exemptions, currently only applicable in bad times, need to be permanent exemptions to be used also in good times.

Carlo Cotarelli\textsuperscript{332} meanwhile proposes an EU-level investment capacity, a novel option, as part of a triple pack suggestion. In the context of more structural budgetary efforts, for instance Next


\textsuperscript{332} C. Cottarelli, ‘The role of fiscal rules in relation with the green economy’, in-depth analysis requested by the ECON committee of the European Parliament, August 2020.
Generation EU, green spending could be undertaken, directly or indirectly, at EU level. This way, the SGP rules would stay in place, unaffected by the need to increase green public investment.

Similarly, Atanas Pekanov and Margit Schratzenstaller discuss another three approaches for a reform of the fiscal rules, including one in which the European Commission recommends a benchmark for Member States that should be committed to green public investment as a share of government expenditures. The recommendation would be based on an estimate of a country-specific green investment gap that would consider also the country-specific general public investment gap. While this approach would not constitute an excessive breach of the fiscal-policy sovereignty of the Member States since only the composition of spending is re-directed, investment-specific areas, such as fighting climate change, could be scaled up. The drawback of this pro-active approach, according to the authors, is that similar approaches regarding debt rules have not only proven to be complex but have also failed to ensure that countries comply with the given recommendations.

The sheer number of proposals, of which only a fraction are described above, shows just how pertinent is the question of fiscal rules and their role going forward. However, the underlying problem, the transition towards a low-carbon recovery, needs to be tackled in various ways.

6.4.2. Low-carbon recovery

Global CO₂ emissions and expected warming by the end of the century

As a result of the Covid-19 pandemic, global CO₂ emissions from the combustion of fossil fuels declined by 5.4 % in 2020. However, global emissions are bouncing back to pre-Covid-19 levels as the economies recover. Preliminary estimates indicate that CO₂ emissions could grow by 4.8 % in 2021 (excluding cement) and are expected to be only slightly lower than the record emissions level of 2019. Moreover, concentrations of CO₂ emissions continue to rise, growing by about 2.3 parts per million in 2020. The global emissions reduction in 2020 will likely not be detectible in the atmospheric growth rate, as the natural variability of around one part per million is far greater than the effect of a 5.4 % emissions reductions in a year. Climate change mitigation requires prompt reductions in the level of emissions that will be sustained beyond the pandemic-induced 2020 decline.

In the EU, CO₂ emissions decreased by almost 10 % in 2020 compared with 2019 levels as a result of the pandemic, which affected mainly transport, industrial activities and power supply. Emissions from installations covered by the EU emissions trading system (ETS) fell by 11.4 %, and non-ETS emissions by 5.6 %. Aviation reported a record drop in emissions of 63.5% from within-EEA travel, and 54 % from international travel. Maritime emissions decreased by 15 %. Fossil CO₂ emissions in the EU are expected to rebound less compared with other regions, as the economic outlook is dimmer, according to the International Energy Agency (IEA). The expected increase of CO₂ in 2021 will reverse only one-third of 2020’s drop, reaching about 2.4 gigatonnes of emissions in total. Most of the CO₂ emissions reduction in the power sector in 2020 is likely to have continued in 2021, as only 10 % of the 2020 drop is expected to have been reversed by an increase in coal and gas-fired

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generation. The share of coal in electricity generation in the EU declined by about three percentage points between 2019 and 2021, to less than 14%. The most recent Intergovernmental Panel on Climate Change (IPCC) report states that the thresholds of 1.5 °C and 2 °C global warming will be exceeded during the 21st century unless there are significant reductions in CO₂ and other greenhouse gas (GHG) emissions in the coming decades. In light of the carbon-cutting pledges made at the COP26 summit, Climate Action Tracker (CAT) confirms that global temperatures are likely to rise by more than 2 °C by the end of this century, compared with the pre-industrial average. Based on the countries’ 2030 targets in their nationally determined contributions (NDCs), the global temperature is estimated to increase by 2.4 °C. Accounting also for full implementation of submitted and binding long-term targets, the estimated increase is 2.1 °C. Here CAT highlights the growing credibility gap and inconsistency between the 2030 targets and the 2050 net-zero targets.

Under current policies, CAT estimates that the global temperature will rise by 2.7 °C by the end of the century, but that under the most optimistic scenario, which assumes full implementation of all targets announced, the temperature increase would be brought down to 1.8 °C. However, CAT emphasises that this optimistic scenario is not compatible with the Paris Agreement and that warming of 2.4 °C or more cannot be ruled out. CAT recommends that the 2030 targets be aligned rapidly with the net-zero goals, and implementing the necessary policies today. It also recommends that developed countries significantly increase climate financing to support the transition towards net-zero.

Green recovery in the world

Following the disruptions caused by the pandemic, the response of several governments has shifted from the ‘rescue’ phase to the ‘recovery’ phase. In light of the global environmental and climate change challenges, it is vitally important that the funds mobilised in the recovery phase support the transition towards sustainable economies. Yet, despite growing evidence that government fiscal investments in climate change mitigation and adaptation have the potential to deliver economic returns while reducing GHG emissions at the same time, the United Nations Environment Programme (UNEP) fears many countries worldwide have so far failed to support a low-carbon Covid-19 recovery. Investments combining the potential of economic returns with the mitigation of emissions include, among others, electric vehicles, public transport modernisation, clean energy infrastructure and efficiency upgrades.

The Global Recovery Observatory tracks crisis expenditure during the pandemic to make government spending practices transparent, and to assess their environmental impact. It reports that, as of November 2021, only about 5% of a total US$18 trillion in Covid-19 fiscal spending, and only about 30% of a total US$3 trillion in Covid-19 ‘recovery' spending in the 50 leading economies worldwide has been allocated towards low-carbon spending as of January 2022.

The Organisation for Economic Cooperation and Development (OECD) Green Recovery Database estimates that 21% of total Covid-19 economic recovery spending in OECD, EU and key partner

338 Climate Action Tracker website.
339 Climate Action Tracker, Glasgow’s 2030 credibility gap: net zero’s lip service to climate action, November 2021.
countries is currently allocated towards environmentally positive measures, while the share representing negative and mixed measures represents 10% of spending. Most environmentally positive measures are in the areas of climate mitigation and air pollution, while areas such as biodiversity and climate adaptation are being neglected. Looking at the sectoral perspective, energy and ground transport receive the largest shares of green recovery spending, while agriculture receives one of the lowest. Moreover, the importance of careful monitoring and evaluation of the recovery measures is emphasised to ensure efficiency, sustainability, and public support.

The International Energy Agency (IEA) Sustainable Recovery Tracker assesses the existing energy-related plans worldwide and estimates that 3% of the overall fiscal efforts will be allocated to investments in clean energy, including the energy efficiency of buildings, renewable electricity, clean transport, hydrogen technologies and carbon capture, usage and storage (CCUS). This finding is broadly aligned with OECD estimated of green recovery spending, as measures boosting clean energy investments represent about 20% of the economic recovery measures. Nevertheless, the IEA highlights the fact that about 90% of total government spending on clean energy happens in advanced economies. Emerging and developing economies currently face the risk of slower economic recovery and limited fiscal capacity. International catalysts such as development assistance could contribute significantly towards clean energy investments in emerging and developing countries.

Despite the fact that developing countries have been disproportionately affected by the pandemic as well as the climate risks, their recovery spending has been very low compared with advanced economies (approximately US$60 compared with approximately US$11,800 per person). However, the share of total Covid-19 spending classified as recovery spending is comparable in advanced and emerging and developing countries (about 16%) as of November 2021.

Both the OECD and the IEA also highlight ongoing support for fossil fuels, combined with increasing consumption. The IEA states that ‘despite some increases in clean energy investment’, the world is in the midst of an ‘uneven and unsustainable economic recovery’, ‘with emissions set for the second largest rebound in history’. The OECD has meanwhile stated that ‘ongoing annual support to fossil fuels will likely surpass all the one-off green recovery spending in just a few years, undermining efforts to meet the Paris climate goals’.

6.4.3. Green recovery in the European Union

The European Union’s long-term strategy, defined in the European Green Deal, aims to reduce greenhouse gas (GHG) emissions while achieving economic growth that is inclusive and decoupled from resource use. The European Climate Law obliges the EU to become climate neutral by 2050, with an intermediate 2030 GHG emissions reduction target of at least 55% compared with 1990

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342 Key partner countries include Brazil, China, India, Indonesia and South Africa.
343 Key findings from the update of the OECD Green Recovery Database, OECD, September 2021.
345 Key findings, Sustainable Recovery Tracker, IEA, October 2021.
349 Key findings from the update of the OECD Green Recovery Database, OECD, September 2021.
levels. To put these overall objectives into practice, a set of interconnected legal proposals was proposed by the Commission on 14 July 2021 in the ‘fit for 55’ legislative package. The ‘fit for 55’ package states that investments in the low-carbon economy can ‘spur economic growth and jobs, accelerate the clean energy transition, increase long-term competitiveness and play a role in the green recovery’.

EU investment in the green transition and implementation of the Green Deal is set to grow considerably, with both the EU’s regular budget as well as its Covid-19 recovery plan. This approach reflects a growing recognition that green investments have high fiscal multiplier effects and can achieve a so-called ‘triple dividend’: supporting economic growth together with job creation while reducing GHG emissions. The Covid-19 pandemic has changed the investment needed to reach the increased 2030 GHG emissions reduction target in any significant way, but it has worsened the conditions for such investment to take place. Therefore, policy initiatives at EU and national levels need to provide increased support for the investments targeted at the green transition.

The EU’s 2021-2027 Multiannual Financial Framework and the NGEU jointly allocate 30% to fight climate change. This is the highest share ever from the largest EU financial package so far. These funds are part of a major investment plan that will facilitate the EU’s transition to the green economy, combining EU and Member States’ public funds as well as public and private investments. Moreover, in 2026 and 2027, 10% of annual spending will be allocated towards halting and reversing the decline of biodiversity.

The Recovery and Resilience Facility (RRF) is the centrepiece and main instrument of Next Generation EU, providing loans and grants to enable Member States to support investment and reforms in their sustainable recovery. The facility sets conditions for Member States to receive financial support, two of which are related to climate and the environment.

First, Member States need to allocate at least 37% of their expenditure to climate-related expenditure, as defined in their recovery and resilience plans. Member States must apply the methodology for climate tracking set out in Annex VI of the RRF Regulation. This assigns a weighting to the fields of support provided, to reflect their contribution to the climate objectives.

Second, Member States must ensure that all investments and reforms respect the ‘do no significant harm’ principle and therefore do not harm any of the following six environmental objectives: climate change mitigation and adaptation, sustainable use and protection of water and marine

352 Communication on ‘Fit for 55’: delivering the EU’s 2030 Climate Target on the way to climate neutrality, COM(2021) 550 final, European Commission, 14 July 2021.
356 The EU’s 2021-2027 long-term Budget and Next Generation EU, European Commission, April 2021.
resources, circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems.\textsuperscript{360}

In total, the EU is investing €806.9 billion through NGEU, in current prices, €723.8 billion of which through the Recovery and Resilience Facility (€338 billion in grants and €385.8 billion in loans).\textsuperscript{361} To finance NGEU, the European Commission will raise funds on capital markets in the years 2021 to 2026, translating into volumes of up to €160 billion per year on average (see Section 7.1). All borrowing is to be repaid by 2058. The Commission is using both bonds with different maturities and short-term debt instruments (EU-Bills). The Commission aims to raise 30\% of NGEU funds by issuing green bonds in order to further develop the green bonds market, strengthen the position of the EU as a leader in sustainable finance and to attract investors oriented towards investment respecting environmental, social and corporate governance (ESG) principles.\textsuperscript{362}

Member States are encouraged to include several flagship areas in their resilience and recovery plans. Areas relating to the green recovery are labelled: 'Power up' (clean technologies and renewables), 'Renovate' (improvement of energy efficiency of public and private buildings) and 'Recharge and Refuel' (sustainable, accessible and smart transport, charging and refuelling stations and extension of public transport).\textsuperscript{363} A July 2021 analysis\textsuperscript{364} of the overall spending priorities of the 22 national recovery plans submitted at that date showed that for the EU as a whole, 'Recharge and Refuel' was the main area of spending in the green recovery, accounting for more than a third of the RRF (about €86 billion). For countries such as Estonia, Germany, Hungary, Latvia and Romania, this area represents more than 50\% of green spending. 'Power up' accounts for about 25\% of green spending in the EU (about €55 billion). This category represents a higher share in countries including Cyprus, Czechia and Poland. The least significant category is 'Renovate', which has been allocated around €48 billion. Countries including France, Greece, Latvia, Slovakia and Belgium have allocated a significantly higher proportion to this priority compared with the EU average. 'Other green' spending, which could not be put into single category, or which is devoted to other items in support of the green transition (such as reforestation or biodiversity protection), represents about €34 billion of total spending.

A more granular breakdown of the Member States' green recovery and resilience plans in the same analysis shows that the largest share of green spending, about 20\%, is devoted to the energy efficiency of buildings (with significantly higher shares in Belgium, France, Greece, Latvia and Slovakia). The public transport category ranks second, representing about 15\% (in Romania, this category represents 47\%, and in Austria, Hungary, Latvia and Lithuania, it represents more than 30\%). A separate category for high-speed trains ranks third, with 12\% (about 90\% of the investments are in Italy, the rest is mostly in Czechia and Germany). Spending on renewable energy sources ranks fourth, representing about 10\% of green spending (it is the largest category in Poland, and is also a high priority in Spain and Italy). The last three categories by share of the allocated resources are electric mobility, climate adaptation and hydrogen. Overall, at EU level, about €220 billion of the RRF resources analysed in the July 2021 study is allocated to green categories.

\textsuperscript{360} Technical guidance on the application of 'do no significant harm' under the Recovery and Resilience Facility Regulation, European Commission, 2021.
\textsuperscript{361} Recovery plan for Europe, European Commission, 2021.
\textsuperscript{362} Next Generation EU: Funding Strategy, European Commission, April 2021.
\textsuperscript{364} K. Lenaerts and S. Tagliapietra, A breakdown of EU countries’ post-pandemic green spending plans, Bruegel Blog, July 2021.
To supplement green spending under the recovery plan, the European Commission put forward a strategy to finance the transition to a sustainable economy, proposing ways to channel private investment flows to support the EU’s sustainable recovery.\(^{365}\)

In addition to the Recovery and Resilience Facility, the EU provides financial support in the green recovery through the Just Transition Fund, a key tool for supporting regions most affected by the transition towards climate neutrality.\(^{366}\) Additional support includes the funding for sustainable infrastructure through the InvestEU programme,\(^{367}\) sustainable management of natural resources and climate action in urban development through the European agricultural fund for rural development,\(^{368}\) research and innovation tackling the climate change through Horizon Europe,\(^{369}\) and disaster risk management by RescEU (see Chapter 7).\(^{370}\)

According to the OECD, the cost of some key technologies needed to achieve climate neutrality by 2050 (such as low-carbon cement and steel) still needs to decrease, and recovery packages play important roles in supporting innovation through a supply-side ‘technology-push’.\(^{371}\) In 2020, the EU launched the first call for proposals under its Innovation Fund to support the green recovery and transition towards climate neutrality, and technological leadership in areas such as renewable energy, energy-intensive industries, energy storage, and carbon capture, usage and storage (CCUS). The Innovation Fund will allocate about €10 billion during the 2020-2030 period, mostly from the revenues from the auctioning of allowances from the EU ETS.\(^{372}\)

Some non-governmental organisations (NGOs) and climate tracking initiatives are asking whether climate-related spending out of the recovery initiative is reaching the required level of effectiveness: Green Recovery Tracker, led by E3G and the Wuppertal Institute, tracks the contribution of 15 Member States’ recovery efforts towards the green transition. It finds that many of the national recovery plans are at risk of missing the 37 % climate-related spending target. The uncertainties include: climate spending not being in line with the official climate tracking methodology, as defined in the RRF Regulation; measures being referred to as green despite unclear climate contribution; and measures assessed positively despite having harmful effects. Furthermore, about 25 % of the assessed recovery funding is allocated to interventions for which the climate effect cannot yet be assessed. Finally, the Green Recovery Tracker finds that most national recovery plans are not aligned with the EU’s 2030 climate target, and are missing the opportunity to use the funds to accelerate the green transition. As an example, it highlights the fact that most RRPs do not have enough links to the existing climate policy frameworks and are based on energy and climate plans (NECPs) that are no longer aligned with the EU’s increased climate ambitions.\(^{373}\)

The Greenness of Stimulus Index (GSI) assesses the effectiveness of countries in ensuring a Covid-19 recovery that supports sustainable growth and resilience through protection of climate and


\(^{366}\) Just Transition funding sources, European Commission, 2021.

\(^{367}\) InvestEU, European Commission, 2021.

\(^{368}\) European agricultural fund for rural development, European Commission, 2021.

\(^{369}\) Horizon Europe, European Commission, 2021.


\(^{371}\) Key findings from the update of the OECD Green Recovery Database, OECD, September 2021.

\(^{372}\) Boosting the EU’s green recovery: Commission invests €1 billion in innovative clean technology projects, press release, European Commission, 3 July 2020.

\(^{373}\) Green Recovery Tracker, Is the EU Recovery and Resilience Facility Enabling a Green Recovery?, June 2021. For more information on contribution of national recovery plans towards climate-neutral EU, see: Green Recovery Tracker.
biodiversity. While the EU’s national recovery and resilience plans are focused on climate change, the GSI finds that they risk missing the holistic environmental picture. More specifically, the analysis of 10 country plans suggests that while 98% of spending directed to climate change would reduce emissions, more than 50% of spending on the protection of nature would actually be harmful to nature. The GSI argues that this large discrepancy between climate and nature-related spending translates into a failed attempt to treat the environmental targets of the recovery package set by the European Commission in a holistic way. Despite this, it suggests that Europe overall is one of few parts of the world to have been successful in orienting its stimulus towards green transition. It ranks Denmark as the leader in the green recovery, while the EU as a whole is ranked second among the 30 countries assessed. The GSI further also states that national-level stimulus spending in France, Germany, Finland, Spain and Sweden has achieved strongly positive outcomes and a transformational shift.\textsuperscript{374}

A recent evaluation by the European Commission of the 22 resilience and recovery plans adopted by mid-November 2021 showed that all of them meet the quantitative climate target. The highest shares of climate-related spending of about 60% were reported in Austria, Denmark and Luxembourg.

The largest share of the climate-related spending is allocated to sustainable mobility and energy efficiency, together accounting for almost 60% of green expenditure in the adopted plans.\textsuperscript{375}

\textsuperscript{374} Vivid Economic, \textit{Greenness of Stimulus Index}, July 2021. Since not all the national resilience and recovery plans had been approved by the European Commission at the time of publication, their impact is not included in the GSI scores.

Although the resources allocated to green recovery through NGEU and EU's long-term budget are significant sums, this level does not achieve the additional €350 billion that needs to be invested every year during 2021-2030 decade compared with the previous decade to meet the increased targets set by the European Green Deal.\footnote{Overview of sustainable finance, European Commission, 2021.} To this end, according to the European Commission, all the EU's policies need to continue to be mobilised to support the transition towards climate neutrality – including research, skills, industrial, competition and trade policies – as stated in the proposal on the fit for 55 package.\footnote{Communication on ‘Fit for 55’: delivering the EU’s 2030 Climate Target on the way to climate neutrality, COM(2021) 550 final, European Commission, 14 July 2021.} The Centre for European Reform (CER) even recommends the EU recovery instrument become permanent and larger in size, as it provides cheaper funding to meet the EU’s climate targets compared with individual governments borrowing on their own account.\footnote{Why the EU’s recovery fund should be made permanent, Centre for European Reform, November 2021.} Finally, changes in consumer behaviour will also play a role in achieving the green transition and environmental targets under the Green Deal.\footnote{The Sectoral Impact of the COVID-19 Crisis: An Unprecedented & Atypical Crisis, European Commission, December 2021.}

6.5. Towards a labour-rich recovery

The serious economic disruptions caused by the pandemic translated into increased dislocation of labour markets. Average unemployment rates have increased and labour force participation has decreased in both advanced and emerging markets and developing economies.\footnote{Recessions and Recoveries in Labor Markets: Patterns, Policies, and Responses to the Covid-19 Shock, World Economic Outlook, IMF, April 2021.}

The Covid-19 pandemic shock has had varying effects both between and within countries. The effects were also highly unequal across different social groups, while exacerbating pre-existing inequalities in labour market outcomes,\footnote{See Labour market outcomes, OECD.} skills and opportunities. The pandemic has affected...
young and lower-skilled workers more harshly, as many have experienced a 'triple whammy': not only are they more likely to have been employed in the sectors most negatively affected by the pandemic, but they are also more likely to have become unemployed, and more likely to have suffered a fall in earnings in cases where they were obliged to change job.382

In advanced economies, the impact has been highly unequal across sectors, with some experiencing bankruptcies, falling firm entry rates and employment losses. The sectors with the largest losses in employment were wholesale and retail, transportation, accommodation and food services, and arts and entertainment. Moreover, employment in sectors that are more vulnerable to automation declined more steeply compared with other sectors, as previously existing trends accelerated as a result of the pandemic.383 On the other hand, some sectors, such as information and communication technology (ICT) and finance and insurance, have prospered and increased their operations and number of employees.384

Skills mismatches, i.e. discrepancies between the skills that employers are looking for and the skills that the workforce have, remain high in many Member States. By October 2020, over 60 million adults in the EU lacked the necessary literacy, numeracy and digital skills. Digital technologies are used increasingly in workplaces across Europe and nowadays most jobs require basic digital skills. In 2017, almost half the EU population (43 %) had basic or below basic digital skills, with the share rising only slightly since 2015. For 38 % of employers, the lack of digital skills has had an impact on performance, notably through productivity losses.385

The causes of macroeconomic skills mismatches386 can be both cyclical and structural. On the one hand, as low-skilled employment tends to be more cyclical than high-skilled employment, the difference in employment rates between qualification groups typically increases in economic downturns. As a result, macroeconomic skills mismatches typically increase during an economic downturn and fall again during the recovery. Nevertheless, changes in the index could also be due to structural factors, such as technological,387 occupational or demographic changes.388

Even prior to the pandemic, disruptions linked to technological change and shifting patterns of demand had already been challenging labour markets in many countries.

386 The gap between the skills of the working-age population and the skills needed in the economy.
387 The rapid pace of technological change may require skills and qualifications higher than the skills the workforce can offer. It changes the demand for skills between sectors, occupations and firms. Technological change can lead to skill shortages by creating the need for new skills that are not immediately available on the labour market, until the broader education system (including employer training) is able to meet the demand for new skills. In addition, firms may wish to hire highly-skilled workers as they can adapt at a lower cost relative to unskilled workers.
388 Demographic change also affects demand for goods and services, and hence demand for the skills required to provide them (e.g. medical services and personal care). A shift in demand for labour towards more skilled jobs and an ageing workforce – a long-term feature of European economies – can result in skill shortages and mismatches, as older workers have skills that do not necessarily match closely the skills required by the process of digitalisation of modern economies.
Some of these changes were highlighted in the World Bank's 2019 World Development Report, namely:\textsuperscript{390} changes in skills needed on the labour market (advanced cognitive and socio-behavioural skills that complement technology); growth in digital platforms and associated disruption of value chains and geography of jobs; and changes in the way people work owing to the rise of the ‘gig economy’.\textsuperscript{391}

In response to these labour market changes, analysts point to the need to (i) increase investment in human capital (knowledge, skills, and health) and lifelong learning, for workers to adapt to future labour markets; (ii) strengthen social protection, expanding safety net coverage and reforming financing arrangements and labour market norms to facilitate work transition and reduce disincentives to the creation of formal jobs; (iii) ensure affordable access to the internet while adapting regulations to confront the challenges posed by digital platforms (such as data privacy and protection and competition rules); and (iv) to upgrade taxation systems to address tax avoidance and create fiscal space for universal social protection and human capital development.\textsuperscript{392}

In addition to boosting automation, the pandemic shock has accelerated the transition towards digitalisation. While teleworking became the default option for many high-skilled workers, it remained marginal for low-skilled occupations. Furthermore, while low-skilled workers were more likely to be laid off, high-skilled workers were more likely to reduce their working time during the onset of the crisis.\textsuperscript{393}

The immediate policy responses to the pandemic included mostly job retention schemes, while in the transition to the recovery phase, reallocation and other active labour market policies started to be implemented in many countries.

\subsection*{6.5.1. Rescue policy responses}

In the EU, around six million jobs – 3\% of total employment – were lost between the fourth quarter of 2019 and the second quarter of 2020.\textsuperscript{394} The EU Labour Force Survey (EU-LFS) reports that labour market slack (unmet demand for employment)\textsuperscript{395} among people aged 20 to 64 affected 14.3\% of the extended labour force\textsuperscript{396} in the second quarter of 2020, when the EU experienced large economic disruptions. The share decreased in the fourth quarter of 2020 to 13.7 \%. In comparison, the labour market slack accounted for 12.5 \% in the fourth quarter of 2019.\textsuperscript{397}

The EU employment rate also dropped, from 73.2 \% in the fourth quarter of 2019 to 71.7 \% in the second quarter of 2020, before increasing to 72.6 \% in the fourth quarter of 2020. Young people...
aged 15-24 suffered the largest reduction in employment opportunities. This age group also saw the largest rise in labour market slack during the Covid-19 crisis, compared with other age groups. Reduced employment levels among young people were especially pronounced in Spain, Portugal, Belgium, Poland, Slovenia, Latvia, Estonia, Sweden and Ireland.398

Well-designed policies may alleviate the effects of the crisis. In the EU, the immediate ‘rescue’ policy response to the pandemic included job retention schemes, which are effective in countering transitory and asymmetric shocks. Job retention schemes take the form of either short-time work schemes that directly subsidise hours not worked (e.g. Germany’s Kurzarbeit, France’s activité partielle, or Italy’s Cassa Integrazione Guadagni), or wage subsidy schemes that subsidise hours worked. These schemes can also be used to increase the earnings of workers on reduced working hours (e.g. the Dutch Noodmatregel Overbrugging Werkgelegenheid – NOW, or retention schemes applied in Poland and Ireland).

The main feature of these job retention policies is that the employees keep their contracts although their work is reduced or suspended, thus enabling them to avoid financial hardship, and allowing companies to continue operating once economies recover. The number of employees in short-time work contracts increased significantly in some countries: in Germany, 19 % of dependent employees worked short-time under a job retention scheme in May 2020 (compared with 4 % during the global financial crisis), and in France, the uptake was 33 % (compared with 1 % during the global financial crisis).399

Large contractions in the number of hours worked could be observed around the second quarter of 2020, in line with contractions in economic activity. Subsequently, the increase in hours worked was more pronounced compared with the rise in employment, as the impact of the pandemic on jobs was more muted owing to the adoption of policy retention schemes.

At the height of the first wave in the second quarter of 2020, the economic activity of the worst affected sectors in the EU was 25 % below pre-pandemic levels. The impact on sectors requiring less physical contact was less severe: industry contracted by 17 % and construction by 13 %. High-skilled services such as ICT, finance and real estate were, meanwhile, affected by less than 5 %.400

Meinen and Serafini studied the regions in the four largest euro area economies in the first phase of pandemic and found that regional patterns in changes in employment contracts did not correlate with the number of Covid-19 infections. These heterogeneous market effects could be explained by the sectoral structure of regions, as different sectors are exposed to government restrictions to varying degrees. The second driver of the degree of labour market disruption is the region’s trade relations with other regions heavily exposed to the Covid-19 shock. By way of example, a region’s activity might have been affected by a shortage of supply of intermediate goods from regions highly exposed to the Covid-19, or by decreased demand for its exports.401

The EU introduced the ‘Support to mitigate Unemployment Risks in an Emergency’ (SURE) temporary instrument as an initial 'rescue' response to the pandemic. SURE provides loans to finance

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398  Key figures on the impact of the COVID-19 crisis on the labour market, Eurostat, April 2021.
Member States’ short-time work schemes or similar measures aimed at protecting employees and the self-employed, or ancillary, health-related measures, in particular in the workplace.\textsuperscript{402}

SURE was the first instance of the EU issuing social bonds,\textsuperscript{403} furthering the development of the social bond market and sustainable finance. The EU adopted and published an EU SURE Social Bond Framework to facilitate this commitment, in particular by requiring issuers to report certain information to ensure transparency, specifically on the allocation and impact of proceeds.\textsuperscript{404}

After the requests for financial assistance from Member States had been granted, the Commission began borrowing on capital markets on behalf of the EU by issuing bonds in October 2020. The first seven bond issuances were very successful, raising €75.5 billion between October 2020 and March 2021. The bonds were issued with maturities ranging from 5 to 30 years.

Out of the 18 Member States that were granted SURE support at the time of the report, 15 Member States did so in order to help finance short-time work schemes. In the majority of cases, the short-time work schemes were new schemes set up in response to the Covid-19 pandemic.

Most beneficiary Member States also applied for support to finance ‘measures similar to short-time work schemes’. These are measures that do not fall strictly under the definition of short-time work schemes but achieve the same purpose of preserving employment and providing income support as a response to the pandemic.

A report by the Commission shows that SURE has been successful in mitigating the immediate socio-economic impact of the Covid-19 pandemic, reducing unemployment by about 1.5 million people in 2020 in the beneficiary Member States. The report suggests that the instrument was responsible for the increase in unemployment being smaller than in the global financial crisis, despite the larger drop in GDP. SURE supported about 31 million people in 2020 (22.5 million employees and 8.5 million self-employed people), representing about 25 % of the total number of employed people in the 19 beneficiary Member States. Furthermore, the instrument supported about 2.5 million companies, allowing them to hold onto their employees during the crisis.\textsuperscript{405}

### 6.5.2. Recovery policy responses

During the second quarter of 2020, preventive measures against the pandemic were gradually eased in line with the number of new cases of Covid-19. In the second quarter of 2021, the EU’s economic and labour market showed signs of recovery, translating into increased employment and decreased labour market slack, although, by the end of the second quarter of 2021, overall employment was still at around 2 million jobs below the level of the fourth quarter of 2019.\textsuperscript{406}

**Labour market slack** in the EU accounted for 14.5 % of the extended labour force in the second quarter of 2021 for people aged 15 to 74, with unemployed people representing less than half of


\textsuperscript{403} Social bonds are assets compliant with the principles defined by the International Capital Market Association (ICMA), which offers investors assurance that the proceeds of the loans are used to fund targeted social policy measures.

\textsuperscript{404} EU SURE Social Bond Framework, European Commission, October 2020.

\textsuperscript{405} SURE: Report confirms instrument’s success in protecting jobs and incomes, European Commission, September 2021.

The slack (7 %).\textsuperscript{407} This represents a decrease of 1 percentage point (p.p.) in labour market slack from the previous quarter. The lowest levels of labour market slack in the second quarter of 2021 were reported in Czechia, Malta and Poland.\textsuperscript{408}

The share of employed people aged 20 to 64 reached 72.8 \% in the second quarter of 2021, an increase of 0.7 p.p. from the previous quarter. The gender gap was 11.1 p.p. in the second quarter. The employment rate for young people aged 15 to 24 was 32.3 \%, while the figure reached 80.3 \% for people aged 25 to 54, and 60 \% for people aged 55 to 64. From the first to the second quarter of 2021, the employment rate rose in 25 out of 27 Member States. The largest increases in employment were recorded in Slovenia (2.8 p.p.), Greece (2.1 p.p.), Belgium and Luxembourg (both 1.5 p.p.). However, employment rates still varied widely between Member States. In the Netherlands and Sweden, employment rates were over 80 \%, while in Greece, Italy, Romania, Spain and Croatia, they were between 60 and 70 \%. The employment rate was higher for men than for women, with the highest differences reported in Romania, Italy, Greece, Malta and Czechia, and the lowest differences reported in Estonia, Latvia, Finland and Lithuania in the second quarter of 2021.\textsuperscript{409}

Statistics on the volume of hours worked offer an economic perspective on employment recovery as this variable represents an estimate of labour input to production. The EU-LFS reports that in the second quarter of 2021, employed people aged between 20 and 64 worked 36.2 hours per week, on average. The working hours recorded for eastern and southern Member States were higher than those recorded for western and northern countries.\textsuperscript{410} Between the first and the second quarter of 2021, the total volume of hours worked increased in most Member States, by an average of 3 \% at EU level. The highest rises – of more than 10 \% – were reported in Greece, Slovakia, Ireland and Portugal. The increased hours worked in Greece, Slovakia and Portugal were mostly the result of a change in the hours worked by women, increasing by 23.9 \%, 17.3 \% and 15.5 \%, respectively.

The increase in hours worked between the first two quarters of 2021 was especially pronounced in those sectors most affected in the first wave of the Covid-19 crisis in 2020: the accommodation and food services sectors (49.2 \%), followed by arts, entertainment and recreation (21 \%) and other service activities (11.8 \%).\textsuperscript{411}

Going forward, the recovery is expected to be unequal across sectors, with some recovering relatively quickly and others languishing in the coming years.\textsuperscript{412} For example, tourism is expected to return to 2019 levels between 2022 (domestic travel) and 2024 (international travel),\textsuperscript{413} whereas the retail sector is expected to take about five years to recover.\textsuperscript{414}

\textsuperscript{407} Labour market slack reported for the first and second quarter of 2021 cannot be directly compared with the statistics for 2020 in the previous part of the text, as for the 2021 statistics, the age group considered is 15 to 74, whereas for 2020 statistics, the age group considered is 20 to 64.

\textsuperscript{408} Labour market slack – Unmet need for employment – Quarterly statistics, Eurostat, October 2021.

\textsuperscript{409} Employment – quarterly statistics, Eurostat, October 2021.

\textsuperscript{410} Average working hours include people working both full and part-time. It could therefore be expected that countries with a higher share of part-time workers would report fewer working hours per week for the total employed population. Indeed, the Netherlands, Austria and Germany report both the shortest average working week while having the highest share of part-time workers in the EU in the second quarter of 2021.

\textsuperscript{411} Hours of work and absences from work – Quarterly statistics, Eurostat, October 2021.

\textsuperscript{412} The Sectoral Impact of the COVID-19 Crisis: An Unprecedented and Atypical Crisis, European Commission, December 2021.

\textsuperscript{413} European Tourism 2021 – Trends & Prospects (Q1/2021), European Travel Commission, May 2021.

\textsuperscript{414} The Sectoral Impact of the COVID-19 Crisis: An Unprecedented and Atypical Crisis, European Commission, December 2021.
In the aftermath of the crisis, some of the previously described labour market effects may become more long lasting depending on the sectors and jobs concerned. An important question for policymakers is whether demand will return to its previous levels, or whether some firms and sectors will shed jobs permanently. In the latter case, productive factors will need to move from shrinking firms and sectors to growing ones (a reallocation of labour).\textsuperscript{415} The IMF recorded a spike in reallocation at the beginning of the crisis, which receded later but remains at levels significantly higher than before the pandemic. Given the highly asymmetrical sectoral impacts, the scale of the shock, the feedback loop between recession and reallocation, and analysis of firm-level earnings forecasts, the IMF is of the view that unequal sectoral performance and higher reallocation of resources may become a perennial feature of the post-pandemic recovery. The recovery in output will go hand in hand with a significant reallocation of labour, with workers from contact-intensive services shifting to other activities.\textsuperscript{416}

In this context, the aim is to adapt recovery schemes to support jobs that are viable in the long term as well as the most vulnerable households. The OECD recommends that employees in jobs that have become obsolete be supported through unemployment benefits in combination with reallocation policies.\textsuperscript{417} The IMF further suggests that in addition to labour reallocation, active and also passive labour market and education policies should be implemented to improve general labour conditions, lower transition costs, promote employees’ skills and mitigate the impact of the pandemic on inequality.\textsuperscript{418} In any event, country-specific characteristics are important and must be taken into consideration when determining the most effective policy options.\textsuperscript{419}

Another crucial point going forward is the timing of the phase-out of the ‘rescue’ job retention policies. Inadequate timing runs the risk of supporting jobs that are not viable in the long-term and slowing the reallocation of jobs towards expanding firms and sectors, thus decreasing aggregate productivity and overall economic recovery. On the other hand, phasing out the retention policies too soon risks the unnecessary disappearance of jobs that could still be viable and could still help to alleviate unemployment.\textsuperscript{420}

This is in line with many EU Member States announcing the partial or complete end of financial support for businesses to mitigate the effects of the pandemic on operations and employment as they turn from immediate ‘rescue’ towards long-term recovery measures.\textsuperscript{421} In March 2021, the Commission presented a recommendation on effective active support to employment following the


\textsuperscript{416} More specifically, while the share of output from contact-intensive sectors (hospitality) is expected to decrease, high-skilled services (ICT, finance and real estate) sectors are likely to grow. See \textit{Regional Economic outlook – Europe}, IMF, October 2021.

\textsuperscript{417} Reallocation policies are effective for a permanent shock as they enhance job creation as well as on-the-job occupational switches in the long-term recovery. These policies include job search-and-matching assistance, training and reskilling programmes, counselling and mentoring, entrepreneurship support, and providing hiring and start-up incentives. In the past, retention policies have benefited low-skilled workers more, while women and young people have benefited more from reallocation policies. See IMF, \textit{Regional Economic outlook – Europe}, April 2021.

\textsuperscript{418} \textit{Regional Economic outlook – Europe}, IMF, October 2021.

\textsuperscript{419} Job retention schemes during the COVID-19 lockdown and beyond, OECD, October 2020. The IMF shares this view. It notes that uncertainties about the development of the pandemic make the phase-out complex. Furthermore, impacts on output and employment, and the fiscal space of countries should be considered. According to the IMF, in Europe, countries should keep their job retention policies until the pandemic is fully under control, but should gradually shift towards encouraging reallocation. See Recessions and Recoveries in Labor Markets: Patterns, Policies, and Responses to the Covid-19 Shock, World Economic Outlook, IMF, April 2021.

\textsuperscript{420} Job retention schemes during the COVID-19 lockdown and beyond, OECD, 2020.

\textsuperscript{421} Employment – Quarterly statistics, Eurostat, October 2021.
Covid-19 crisis (EASE). It involves a strategic approach to gradual transition from emergency measures towards new measures required for a job-rich recovery. With EASE, the Commission enhances job creation as well as job-to-job transition through targeted employment services, while encouraging Member States to use the EU funds available, such as NGEU and the RRF.

Lastly, as described above, the shock may accelerate pre-existing trends in automation, further increasing reallocation needs. While reallocation could improve allocative efficiency and raise productivity and output, it could also have significant adjustment costs owing to friction in factor markets. Evidence from European economies suggests that reallocation shock could result in subdued employment and wage growth in subsequent years. This is due to labour market information asymmetries and wage rigidities, resulting in lengthy searching and matching of displaced workers, especially if the sectors that are downsizing differ from the sectors that are growing, as is the case in the present crisis. For the current recovery, the asymmetry between the knowledge and skills of employees in different sectors emphasises the need for upskilling in the workforce, to facilitate the transition.422

This is the reason why, as is the case with the environment, an important share of RRF funds is to be used for the digital transition.423 In addition, the Commission recommends that Member States develop coherent active labour market policies to tackle the labour market challenges induced by the Covid-19 crisis, bridge the skills shortages that could slow down economic growth in the recovery phase, and help citizens navigate the digital transition successfully. Member States’ policy packages should include three components: 1) hiring incentives and entrepreneurial support, 2) upskilling and reskilling opportunities, and 3) enhanced support from employment services, focusing especially on young people and workers in the sectors most affected by the pandemic. For this purpose, they should develop comprehensive skills strategies for different economic sectors, promoting cooperation between companies, social partners, education and training institutions, public employment services and other stakeholders, in line with the pact for skills and the European skills agenda.424

Member States are also encouraged to provide grants, loans and equity for start-ups to support entrepreneurship, together with improved access to social protection for the self-employed. Complementary measures could include focus on youth, women and social entrepreneurs. The Commission recommends that public employment services should also offer the necessary support to workers affected by company restructuring (for example due to the acceleration of automation) by recommending personalised career paths and providing workers with the skills needed for reallocation to different jobs. This should go together with facilitating cross-border mobility and supporting the recognition or validation of skills to address the skill shortages in some sectors.425 Improving labour market institutions and social safety nets will be key to maintaining social cohesion and addressing inequality in light of the dislocation of labour.

422 Regional Economic outlook – Europe, IMF, October 2021.
423 Member States are invited to propose EASE measures in their recovery and resilience plans (RRP) under the NGEU Recovery and Resilience Facility (RRF). One of the flagship areas to be included in the plans is labelled ‘Reskill and upskill’, where the Commission proposes that Member States adopt education systems to support digital skills and educational and vocational training for all ages.
424 Pact for skills is an engagement and governance model for a joint skills endeavour. The European skills agenda is an agenda for sustainable competitiveness, social fairness and resilience, setting objectives for upskilling and reskilling to be achieved in the next five years.
Most of the 22 national resilience and recovery plans for which a Council implementing decision has been adopted include investments in education, as well as training and skills development. Additional reforms include, for example, the reorganisation and strengthening of public employment services in France and Austria, the rationalisation of employment contracts in Spain, and the reform of unemployment benefits to boost incentives to work in France and Slovenia. Other education reforms relate to early childhood education and care—in Romania—and revamping the school curriculum—in Slovenia (see Section 7.3.).

The aforementioned actions and proposals are complementary to the Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU) instrument, which extends the immediate ‘rescue’ crisis response and measures delivered through the Coronavirus Response Investment Initiative (CRII) and Coronavirus Response Investment Initiative Plus (CRII+), and serves as a bridge towards long-term recovery plans, supporting job creation and youth employment as well as providing working capital and investment support for small and medium-sized enterprises.

Other support for the Member States’ EASE policy measures in their job-rich recoveries is available through the European Social Fund Plus (ESF+), the European Regional Development Fund (ERDF), the Just Transition Fund (JTF) and the European Globalisation Adjustment Fund for Displaced Workers (EGF). Other EU funding instruments for upskilling and reskilling include InvestEU, the Skills and Education Guarantee Pilot, the Digital Europe programme, Erasmus+, the European Agricultural Fund for Rural Development (EAFRD) and SURE.

6.6. Conclusion

In the last two years, the Covid-19 pandemic has been acting as a catalyst for structural change, such as the twin green and digital transition. The digital transition has the potential to generate significant productivity improvements, although some sectors will likely benefit more than others, and the effects will take some time to materialise. The green transition could boost low- and medium-skilled employment (e.g. for the renovation of buildings and the production of renewable energy), counteracting some of the negative impacts of the pandemic on the employment of lower-skilled workers. However, for many workers the green transition would also require reskilling, for them to be able to adopt alternative production methods or shift to new sectors and occupations. Concerns raised also include concentration and increased wage inequality, both of which should be addressed by policy measures.

The NGEU recovery instrument will help Member States adopt the necessary reforms and enhance the investments needed for the transition. NGEU will help to improve labour market conditions, and should boost employment by up to 1% during its period of operation, compared with a no-policy change baseline scenario. In the medium-term, improved labour market conditions and productivity gains could result in significant and persistent real wage gains (about 0.8% in 2030). Providing the reforms are implemented effectively, NGEU could have a significant effect.

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429 The adoption of digital technologies may result in lower competition in some markets. Increased adoption of automation technologies and teleworking could also skew the labour market demand towards high-skilled, high-wage employment, especially in the service sector.
contributing towards a better recovery path for Member States in terms of both labour market conditions and GDP.431

It is also important to address the structural issues affecting the labour markets, by means of reforms written into the RRF recovery and resilience plans. These should support economic growth by increasing labour market participation, boosting allocative efficiency and improving the business environment in the medium and long term.432 Structural policies (such as education policies, bankruptcy and insolvency frameworks, product and service market regulations, housing, and credit policies) could prove effective in complementing the suggested labour market policies.433

433 Regional Economic outlook - Europe, IMF, October 2021.
7. Next Generation EU: Temporary recovery instrument

The launch of Next Generation EU (NGEU) represents a major innovation in EU finances. This joint instrument is geared towards economic recovery, significantly reinforcing the resources channelled through EU budgetary instruments over the years 2021 to 2023 (and to 2026 for payments). The establishment of NGEU was the result of a growing consensus on the need to complement European Central Bank (ECB) measures and national stimulus packages with a coordinated common fiscal response, to address the challenges that the pandemic was posing to the smooth functioning of the single market and the euro area.434 The main expenditure instrument financed by NGEU is the Recovery and Resilience Facility (RRF). RRF resources are implemented through national plans that comprise a coherent package of reforms and investments aimed at making the EU economy more sustainable, innovative and inclusive. While 2022 is the first year of full deployment of the RRF, the facility is already contributing to the EU recovery and its implementation may play an important role in the ongoing debate on the review of the EU’s economic governance framework.

7.1. Main features of Next Generation EU (NGEU)

Unlike the MFF, which is financed by EU own resources, NGEU financing is achieved by means of borrowing operations, which the European Commission carries out on behalf of the Union. Prior to NGEU, the Commission had already borrowed resources on the markets to provide Member States with financial support. The instruments concerned were based on the use of the margin available under the own resources ceiling as a guarantee and/or on guarantees from Member States. One recent example is SURE, the €100 billion instrument for temporary support for unemployment schemes, which is also part of the broader EU response to the pandemic.435 The second bi-annual report on SURE pointed to a large take-up of the instrument, with 94 % of the financial envelope already allocated one year after its September 2020 launch. In 2020 only, SURE supported approximately 31 million workers and 2.5 million firms.436

Nevertheless, NGEU is unprecedented in scale, involving collective borrowing that represents some 5 % of EU gross national income (GNI) (although spread over a number of years).437 For the first time, it enables the EU budget to contribute directly to macroeconomic stabilisation (see Section 3.1). Amounting to €806.9 billion in current prices (or €750 billion in 2018 prices), NGEU makes the Commission one of the major issuers of bonds denominated in euro.

Borrowing operations for NGEU activities started in mid-2021 following the ratification of the new Own Resources Decision by all Member States.438 Given the volumes involved (on average up to €160 billion per year) and the frequency and complexity of the operations required, the European Commission is implementing a diversified funding strategy that combines the use of different funding instruments and funding techniques with open and transparent communication to the

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market participants. The objective is to facilitate the market absorption of the funding programme, while being able to respond promptly to evolving funding requirements or market conditions, with a view to ensuring cheaper borrowing and the availability of liquidity at all times.\footnote{European Commission, \textit{Communication to the European Parliament and the Council on a new funding strategy to finance Next Generation EU}, COM(2021)250, 14 April 2021.} In its semi-annual funding plan of December 2021, the Commission announced its intention to issue €50 billion in long-term bonds between January and June 2022, to be topped-up by short-term EU-bills.\footnote{European Commission, \textit{NGEU Funding Plan January-June 2022}, 14 December 2021.}

Commission President Ursula von der Leyen announced that 30% of borrowing (up to around €250 billion) will be through green bonds,\footnote{U. von der Leyen, \textit{State of the Union Address at the European Parliament Plenary}, 16 September 2020.} which gives the EU an opportunity to establish itself as a global standard-setter in this area. After adopting the independently evaluated NGEU green bond framework, the Commission issued the first NGEU green bond in October 2021. Worth €12 billion, the emission of this 15-year bond represents the world's largest green bond transaction to date.\footnote{European Commission, \textit{Next Generation EU – Green Bond Framework}, SWD(2021) 242 final, 7 September 2021; and \textit{Next Generation EU: European Commission successfully issues first green bond to finance the sustainable recovery}, Press release, 12 October 2021.}

According to the Bruegel think tank, the Commission successfully managed to organise large-scale borrowing operations in a short time. The authors argue that NGEU is a demonstration of EU solidarity that has generated confidence in the resilience of the euro area, providing an additional option to borrow at cheap rates and invest the proceeds in joint priorities.\footnote{R. Christie, G. Claey and P. Weil, \textit{Next Generation EU borrowing: a first assessment}, Policy Contribution 22/2021, Bruegel, November 2021.}

On the expenditure side, NGEU aims specifically to address the socio-economic consequences of the coronavirus pandemic and make the EU economy more resilient and sustainable through investment and reforms. Combined with the new MFF, it represents the largest stimulus package ever financed through the EU budget and further modifies the structure of EU spending as compared with the 2014-2020 period (see Figure 30). Commentators have dubbed the agreement as momentous.\footnote{Recovery fund is a huge breakthrough for the EU, Editorial Board, \textit{Financial Times}, 21 July 2020.}
Various analysts have identified the absorption capacity of the unprecedented level of resources channelled through the EU budget as an important challenge for the recovery package.\footnote{Z. Darvas, \textit{Will European Union countries be able to absorb and spend well the bloc's recovery funding?}, Bruegel Blog, 24 September 2020; A. Eisl and E. Rubio, \textit{Spending EU subsidies well: a challenge for Member States}, Jacques Delors Institute, February 2021.} The CEPS think tank has estimated that NGEU support for individual southern and eastern European Member States may be worth as much as 3\% to 5\% of domestic gross domestic product (GDP) each year.\footnote{C. Alcidi, D. Gros and F. Corti, \textit{Who will really benefit from the Next Generation EU funds?}, CEPS, Policy Insight 2020-25, October 2020.} Moreover, Member States simultaneously have to manage the remaining allocations from the 2014-2020 MFF and the launch of the new programmes under the 2021-2027 MFF. According to Commission data, among the EU countries with the lowest records for absorption of EU structural and investment funds (ESI funds) are Italy and Spain,\footnote{By the end of September 2021, Italy and Spain had spent 47\% and 42\% respectively of their ESI fund allocations under the 2014-2020 MFF. Please see: \textit{2014-2020 ESIF OVERVIEW}, European Commission website.} the two countries with the largest allocations of RRF grants in absolute figures. At the same time, there are many potential benefits from interaction and synergies between the ESI funds and the RRF.\footnote{M. Ferry, S. Kah, Pursuing Positive Interactions – within Structural Funds and with the RRF, \textit{IQ-Net Thematic Paper 48(2)}, European Policies Research Centre Delft, 2021.}

Given its close link to the recovery from the impact of the pandemic, NGEU has been designed as a temporary instrument, with a shorter timespan than the new MFF. Commitments under NGEU must be carried out over the 2021-2023 period, while payments must be finalised by 2026. However, implementing rules enable the instrument to finance retroactively expenditure that Member States already incurred as from 1 February 2020 in the wake of the pandemic, with a view to countering its consequences.

NGEU resources are composed of grants (€421.1 billion) and loans (€385.8 billion). The former provide additional resources for the EU budget and increase its size in the form of external assigned revenue (see Chapter 4), while the latter are transferred, through a EU budgetary instrument but outside the EU budget, to the Member States that have requested them. Repayments are spread over a long timeframe (by 2058 at the latest). The EU budget will repay the grants and their borrowing costs, while Member States that have resorted to loans will be in charge of their repayment.

Another significant feature of NGEU is that resources are to be spent in line with commonly agreed EU objectives, such as the green transition and digital transformation, with a view to increasing the resilience and sustainability of economies and societies. Three strategic axes have been identified as common challenges at EU level: digitalisation and innovation; ecological transition; and social inclusion. The idea is to ensure not only an economic rebound, but also a quality recovery. This approach is consistent with calls for stimulus packages to invest in activities contributing to the fight against climate change, an opportunity that fiscal spending left largely untapped in the wake of the 2007-2008 financial crisis.\footnote{See: McKinsey & Company, \textit{How a post-pandemic stimulus can both create jobs and help the climate}, 27 May 2020; and A. Bailey et al. \textit{The world must seize this opportunity to meet the climate challenge}, \textit{The Guardian}, 5 June 2020.}
NGEU provides resources for seven EU budgetary instruments under headings 1, 2 and 3 of the MFF, including in the area of cohesion (through the €50.6 billion REACT-EU programme, which extends the crisis response and repair measures delivered under the two Coronavirus Response Investment Initiative packages in 2020). Figure 31 presents the 2021-2023 allocation of resources between the seven instruments, showing that the bulk of funding goes to the Recovery and Resilience Facility (RRF).

Both in the interinstitutional agreement on budgetary matters and the political agreement on the RRF, the European Parliament managed to strengthen the involvement of the budgetary authority in the governance of NGEU and its largest implementing instrument, including through a regular recovery and resilience dialogue (see Section 7.6).

7.2. Main features of the Recovery and Resilience Facility (RRF)

The RRF is the main implementing tool for the recovery instrument, channelling 90% of NGEU resources (i.e. 80% of NGEU grants and all NGEU loans). Non-repayable grants under the RRF amount to €338 billion, but RRF spending may total up to €723.8 billion over the 2021-2023 period if Member States decide to use its loan component (€385.8 billion) fully. To use RRF resources, Member States have to prepare national recovery and resilience plans (NRRPs) with a coherent package of investments and reforms, taking into account the 2019 and 2020 country-specific recommendations of the European Semester. Each NRRP should address issues that require significant investment to create jobs and growth.

Whereas the RRF is part of the emergency NGEU package, and reforms and investments financed under the RRF have to be implemented in relatively short time, i.e. by 2026, its overall aim is to bring about structural change and lasting impact in the Member States. To this end, the facility is structured around six pillars representing policy areas of European relevance identified by the RRF Regulation as vital for strengthening the EU’s resilience (see Figure 32). The pillars define investment priorities and the scope of application of financing under the RRF. For two of these pillars, the RRF

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450 European Parliament, Decision on the conclusion of an Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management, as well as on new own resources, including a roadmap towards the introduction of new own resources, 16 December 2020.


Regulation includes specific quantitative targets: each NRRP must earmark at least 37% of its resources for the green transition and at least 20% for digital transformation. Overall, the 22 plans approved by the Council by the end of 2021 devote around 40% of their allocations to the green transition and around 26% to digital transformation, thus exceeding the compulsory targets (see Section 7.3).

In addition, the Commission has encouraged national authorities to focus their plans on seven flagship areas relating to the above-mentioned pillars: 1) clean technologies and renewables; 2) energy efficiency of buildings; 3) sustainable transport and charging stations; 4) rapid broadband...
services; 5) digitalisation of public administration; 6) data cloud capacities and sustainable processors; and 7) education and training to support digital skills.\textsuperscript{453}

The other feature that makes the RRF a tool for achievement of sustainable resilience and structural change is its link with the European Semester. The reforms and investments financed under the RRF should be designed to address at least a significant subset of challenges identified in the country-specific recommendations addressed to each Member State in 2019 and 2020.\textsuperscript{454} This requirement is among the key criteria applied in the assessment of the NRRPs. The combination of the RRF governance system and the European Semester framework is seen as an opportunity to generate important synergies and benefits for the functioning of both instruments.\textsuperscript{455}

The RRF governance and implementation method introduces some important innovations as compared with the approach used for EU budgetary instruments so far.\textsuperscript{456} In particular, the RRF embeds a performance-based system where payments are made when Member States achieve agreed steps towards the reforms and investments envisaged in their NRRPs. Progress in the implementation of reforms and investment is measured against a set of milestones (qualitative achievements), targets (quantitative achievements) and completion dates. In the preparatory stage, each Member State wishing to use the RRF has to prepare a plan outlining its national reform and investment package, referring to the areas specified under the six pillars and taking into account the country-specific recommendations of the European Semester. The plan is then thoroughly analysed and assessed against 11 criteria by the European Commission, and approved by the Council in a legal act – implementing decision. The decision, complemented by documents including operational arrangements\textsuperscript{457} agreed and signed by each Member State and the European Commission, is the basis for the implementation of the NRRPs.

The eligibility period for the reforms and investments proposed in the NRRPs starts on 1 February 2020. Member States can therefore apply for financing for projects that were launched at the beginning of the pandemic, provided these are in line with RRF objectives and requirements. All legal commitments must be made by the end of 2023 and payments by the end of 2026. It is worth noting that, in contrast to the funds under cohesion and rural development policy, implementation of measures under the RRF does not require additional resources from a Member State. The measures are 100 % financed from the facility.

Once the plan is approved by the Council, the process enters the implementation stage. For the plans approved by 31 December 2021, Member States are entitled to receive 13 % of the amount in pre-financing, with a view to ensuring that the flow of resources for the recovery starts immediately.

\textsuperscript{454} European Commission, The European Semester timeline: Spring package 2020, website.
\textsuperscript{456} For an analysis of similarities and synergies between the governance and regulatory system of the RRF and cohesion funds see: J. Bachtler, C. Mendez, Recovery & Cohesion: ambitious objectives, challenging implementation, EoRPA Report 21/2, Regional Policy Research Consortium, European Policies Research Centre, University of Strathclyde, Glasgow and EPRC Delft.
\textsuperscript{457} Operational arrangements include detailed and technical aspects of implementation, such as the timeline for instalments and monitoring, indicators relating to the fulfilment of milestones and targets and arrangements for providing access to the underlying data (Article 20 of the RRF regulation).
Subsequent payments (or all the payments for the plans approved after 31 December 2021) are linked to the achievement of milestones and targets.

Up to twice a year, Member States can send the Commission requests for payments supported with evidence of the progress made in implementation. The application is then assessed by the Commission (within maximum two months), following which the Economic and Financial Committee must provide its opinion (within maximum four weeks of receiving the Commission’s preliminary assessment). The procedure envisages involvement of the European Council in the event of serious deviations from the satisfactory fulfilment of the relevant milestones and targets.

One element under the spotlight is the breakdown of resources among Member States, since one objective of NGEU and the RRF is to focus support on areas where the impact of the pandemic has been most severe. To this end, the grant component has been pre-allocated to Member States in the RRF Regulation. Figure 33 shows the breakdown of available RRF grants per Member State, with

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458 The Economic and Financial Committee is an advisory body of the Council of the EU, composed of senior officials from national administrations and central banks, the European Central Bank and the European Commission (based on article 134 of the TFEU).
final allocations already known for 2021-2022 and estimated for 2023. The formula for the calculation is based on population, inverse of GDP per capita and the 2015-2019 unemployment rate compared with the EU average. The fall in real GDP in 2020-2021 replaces the last indicator for the allocation of resources for 2023. The allocations for 2023 will be revised by June 2022, based on actual outturn data from Eurostat. A series of safeguards avoid excessive concentration of resources.

As for loans under the same facility, the maximum amount for each Member State is capped at 6.8 % of its GNI in 2019. Member States can request loans along with the submission of the national plans or later, but before 31 August 2023.

7.3. Implementation of the RRF: State of play in December 2021

Progress made on implementing the RRF varies from one Member State to another. While some have already applied for the first payments based on milestones and targets achieved, others are still waiting for the assessment and approval of their plans, and one has yet to submit the plan. Whereas the start date for implementation can differ, the deadlines for the final commitments and payments are common for all Member States (end of 2023 and 2026 respectively). In order to meet these deadlines, the RRF implementation needs to accelerate in 2022.

By the end of 2021, the overall value of the 22 approved NRRPs totalled €291.2 billion in grants and €153.9 billion in loans. These figures represent 86 % and 40 % respectively of the maximum available (see Section 7.2. above). Counted together with the plans pending approval (Bulgaria, Hungary, Poland, and Sweden) and not submitted (Netherlands), the figures amount to €338 billion for grants (i.e. the maximum available allocation) and €166 billion for loans (€504 billion in total). Since the Member States have so far shown less interest in the loans, the overall RRF take-up rate is at the level of 70 % of the maximum approved in the RRF Regulation.

7.3.1. RRF distribution by Member State

The Member States’ interest in the grant component of the RRF has been very high. With the exception of the Dutch plan, which has still to be submitted, all Member States requested the full available amount. In line with the RRF main objective, the resources focus on the areas where the impact of the pandemic has been most severe. In absolute terms, the three biggest beneficiaries of the RRF grants are Spain (€69.5 billion), Italy (€68.9 billion) and France (€39.4 billion). As shown in Figure 34, when taking into account the number of inhabitants of the Member States, the three biggest beneficiaries of grants are Greece (€1 666 per capita), Croatia (€1 561 per capita) and Spain (€1 466 per capita).

Yet another picture emerges when the share of the grant component is calculated in relation to national GDP (2019), illustrating the RRF’s relative importance in the Member States’ economies. The three countries with the highest shares are Croatia (11.6 %), Bulgaria (10.8 %), and Greece (9.7 %). The three countries with the lowest shares are Luxembourg (0.2 %), Ireland (0.3 %) and Denmark (0.5 %).

459 The formula for the calculation is included in Article 11 and Annexes I to IV of the RRF Regulation.

460 For a comprehensive collection of EPRS publications and infographics about the recovery package for Europe, including on the Recovery and Resilience Facility, please see the EPRS blog.
By contrast, so far there has been much less appetite for the loans offered under the facility. Seven Member States have requested loans, for a sum total of €166 billion (Greece, Italy, Cyprus, Poland, Portugal, Romania and Slovenia) (Figure 35). Three quarters of this sum has been requested by Italy (€122.6 billion). While Greece, Italy and Romania requested the maximum loans available to them, Cyprus, Poland, Portugal and Slovenia opted, for now, to use part of the available amount. Member States can request loans until 31 August 2023 (see Section 7.2).
Figure 35 – Distribution of RRF loans requested per Member State

Data source: Recovery and resilience scoreboard of the European Commission.

Figure 36 – RRF grants and loans requested as a share of Member States’ GDP and allocation per capita

Note: The data includes the expected allocation for the Netherlands (€6 billion in grants).
Data sources: European Commission and Eurostat (GDP, population).
The list of top RRF beneficiaries changes after taking into account requested loans (Figure 36). The grants and loans together represent the highest GDP shares for Greece (16.6 %), Romania (13.1 %), Croatia (11.6 %) and Italy (10.7 %). Italy is the biggest beneficiary per capita (€3 232 per capita) on account of the relatively high amount of loans it has requested.

**Box 6 –Recovery and Resilience Facility implementation – State of play at the end of 2021**

**Submission of the plans:** 26 Member States had submitted their national recovery and resilience plans by the end of 2021 (the Netherlands is expected to submit its NRRP in spring 2022).

**Assessment of plans by the Commission:** 22 positive assessments; decisions are pending for Bulgaria, Hungary, Poland and Sweden.

**Approval by the Council:** 22 plans and implementing decisions approved (Belgium, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Austria, Portugal, Romania, Slovenia, Slovakia and Finland).

**Total amount approved so far:** €445.1 billion (61 % of the maximum available), including €291.2 billion in grants (86 % of maximum available) and €153.9 billion in loans (40 % of maximum available).

**Pre-financing:** since August 2021, some €54.3 billion of the pre-financing (13 % of the allocation, except for Germany, which requested only 9 %) has been disbursed to 20 Member States (Belgium, Czechia, Denmark, Germany, Estonia, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Austria, Portugal, Romania, Slovenia and Slovakia).

**Payment requests submitted to the Commission:** In November 2021, Spain and France, and in December 2021, Greece and Italy submitted payment requests together with evidence on milestones and targets reached. In December 2021, the Commission disbursed €10 billion to Spain (on the basis of 52 milestones achieved by the end of June 2021).

### 7.3.2. Progress on RRF implementation: Submission of plans to first instalment

The regulation states that the Member States should ‘as a rule’ submit their NRRPs between 15 October 2020 and 30 April 2021. However, giving priority to the quality of the plans and taking into account exceptional, pandemic-related circumstances, the European Commission subsequently announced that Member States could submit their NRRPs until mid-2022. As a result, nine Member States presented their plans within the initial deadline, and 16 by the end of July 2021. The delay was particularly significant in the cases of Bulgaria and the Netherlands, where national elections and prolonged periods forming new governments made it difficult to take the decisions on the NRRPs. Finally, the Bulgarian caretaker government sent the plan to the European Commission on 15 October 2021 and it is awaiting assessment. It is expected that the new Dutch government, formed in December 2021, will submit its plan in spring 2022.

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462 See: Stand van zaken Nederlands EU-herstelplan, Nieuwsbericht, Rijksoverheid, 1 November 2021. This information was also confirmed by Commissioner Valdis Dombrovskis at the 4th Recovery and resilience dialogue with the European Commission, meeting at the European Parliament on 13 December 2021.
Figure 37 – RRF implementation: Submission of national recovery and resilience plans to payments – State of play at the end of December 2021

<table>
<thead>
<tr>
<th>Member State</th>
<th>NRRP submitted to the European Commission</th>
<th>NRRP assessed by the European Commission</th>
<th>NRRP approved by the Council</th>
<th>Pre-financing disbursed</th>
<th>Request for the first instalment</th>
<th>Payment of the first instalment</th>
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Data source: Recovery and resilience scoreboard of the European Commission.
By the end of 2021, based on the Commission’s positive assessment, the Council had approved 22 plans for an overall amount of €291.2 billion in grants (86% of the maximum available) and €153.9 billion in loans (40% of maximum available) (see Figure 38). On 3 August 2021, the first payments in the form of pre-financing, i.e. with no need to fulfil any extra conditions (13% of the approved national envelope), were transferred to Belgium, Luxemburg and Portugal. By the end of 2021, the Commission had paid out a total of €54.3 billion in pre-financing to 20 Member States. The transfer to Finland is expected at the beginning of 2022, while Ireland did not ask for the pre-financing.

Figure 38 – RRF in figures: State of play at the end of December 2021

<table>
<thead>
<tr>
<th></th>
<th>Maximum RRF in 2021</th>
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<td></td>
<td>€ 723.8 billion</td>
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<td>Grants</td>
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<td>Loans</td>
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<td>Approved (22 NRRPs)</td>
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<td>Loans</td>
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</tbody>
</table>

Note: Amounts under the requested grants do not include the allocation of the Netherlands (the NRRP still to be submitted).

Data source: Recovery and resilience scoreboard of the European Commission.

In line with the RRF Regulation, the measures included in the NRRPs focus on six priority areas (see Section 7.2) While two of them are earmarked with a compulsory, minimum target (37% for green transition and 20% for digital transformation), the Member States were free to decide how they allocated the rest of the resources among the RRF priority areas. All Member States exceeded one or both expenditure targets. For example, Germany is going to spend 42.6% of its funding on the green transition and 52.7% on digital measures, Belgium has dedicated 50% of the allocation to climate action, and Lithuania 31.5% to digital.463

463 For details and data see the recovery and resilience scoreboard, European Commission.
The European Commission presented data, in which each measure under the RRF is tagged as contributing towards two out of six policy pillars (primary or secondary contribution, see Figure 39). Based on 22 approved NRRPs, data that take the primary and secondary contributions of measures jointly show that RRF funds make the largest contributions, in descending order, to pillar 1 – green transition, pillar 3 – smart, sustainable and inclusive growth, and pillar 4 – social and territorial cohesion. Looking only at the primary contribution of measures, the picture is partially different: the green transition pillar remains the largest, but this time it is followed by pillar 2 – digital transition, and pillar 3.

Figure 39 – RRF contribution to the six priority pillars (% of funds allocated based on 22 approved NRRPs)

Note: The total in the figure is 200 %, given the fact that each measure is assigned to two pillars.

Given that the main trigger of the current crisis was a health issue, worth noting are the measures supporting healthcare in the Member States. The European Commission estimates that expenditure on healthcare-related projects totals €37 billion, this represents 8 % of the plans’ total expenditure. Estonia is the country with the highest share of its RRF allocation invested in healthcare (33.2 %). One of the country’s biggest investments is in the construction of the North Estonia Medical Campus.

Gender equality is another area seriously affected by the current crisis and supported by the RRF. The RRF Regulation mentions mainstreaming and the promotion of gender equality among important aspects to be taken into account in the NRRPs and demonstrated across all six policy pillars. As a result, most of the Member States declared gender equality and the improvement of the situation of women to be a horizontal objective of the recovery plans, however, the number of targeted reforms and investments addressing gender-related challenges explicitly is limited. In this respect, according to one analysis, the plans of Belgium, Spain, Italy and Austria stand out. In the plans approved so far, the Commission identified 115 measures with a focus on this issue, with the biggest number of actions in Austria, Spain and Estonia.

464 The total in the figure is 200 %, given the fact that each measure is assigned to two pillars.
467 Support to gender equality and to children and youth, Recovery and resilience scoreboard, European Commission.
Various measures included in the NRRPs are large-scale and multiannual. This category includes, in particular, investments in sustainable infrastructure, such as the development of high-speed railway networks in Italy,\textsuperscript{468} or the electricity interconnection between Cyprus and Greece.\textsuperscript{469} Other Member States have earmarked a significant share of their RRF resources for measures supporting transport and mobility, for example Malta 34.8\%, Luxembourg 32.3\%, and Romania 26.2\%.\textsuperscript{470}

In 2022, the Commission and all Member States whose NRRPs have been approved should sign the operational arrangements. Member States will then begin regular submission of payment requests along with information on milestones and targets achieved. By the end of 2021, only Greece, Spain, France and Italy had signed the operational arrangements.\textsuperscript{471} The four countries were also the first countries to submit their applications for disbursement based on milestones and targets achieved. In December 2021, the Commission, based on the fulfilment of 52 milestones and targets and after the positive opinion of the Economic and Financial Committee, paid out €10 billion to Spain.\textsuperscript{472}

The process of approving the NRRPs is proving lengthy in the cases of Hungary, Poland and Sweden. The prolongation of the assessment period beyond the usual two months for the Swedish plan relates to recent, internal, political events (failure to adopt the government’s budget and the change in the government itself).\textsuperscript{473} In cases of Hungary and Poland, the Commission is not yet entirely satisfied with the content of the plans as far as protection of the EU’s financial interests is concerned.\textsuperscript{474} From Hungary, the Commission is expecting elements such as adequate control mechanisms, anti-corruption, transparency, equality and oversight of public procurement to be strengthened and clarified. As for the Polish NRRP, improvements are expected in the area of judicial independence. These expectations are based on requirements and assessment criteria included in the RRF Regulation, and linked to country-specific recommendations addressed to these Member States. On 13 December 2021, at a meeting at the European Parliament, Commissioners Valdis Dombrovskis and Paolo Gentiloni emphasised that the dialogue on the assessment of the NRRPs with Hungary and Poland was ongoing. Meanwhile, both Member States have lost the possibility to receive pre-financing for the implementation of their plans. This could have been granted only if the plans had been approved by the Council before the end of the 2021 (see Section 7.2).\textsuperscript{475}

\textsuperscript{471} The documents are publicly available on the European Commission’s website, on pages dedicated to the individual Member States (\textit{France, Spain, Greece} and \textit{Italy}).
\textsuperscript{472} Next Generation EU: la Commission verse un premier paiement de 10 milliards d'euros à l'Espagne au titre de la Facilité pour la reprise et la résilience, Daily news, European Commission, 3 January 2022.
\textsuperscript{473} Sweden’s recovery plan within the EU Recovery and Resilience Facility, \textit{Ministry of Finance, Sweden, 23 September 2021}.
\textsuperscript{474} 4th Recovery and resilience dialogue with the European Commission, meeting at the European Parliament on 13 December 2021.
\textsuperscript{475} See Article 13 of the \textit{RRF Regulation}.
7.4. Monitoring of RRF implementation

As there is a strong link between the RRF disbursements and achievement of the milestones and targets envisaged in the plans, reporting methods, relevant indicators, and close monitoring of progress all play an important role in the implementation of the facility. The Member States are responsible for reporting on the progress made in the implementation of their plans to the European Commission (see Box 7). This should happen twice a year, not later than the end of April and mid-October, as part of the European semester process and the national reform programmes. In addition, by the end of February and August, the Member States should provide data for an update of the common indicators, used to monitor implementation of the plans and progress towards achieving the RRF objectives. Based on this information, the Commission has the task of monitoring and reporting on the implementation of the general and specific objectives of the RRF (Chapters VI and VII of the RRF Regulation). To this end, the Commission has developed a methodology for reporting social expenditure in the RRF, and for reporting on common indicators.\textsuperscript{476} It has also developed an online tool for presentation of progress on implementing the NRRPs, known as the ‘recovery and resilience scoreboard’.\textsuperscript{477}

The Commission’s reporting obligations include the presentation of annual reports on the status of RRF implementation (in the first quarter of a year), as well as an independent interim report (by February 2024) and an ex post evaluation report (by 31 December 2028). Furthermore, by 31 July 2022 the Commission must submit a review report to the European Parliament and Council, (Article 16 of the RRF Regulation). In this report the Commission must present the state of play of RRF implementation, including an assessment of the contribution to the six pillars, and of how the recovery and resilience plans are tackling inequalities between women and men. In addition to its role in reviewing and evaluating progress, the report may serve as guidance for Member States wishing to update their NRRPs following the recalculation of the maximum contribution, which is due by 30 June 2022 (Article 11 of the RRF Regulation). The findings of the review report will be discussed in the framework of the dialogue between the European Parliament and the European Commission (see below).

7.5. NGEU programmes in 2022

The 2022 budgetary year is the second year of implementation of the NGEU, crucial for the effective and timely deployment of the fund. The estimated NGEU 2022 allocation amounts to €338.3 billion in commitments and includes €143.5 billion in the form of grants and €194.8 billion in loans (see Table 7). The bulk of the grants will be spent through the RRF, and the rest (about 17 %) will reinforce

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Box 7 – Key RRF reports expected in 2022

**Member States:**
- By the end of February and August – reporting on common indicators
- By the end of April and in mid-October – stocktaking on milestones and targets (as part of the European semester process)

**European Commission:**
- By the end of March: annual report
- By the end of July: review report

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\textsuperscript{476} The methodology for reporting social expenditure is included in the Commission delegated regulation (EU) 2021/2105 of 28 September 2021. The common indicators and the recovery and resilience scoreboard are specified in the Commission delegated regulation (EU) 2021/2106 of 28 September 2021.

\textsuperscript{477} The data base presenting the indicators is available online on the European Commission’s recovery and resilience scoreboard.
various programmes under headings 1, 2 and 3 of the 2021-2027 MFF (for an analysis of NGEU’s impact on the EU’s 2022 budget see also Sections 4.2 and 4.3). Total NGEU payment appropriations are still much lower than commitment appropriations, indicating that implementation is still at an early stage.\textsuperscript{478}

Table 7 – Next Generation EU by programme: Indicative planning for 2022 (commitment appropriations, rounded figures, € million)

<table>
<thead>
<tr>
<th>EU programme / budget line</th>
<th>2022</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Commitment appropriations</td>
<td>Payment appropriations</td>
</tr>
<tr>
<td>Heading 1 Single market, innovation and digital</td>
<td>3 595</td>
<td>3 222</td>
</tr>
<tr>
<td>Horizon Europe</td>
<td>1 777</td>
<td>1 982</td>
</tr>
<tr>
<td>InvestEU Fund</td>
<td>1 818</td>
<td>1 240</td>
</tr>
<tr>
<td>Heading 2 Cohesion, resilience and values</td>
<td>129 895</td>
<td>72 090</td>
</tr>
<tr>
<td>REACT-EU total</td>
<td>10 824</td>
<td>8 655</td>
</tr>
<tr>
<td>REACT-EU European Regional Development Fund (ERDF)</td>
<td>7 581</td>
<td>6 040</td>
</tr>
<tr>
<td>REACT-EU European Social Fund Plus (ESF+)</td>
<td>3 243</td>
<td>2 614</td>
</tr>
<tr>
<td>European Recovery and Resilience Facility (RRF) – grants</td>
<td>118 391</td>
<td>63 000</td>
</tr>
<tr>
<td>Union civil protection mechanism (RescEU)</td>
<td>680</td>
<td>435</td>
</tr>
<tr>
<td>Heading 3 Natural resources and environment</td>
<td>10 013</td>
<td>2 670</td>
</tr>
<tr>
<td>Rural development (EAFRD)</td>
<td>5 683</td>
<td>2 444</td>
</tr>
<tr>
<td>Just Transition Fund (JTF)</td>
<td>4 330</td>
<td>226</td>
</tr>
<tr>
<td>TOTAL under the budget (grants)</td>
<td>143 503</td>
<td>77 982</td>
</tr>
<tr>
<td>Loans under the RRF (outside the budget)</td>
<td>194 838</td>
<td>N/A</td>
</tr>
<tr>
<td>TOTAL proceeding from NGEU 2022</td>
<td>338 341</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Any discrepancies are due to rounding.

7.5.1. Horizon Europe

Horizon Europe is financed mostly under the 2021-2027 MFF, and NGEU represents 6\% of the total allocation for the programme. In 2022, the MFF contribution to Horizon Europe (€12.2 billion in commitments) is boosted by €1.8 billion under NGEU, increasing it by 14.5\%. These additional resources will be equally divided between Horizon Europe’s three clusters, namely research in: 1) health, 2) digital, industry and space, and 3) climate, energy and mobility, as well as the functioning of the European Innovation Council.

7.5.2. InvestEU

Only 1\% (€6.1 billion in current prices) of total resources under NGEU support the InvestEU Fund. However, this reinforcement is essential for the InvestEU as it triples the allocation from €3 billion

\textsuperscript{478} The analysis included in Section 7.5. is based on: European Commission, \textit{Draft general budget 2022}, 9 July 2021.
under the 2021-2027 MFF to €9.1 billion in total. Furthermore, endowed with an EU budgetary guarantee of €26 billion, InvestEU is expected to mobilise €370 billion over the MFF period. This investment supports such areas as the green and digital transitions, research and innovation, the European health sector and strategic technologies.

In 2022, the reinforcement of InvestEU from the NGEU amounts to €1.8 billion in commitments (the top-up representing +152%). It will be used mostly for to provision the InvestEU guarantee and support the InvestEU Advisory Hub.

### 7.5.3. Recovery and Resilience Facility

In 2022, the RRF enters its full deployment stage. For Member States whose plans have been approved begins the period of implementation and regular reporting on milestones and targets achieved. Provided that the assessment of the progress made is positive, they can also expect the disbursement of the instalments envisaged in the operational arrangements (see Section 7.3.2). In 2022, taking the approved NRRPs altogether, more than 1 000 milestones and targets will have to be met. For instance in France, a revised thermal regulation should enter into force in the first quarter of 2022. Its goal is to reduce emissions of harmful gases and improve the energy performance of new constructions. Latvia is going to make available 13 310 information and communication technology (ICT) equipment units for school pupils and teachers in the framework of a borrowing system called a ‘computer library’. The Greek Ministry of Environment and Energy is planning to adopt at minimum 300 plans submitted by local authorities for the installation of publicly available electric vehicle charging points.

The EU’s 2022 budget will be endowed with the significant sum of €118.4 billion in commitments in the form of external assigned revenues, to finance the RRF grants. RRF grant payments are estimated at €63 billion in 2022. It should be noted that since the payments are spread over a longer period (until 2026), in 2022 their level is still much lower than the commitments. In addition, commitments of €194.8 billion in loans are estimated to be made available outside the budget in 2022.

### 7.5.4. REACT-EU

The overall allocation for REACT-EU (Recovery Assistance for Cohesion and the Territories of Europe) is set at €50.6 billion (current prices) for the 2021-2022 period. Although it represents only 6% of resources under NGEU, the reinforcement has an important role to play in financing measures for those regions that suffered most from the pandemic. It was the very first instrument to be used under NGEU. Already in June 2021, the Commission disbursed €800 million to national and regional programmes in 16 Member States. By the end of 2021, €37.8 billion, i.e. 74% of the total available sum, had been allocated through the European Regional Development Fund (ERDF) and the European Social Fund Plus (ESF+) to all EU Member States. Examples of projects supported include the modernisation of the Brno Military Hospital in Czechia, the provision of masks and disinfectant in Latvia, and school equipment for children in need in Austria and Romania.

The 2022 tranche of the programme amounts to €10.8 billion in commitments and increases ESF+ resources by 24.6% and the ERDF by 25.1%. The second tranche of REACT-EU was allocated to the

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480 For details see the European Commission’s dedicated website.
481 €11 billion REACT-EU funds allocation now available for 2022, European Commission, 24 November 2021.
Member States on the basis of the latest statistical data available at the end of 2021. The biggest beneficiaries of the 2022 allocation are Spain (€3.6 billion) and Italy (€3 billion).482

7.5.5. rescEU

The Union’s civil protection mechanism (UCPM) response capacity (rescEU) gives the Union the capacity and the logistical infrastructure needed to react to different types of emergency, including the transport of medical equipment and aerial firefighting equipment. The overall budget of rescEU totals €3.3 billion for the years 2021 to 2027, and 62% of it is provided by NGEU.

NGEU is crucial for the functioning of the UCPM. In 2022, the overall allocation for rescEU amounts to €781 million in commitments and includes €101 million from the regular budget and a significant boost of €680 million from NGEU.

7.5.6. Rural development

About 2% of resources under NGEU (€8.1 billion) is dedicated to reinforcing projects financed in the framework of the European Agricultural Fund for Rural Development (EAFRD). The resources were pre-allocated to the Member States483 and are earmarked for recovery and resilience measures for farmers, food producers and rural areas. Some €2.4 billion in commitments, around 30% of the total sum, was available in 2021, and the remaining 70% (€5.7 billion in commitments) will be deployed in 2022. A significant share of recovery funding (about 55%) is addressed to measures promoting economic and social development in rural areas, investment in physical assets, farm and business development, support for basic services, and village renewal in rural areas. Furthermore, additional resources support actions in organic farming, environment and climate and animal welfare.484

In 2022, the EAFRD envelope amounts to €12.7 billion and will be reinforced significantly by €5.7 billion from NGEU (+44.6%).

7.5.7. Just Transition Fund

More than a half of the total JTF allocation for the years 2021 to 2027 is based on NGEU resources (€10.9 billion of the total €19.3 billion, i.e. 56%). The share of NGEU resources in the total allocation on the JTF will be even bigger in the 2022 budget. It will total €4.3 billion, representing almost 80% of the total €5.5 billion allocation. Implementation of the JTF has been delayed, as it is partly linked to implementation of the cohesion funds, which had a slow start due to delays in adopting the 2021-2027 MFF and the sectoral legislation. It is expected that in 2022, most of the programmes under the JTF will be adopted and implementation will accelerate.

7.6. The role of the European Parliament

The European Parliament is not directly involved in assessing the national plans or adopting the implementing decisions that authorise the financial contributions to the Member States under the RRF. Those are the roles of the European Commission and Council respectively. However, based on the provisions of the RRF Regulation (in particular Articles 25 and 26) and the Interinstitutional Agreement on cooperation on budgetary matters, Parliament scrutinises the Commission’s work. This scrutiny relies on the provision of information, dialogues and reviews. In addition, Parliament’s scrutiny role over NGEU spending stems from its competences as one arm of the budgetary

482 The REACT-EU 2022 allocation by Member States, European Commission website.
483 The breakdown by Member State is available on the European Commission website.
authority (budgetary and discharge procedures), as well as from its involvement in the dialogue on the European Semester. The involvement of the European Parliament is especially important for ensuring the transparency and democratic scrutiny of the assessment and implementation process for the extraordinary resources under NGEU, including the RRF.

According to the RRF Regulation, the Commission should transmit information simultaneously to Council and Parliament. Moreover, the relevant outcomes of discussions held in Council preparatory bodies should be shared with the competent committee of the European Parliament. In particular, Parliament is to receive information on the state of play of the assessment of the recovery and resilience plans submitted to the Commission, proposals for Council implementing decisions, and a number of reports produced by the Commission in the process of implementing and financing the facility.\textsuperscript{485} Two bodies were established to facilitate interinstitutional cooperation and are important in efforts to ensure transparency and accountability in implementation of NGEU and the RRF:\textsuperscript{486}

- interinstitutional meetings on the implementation of Next Generation EU (based on the Interinstitutional Agreement on budgetary matters of 16 December 2022, Annex I, part H). The meetings include representatives of Parliament, Council and Commission and are to take place at least three times a year. So far, three meetings have been held, on 29 April, 15 July and 14 October 2021;
- a recovery and resilience dialogue with the European Commission (based on Article 26 of the RRF Regulation). These meetings are an important opportunity for the Members of the Committee on Budgets (BUDG), the Committee on Economic and Monetary Affairs (ECON) and representatives of the European Commission (Valdis Dombrovskis, Executive Vice-President for the Economy that Works for People, and Paolo Gentiloni, Commissioner for Economy) to exchange information. These meetings are supposed to take place every two months. Four dialogues were organised in 2021 (on 10 May, 14 July, 1 September and 13 December).

The two main committees dealing with the topic are BUDG and ECON, but many others are involved in the discussions on various aspects of NGEU implementation. In order to fulfil its role, Parliament set up the Standing Working Group on scrutiny of the RRF. It has existed since March 2021 and serves as an internal forum for the exchange of information and debate, as well as a preparatory and follow-up forum for the bi-monthly recovery and resilience dialogue. It consists of 27 Members and 14 substitute Members of the BUDG, ECON and associated committees (on Employment and Social Affairs (EMPL), on the Environment, Public Health and Food Safety (ENVI), on Industry, Research and Energy (ITRE), and on Transport and Tourism (TRAN)), nominated by the political groups.

Furthermore, with a view to protecting the EU’s financial interests, and future discharge procedures, the Committee on Budgetary Control (CONT) is responsible for scrutiny of the unprecedented level of expenditure under NGEU (see also Section 4.4). The discharge procedure for the annual 2021 budget should be launched in mid-2022 and cover, for the first time, evaluation of NGEU spending.\textsuperscript{487}

\textsuperscript{485} For the information sent to the European Parliament or to Council see the European Commission website.
\textsuperscript{487} On 25 October 2021, the CONT committee organised a public hearing on the issue. The guest speakers emphasised the need for more transparency, more audits and involvement of the European Public Prosecutor’s Office, and the use of artificial intelligence to use the data available more effectively.
Since March 2021, Parliament has debated the RRF during plenary sessions regularly,\(^{488}\) and has adopted two resolutions: on the right to information on the assessment process (20 May 2021) and on Parliament’s scrutiny of the process of assessing the national plans (10 June 2021). The transparency of the approval process and successful implementation of the NRRPs are important issues in the debate. Parliament has called on the Commission to assess the plans transparently, meticulously, and in line with the objectives and criteria included in the RRF regulation. It has also called on the Commission to provide all relevant information on the state of play of the assessment of the plans and implementation of the RRF.

Other key problems raised by Members concern the quality of the reforms and investments included in the NRRPs, risks and delays in the implementation process, assessment of the payment requests and verification of the milestones and targets that are the condition for payments. Also under discussion are equal treatment of the Member States, application of rule of law conditionality, and involvement of regional and local authorities in implementation of the RRF. In the first months of the 2022, Parliament is preparing an implementation report that will feed into the Commission’s review report, due in June 2022 (see Section 7.4 above).

### 7.7. The estimated impact of NGEU and the RRF

One negative effect that the 2008-2012 financial and sovereign debt crises had on the EU economy was the significant reduction in the level of public investment. This has led to a chronic situation of under-investment with a knock-on reduction in the potential growth of the area.\(^{489}\) Data from the European Commission show that the RRF is instrumental in avoiding a repeat of the same trend. Contrary to what happened in the wake of the previous crises, in 2021 and 2022 public investment in the EU is projected to increase thanks to RRF financing (see Figure 40).

According to an analysis of six national plans by the CEPS think tank, Member States appear to adopt different approaches to allocating RRF resources. The paper estimates that Germany, Austria and Spain are investing the bulk of their grants either in projects already planned or in the

\(^{488}\) On 11 March 2021 – debate on upholding the partnership principle in the preparation and implementation of national recovery and resilience plans, and ensuring good governance of the spending; on 18 May 2021 – debate on the right to information regarding the ongoing assessment of the national recovery and resilience plans; on 8 June 2021 – debate on the European Parliament’s scrutiny of the ongoing assessment by the Commission and the Council of the national recovery and resilience plans; 6 October 2021 – debate on the state of play on the RRF recovery plans submitted and awaiting approval; 15 December 2021 - debate on the state of play on the implementation of the RRF.

extension/continuation of existing projects. Conversely, Belgium, Italy and Portugal are devoting the largest share of their RRF allocations to new projects.490

After the agreement on NGEU but before the adoption of the RRF, ECB staff estimated the macroeconomic impact of NGEU on the euro area. The authors concluded that using NGEU for public investment could increase real output in the euro area by around 1.5 % of GDP over the medium term. They stressed that the magnitude and persistence of this positive impact would be closely linked to the use of NGEU for productive public investment projects, noting that the high level of resources involved could pose a challenge to administrative capacity in many Member States.491

Once additional information on the RRF and its national plans became available, Commission staff produced new estimates for all the EU, taking into account not only the direct impact of individual plans but also their spillover effects on the other EU Member States. The study pointed to substantial macroeconomic effects of NGEU. For a fast spending scenario (four years), with evenly distributed spending between 2021 and 2024, the authors concluded that in 2024 real GDP in the EU-27 could be around 1.5 % higher than in a baseline scenario without NGEU investments. In addition, given the productive nature of public investment, NGEU is expected to increase potential growth in the long run beyond its implementation period. The simulations do not include the effect of structural reforms, which could further reinforce the contribution of NGEU to growth. A significant part of the growth impact of NGEU comes from spillover effects. In other words, Member States are expected to benefit considerably not only from their own NRRP, but also from NGEU investments in other Member States, on account of trade flows and exchange rate movements. In small and open

![Figure 41 – GDP effects of NGEU investments across the EU in 2024 (fast-spending and high-productivity scenario)](image)

Source: European Commission.


491 K. Bańkowski et al., The macroeconomic impact of the Next Generation EU instrument on the euro area, European Central Bank, Occasional Paper Series No 255, January 2021.
economies, such as Ireland and Luxembourg, spillover effects represent the bulk of the growth impact. Overall, the largest spillover effects are expected to come from Italy, a large economy with a major share of NGEU resources.492

Figure 41 shows the peak GDP effect estimated by the Commission paper for all Member States in a fast-spending and high-productivity scenario. Under these assumptions, the highest GDP growth triggered by NGEU would be experienced by Greece (more than 4 %), Bulgaria, Croatia and Romania (around 3.75 %), Italy and Portugal (around 3 %).493 Overall, the Commission estimates suggest that NGEU would promote convergence within the EU in line with its objectives, since the temporary instrument was agreed and designed to counter the divergences that the pandemic risked triggering in the single market.494

NGEU is projected to increase employment by up to 1 % during its period of operation. This would result from improved labour market conditions that, together with productivity gains, could lead to significant and persistent real wage gains in the medium-term (about 0.8 % by 2030). In addition, a Commission report concludes that the adoption of the RRF, coupled with other measures, has also generated other benefits, such as a reduction in risk premiums and a boost to consumer spending and investment.495

NGEU is part of a broader and comprehensive package of measures that EU institutions and Member States took to mitigate the major socio-economic impact of the pandemic,496 which is enabling the EU economy to rebound from the crisis faster than initially forecast. The Commission's Autumn 2021 Economic Forecast expected most Member States to recover fully by the end of 2021, while a few others would reach this objective in 2022. Some 3.4 million jobs are projected to be created in the EU in 2022 and 2023. However, the Commission also highlighted a series of persisting risks to the economic outlook, not least new waves of coronavirus infections, rising energy prices, and disruptions to supply chains for key industries. Conversely, NGEU was included among the positive factors that could further reinforce growth prospects through the structural changes triggered by its package of investments and reforms.497

7.8. The debate on a permanent fiscal capacity

Following the euro crisis, one challenge in relation to which the possible role and contribution of the EU budget have been debated concerns efforts to strengthen economic and monetary union (EMU). In this respect, one idea that has long been on the table has been the creation of a specific ‘fiscal capacity’ for the euro area, either inside or outside the EU budget.498 Proving politically sensitive, the debate on this idea has advanced slowly, but it is possible that it will stay on the agenda and be broadened to the entire EU following the launch of NGEU.

492 P. Pfeiffer, J. Varga and J. in ’t Veld, Quantifying Spillovers of NGEU investment, European Commission, European Economy Discussion Papers No. 144, July 2021.
496 Examples of EU measures are the monetary policy response of the European Central Bank (ECB), departure from the budgetary requirements under the stability and growth pact and full flexibility for state aid rules.
In 2017, four months after being elected, French President Macron revived the idea, calling for the creation of a common budget for the euro area, while Jean-Claude Juncker, Commission President at the time, supported the establishment of a dedicated euro-area budget line as a subsection of the EU budget itself. In May 2018, the European Commission put forward proposals for the establishment of two new budgetary instruments to deepen EMU under the post-2020 MFF. In the Meseberg Declaration of June 2018, France and Germany jointly proposed creating a euro area budget within the EU framework as of 2021, identifying the promotion of competitiveness, convergence and stabilisation in the currency area as its objective. In this respect, the two countries presented a proposal on the architecture of such an instrument to the Eurogroup in November 2018. In 2019, discussions advanced on the design of a – rather limited – budgetary instrument for convergence and competitiveness (BICC), but references to a stabilisation function were not included.

In 2020, the outbreak of the coronavirus pandemic and its severe impact changed the debate on this instrument dramatically, as the European Council and Parliament asked the Commission to put forward proposals for an appropriate recovery instrument. On 18 May 2020, a Franco-German initiative backed the idea of an ambitious recovery fund at EU level for solidarity and growth. A few days later, the Commission presented the proposal for NGEU and the amended proposals for the 2021-2027 MFF, withdrawing the proposal for the BICC.

The subsequent agreement on NGEU has led to the establishment of a recovery instrument that is much bigger in size and scope than the BICC would have been. Another important difference concerns geographic coverage, since NGEU is not limited to the euro area but is an EU-wide instrument, contrary to ideas that were explored in the wake of the euro crisis.

NGEU being a temporary tool, the debate on the need to create a permanent fiscal capacity has been relaunched. In October 2020, Christine Lagarde, President of the ECB, deemed NGEU a turning point for the EU, arguing that its possible transformation into a permanent instrument should be discussed as well as the creation of a common budgetary tool for the euro area. In December 2021, in the context of the broader debate on the possible reform of EU’s fiscal rules, Italian Prime Minister Mario Draghi and French President Emmanuel Macron, said that NGEU was a success in the way it assessed public spending quality and financed related investments, arguing that the instrument offered a useful blueprint for a possible way forward. Some analysts consider that transforming NGEU into a permanent facility is a key priority for reinforcement of EMU.

Lessons learnt from the RRF, such as a commitment-based approach to policy coordination, with strong national ownership of policy design and outcomes, are likely to contribute to the debate. In October 2021, when relaunching the public debate on the review of EU’s economic governance, the

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503 *Eurogroup*, *Term sheet on the budgetary instrument for convergence and competitiveness (BICC)*, press release, 10 October 2019.
504 *Le Monde* Interview with Christine Lagarde, President of the ECB, conducted by M. Charrel and E. Albert, 19 October 2020.
European Commission included a new question relating directly to NGEU: ‘In what respects can the design, governance and operation of the RRF provide useful insights in terms of economic governance through improved ownership, mutual trust, enforcement and interplay between the economic and fiscal dimensions?’.

The French Presidency of the Council of the European Union has highlighted the promotion of a new European model for growth as one of the three key ambitions of its semester. In this respect, the French Presidency’s programme includes discussions on a new European model for growth, investment and employment, to take place at an informal meeting of Heads of State and Government on 10 and 11 March 2022. The same month, the Economic and Financial Affairs (ECOFIN) Council is scheduled to discuss the initial conclusions that the Commission draws from its consultation on the review of the EU’s economic governance framework.

The debate on a fiscal capacity also concerns its possible function. Recent suggestions from academics include the creation of a standing contingent fiscal capacity at EU level, through a fund set up within the RRF and endowed with appropriate resources. Under this proposal, the facility would not play the role of an off-budget device but would rather be an insurance mechanism to be triggered when specific conditions were met.

Other ideas point to the need to support common investment in light of joint EU priorities that will require huge resources in the years to come, notably the fight against climate change. Along these lines, the Centre for European Reform (CER) think tank recommends that the recovery fund be made permanent and its size doubled after the expiry of NGEU in 2026. The authors argue that the fund should focus on climate investment and its larger size would bring more sizeable macroeconomic benefits. To support such investments, the Bruegel think tank proposes a different option: the introduction of a ‘green golden rule’ that would exclude net green public investment from the deficit and debt calculations under the stability and growth pact.

Views on the need for a permanent fiscal capacity and its possible function continue to differ, requiring further political debate. How successful NGEU is in delivering its agreed objectives is likely to play a significant role in shaping relevant discussions, confirming the importance of appropriate monitoring of NGEU implementation, as stressed by the European Parliament in the negotiations on EU finances for the 2021-2027 period and the establishment of the RRF (see Section 7.6).

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## 9. Annexes

### Annex 1 – EU spending allocation by Member State in 2020 (€ million)

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<th>1b</th>
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<th>Total expenditure</th>
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## 2019 (€ million)

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<td>43.8</td>
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<td>0.0</td>
<td>39.5</td>
<td>2 190.7</td>
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<td>1 263.7</td>
<td>3 929.4</td>
<td>159.1</td>
<td>0.0</td>
<td>111.4</td>
<td>6 826.7</td>
</tr>
<tr>
<td><strong>EU-28</strong></td>
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<td>59 483.9</td>
<td>60 595.5</td>
<td>6 332.8</td>
<td>11 411.9</td>
<td>10 319.4</td>
<td>1 109.2</td>
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<td>59 483.9</td>
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<td>11 411.9</td>
<td>10 319.4</td>
<td>1 109.2</td>
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Data source: European Commission, [EU expenditure and revenue 2014-2020](http://...).
### Annex 2 – Own resources by Member State in 2020 (€ million and % of GNI, rounded figures)

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<th>Member State</th>
<th>VAT-based resource</th>
<th>GNI-based Resource</th>
<th>UK correction</th>
<th>Netting of adjustments to VAT and GNI-based own resources for previous financial years</th>
<th>Lump-sum reduction granted for DK, NL, AT &amp; SE(*)</th>
<th>Total national contribution</th>
<th>Traditional own resources (TOR, net 80 %)</th>
<th>Total own resources 8=6+7</th>
<th>% GNI 7</th>
<th>% GNI 8=6+7</th>
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<td>46.5</td>
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<td>87.2</td>
<td>673.0</td>
<td>1.09%</td>
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<td>MT</td>
<td>17.3</td>
<td>92.6</td>
<td>8.1</td>
<td>-2.5</td>
<td>0.8</td>
<td>116.5</td>
<td>1.01%</td>
<td>12.8</td>
<td>129.3</td>
<td>1.12%</td>
</tr>
<tr>
<td>NL</td>
<td>471.2</td>
<td>6 168.0</td>
<td>89.9</td>
<td>-156.3</td>
<td>-727.1</td>
<td>5 845.8</td>
<td>0.74%</td>
<td>3 175.5</td>
<td>9 021.3</td>
<td>1.14%</td>
</tr>
<tr>
<td>AT</td>
<td>526.7</td>
<td>3 029.0</td>
<td>44.3</td>
<td>-77.8</td>
<td>27.9</td>
<td>3 550.1</td>
<td>0.95%</td>
<td>209.6</td>
<td>3 759.7</td>
<td>1.00%</td>
</tr>
<tr>
<td>PL</td>
<td>820.1</td>
<td>3 814.3</td>
<td>308.7</td>
<td>-97.1</td>
<td>35.1</td>
<td>4 881.0</td>
<td>0.97%</td>
<td>792.8</td>
<td>5 673.8</td>
<td>1.13%</td>
</tr>
<tr>
<td>PT</td>
<td>302.5</td>
<td>1 597.2</td>
<td>134.8</td>
<td>-39.7</td>
<td>14.4</td>
<td>2 009.2</td>
<td>1.01%</td>
<td>163.8</td>
<td>2 173.0</td>
<td>1.09%</td>
</tr>
<tr>
<td>RO</td>
<td>252.1</td>
<td>1 680.4</td>
<td>146.6</td>
<td>-42.1</td>
<td>15.3</td>
<td>2 052.3</td>
<td>0.95%</td>
<td>183.7</td>
<td>2 236.0</td>
<td>1.04%</td>
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<tr>
<td>SI</td>
<td>69.3</td>
<td>364.0</td>
<td>29.5</td>
<td>-9.6</td>
<td>3.3</td>
<td>456.5</td>
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<td>77.9</td>
<td>534.4</td>
<td>1.19%</td>
</tr>
<tr>
<td>SK</td>
<td>114.6</td>
<td>717.4</td>
<td>57.7</td>
<td>-18.8</td>
<td>6.5</td>
<td>877.4</td>
<td>0.98%</td>
<td>79.6</td>
<td>957.0</td>
<td>1.06%</td>
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<tr>
<td>FI</td>
<td>309.2</td>
<td>1 884.3</td>
<td>154.9</td>
<td>-46.8</td>
<td>16.8</td>
<td>2 318.3</td>
<td>0.97%</td>
<td>139.3</td>
<td>2 457.6</td>
<td>1.02%</td>
</tr>
</tbody>
</table>
### VAT-based Resource

<table>
<thead>
<tr>
<th>Country</th>
<th>VAT-based Resource</th>
<th>GNI-based Resource</th>
<th>UK Correction</th>
<th>Adjustments to VAT and GNI-based resources for previous financial years</th>
<th>Lump sum reduction granted for DK, NL, AT &amp; SE (**)</th>
<th>Total national contribution</th>
<th>Traditional own resources (TOR, net (80%))</th>
<th>Total own resources</th>
<th>% GNI</th>
<th>% GNI</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE</td>
<td>304.3</td>
<td>4 008.1</td>
<td>49.0</td>
<td>-91.2</td>
<td>-172.7</td>
<td>4 097.4</td>
<td>482.7</td>
<td>4 580.1</td>
<td>0.84%</td>
<td>0.94%</td>
</tr>
<tr>
<td>UK</td>
<td>3 333.3</td>
<td>19 923.4</td>
<td>-5 889.5</td>
<td>-461.8</td>
<td>169.9</td>
<td>17 075.4</td>
<td>2 634.1</td>
<td>19 709.4</td>
<td>0.73%</td>
<td>0.85%</td>
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</table>

### EU-28

<table>
<thead>
<tr>
<th>Country</th>
<th>VAT-based Resource</th>
<th>GNI-based Resource</th>
<th>UK Correction</th>
<th>Adjustments to VAT and GNI-based resources for previous financial years</th>
<th>Lump sum reduction granted for DK, NL, AT &amp; SE (**)</th>
<th>Total national contribution</th>
<th>Traditional own resources (TOR, net (80%))</th>
<th>Total own resources</th>
<th>% GNI</th>
<th>% GNI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-28</td>
<td>17 843.2</td>
<td>125 392.5</td>
<td>169.0</td>
<td>-3 164.7</td>
<td>-7.6</td>
<td>140 223.4</td>
<td>19 866.5</td>
<td>160 089.9</td>
<td>0.89%</td>
<td>1.02%</td>
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</table>

#### Surplus from previous year

<table>
<thead>
<tr>
<th>Surplus from previous year</th>
<th>3 218.4</th>
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<tbody>
<tr>
<td>Surplus external aid guarantee fund</td>
<td>0.0</td>
</tr>
<tr>
<td>Other revenue</td>
<td>10 997.3</td>
</tr>
<tr>
<td>Total revenue</td>
<td>174 305.6</td>
</tr>
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</table>

Data source: European Commission, [EU expenditure and revenue 2014-2020](https://ec.europa.eu/).  

(*) For simplicity, the GNI-based own resource includes the adjustment for Denmark, Ireland and the United Kingdom related to specific activities in the area of freedom security and justice (FSJ) in which they do not take part.  

(**) Totals for UK correction payments and GNI reduction granted to NL and SE are not equal to zero on account of exchange rate differences.
### Annex 3 – The EU budget 2021 and 2022

#### Headings and clusters presented according to the 2021-2027 MFF

<table>
<thead>
<tr>
<th>Cluster</th>
<th>2021 budget (incl. AB1-4 and DABS-6) € million</th>
<th>2022 budget € million</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CA</td>
<td>PA</td>
<td>CA</td>
</tr>
<tr>
<td><strong>SINGLE MARKET, INNOVATION AND DIGITAL</strong></td>
<td>20 816.8</td>
<td>17 191.9</td>
<td>21 775.1</td>
</tr>
<tr>
<td>— Cluster 01 – Research and Innovation</td>
<td>20 816.8</td>
<td>17 191.9</td>
<td>21 775.1</td>
</tr>
<tr>
<td></td>
<td>12 646.1</td>
<td>10 716.5</td>
<td>13 239.2</td>
</tr>
<tr>
<td></td>
<td>Horizon Europe</td>
<td>12 646.1</td>
<td>10 716.5</td>
</tr>
<tr>
<td></td>
<td>— Horizon Europe</td>
<td>12 646.1</td>
<td>10 716.5</td>
</tr>
<tr>
<td></td>
<td>1.506.5</td>
<td>9 835.1</td>
<td>12 392.2</td>
</tr>
<tr>
<td></td>
<td>Euratom research and training programme</td>
<td>265.7</td>
<td>253.8</td>
</tr>
<tr>
<td></td>
<td>International Thermonuclear Experimental Reactor (ITER)</td>
<td>864.0</td>
<td>613.6</td>
</tr>
<tr>
<td></td>
<td>Pilot projects and preparatory actions</td>
<td>9.8</td>
<td>14.0</td>
</tr>
<tr>
<td>— Cluster 02 – European strategic investments</td>
<td>5 238.2</td>
<td>3 955.0</td>
<td>5 509.2</td>
</tr>
<tr>
<td></td>
<td>InvestEU Fund</td>
<td>5 238.2</td>
<td>3 955.0</td>
</tr>
<tr>
<td></td>
<td>Connecting Europe Facility (CEF)</td>
<td>653.6</td>
<td>1 081.0</td>
</tr>
<tr>
<td></td>
<td>— Connecting Europe Facility (CEF) - Transport</td>
<td>2 847.9</td>
<td>2 107.0</td>
</tr>
<tr>
<td></td>
<td>— Connecting Europe Facility (CEF) - Energy</td>
<td>2 847.9</td>
<td>2 107.0</td>
</tr>
<tr>
<td></td>
<td>— Connecting Europe Facility (CEF) - Digital</td>
<td>2 847.9</td>
<td>2 107.0</td>
</tr>
<tr>
<td></td>
<td>Digital Europe programme</td>
<td>2 847.9</td>
<td>2 107.0</td>
</tr>
<tr>
<td>— Cluster 03 – Single market</td>
<td>899.3</td>
<td>833.0</td>
<td>952.6</td>
</tr>
<tr>
<td></td>
<td>— Single market programme (incl. SMEs)</td>
<td>899.3</td>
<td>833.0</td>
</tr>
<tr>
<td></td>
<td>— EU Anti-Fraud Programme</td>
<td>577.5</td>
<td>547.8</td>
</tr>
<tr>
<td></td>
<td>— Cooperation in the field of taxation (FISCALIS)</td>
<td>24.1</td>
<td>23.8</td>
</tr>
<tr>
<td></td>
<td>— Cooperation in the field of customs (CUSTOMS)</td>
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<td>23.8</td>
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125
<table>
<thead>
<tr>
<th>Category</th>
<th>Value 121 2021</th>
<th>Value 2022</th>
<th>Change 2021</th>
<th>Change 2022</th>
<th>% Change 2021</th>
<th>% Change 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decentralised agencies</td>
<td>121.4</td>
<td>121.4</td>
<td>119.7</td>
<td>119.7</td>
<td>-1.4%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Other actions</td>
<td>7.5</td>
<td>7.5</td>
<td>10.3</td>
<td>9.0</td>
<td>37.3%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Pilot projects and preparatory actions</td>
<td>5.6</td>
<td>13.4</td>
<td>17.3</td>
<td>13.3</td>
<td>206.0%</td>
<td>-0.9%</td>
</tr>
<tr>
<td>Cluster 04 – Space</td>
<td>2 033.3</td>
<td>1 687.4</td>
<td>2 076.5</td>
<td>2 156.4</td>
<td>2.1%</td>
<td>27.8%</td>
</tr>
<tr>
<td>European space programme</td>
<td>1 997.4</td>
<td>1 651.5</td>
<td>2 008.2</td>
<td>2 088.1</td>
<td>0.5%</td>
<td>26.4%</td>
</tr>
<tr>
<td>Decentralised agencies</td>
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<td>35.9</td>
<td>68.3</td>
<td>68.3</td>
<td>90.3%</td>
<td>90.3%</td>
</tr>
<tr>
<td>Pilot projects and preparatory actions</td>
<td>5.6</td>
<td>13.4</td>
<td>17.3</td>
<td>13.3</td>
<td>206.0%</td>
<td>-0.9%</td>
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</table>

**COHESION AND VALUES**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value 2021</th>
<th>Value 2022</th>
<th>Change 2021</th>
<th>Change 2022</th>
<th>% Change 2021</th>
<th>% Change 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of which: under Flexibility Instrument</td>
<td>311.9</td>
<td>-100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**Economic, social and territorial cohesion**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value 2021</th>
<th>Value 2022</th>
<th>Change 2021</th>
<th>Change 2022</th>
<th>% Change 2021</th>
<th>% Change 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience and values</td>
<td>4 905.8</td>
<td>4 493.2</td>
<td>5 300.2</td>
<td>5 701.8</td>
<td>29.0%</td>
<td>26.9%</td>
</tr>
<tr>
<td>Of which: under Flexibility Instrument</td>
<td>310.8</td>
<td>-100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cluster 05 – Regional development and cohesion</td>
<td>35 412.0</td>
<td>45 755.8</td>
<td>36 569.6</td>
<td>42 651.5</td>
<td>3.3%</td>
<td>-6.8%</td>
</tr>
<tr>
<td>European Regional Development Fund (ERDF)</td>
<td>29 240.3</td>
<td>33 871.0</td>
<td>30 173.8</td>
<td>29 597.5</td>
<td>3.2%</td>
<td>-12.6%</td>
</tr>
<tr>
<td>Cohesion Fund (CF)</td>
<td>6 138.1</td>
<td>11 845.3</td>
<td>6 358.8</td>
<td>13 013.8</td>
<td>3.6%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Support for the Turkish-Cypriot community</td>
<td>32.0</td>
<td>34.9</td>
<td>34.3</td>
<td>36.9</td>
<td>7.2%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Pilot projects and preparatory actions</td>
<td>1.6</td>
<td>4.7</td>
<td>2.7</td>
<td>3.3</td>
<td>67.6%</td>
<td>-29.2%</td>
</tr>
<tr>
<td>Cluster 06 – Recovery and resilience</td>
<td>1 079.9</td>
<td>1 029.0</td>
<td>1 508.0</td>
<td>1 092.6</td>
<td>39.6%</td>
<td>6.2%</td>
</tr>
<tr>
<td>European Recovery and Resilience Facility (incl. Technical Support Instrument)</td>
<td>116.4</td>
<td>109.2</td>
<td>118.7</td>
<td>112.0</td>
<td>2.0%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Protection of the euro against counterfeiting (the ‘Pericles IV programme’)</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>0.9</td>
<td>1.9%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Financing cost of the European Union Recovery Instrument</td>
<td>39.6</td>
<td>39.6</td>
<td>145.0</td>
<td>145.0</td>
<td>266.2%</td>
<td>266.2%</td>
</tr>
<tr>
<td>Union civil protection mechanism (RescEU)</td>
<td>148.0</td>
<td>193.5</td>
<td>101.3</td>
<td>186.9</td>
<td>-31.6%</td>
<td>-3.4%</td>
</tr>
<tr>
<td>EU4Health</td>
<td>327.5</td>
<td>127.9</td>
<td>839.7</td>
<td>353.3</td>
<td>156.4%</td>
<td>176.3%</td>
</tr>
<tr>
<td>Instrument for emergency support within the Union (ESI)</td>
<td>156.2</td>
<td>238.1</td>
<td>8.1</td>
<td>-100.0%</td>
<td>-96.6%</td>
<td></td>
</tr>
<tr>
<td>Decentralised agencies</td>
<td>280.1</td>
<td>307.6</td>
<td>290.6</td>
<td>275.9</td>
<td>3.7%</td>
<td>-10.3%</td>
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</table>
### Economic and Budgetary Outlook for the European Union 2022

<table>
<thead>
<tr>
<th>Category</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>Change</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions financed under the prerogatives of the Commission and specific</td>
<td>11.4</td>
<td>10.5</td>
<td>12.0</td>
<td>10.6</td>
<td>5.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>competences conferred to the Commission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilot projects and preparatory actions</td>
<td>1.8</td>
<td></td>
<td></td>
<td></td>
<td>-100%</td>
<td></td>
</tr>
<tr>
<td>Cluster 07 - Investing in people, social cohesion and values</td>
<td>16 606.0</td>
<td>19 576.7</td>
<td>17 961.4</td>
<td>18 308.7</td>
<td>8.2%</td>
<td>-6.5%</td>
</tr>
<tr>
<td>European Social Fund Plus (ESF+)</td>
<td>12 812.1</td>
<td>16 147.4</td>
<td>13 173.5</td>
<td>13 736.3</td>
<td>2.8%</td>
<td>-14.9%</td>
</tr>
<tr>
<td>Employment and social innovation</td>
<td>102.6</td>
<td>85.3</td>
<td>106.5</td>
<td>87.2</td>
<td>3.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Erasmus+</td>
<td>2 663.0</td>
<td>2 407.7</td>
<td>3 401.7</td>
<td>3 300.8</td>
<td>27.7%</td>
<td>37.1%</td>
</tr>
<tr>
<td>European Solidarity Corps (ESC)</td>
<td>135.7</td>
<td>126.6</td>
<td>141.4</td>
<td>115.9</td>
<td>4.2%</td>
<td>-8.4%</td>
</tr>
<tr>
<td>Creative Europe</td>
<td>306.4</td>
<td>236.5</td>
<td>406.5</td>
<td>400.2</td>
<td>32.7%</td>
<td>69.2%</td>
</tr>
<tr>
<td>Justice</td>
<td>46.4</td>
<td>45.2</td>
<td>43.6</td>
<td>37.6</td>
<td>-6.0%</td>
<td>-16.9%</td>
</tr>
<tr>
<td>Rights and values</td>
<td>97.5</td>
<td>87.8</td>
<td>214.9</td>
<td>170.3</td>
<td>120.3%</td>
<td>94.0%</td>
</tr>
<tr>
<td>Decentralised agencies and European Public Prosecutor's Office (EPPO)</td>
<td>220.5</td>
<td>220.5</td>
<td>246.3</td>
<td>237.8</td>
<td>11.7%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Other actions</td>
<td>8.6</td>
<td>7.3</td>
<td>8.7</td>
<td>6.8</td>
<td>0.9%</td>
<td>-7.0%</td>
</tr>
<tr>
<td>Actions financed under the prerogatives of the Commission and specific</td>
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<td>162.0</td>
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<td>1.1%</td>
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<tr>
<td>competences conferred to the Commission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilot projects and preparatory actions</td>
<td>29.2</td>
<td>50.4</td>
<td>35.3</td>
<td>52.0</td>
<td>20.9%</td>
<td>3.2%</td>
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### NATURAL RESOURCES AND ENVIRONMENT

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<th>2020</th>
<th>2019</th>
<th>Change</th>
<th>Change</th>
</tr>
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<tbody>
<tr>
<td>Of which: European Agricultural Guarantee Fund (EAGF) — Market related expenditure and direct payments</td>
<td>40 368.0</td>
<td>40 353.7</td>
<td>40 368.9</td>
<td>40 393.0</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Cluster 08 - Agriculture and maritime policy</td>
<td>56 644.0</td>
<td>55 924.0</td>
<td>54 257.9</td>
<td>56 006.9</td>
<td>-4.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>European Agricultural Guarantee Fund (EAGF)</td>
<td>40 368.0</td>
<td>40 353.7</td>
<td>40 368.9</td>
<td>40 393.0</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>European Agricultural Fund for Rural Development (EAFRD)</td>
<td>15 345.0</td>
<td>14 572.2</td>
<td>12 727.7</td>
<td>14 680.2</td>
<td>-17.1%</td>
<td>0.7%</td>
</tr>
<tr>
<td>European Maritime and Fisheries Fund (EMFF)</td>
<td>760.7</td>
<td>829.4</td>
<td>971.9</td>
<td>732.4</td>
<td>27.8%</td>
<td>-11.7%</td>
</tr>
<tr>
<td>Sustainable Fisheries Partnership Agreements (SFPA) and Regional Fisheries Management Organisations (RFMO)</td>
<td>151.6</td>
<td>144.5</td>
<td>159.2</td>
<td>166.4</td>
<td>5.0%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Decentralised agencies</td>
<td>18.7</td>
<td>18.7</td>
<td>28.7</td>
<td>28.7</td>
<td>53.3%</td>
<td>53.3%</td>
</tr>
<tr>
<td>Pilot projects and preparatory actions</td>
<td>6.0</td>
<td>1.5</td>
<td>6.1</td>
<td></td>
<td>53.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Cluster 09 - Environment and climate action</td>
<td>1,929.8</td>
<td>431.5</td>
<td>1,977.6</td>
<td>594.8</td>
<td>2.5%</td>
<td>37.8%</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Programme for environment and climate action (LIFE)</td>
<td>738.5</td>
<td>371.5</td>
<td>755.5</td>
<td>528.5</td>
<td>2.3%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Just Transition Fund</td>
<td>1,137.0</td>
<td>1,159.7</td>
<td>1.3</td>
<td>2.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decentralised agencies</td>
<td>50.8</td>
<td>50.8</td>
<td>54.1</td>
<td>54.1</td>
<td>6.7%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Pilot projects and preparatory actions</td>
<td>3.5</td>
<td>9.3</td>
<td>8.1</td>
<td>10.8</td>
<td>132.0%</td>
<td>17.0%</td>
</tr>
</tbody>
</table>

**MIGRATION AND BORDER MANAGEMENT**

<table>
<thead>
<tr>
<th>Cluster 10 - Migration</th>
<th>2,278.8</th>
<th>2,686.2</th>
<th>3,091.2</th>
<th>3,078.3</th>
<th>35.7%</th>
<th>14.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asylum and Migration Fund (AMF)</td>
<td>873.3</td>
<td>1,301.3</td>
<td>1,119.5</td>
<td>1,291.8</td>
<td>28.2%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Decentralised agencies</td>
<td>137.8</td>
<td>137.8</td>
<td>153.7</td>
<td>153.7</td>
<td>11.5%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cluster 11 – Border management</th>
<th>1,267.8</th>
<th>1,247.1</th>
<th>1,818.1</th>
<th>1,632.8</th>
<th>43.4%</th>
<th>30.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Border Management Fund (IBMF) - Instrument for border management and visa (BMVI)</td>
<td>398.0</td>
<td>488.2</td>
<td>671.1</td>
<td>510.9</td>
<td>68.6%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Integrated Border Management Fund (IBMF) - Instrument for financial support for customs control equipment (CCEi)</td>
<td>135.5</td>
<td>33.0</td>
<td>138.2</td>
<td>136.3</td>
<td>2.0%</td>
<td>313.3%</td>
</tr>
<tr>
<td>Decentralised agencies</td>
<td>734.3</td>
<td>725.9</td>
<td>1,008.8</td>
<td>985.7</td>
<td>37.4%</td>
<td>35.8%</td>
</tr>
</tbody>
</table>

**SECURITY AND DEFENCE**

<table>
<thead>
<tr>
<th>Cluster 12 - Security</th>
<th>1,709.3</th>
<th>670.6</th>
<th>1,785.3</th>
<th>1,237.9</th>
<th>4.4%</th>
<th>84.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Security Fund (ISF)</td>
<td>536.5</td>
<td>527.4</td>
<td>607.8</td>
<td>583.2</td>
<td>13.3%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Nuclear decommissioning (Lithuania)</td>
<td>175.6</td>
<td>180.6</td>
<td>227.1</td>
<td>240.7</td>
<td>29.3%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Nuclear safety and decommissioning (incl. For Bulgaria and Slovakia)</td>
<td>72.5</td>
<td>50.0</td>
<td>98.9</td>
<td>40.0</td>
<td>36.4%</td>
<td>-20.0%</td>
</tr>
<tr>
<td>Decentralised agencies</td>
<td>69.2</td>
<td>78.4</td>
<td>43.9</td>
<td>65.3</td>
<td>-36.5%</td>
<td>-16.6%</td>
</tr>
<tr>
<td>Actions financed under the prerogatives of the Commission and specific competences conferred to the Commission</td>
<td>197.6</td>
<td>197.6</td>
<td>215.9</td>
<td>215.9</td>
<td>9.3%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Pilot projects and preparatory actions</td>
<td>21.5</td>
<td>20.8</td>
<td>22.0</td>
<td>20.9</td>
<td>2.0%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cluster 13 - Defence</th>
<th>1,172.8</th>
<th>143.2</th>
<th>1,177.4</th>
<th>654.6</th>
<th>0.4%</th>
<th>357.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Defence Fund (Research)</td>
<td>283.3</td>
<td>13.1</td>
<td>318.3</td>
<td>177.5</td>
<td>12.4%</td>
<td>1,253.8%</td>
</tr>
<tr>
<td>European Defence Fund (Non Research)</td>
<td>662.4</td>
<td>109.0</td>
<td>627.4</td>
<td>378.9</td>
<td>-5.3%</td>
<td>247.8%</td>
</tr>
<tr>
<td>Military mobility</td>
<td>227.1</td>
<td>16.7</td>
<td>231.7</td>
<td>98.2</td>
<td>2.1%</td>
<td>489.2%</td>
</tr>
<tr>
<td>NEIGHBOURHOOD AND THE WORLD</td>
<td>16 697.0</td>
<td>11 261.0</td>
<td>17 170.4</td>
<td>12 916.1</td>
<td>-100%</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Cluster 14 - External action</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Neighbourhood, Development and International Cooperation Instrument (NDICI)</td>
<td>12 521.3</td>
<td>6 964.3</td>
<td>12 716.6</td>
<td>7 891.7</td>
<td>1.6%</td>
<td>13.3%</td>
</tr>
<tr>
<td>— European Instrument for International Nuclear Safety Cooperation</td>
<td>37.6</td>
<td>32.5</td>
<td>38.6</td>
<td>32.6</td>
<td>2.6%</td>
<td>0.4%</td>
</tr>
<tr>
<td>— Humanitarian aid (HUMA)</td>
<td>1 652.6</td>
<td>1 900.1</td>
<td>1 806.1</td>
<td>2 091.6</td>
<td>9.3%</td>
<td>10.1%</td>
</tr>
<tr>
<td>— Common foreign and security policy (CFSP)</td>
<td>351.9</td>
<td>328.7</td>
<td>361.7</td>
<td>333.6</td>
<td>2.8%</td>
<td>1.5%</td>
</tr>
<tr>
<td>— Overseas countries and territories (OCT)</td>
<td>67.0</td>
<td>33.4</td>
<td>69.0</td>
<td>52.4</td>
<td>2.9%</td>
<td>56.9%</td>
</tr>
<tr>
<td>— Other actions</td>
<td>72.1</td>
<td>41.6</td>
<td>72.2</td>
<td>47.2</td>
<td>0.2%</td>
<td>13.4%</td>
</tr>
<tr>
<td>— Actions financed under the prerogatives of the Commission and specific competences conferred to the Commission</td>
<td>93.0</td>
<td>78.0</td>
<td>94.8</td>
<td>95.1</td>
<td>1.9%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EUROPEAN PUBLIC ADMINISTRATION</th>
<th>10 442.8</th>
<th>10 444.1</th>
<th>10 620.1</th>
<th>10 620.2</th>
<th>-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of which: Administrative expenditure of the institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— European schools and pensions</td>
<td>2 412.5</td>
<td>2 412.5</td>
<td>2 332.2</td>
<td>2 332.2</td>
<td>-3.3%</td>
</tr>
<tr>
<td>— Administrative expenditure of the institutions</td>
<td>8 030.3</td>
<td>8 031.6</td>
<td>8 287.9</td>
<td>8 288.0</td>
<td>3.2%</td>
</tr>
<tr>
<td>— European Parliament</td>
<td>2 062.9</td>
<td>2 062.9</td>
<td>2 112.2</td>
<td>2 112.2</td>
<td>2.4%</td>
</tr>
<tr>
<td>— European Council and Council</td>
<td>594.4</td>
<td>594.4</td>
<td>611.5</td>
<td>611.5</td>
<td>2.9%</td>
</tr>
<tr>
<td>— Commission</td>
<td>3 724.2</td>
<td>3 725.5</td>
<td>3 868.1</td>
<td>3 868.2</td>
<td>3.9%</td>
</tr>
<tr>
<td>— Court of Justice of the European Union</td>
<td>444.0</td>
<td>444.0</td>
<td>464.8</td>
<td>464.8</td>
<td>4.7%</td>
</tr>
<tr>
<td>— European Court of Auditors</td>
<td>153.7</td>
<td>153.7</td>
<td>162.1</td>
<td>162.1</td>
<td>5.5%</td>
</tr>
<tr>
<td>— European Economic and Social Committee</td>
<td>145.0</td>
<td>145.0</td>
<td>150.9</td>
<td>150.9</td>
<td>4.0%</td>
</tr>
<tr>
<td>— European Committee of the Regions</td>
<td>106.7</td>
<td>106.7</td>
<td>108.4</td>
<td>108.4</td>
<td>1.5%</td>
</tr>
<tr>
<td>— European Ombudsman</td>
<td>12.3</td>
<td>12.3</td>
<td>12.1</td>
<td>12.1</td>
<td>-1.8%</td>
</tr>
<tr>
<td>— European Data Protection Supervisor</td>
<td>19.5</td>
<td>19.5</td>
<td>20.2</td>
<td>20.2</td>
<td>3.8%</td>
</tr>
<tr>
<td>— European External Action Service</td>
<td>767.6</td>
<td>767.6</td>
<td>777.7</td>
<td>777.7</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPROPRIATIONS FOR HEADINGS</th>
<th>163 616.5</th>
<th>164 971.6</th>
<th>166 716.6</th>
<th>167 980.5</th>
<th>-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriations as % of GNI</td>
<td>1.16%</td>
<td>1.17%</td>
<td>1.12%</td>
<td>1.13%</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td><strong>Of which: under Flexibility Instrument</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriations as % of GNI</td>
<td>1.16%</td>
<td>1.17%</td>
<td>1.12%</td>
<td>1.13%</td>
<td></td>
</tr>
<tr>
<td><strong>Thematic special instruments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Solidarity and Emergency Aid Reserve (SEAR)</td>
<td>1 321.4</td>
<td>1 321.4</td>
<td>1 298.9</td>
<td>1 298.9</td>
<td>-1.7%</td>
</tr>
<tr>
<td>— European Globalisation Adjustment Fund for Displaced Workers</td>
<td>197.4</td>
<td>20.0</td>
<td>201.3</td>
<td>25.0</td>
<td>2.0%</td>
</tr>
<tr>
<td>— Brexit Adjustment Reserve (BAR)</td>
<td>1 697.6</td>
<td>1 697.9</td>
<td>1 298.9</td>
<td>1 298.9</td>
<td>-23.5%</td>
</tr>
<tr>
<td><strong>TOTAL APPROPRIATIONS</strong></td>
<td>1 668 333.2</td>
<td>1 680 011.0</td>
<td>1 695 158.8</td>
<td>1 706 033.3</td>
<td>1.6%</td>
</tr>
<tr>
<td>Appropriations as % of GNI</td>
<td>1.18%</td>
<td>1.19%</td>
<td>1.14%</td>
<td>1.14%</td>
<td></td>
</tr>
</tbody>
</table>
Annex 4 – Estimates of climate contribution per programme in the 2022 budget (in commitment appropriations and € million)

<table>
<thead>
<tr>
<th>Heading/ EU programme</th>
<th>Budget 2022</th>
<th>Climate contribution (as a % of budget 2022)</th>
<th>Climate contribution (as a % of both budget 2022 and NGEU)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heading 1 Single market, innovation and digital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horizon Europe – Framework programme</td>
<td>5 526.0</td>
<td>3.34 %</td>
<td>1.80 %</td>
</tr>
<tr>
<td>Euratom research and training programme</td>
<td>129.5</td>
<td>0.08 %</td>
<td>0.04 %</td>
</tr>
<tr>
<td>International Thermonuclear Experimental Reactor (ITER)</td>
<td>710.1</td>
<td>0.43 %</td>
<td>0.23 %</td>
</tr>
<tr>
<td>InvestEU programme</td>
<td>904.4</td>
<td>0.55 %</td>
<td>0.29 %</td>
</tr>
<tr>
<td>Connecting Europe Facility (CEF) (incl. contribution from Cohesion Fund)</td>
<td>4 323.0</td>
<td>2.61 %</td>
<td>1.41 %</td>
</tr>
<tr>
<td>European space programme</td>
<td>357.0</td>
<td>0.22 %</td>
<td>0.12 %</td>
</tr>
<tr>
<td><strong>Subheading 2b Resilience and values</strong></td>
<td>129 125.9</td>
<td>78.10 %</td>
<td>42.08 %</td>
</tr>
<tr>
<td>European Regional Development Fund (ERDF) and Cohesion Fund (CF)</td>
<td>12 747.5</td>
<td>7.71 %</td>
<td>4.15 %</td>
</tr>
<tr>
<td>Support to the Turkish Cypriot Community</td>
<td>5.0</td>
<td>0.0 %</td>
<td>0.0 %</td>
</tr>
<tr>
<td>European Recovery and Resilience Facility (grants and loans)*</td>
<td>115 239.9</td>
<td>69.70 %</td>
<td>37.55 %</td>
</tr>
<tr>
<td>Union civil protection mechanism (RescEU)</td>
<td>58.5</td>
<td>0.04 %</td>
<td>0.02 %</td>
</tr>
<tr>
<td>European Social Fund + (incl. Fund for the most deprived and Employment and Social Innovation)</td>
<td>1 075.0</td>
<td>0.65 %</td>
<td>0.35 %</td>
</tr>
<tr>
<td><strong>Heading 3 Natural resources and environment</strong></td>
<td>20 163.5</td>
<td>12.20 %</td>
<td>6.57 %</td>
</tr>
<tr>
<td>European Agricultural Guarantee Fund (EAGF)</td>
<td>7 153.0</td>
<td>4.33 %</td>
<td>2.33 %</td>
</tr>
<tr>
<td>European Agricultural Fund for Rural Development (EAFRD)</td>
<td>6 931.0</td>
<td>4.19 %</td>
<td>2.26 %</td>
</tr>
<tr>
<td>European Maritime, Fisheries and Aquaculture Fund (EMFAF)</td>
<td>145.9</td>
<td>0.09 %</td>
<td>0.05 %</td>
</tr>
<tr>
<td>Sustainable Fisheries Partnership Agreements (SFPA) and Regional Fisheries Management Organisations (RFMO)</td>
<td>14.1</td>
<td>0.01 %</td>
<td>0.0 %</td>
</tr>
<tr>
<td>Programme for the environment and climate action (LIFE)</td>
<td>430.0</td>
<td>0.26 %</td>
<td>0.14 %</td>
</tr>
<tr>
<td>Just Transition Mechanism</td>
<td>5 489.5</td>
<td>3.32 %</td>
<td>1.79 %</td>
</tr>
<tr>
<td><strong>Heading 6 Neighbourhood and the world</strong></td>
<td>4 097.1</td>
<td>2.48 %</td>
<td>1.34 %</td>
</tr>
<tr>
<td>Neighbourhood, Development and International Cooperation Instrument (NDICI) - Global Europe</td>
<td>3 758.0</td>
<td>2.27 %</td>
<td>1.22 %</td>
</tr>
<tr>
<td>Overseas countries and territories (OCT) (incl. Greenland)</td>
<td>17.2</td>
<td>0.01 %</td>
<td>0.01 %</td>
</tr>
<tr>
<td>Pre-accession assistance (IPA III)</td>
<td>321.9</td>
<td>0.19 %</td>
<td>0.10 %</td>
</tr>
<tr>
<td><strong>Total climate financing in EU budget</strong></td>
<td>165 336.5</td>
<td>100.00 %</td>
<td>53.88 %</td>
</tr>
<tr>
<td><strong>Total EU budget and NGEU</strong></td>
<td>306 875.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* includes external assigned revenue and estimated loans from NGEU.

Data source: European Commission, Draft general budget 2022, 9 July 2021.
Offering an overview of the economic and budgetary situation in the EU and beyond, and summarising the main economic indicators in the EU and euro area and their two-year trends, this study is the sixth in an annual series of 'Outlooks' produced by the European Parliamentary Research Service (EPRS).

In seven chapters, the authors of the publication explain and analyse the EU annual budget and give an overview of its headings for 2022, all within the wider budgetary context of the EU’s post-2020 Multiannual Financial Framework (MFF) and the Next Generation EU (NGEU) recovery fund.

This year’s special ‘economic focus’ puts the spotlight on some aspects of the ongoing economic recovery – namely, fiscal and monetary matters, labour issues and environmental choices – and aims to give a flavour of the discussion expected in the coming months.