

## IV. The SURE instrument – key features and first assessment

*By Cliona McDonnell, Jocelyn Boussard, Isabelle Justo, Philipp Mohl, Gilles Mourre and Klara Stovicek*

*This section summarises the use of SURE financial assistance to date (25 May 2021) and provides early evidence of its impact, based on the Commission's first bi-annual report on the instrument. Regarding the use of the instrument to date, demand from Member States for SURE loans has been strong, with 19 Member States being granted almost 95% of the maximum amount of EUR 100 billion. Investor interest in SURE bonds has also been significant, enabling the EU to achieve favourable pricing terms and disburse the loans to Member States quickly. Member States have primarily used SURE to finance short-time work schemes and similar measures for expenditure that occurred in 2020, supporting an estimated 25-30 million people and 1½ to 2½ million firms. Regarding the first assessment of SURE's impact, an analysis using Okun's Law shows that the increase in unemployment rates in 2020 was milder than expected, largely due to policy supports including the SURE instrument. In addition to improving general confidence in the EU, SURE encouraged Member States to adopt new short-time work schemes or modify existing schemes. Furthermore, the interest savings Member States made through SURE are estimated to be almost EUR 6 billion across the first four issuances.*

### IV.1. Introduction

**The European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) has been a key element of the EU's pandemic-related policy supports** <sup>(83)</sup>. This section outlines the use of SURE to date and reviews its socio-economic impacts, based on the first bi-annual report on SURE published in March 2021 <sup>(84)</sup>.

**SURE is an EU financial assistance instrument endowed with a budget of EUR 100 billion to address the crisis.** It was created by the EU to help Member States protect jobs and workers' incomes in the context of the COVID-19 pandemic. SURE provides loans to finance Member States' short-time work schemes or similar measures aimed at protecting employees and the self-employed, and as an ancillary, health-related measures, in particular in the workplace.

**The guarantee system underpinning SURE is a strong expression of solidarity in the EU between Member States, ensuring necessary financial robustness and credibility.** For SURE to become available, all Member States agreed to guarantee the risk borne by the EU when

borrowing resources. All Member States voluntarily provided irrevocable, callable, unconditional guarantees to the EU for the loans to Member States totalling EUR 25 billion, or 25% of the total SURE budget. These guarantees enabled the Commission to expand the volume of loans it could provide to Member States on behalf of the EU, while also ensuring a prudent financing of the SURE instrument and preserving the EU's high credit rating.

**SURE has had significant success to date with a large take-up by Member States.** As will be detailed in this section, among other achievements, the take-up among Member States has been strong, the bonds issued to finance SURE loans have been in high demand from investors, and between 25 and 30 million people are estimated to have been supported by SURE across the EU in 2020. One of the notable characteristics of the pandemic's economic impact in Europe has been the lower than expected increase in unemployment, in which SURE has been a factor.

**This chapter is divided into two parts.** First, the use of the SURE instrument is described, both from a financial point of view and in terms of the national measures SURE was used to fund. The second section provides a preliminary assessment of SURE's impact on employment and other factors, including interest savings by Member States.

<sup>(83)</sup> Council Regulation (EU) 2020/672 of 19 May 2020 on the establishment of a European instrument for temporary support to mitigate unemployment risks in an emergency (SURE) following the COVID-19 outbreak, OJ L 59, 20.5.2020, p. 1

<sup>(84)</sup> [https://ec.europa.eu/commission/presscorner/detail/en/i\\_p\\_21\\_1209](https://ec.europa.eu/commission/presscorner/detail/en/i_p_21_1209). The cut-off date for the report was 26<sup>th</sup> February 2021; the amounts granted and disbursements in Section 2a of this section are updated to 25 May 2021.

## IV.2. The use of SURE financial assistance

### IV.2.1. The amount and characteristics of financial assistance under SURE

**Member State demand for financial assistance under SURE has been strong.** Since its introduction, almost 95% of the EUR 100 billion budget, or EUR 94.3 billion, has been granted to 19 Member States. The amounts granted to Member States range from EUR 27.4 billion to Italy to EUR 230 million to Estonia (see Graph IV.1 for further detail).

**Under SURE, the Commission borrows on capital markets by issuing bonds to finance cheap back-to-back lending to Member States.**

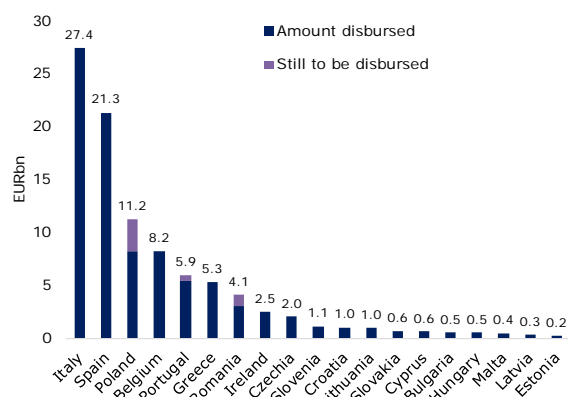
After the requests for financial assistance from Member States were granted, the Commission began borrowing, on behalf of the EU, by issuing bonds in October 2020, and then disbursing the proceeds to Member States. The first seven bond issuances were very successful, raising EUR 75.5 billion from October 2020 to March 2021. The bonds were issued with maturities ranging from 5 to 30 years, resulting in loan disbursements to Member States with an average maturity of 14.2 years, close to the maximum average maturity of the loans to Member States of 15 years. The issuances were significantly over-subscribed by investors, 10 times on average, resulting in favourable pricing terms, including negative yields on all but one of the bonds with maturities of 15 years or less.

SURE is the first instance of the EU issuing social bonds, furthering the development of the social bond market and sustainable finance. 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. The EU adopted and published an EU SURE Social Bond Framework to facilitate this commitment, in particular by requesting issuers to report certain information to ensure transparency, specifically on the allocation and impact of proceeds<sup>(85)</sup>.

<sup>(85)</sup>

[https://ec.europa.eu/info/sites/default/files/about\\_the\\_european\\_commission/eu\\_budget/eu\\_sure\\_social\\_bond\\_framework.pdf](https://ec.europa.eu/info/sites/default/files/about_the_european_commission/eu_budget/eu_sure_social_bond_framework.pdf)

Graph IV.1: SURE amounts granted and disbursed



Note: Figures in the report were updated here beyond the cut-off date to reflect the situation on 25 May 2021.

Source: Commission.

### IV.2.2. The national measures and spending covered by SURE financial assistance

**SURE was primarily used to finance short-time work schemes.** These are public programmes allowing businesses experiencing economic difficulties to temporarily reduce the hours worked by their employees, who are provided with public income support for the hours not worked. 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<sup>(86)</sup>. In the majority of cases, the supported short-time work schemes are new schemes set up in response to the COVID-19 pandemic.

**Most beneficiary Member States have also applied for support to finance ‘measures similar to short-time work schemes’.** These are measures that do not strictly fall 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 COVID-19 outbreak<sup>(87)</sup>. They are aimed at protecting employees and the self-employed, reducing the incidence of unemployment and loss of income in the context of the COVID-19 crisis.

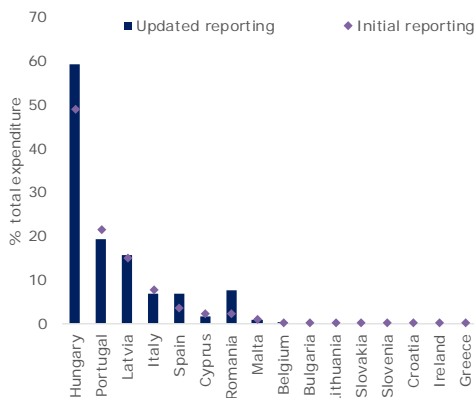
<sup>(86)</sup> The analysis in this section does not include Estonia, who was granted financial assistance after the cut-off date for the SURE report.

<sup>(87)</sup> The similar measures supported by SURE vary considerably by country but include wage subsidy schemes, such as those in Ireland and Malta, and supports for the self-employed to keep their activity afloat.

14 Member States are financing such similar measures to specifically support the self-employed.

**Nine Member States also requested financial assistance to finance health-related expenditure.** The SURE Regulation allows for the financing of health-related measures, in particular at the workplace, as an ancillary. This means that the financial assistance for health-related expenditure is provided only in conjunction with eligible labour market measures. In aggregate, 5% of the financial assistance under SURE has been allocated to health-related measures so far.

Graph IV.2: Share of health-related public expenditure



Note: Initial reporting was provided by Member States in August 2020, updated reporting was provided in January - February 2021.

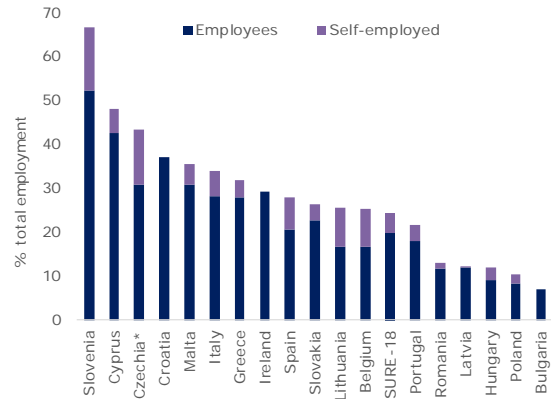
Source: Member States' reporting.

**In 2020, SURE is estimated to have supported between 25 and 30 million people, accounting for one quarter of total employment across beneficiary Member States.** This covers approximately 21½ million employees and 5 million self-employed workers and should be compared with a total of 35 million people who benefitted from short-time work schemes in the EU. A breakdown by Member State is shown in Graph IV.3, with coverage ranging from 7% to almost 70% of total employment. The number of people covered by health-related measures is not included in these figures. Therefore, these estimates could also be considered conservative.

Based on the reporting by Member States, it is estimated that between 1½ million and 2½ million firms were supported by SURE in 2020. This represents 12 – 16% of firms in beneficiary Member States, based on Member States reporting

(and Commission assumptions where the data are missing).

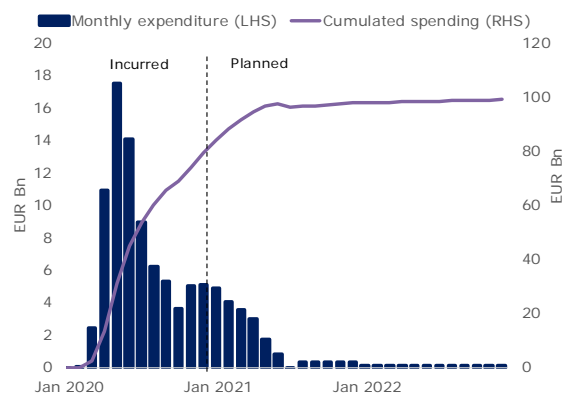
Graph IV.3: No. of workers covered by SURE (% of 2020 employment)



Source: Member States' reporting, Commission calculations.

**By the end of 2020, 80% of total planned public expenditure on eligible measures had already taken place.** As part of the Commission's monitoring, the two bi-annual reports present the planned and actual use of the financial assistance granted under SURE (see Graph IV.4). The graph shows that the spending dynamics tracked the first two waves of the pandemic. Updated reporting by Member States has also shown some backloading of public expenditure. They spent less than originally expected in 2020 and planned to spend more in 2021 and (marginally) in 2022 than initially reported when applying for SURE in August 2020.

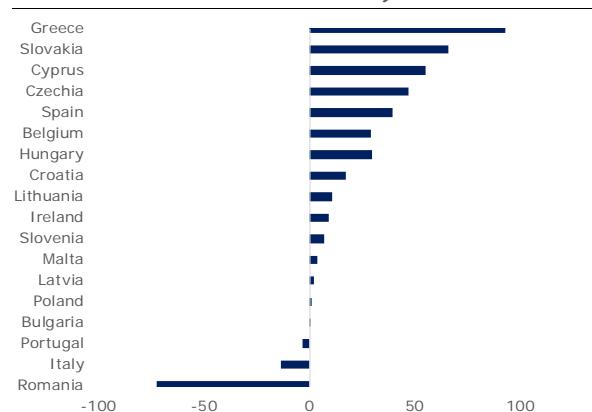
Graph IV.4: Monthly evolution of public expenditure under SURE (incurred and planned)



Source: Member States' reporting.

**The instrument is not facing absorption risks in most Member States.** In aggregate, Member States spent or planned to spend more on short-time work schemes and similar measures than the amount for which they have applied for under SURE financial assistance. While three Member States – Romania, Portugal and Italy – reported lower (planned or actual) public expenditure on eligible schemes than the amount granted under SURE, they have already taken or intend to take measures to use all of the financial assistance granted by the Council <sup>(88)</sup>.

Graph IV.5: Excess of planned and incurred public expenditure over loan amount (% of loan amount)



Source: Member States' reporting.

### IV.3. The impact of SURE – a first analytical assessment

#### IV.3.1. How did employment behaviour change after SURE's introduction?

**A first indicative assessment of SURE's impact is provided by the dynamic of unemployment rates in beneficiary Member States.** The purpose of SURE is to help Member States preserve employment of workers and the self-employed during the COVID-19 pandemic, thus protecting citizens and facilitating a swift recovery when the pandemic abates. While it is difficult to design a counterfactual scenario of labour market performance in the absence of SURE, the analysis presented here examines the relationship between output and unemployment since the pandemic unfolded. The results should be interpreted with caution, since the output-employment relationship

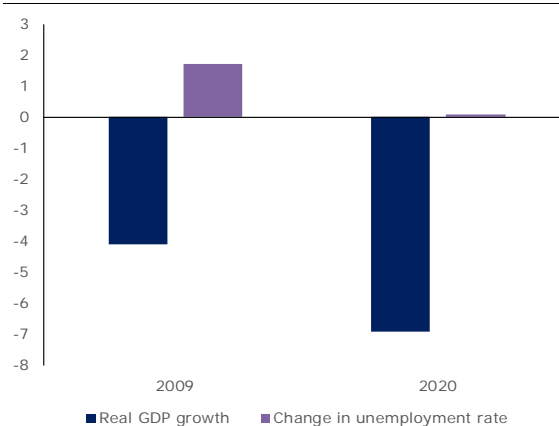
<sup>(88)</sup> In these Member States particularly, the Commission is closely monitoring the absorption of funds.

is impacted by a wide range of factors, including SURE.

**The increase in unemployment rates in 2020 across beneficiary Member States was clearly milder than during the global financial crisis, despite the more severe drop in GDP in 2020** (see Graph IV.6). Real GDP growth fell by 6.9% in the countries that benefitted from SURE funding in 2020. This drop is larger than the one observed at the peak of the global financial crisis in 2009 for the same countries. At the same time, the unemployment rate increased by only 0.1 percentage point in 2020, compared with an increase of 1.7 percentage points in 2009.

**The economic literature frequently uses an Okun's Law approach to capture the relationship between output and unemployment.** The responsiveness of changes in economic growth on unemployment is often referred to in the economic literature as Okun's Law. More of an empirical 'rule of thumb' than a relationship grounded in theory, Okun's Law suggests that a decline in output growth of between 2% and 3% is associated with a one percentage point increase in the unemployment rate <sup>(89)</sup>.

Graph IV.6: Changes in real GDP and unemployment in beneficiary Member States in 2009 vs. 2020



Note: The graph shows the averages of SURE beneficiary Member States, weighted by their share of nominal GDP.

Source: Eurostat.

<sup>(89)</sup> Okun, A.M., 'Potential GNP: Its measurement and significance', Proceedings of the Business and Economic Statistics Section, American Statistical Association, 1962. For a more recent assessment see Furceri, D., Jalles, J.T. and Loungani, P., 2020, 'On the determinants of the Okun's Law: New evidence from time-varying estimates', *Comparative Economic Studies* 62, 661–700.

We estimate an Okun’s Law for a sample of EU countries benefitting from SURE with a regression approach. The specification looks as follows <sup>(90)</sup>.

$$\Delta unemp_{i,t} = \beta_1 growth_{i,t-1} + \beta_2 X_{i,t-1} + \theta_t + \vartheta_i + u_{i,t}$$

where the dependent variable corresponds to the change in unemployment rate and the key independent variable is the real GDP growth rate. We test the robustness of the relationship by using employment as an alternative dependent variable and adding further control variables (*X*), namely the change in the labour force participation rate and employment protection legislation indicators.<sup>(91)</sup> We estimate the Okun’s Law for both a panel of up to 18 SURE-beneficiary Member States (bar Estonia, who benefited from SURE after the report’s cut-off date) and for each country in isolation (*i*). We also run the regression for all the EU countries. The sample covers up to 16 years (*t*), ranging from 2004 to 2019. The panel specification includes time-fixed effects ( $\theta$ ) and country-fixed effects ( $\vartheta$ ) to capture systematic differences across Member States and time, while *u* represents an error term.

**The findings confirm that economic activity appears to be a key determinant of the change in the unemployment rate** (Table IV.1). The real GDP growth variable is strongly statistically significant irrespective of the specification (specifications 1-5). The labour force participation rate appears to have no strongly significant impact on the change in the unemployment rate (3-5). Tighter employment protection measures appear to increase the unemployment rate slightly, which is usually associated with the increase in the cost of hiring. Finally, we find that stronger economic growth appears to have a positive impact on the change in the employment rate (i.e. employment over working-age population). This specification is a way to correct for the change in labour force, affecting unemployment indicators (5).

Table IV.1: **Key determinants of the change in unemployment rate – panel regression results**

Key factor	Estimator		Set of independent variables		Dep. var.
	$\Delta$ UR	$\Delta$ ER	$\Delta$ UR	$\Delta$ ER	$\Delta$ ER
Dependent variable	LSDV	FD-GMM	FD-GMM	FD-GMM	FD-GMM
Estimator	(1)	(2)	(3)	(4)	(5)
Real GDP growth rate	-0.255***	-0.283***	-0.281***	0.215***	0.152***
	(-4.636)	(-3.949)	(-4.117)	(-3.412)	(3.515)
$\Delta$ labour force participation rate			0.557	0.859*	1.054
			(1.453)	(1.862)	(1.746)
$\Delta$ EPL (ind. and collective dismissals)				0.665*	-0.775*
				(1.853)	(-1.901)
Number of countries	18	18	18	14	14
Observations	315	315	315	224	224
R-squared	0.63				
Wald time dummies	0				
Wald country dummies	0.17				
AR(1) (p-value)	0.03		0.03	0.05	0.07
AR(2) (p-value)	0.40		0.45	0.62	0.33
Hansen (p-value)	0.90		0.85	0.82	0.88
Number of instruments	25		27	26	25

Note: The panel estimation includes EU countries benefitting from SURE, covering the period 1999 to 2019. The following two dependent variables are used, namely the change in the unemployment rate ( $\Delta$  UR) and the change in the employment rate ( $\Delta$  ER). The specification controls for the endogeneity of output with internal instruments by using a first-difference GMM estimator (FD-GMM). \*\*\*/\*\*/\* indicates statistical significance at the 10%/5%/1% level. The reduced country sample for the last three regressions is due to data availability.

**Source:** Authors’ calculations based on the AMECO vintage of the Commission Autumn 2020 forecast

The findings show that the increase in unemployment due to changes in output in 2020 was weaker than expected in beneficiary Member States (see Graphs IV.7, IV.8). We use our panel and time series estimates of the real GDP growth coefficient to compare the actual and expected changes in unemployment rates in beneficiary Member States (see note below Graph IV.7 for details). The results suggest that the swift and sizeable policy measures taken in 2020 to address the crisis reduced the impact of the fall in output on unemployment. Therefore, the increase in the unemployment rate was, in most countries, less than expected <sup>(92)</sup>.

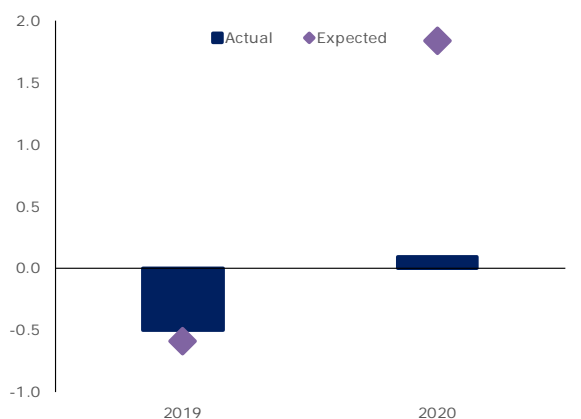
<sup>(90)</sup> A similar set-up is chosen as in European Commission (2020C).

<sup>(91)</sup> The latter corresponds to the employment protection legislation (EPL) indicators by the OECD, namely EPL for individual as well as individual and collective dismissals.

<sup>(92)</sup> In Italy, the unemployment rate even declined in 2020.



**Graph IV.7: Actual vs. expected changes in unemployment rates in beneficiary Member States in 2019 vs. 2020**



Note: y-axis: The expected change in unemployment rates corresponds to the prediction stemming from a panel regression model covering beneficiary Member States and a country-specific regression model, for the period 1999 to 2019. The analysis is based on an Okun's Law approach, where the dependent variable stands for the change in unemployment rate and the independent variable refers to the real GDP growth rate. The specification controls for (non-time varying) country-specific features of the labour market via country-fixed effects and for sample-common factors via time fixed effects. The out-of-sample projection was based on the Commission Autumn 2020 Economic Forecast. The 2020 unemployment rate was the average of the monthly unemployment rates for 2020 available at the time of the analysis.

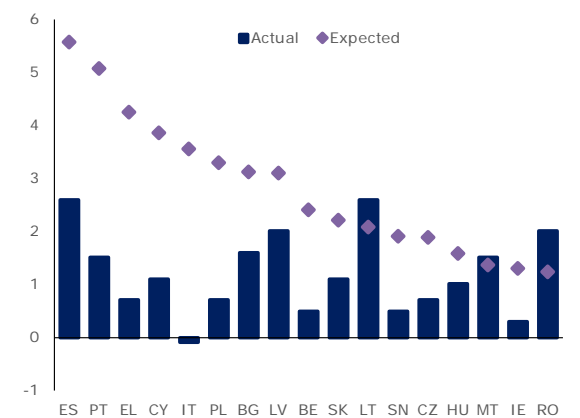
Source: Eurostat, European Commission.

**A key reason for the milder increase in the unemployment rate in 2020 was the policy support measures, including SURE (Graph IV.9).** Based on preliminary evidence, the lower than expected increase in unemployment can be partially attributed to the widespread use of short-time work schemes, in particular in those Member States benefitting from the SURE instrument. This helped maintain employment and limited the rise of unemployment. Other factors are related to the fact that people have been unable to, or were discouraged from, actively seeking work due to the shutdown of large parts of the economy. There are two key channels through which SURE has likely supported employment.

**Through SURE, the EU has supported and encouraged Member States' use of short-time work policies, which has protected employment during the crisis.** This is the first of the two key channels through which SURE has likely supported employment. A majority of beneficiary Member States indicated that SURE played a role in their decision to adopt a new short-

time work scheme or to modify an existing scheme<sup>(93)</sup>. A majority of Member States also introduced new schemes similar to short-time work in response to the potential availability of financing from SURE.

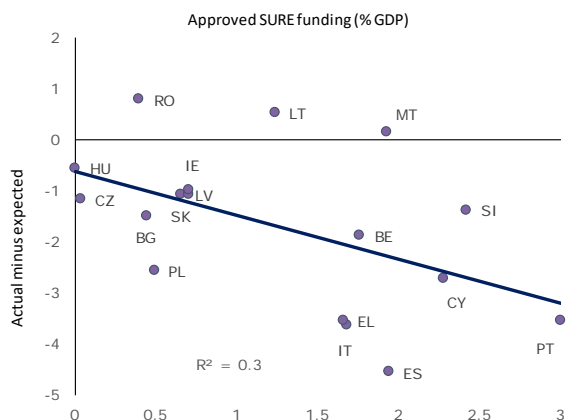
**Graph IV.8: Actual vs. expected changes in unemployment rates by beneficiary Member State in 2020**



Note: see note to Graph IV.7

Source: European Commission.

**Graph IV.9: Relationship between the change in unemployment rate in 2020 and approved SURE funding**



Note: y-axis: The expected change in unemployment rates stems from the country-specific regression model shown in Graph 10 and explained in the note to Graphs 9 and 10.

Source: European Commission.

<sup>(93)</sup> The Commission's Directorate-General for Employment, Social Affairs and Inclusion directly solicited the views of Member State authorities through a questionnaire submitted to the Employment Committee. Of the 19 Member States that have applied for support under SURE, 15 have provided answers to the questionnaire. Member States were asked whether SURE played a role in their decisions to adopt or modify short-time work schemes or similar measures and to increase the funding of those schemes.

**In addition, SURE promoted Member States’ confidence to spend more on short-time work schemes than they otherwise would have.**

Thanks to the favourable financing conditions offered by SURE, beneficiary Member States were keener to take on larger loans, enabling larger labour market spending. This was particularly true as SURE was an early element of the EU policy response, announced on 2 April 2020 and adopted by the Council on 22 May 2020 <sup>(94)</sup>. A majority of beneficiary Member States indicated that SURE support had a role in temporarily increasing the coverage and generosity of short-time work schemes and the overall funding of policies to address the COVID-19 crisis.

**IV.3.2. Other impacts: boosting general confidence, leading the way for the Recovery and Resilience Facility and saving interest payments**

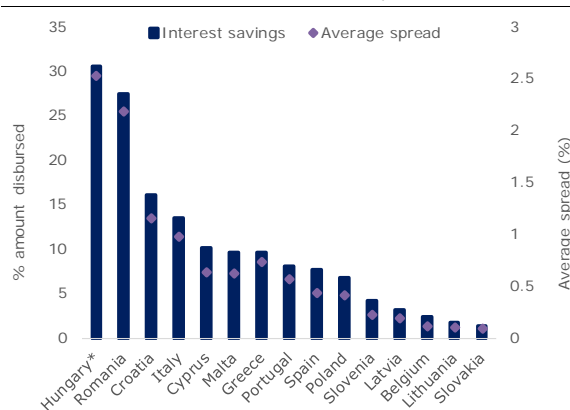
**SURE’s impact goes beyond preserving jobs.**

SURE has likely helped to increase general confidence in the EU’s ability to respond effectively to an unprecedented crisis. The capacity of Member States to agree on SURE – a new, innovative type of financial assistance with a strong social dimension and economic rationale – and the voluntary provision of guarantees to the Union by Member States sent a strong early signal on the EU’s ability to respond effectively and swiftly to a new type of crisis. It also asserts the efficiency of the Community method and contributed to the positive dynamic for the subsequent announcement of the Next Generation EU instrument. This collective capacity and the creation of new emergency instruments, including SURE, likely helped to support the confidence of economic agents in the EU, reducing the interest rate spread for Member States’ sovereign borrowing and improving the EU’s growth outlook <sup>(95)</sup>. In this context, SURE could be seen

as an instrument to mobilise fiscal policy support, while an accommodative monetary policy assists fiscal policy in tackling the fallout of the crisis.

**SURE allows the EU to become a large issuer of euro-denominated bonds in the financial markets, paving the way for financing under the Recovery and Resilience Facility.** The volume of issuance under SURE (up to EUR 90 billion at the end of the first half of 2021) was much larger than what the EU borrowed from the market in the two years before the crisis. SURE helped build experience for the very large bond issuances planned in the context of NextGenerationEU, which represents EUR 800 billion. The large over-subscription of SURE loans is a clear indicator of the interest of financial markets in EU bonds.

**Graph IV.10: Interest savings by Member State (% of loan amount received by Member State)**



Note: Based on first four bond issuances only. Interest savings are computed bond by bond, and summed across issue dates and maturities. Member States have borrowed from the EU at different maturities. Total interest savings are different from the product of the amount disbursed, the average spread, and the average maturity. This is because the interest savings calculations take into account the time value of money and because the spread between EU and national yields varies non-linearly across maturities. All other things equal, Member States that borrowed at a mix of short and long maturities, total interest savings tend to be higher.

\* No yield curve for euro-denominated bonds is available for Hungary. The yield curve in national currency was used instead.

Source: European Commission.

**SURE has also generated a total of EUR 5.8 billion in savings on interest payments for Member States during the first four issuances (Graph IV.10) <sup>(96)</sup>.** The SURE social bonds were issued at very low rates, even at long maturities,

<sup>(94)</sup> While the first disbursement could not start before the signature of all guarantee agreements by Member States on 22 September 2020, Member States were rapidly given the certainty of a swift implementation in June when the European Council concluded to this end.

<sup>(95)</sup> The ECB’s expanded asset purchases under the pandemic emergency purchase programme clearly also played a role in reducing uncertainty in markets. Furthermore, according to the 7 January 2021 ECB Economic Bulletin, the Next Generation EU (NGEU) and SURE programmes are likely to have contributed to a compression of spreads via an improvement in Member States’ growth and fiscal prospects as well as in risk sentiment: (<https://www.ecb.europa.eu/pub/economic-bulletin/html/eb202008.en.html>).

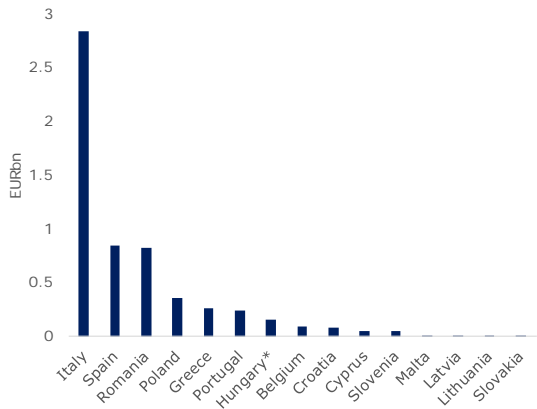
<sup>(96)</sup> See Box IV.1 for details about the calculations of interest savings.

due to the EU’s AAA credit rating and the liquidity of the bonds. As SURE funding terms are expected to remain favourable, further disbursements will likely generate additional savings. Therefore, the estimates shown likely correspond to a lower bound and will rise with the remaining disbursements.

**IV.4. Conclusion**

This section has reviewed the use of the SURE instrument up to 25 May 2021 and provided a first assessment of its impact, drawing on the first bi-annual SURE report, published on 22 March 2021. It has shown that SURE has been successful so far, with a high level of demand from Member States for this type of EU financial assistance. These 19 Member States were granted close to 95% of the maximum amount of EUR 100 billion provided for under the instrument, which was almost entirely disbursed within seven months. Demand from investors for the social bonds issued over the first seven SURE bond issuances has also been strong, with the issuances achieving very favourable pricing terms. Our first preliminary assessment has also shown that SURE, along with other EU and national forms of policy support, has helped to significantly mitigate the impact of the pandemic on employment by supporting the use of short time work schemes. Member States have also saved an estimated EUR 6 billion in interest payments (calculated over the first four bond issuances only). Further assessment will be possible when more time has elapsed and the effects of the policies become clearer.

**Graph IV.11: Interest savings by Member State (EUR bn)**



Note: see note to Graph IV.10.  
**Source:** European Commission.



### Box IV.1: Calculating the savings on interest payments

**The favourable terms obtained by the Commission terms were directly passed on to Member States via back-to-back lending.** Yields ranged from -0.51% to +0.32%, depending on the maturity and the date of issuance. Member States' own funding terms at the time of disbursement were generally less favourable than those obtained by the Commission. Therefore, the loans disbursed under SURE generated interest savings for Member States.

**The savings are computed assuming that, in the absence of SURE loans, Member States would have issued bonds with the same characteristics as the EU SURE bonds.** The characteristics comprise both the maturity date and coupon rate on the day the loans were disbursed. We compute the market issue price  $P_i^c$  of the counterfactual bond with a face value of EUR 1, for each individual Member State's borrowing tranche  $i$ :

$$P_i^c \cong C_i^{SURE} \left( \frac{1 - (1 + Y_i^{Nat})^{-M_i^{SURE}}}{Y_i^{Nat}} \right) + (1 + Y_i^{Nat})^{-M_i^{SURE}}$$

where  $C_i^{SURE}$  and  $M_i^{SURE}$  are, respectively, the coupon rate and time to maturity at the disbursement date (expressed in years) of the corresponding EU SURE bond, and  $Y_i^{Nat}$  is the yield to maturity at the disbursement date of a nationally issued bond with the same maturity. <sup>(1)</sup> The first term corresponds to the present value of all coupon payments until maturity, and the second term corresponds to the present value of the face value paid at maturity.

**An estimate of interest savings is provided by the sum of the difference between the issue price of each EU SURE bond and the counterfactual national bond.** This sum is performed across all tranches and the differences in prices are weighted by the amount borrowed under each corresponding tranche:

$$\text{interest savings} = - \sum_{i=1}^I \text{Amount}_i (P_i^c - P_i^{SURE})$$

where  $P_i^{SURE}$  is the issue price – or tap issue price when the EU reopens an outstanding line – of the corresponding EU SURE bond, and  $\text{Amount}_i$  is the amount disbursed to the Member State.

**This estimate of interest savings is a function of the spreads between national and EU SURE yield curves at the time of disbursement and the maturity structure of each loan.** The average maturity of the SURE loans is below but close to 15 years in all Member States, and the average spread between national yields and EU SURE yields is around 0.8 pp. As a result, the total interest savings across the lifetime of the loans are estimated to be EUR 5.8 billion, or around 11% of the amount disbursed, in the 15 Member States that received a disbursement up to 2 February 2021. Member States with either higher spreads or larger disbursements benefitted the most from the favourable terms obtained by the Commission.

<sup>(1)</sup> The calculations are run with the exact formula, not the pedagogical approximation to the first order shown in the text. The exact formula for the price of the counterfactual bond is  $P_i^c = \frac{C_i^{SURE}}{4} \left( 1 - (1 + Y_i^{Nat})^{-\frac{1}{4}} \right)^{-1} \left( 1 - (1 + Y_i^{Nat})^{-M_i^{SURE}} \right) + (1 + Y_i^{Nat})^{-M_i^{SURE}}$ . If the yield is equal to zero, the formula reduces to  $P_i^c = M_i^{SURE} C_i^{SURE} + 1$ .