SMEs and High Inflation

Summary report

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Directorate-General for Internal market, Industry, Entrepreneurship and SMEs
Single Market Programme - SME Pillar

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Table of contents

Introduction

Over the last two years, firms have faced historically high inflation, with annual increases in consumer prices reaching up to 11.5 % in October 2022.[1] There are 24.7 million small and medium sized enterprises (SMEs) in the European Union (EU), representing 99.8 % of all non-financial businesses, and accounting for 64.4 % of all employment and 51.8 % of the value added in the non-financial business economy.[2] It is therefore important to investigate how inflation has impacted SMEs. This report contributes to this goal by summarising the key findings[3] of a study on SMEs and high inflation with regard to the following research questions:

1. **How has inflation evolved over time and across the industrial ecosystems?**
2. **What are the main and SME-specific inflation drivers?**
3. **What are the past and expected future impacts of sustained high inflation on SMEs compared with large enterprises, considering both those firms that can pass costs onto their consumers, and those that cannot?**
4. **What recent and relevant policies have been adopted by the Member States to support SMEs in the context of rising inflation?**

1. Inflation trends, drivers and outlook

1.1. Inflation trends and drivers

After hovering at around 2 % for the last decade – in line with the goal of the European Central Bank (ECB) – inflation began to increase in 2021, and skyrocketed in 2022. Figure 1 shows quarterly trends in both the inflation experienced by businesses in the non-financial sector (operationalised using a mix of producer price indices and the labour cost index)[4] and the harmonised index of consumer prices (HICP). Between 2018 and the beginning of 2021, year-on-year inflation increased modestly, averaging around 0.8-2.5 % between 2018 and the beginning of 2021. Following this, inflation increased fivefold, reaching more than 10 % in 2022. While both the average annual inflation experienced by businesses and the HICP remained relatively consistent until Q1 of 2021, the former outpaced HICP in the four subsequent quarters, signalling that production costs were rising faster than firms could pass them on to consumers.

The key driver behind these trends was the growing cost of energy. In 2021, rising energy costs were the result of a strong economic recovery in the wake of the COVID-19 pandemic – the fastest post-recession recovery in 80 years[5] – which drove global demand for energy. A long and cold winter in the northern hemisphere further pushed up the demand for energy – particularly for natural gas – which in turn prompted a switch to coal for generating electricity, resulting in higher prices for various energy sources.[6] In 2022, in response to the sanctions imposed on Russia by the EU for its war of aggression against Ukraine, Russia unilaterally suspended deliveries of gas to some EU Member States. This, combined with record heatwaves during the summer of 2022, which increased the demand

[1] Eurostat (2023). HICP – monthly data (annual rate of change). [PRC_HICP_MANR__custom_739172]. Available at: https://ec.europa.eu/eurostat/databrowser/product/view/prc_hicp_midx.

[2] European Commission (2023). SME Performance Review. Available at: https://single-market-economy.ec.europa.eu/smes/sme-strategy/sme-performance-review_en.

[3] For additional information, please see the full study report.

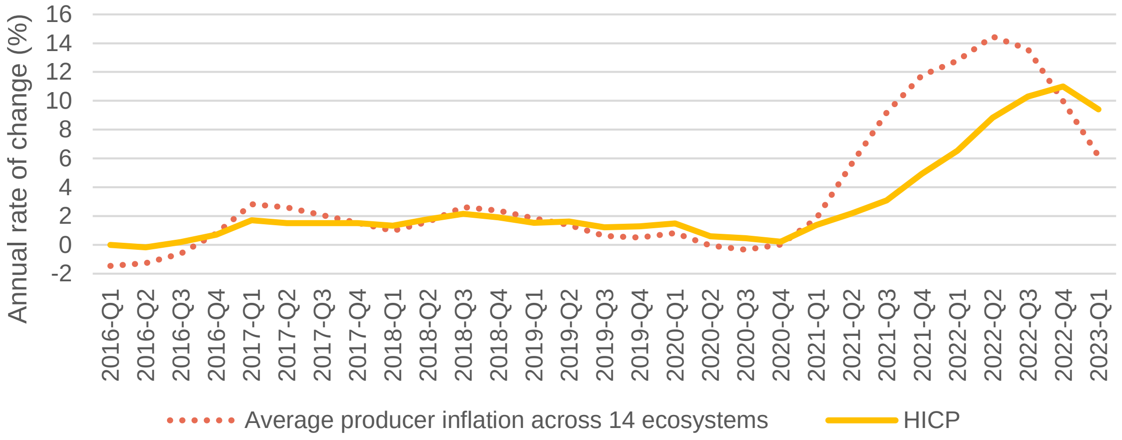
[4] For details, please see Annex 1 of the full study report.

[5] World Bank (2021). Global Recovery Strong but Uneven as Many Developing Countries Struggle with the Pandemic's Lasting Effects. Available at: https://www.worldbank.org/en/news/press-release/2021/06/08/world-bank-global-economic-prospects-2021.

[6] Alvarez, C.F., & Molnar, G. (2021). What is behind soaring energy prices and what happens next? IEA. Available at: https://www.iea.org/commentaries/what-is-behind-soaring-energy-prices-and-what-happens-next

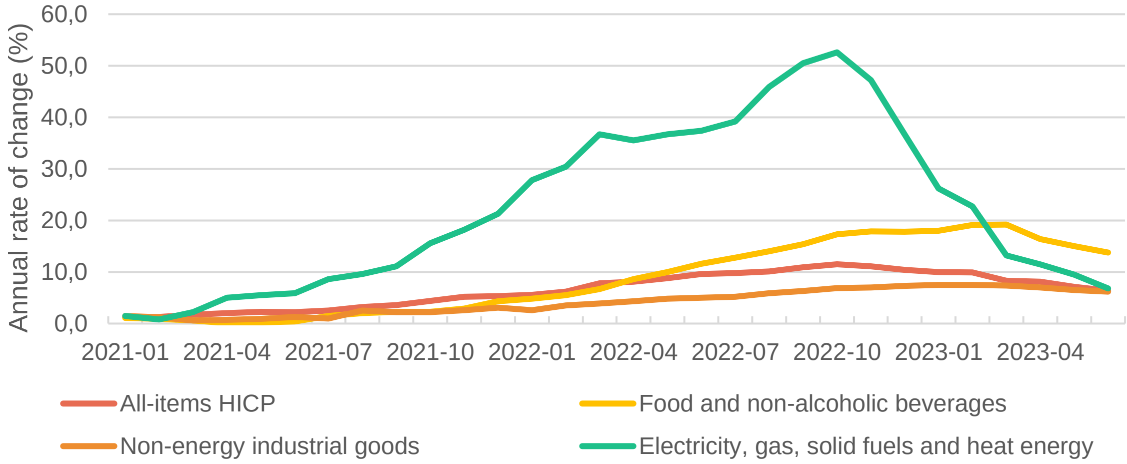
for energy used for cooling and reduced hydropower production,[7] pushed year-on-year energy prices up by 53 % between September 2021 and 2022 (Figure 2). The large size of this increase in energy prices was primarily due to the EU's dependence on Russian energy: in August 2021, 41 % of all gas imported into the EU came from Russia.[8]

Figure 1. Changes in inflation compared with the same quarter in the previous year (%) in the EU-27, Q1/2016-Q1/2023, and HICP



Source: elaborated by PPMI, based on data from Eurostat and national sources.

Figure 2. HICP and some of its components



Source: elaborated by PPMI, based on Eurostat table PRC_HICP_MANR.

Energy-driven inflation explains why energy-renewables and energy-intensive ecosystems saw greater cost increases relative to other ecosystems (Figure 3). Nevertheless, other ecosystems also experienced cost pressures, especially agri-food, tourism, mobility and transport-automotive, as well as retail. Rising energy costs influenced price increases in these ecosystems, too, although other factors also played a role. These included factors related to the COVID-19 pandemic, Russia's war of aggression against Ukraine, and certain ecosystem-specific factors, discussed below.

[7] European Council, Council of the European Union (2023). Infographic – Energy price rise since 2021. Available at: https://www.consilium.europa.eu/en/infographics/energy-prices-2021/#:~:text=Infographic%20%2D%20Energy%20price%20rise%20since%202021&text=The%20rise%2C%20linked%20to%20the,have%20had%20an%20aggravating%20effect.

[8] European Commission (2023). REPowerEU at a Glance. Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en

The pandemic set the stage for the inflationary pressures of 2022 in several ways. First, lockdowns led to **supply-chain disruptions**, which limited access to raw materials, leading to an increase in their prices.[9] Second, the pandemic increased **transportation and logistic costs**, which made the final price of products in the EU market even more expensive.[10] Third, during the pandemic, there was a sudden drop in demand for some goods, and panic buying of others. This led to **price fluctuations** due to limited supplies. Sudden increases in online orders further complicated delivery chains.[11] Lastly, the pandemic also placed upward pressure on wages, due **to wage support and job retention schemes**[12] as well as **labour shortages** when workers chose not to return to work in certain occupations following the lockdowns.[13]

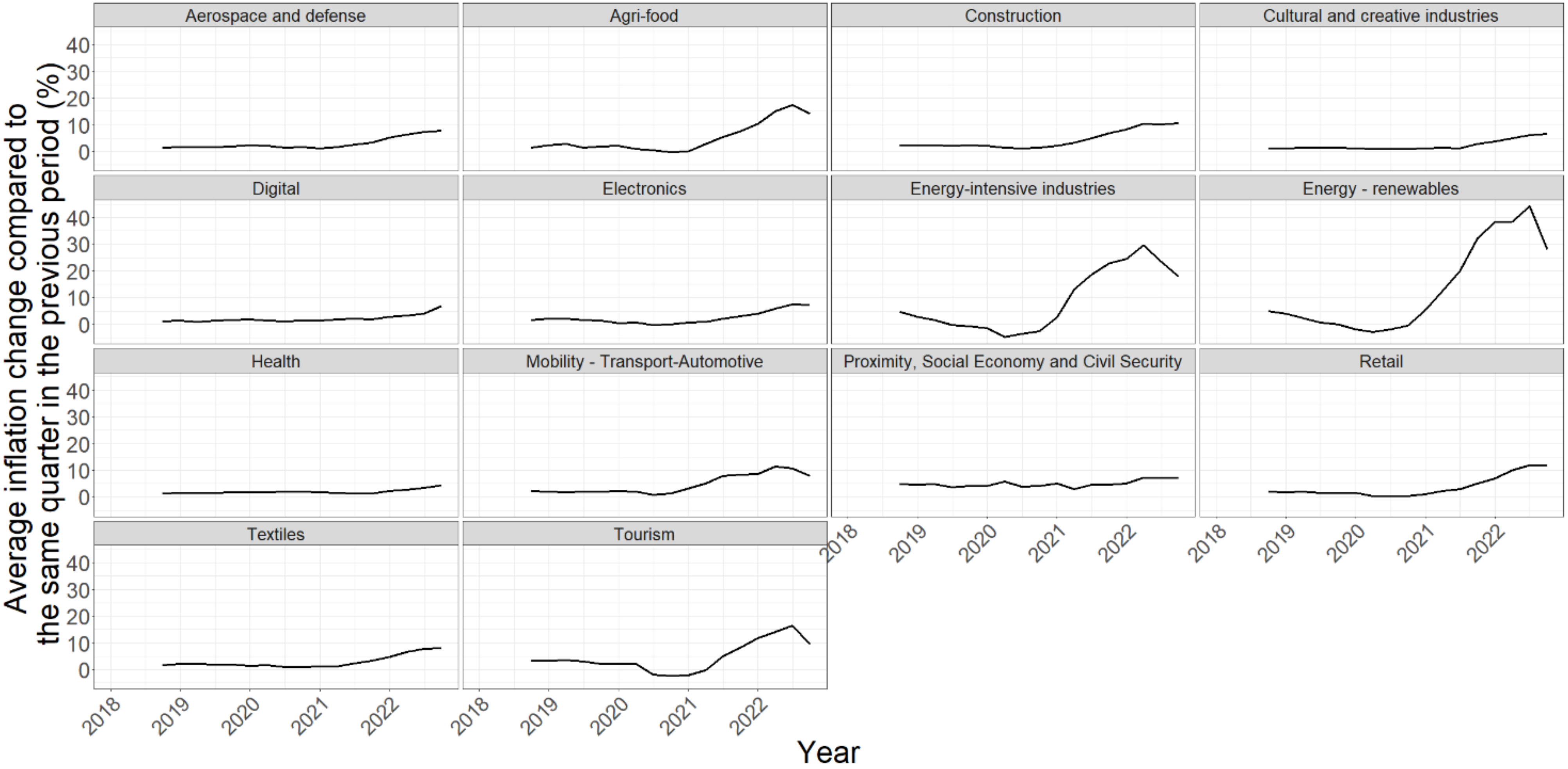
Russia's war of aggression against Ukraine exaggerated pre-existing supply chain disruptions, in particular due to blockades of Ukrainian ports.[14] Furthermore, the war led to shortages of certain **raw materials**, affecting multiple industries. Russia and Ukraine are major players in the international trade in fertilisers,[15] as well agricultural products such as wheat, barley and sunflower oil.[16] The reduced supply of cereals caused by the war also impacted livestock farming activities and the availability and quality of skins and hides, thus affecting the production costs of textile products. The war also impacted wood and pulp (the key raw material for paper manufacturing, extracted from wood) supply, creating challenges for the printing sector.[17] With regard to construction, too, the war increased the prices of steel, copper, aluminium, wood, clay materials (e.g. bricks, tiles), mineral products (gravel, cement and concrete), glass, and certain chemical products.[18]

Lastly, this study identified other, **ecosystem-specific drivers of inflation**. The 2022 **droughts** led to pasture failures, limiting the supply of food and thereby increasing its price.[19] In construction, **labour shortages** among both blue-collar and highly skilled workers are affecting entire value chains, driving up wages within this ecosystem.[20] In addition, many countries opted to **support post-pandemic recovery by funding construction projects**, which drove up the demand for labour and materials still further.[21] One inflation driver specific to the electronics ecosystem is the **shortage of semiconductors and electronics components.** In interviews carried out for the present study, SMEs in the electronics ecosystem had to place **minimum-volume orders** that are greater than their production needs, thereby shouldering an excessive financial burden that affects their overall business operations.

[9] Pasimeni, P. (2022). Supply or Demand, that is the Question: Decomposing the Euro Area Inflation. Luxembourg: Publication Office of the European Union.
[10] Drewry World Container Index Database. Available at https://en.macromicro.me/collections/4356/freight/44756/drewry-world-container-index.
[11] Magableh, G.M. (2021).
[12] Molina, O. (2020). Impact of the COVID-19 crisis on wages and wage setting. Available at: https://www.eurofound.europa.eu/publications/article/2021/impact-of-the-covid-19-crisis-on-wages-and-wage-setting.
[13] Frohm, E. (2021). Labour Shortages and Wage Growth. ECB Working Paper 2576/2021. Available at: https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2576~3f8114fc02.en.pdf; Adăscăliței, D., (2021). The pandemic aggravated labour shortages in some sectors; the problem is now emerging in others. Available at: https://www.eurofound.europa.eu/en/blog/2021/pandemic-aggravated-labour-shortages-some-sectors-problem-now-emerging-others.
[14] *Ibid*.
[15] Saleh, H. (2023). Ukraine war fallout benefits one of world's biggest fertiliser groups, *Financial Times*. Available at: https://www.ft.com/content/850d8c0a-a853-4b0e-aba3-d63d18ab0c93.
[16] European Parliament (2023). At a Glance. Question Time: Food Price Inflation in Europe. Available at: https://www.europarl.europa.eu/thinktank/en/document/EPRS_ATA(2023)739298.
[17] *Ibid*.

[19] Eurostat (2023). Annual inflation more than tripled in the EU in 2022. Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20230309-2.
[20] Eures (2023). *Report on Labour shortages and surpluses.* Luxembourg: Publications Office of the European Union.
[21] European Commission (2021). Scenarios for a transition pathway for a resilient, greener and more digital construction ecosystem. Available at : https://ec.europa.eu/docsroom/documents/47996, p. 7

Figure 3. Changes in inflation compared with the same quarter in the previous year (%) in the EU-27, Q4/2018-Q4/2022, by ecosystem



Source: compiled by PPMI, based on data from Eurostat and national banks.
Note: ecosystem-weighted inflation, which involves a mixture of producer and consumer prices depending on which NACE codes (statistical classifications of economic activities) are included in the 14 ecosystems.

1.2. Inflation projections

Taking into account recent trends in inflation and their main drivers, the study developed three scenarios for the evolution of inflation in 2023 and 2024. Each of these is considered when analysing how inflation could affect SMEs. Table 1 briefly summarises each of these scenarios, while Figure 4 presents them in visual form.[22] The assumptions common to all scenarios up to the forecast horizon are as follows:

- the public fiscal stimulus remains constant across all scenarios;
- the pandemic will not cause any further major disruptions to the EU economy;
- the geopolitical tensions with Russia and all of the stipulated sanctions will remain in place.

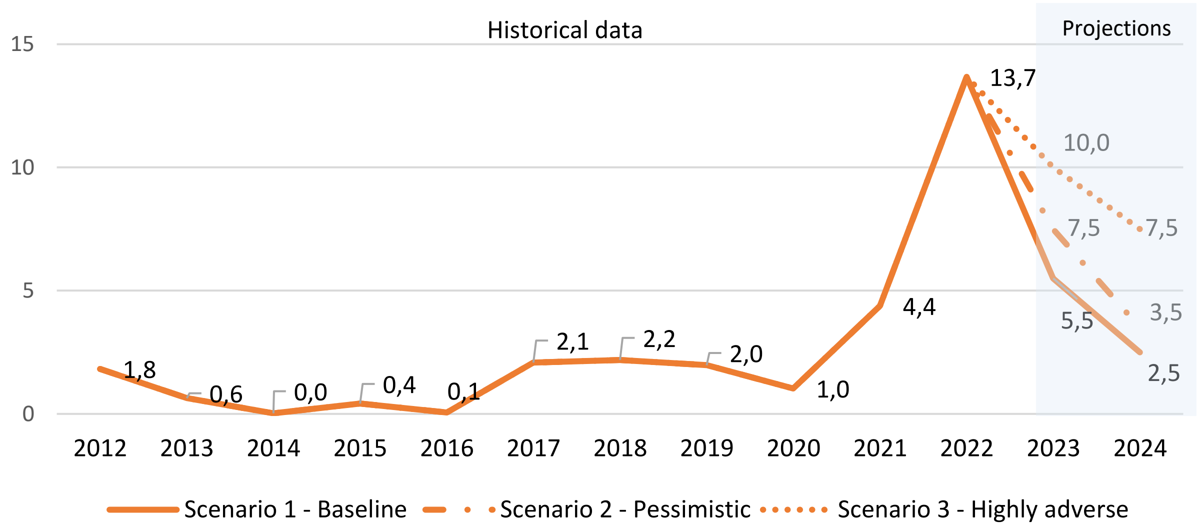
Table 1. Short-term outlook scenarios in the EU[23]

Scenario	Likeli-hood	Interest rate	Annual growth in gross domestic product (GDP)	Inflation (HICP)
Baseline	High	• 2023: increase by 25bp in July and 25bp in September • 2024: no further increases	• 2023: 0.8 % • 2024: 1.4 %	• 2023: 4-7 % • 2024: 2-3 %
Pessimistic (tightening of monetary policy)	Medium	• 2023: increase by 25bp in July, 25bp in September, and at least one more increase by 25bp by the end of the year • 2024: no further increases	• 2023: 0-0.5 % • 2024: 0.5-1 %	• 2023: 7-8 % • 2024: 3-4 %
Highly adverse (tightening of monetary policy and a new energy price crisis)	Low	• 2023: increase by 0.25bp in July, 25bp in September, and at least two additional increases by 25bp by the end of the year • 2024: no further increases	• 2023: between 0.5 % and -0.5 % • 2024:between -1 % and -2 %	• 2023: 8–12 % • 2024: 5-10 %

Source: authors' own elaborations and assumptions, based on European Commission Summer 2023 macroeconomic short-term outlooks released in September 2023, experts' opinions, and triangulation with economic outlooks released by the OECD and the European Central Bank covering the same period.

[22] For a further elaboration, see Section 3.3 of the main study report.
[23] European Commission (2023). European Economic Forecast – Summer 2023. Institutional Paper 255 | September 2023. Available at: https://economy-finance.ec.europa.eu/economic-forecast-and-surveys/economic-forecasts/summer-2023-economic-forecast-easing-growth-momentum-amid-declining-inflation-and-robust-labour_en.

Figure 4. Average year-on-year inflation changes in the EU-27 (%), 2012-2024



Note: the projections for 2023 and 2024 reported in the figure are the mid-points of simulated inflation (HICP) ranges reported in Table 1.
Source: elaborated by PPMI and CSIL.

2. The impact of high inflation on SMEs

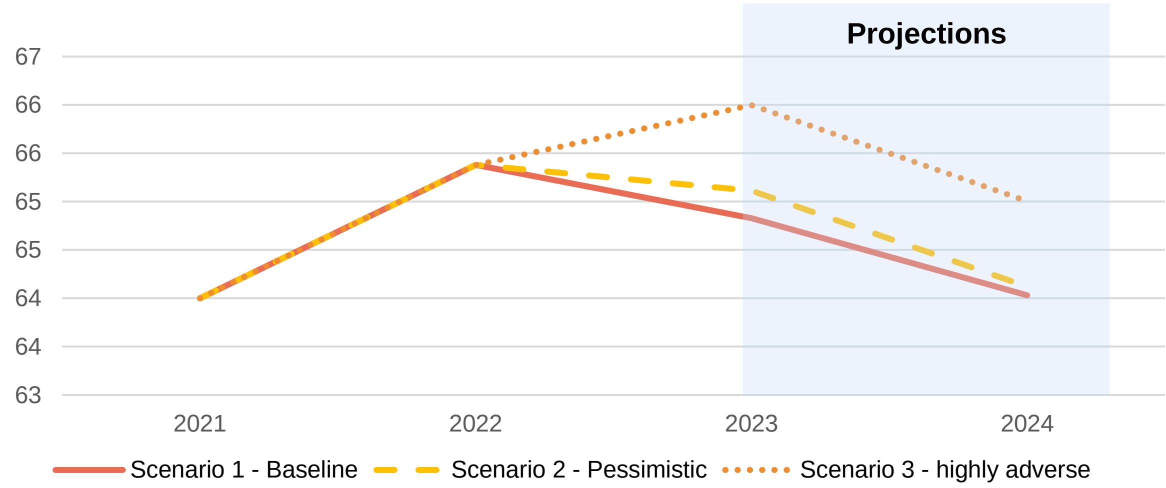
The present study analyses how high inflation is affecting SMEs in terms of late payments, bankruptcies, investment, the adoption of digital and green technologies, participation in public procurement, access to skilled labour, and ultimately profitability. Its findings suggest that high inflation has a small effect on many of the impacts mentioned above. In particular, high inflation has played a minor role in prompting bankruptcies, reducing participation in public procurement, and making it more difficult for SMEs to access skilled labour, while it may even have accelerated investments towards the twin transition. Meanwhile, stronger adverse effects are expected with regard to SMEs' payment practices and their balance sheets in the short term, although these impacts vary between different industrial ecosystems.

While the individual impacts of high inflation are relatively limited, from the perspective of individual firms its direct and indirect effects add up, placing those firms which cannot pass costs on to consumers in a particularly precarious situation. By contrast, firms able to pass costs may use high inflation to their advantage by charging mark-ups greater than needed to offset cost increases. Below, we summarise the estimated effects of inflation, before concluding with an exercise simulating the cumulative effect of inflation on firms' balance sheets.

The number of days taken for companies to receive payments – which averaged around 64 days across small, medium-sized and large firms in the EU in 2021 – was estimated to have increased by 1.5 days as a result of the inflation levels observed in 2022, an additional 0.9 days due to interest rate hikes, and 1.6 days more due to the reduction in the 2022 GDP growth rate, all else being constant. To put this into context, it took almost a decade to reduce the average collection period by 13 days – from an average of 77 days in 2013 to 64 in 2021 – so the current high inflation environment is undoing a sizeable share of the progress made.

The effect of inflation on collection periods is found to be strongest for firms in the construction ecosystem, due to a deep-rooted culture of late payments in this sector, and among SMEs compared with large firms (1.7 vs 0.4 days). Nevertheless, as inflation is expected to decrease over the course of 2023 and 2024 under the baseline scenario, its impact on late payments is also likely to diminish, and the collection period is forecast to return to 2021 levels. In the more pessimistic scenarios, the average collection period will remain higher by around one more day on average (see Figure 5).

Figure 5. Simulated variations of the effects of inflation on average collection period in days in the EU-27, all ecosystems, 2013-2024.



Source: elaborated by CSIL, based on PPMI estimations.
Note: 2022-2024 values are projections. Malta and Luxembourg are excluded from the analysis due to the low number of firms included.

Longer collection periods increase the risk of bankruptcy. **Indeed, firms across the EU have experienced an increase in bankruptcies since the second half of 2022** (see Figure 6). **Nevertheless, inflation made very little direct contribution to this:** a negligible association was found between higher levels of inflation and the solvency ratio of SMEs (i.e. their ability to meet short-term financial obligations). Instead, the increase seen in bankruptcies was largely due to regulatory changes (e.g. in Spain, which made bankruptcy proceedings more debtor-friendly);[24] the delayed effect of the pandemic;[25] a greater prevalence of late payments; and increased difficulties in accessing finance due to higher interest rates. For example, in 2022 the share of SMEs not applying for bank loans due to fear of possible rejection rose to 6.6 %, up from 5.4 % in 2021 (with small firms being most impacted) – whereas the corresponding share among large firms decreased.[26]

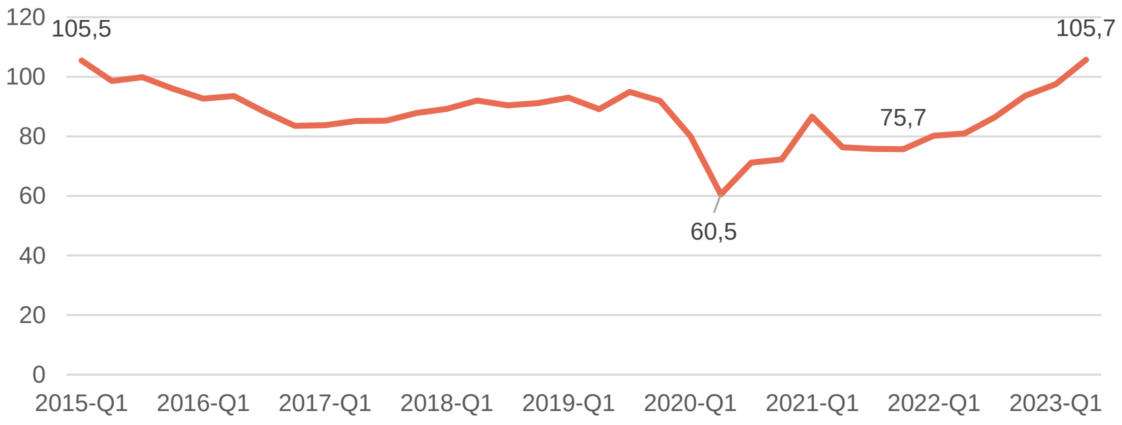
Under the adverse economic scenarios, bankruptcy declarations are expected to increase significantly. The construction sector could see a threefold rise, from 2 firms every 1,000, to 6. Similarly, the accommodation, transport, and agri-food sectors could double from 7.5 firms out of every 1,000, to 17. Despite receiving financial support during the pandemic, SMEs in these sectors experienced steep increases in bankruptcy declarations during the first half of 2023, compared with 2022.

Under the baseline scenario, which is considered more realistic, the trend in bankruptcy declarations in the EU is still expected to rise, though at a much slower pace than in the more pessimistic scenarios, with annual variations in the range of 0-5 % across all sectors, driven by a gradual reduction in EU Member States' fiscal policies to offset the negative effects of inflation on consumption – e.g. price caps and reductions in value added tax

[24] European Commission (2023). *Economic outlook for EA and EU -- Recent developments in bankruptcy declarations in the EU*. Available at: https://ec.europa.eu/economy_finance/forecasts/2023/spring/Box_I_2_2-Recent%20developments%20in%20bankruptcy%20declarations%20in%20the%20EU.pdf; for Spain, the bankruptcy declaration index went from 172.3 in Q2 2022 to 216.2 in Q3 2022, an increase of 25 %.
[25] *Ibid*.
[26] Based on data for firms in the non-financial sector from the European Investment Bank's Investment Survey (EIBIS), 2023. However, the share of large firms applying for a bank loan, negotiating and being rejected increased more than the corresponding share among SMEs.

(VAT)[27] – and the fading out of the cushioning effects of fiscal responses aimed at compensating firms against the detrimental impacts of COVID-19 on firms, such as tax benefits, public guarantees and compensation schemes for self-employed, among others. For instance, several COVID-19-related loans and guarantee schemes are set to mature by 2024.[28] Accordingly, the EU-wide trend in bankruptcies is expected to be slightly higher than that observed during the pre-pandemic period.

Figure 6. Bankruptcy declarations in the EU, Q1 2015 – Q2 2023, seasonally and calendar-adjusted (Index 2015=100)



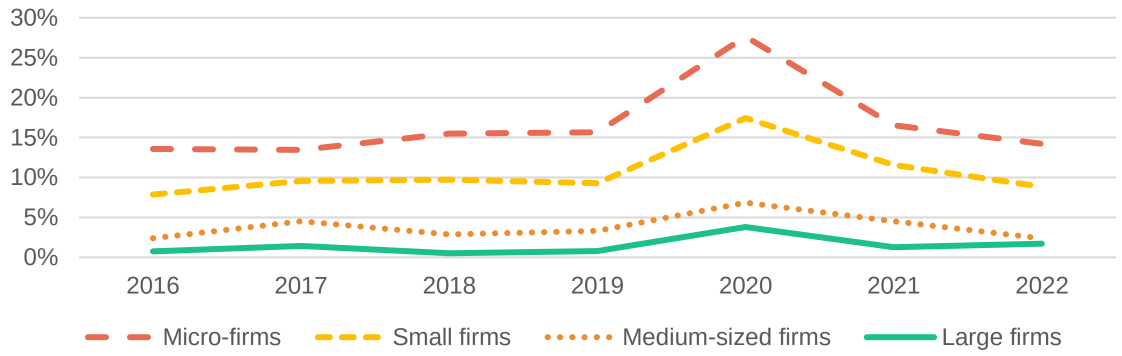
Source: elaborated by PPMI from Eurostat table sts_rb_q.

Even though inflation seems to have only a limited influence on firms' bankruptcies, it may potentially limit their capacity to invest and grow. However, **business investment increased in 2022 compared with 2021 – from 13.4 % to 13.9 % of GDP.**[29] Instead of seeing their cash holdings lose value due to inflation, businesses opted instead to invest that money. This increase seems to be driven by SMEs rather than large firms (see Figure 7). Business investment is forecast to increase further in 2023 and 2024, although this is likely to be at a slower pace than in 2022: by around just 0.1 percentage points (to 14 % of GDP).

The rate of investment is projected to slow down because higher interest rates and a deteriorating economic outlook are associated with lower investment expectations, especially among SMEs. The hikes in interest rates enacted by the ECB, up to 4.50 % in September 2023, are expected to reduce the probability of SMEs reporting positive investment expectations from 31 % to 29.2 %. This compares with a fall from 35.6 % to 34.4 % for large firms. Furthermore, viewing future economic uncertainty as a major obstacle to investment reduces the probability of firms reporting positive investment expectations by 14 % among SMEs and by 10 % among large firms, all other factors being equal.

[27] Freier M., & Ricci M. (2023). How fiscal policy offset the negative welfare effect of euro area inflation. Available at: https://cepr.org/voxeu/columns/how-fiscal-policy-offset-negative-welfare-effect-euro-area-inflation.
[28] European Commission (2023). European Economic Forecast – Summer 2023. Institutional Paper 255 | September 2023. Available at https://economy-finance.ec.europa.eu/economic-forecast-and-surveys/economic-forecasts/summer-2023-economic-forecast-easing-growth-momentum-amid-declining-inflation-and-robust-labour_en; JRC (2021). The cushioning effect of fiscal policy in the EU during the COVID-19 pandemic. JRC Working Papers on Taxation and Structural Reforms No. 02/2021. Available at: https://joint-research-centre.ec.europa.eu/system/files/2021-07/jrc125567.pdf.

Figure 7. Expectation of no planned investment spending in the current financial year in the EU-27 by firm size, 2016-2022 (EIBIS)



Source: elaborated by PPMI, based on EIBIS data.

The effect of high inflation on digital investments and on the adoption of innovations and digital technologies is mostly negative, yet indirect. The probability of introducing innovations is around 2 percentage points lower when inflation is high (>10 %), compared with when it is low (0-5 %), equivalent to a fall from 57 % to around 55 %. High inflation, meanwhile, is found to have no direct effect on the adoption of digital technologies: the share of firms adopting a digital technology jumped from 61 % in 2021 to 69 % in 2022, mostly driven by government support. The rate of growth in digital investments by SMEs is forecast to increase by 1-3 % in 2023-24 in the baseline scenario, although contrasting effects could be seen in more adverse scenarios. While higher interest rates might deter SMEs from making significant investment in digitalisation (thus leading to a rate of growth in investments of between -1 % and 1 %), investing in digital technologies could pay off ahead of a recession, which would translate to a growth rate in SME digitalisation of 3-5 % – even higher than in the baseline scenario.

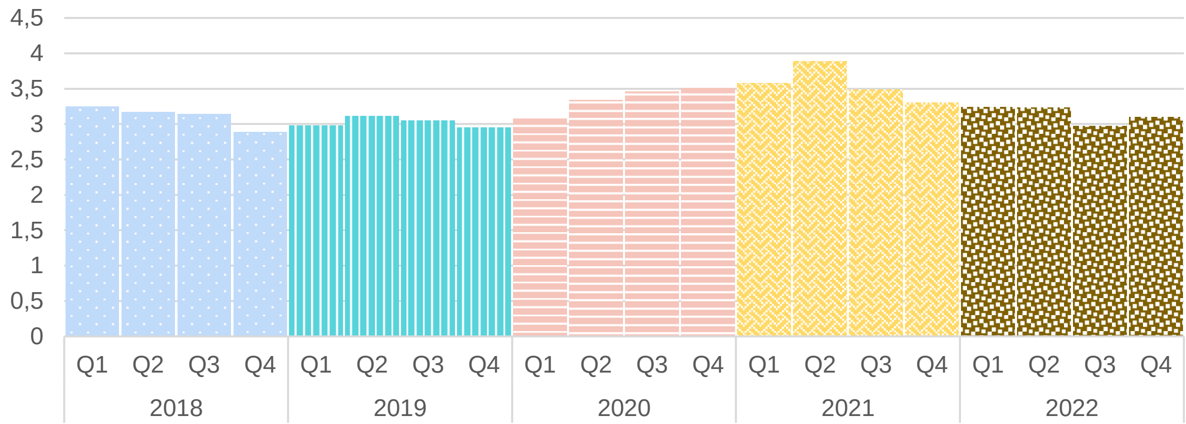
With respect to green investment in particular, inflation has a twofold impact. On the one hand, analyses based on 2021 Eurobarometer data[30] suggest that inflation increases the probability of companies investing nothing in becoming more resource-efficient, from 30 % to 43 %. Interviews with SMEs also pointed to the postponement of substantial and long-term investments relating to the green transition. Conversely, the high energy bills seen in 2022 motivated companies (especially those in the utilities sector) to become more energy-efficient, increasing the probability that SMEs would invest in energy efficiency measures from 53 % to 58 %, with no statistically significant effect being observed for large firms.

Investments are also required in order for SMEs to be able participate in public procurement. This is because they need to shoulder the cost of preparing bids, as well as that of work that needs to be completed before receiving the first payment – the cost which is rising, due to increasing wage costs. Inflation also poses a risk of firms being unable to deliver services and products that are offered for a fixed price. **Based on empirical estimates, however, high inflation is only associated with a small decrease in participation in public procurement when bids for public contracts are considered among all firms**. In 2022, inflation is estimated to have reduced the number of bids submitted for public procurement contracts by roughly 1 % (translating to around 1,000 offers being lost across the EU). Its effect on the proportion of offers from SME is similar: the average marginal effect of inflation is to decrease the proportion of bids coming from SMEs by around 0.11 percentage points. These findings are supported by trends showing that although overall participation in public procurement decreased between 2021 and 2022, it had mostly returned to pre-pandemic

[30] Eurobarometer (2021). Flash Eurobarometer 498 – SMEs, resource efficiency and green markets (wave 5). Available at: https://europa.eu/eurobarometer/surveys/detail/2287.

levels by the end of 2022 (see Figure 8). Nevertheless, it is important to acknowledge these are aggregate trends; in individual cases, contract cancellations due to rising costs may be unavoidable.

Figure 8. Quarterly trends in the average number of procurement offers per contract award notice in the EU-27 and the UK, 2018-2022



Source: elaborated by PPMI, based on TED data.
Note: for the UK, only pre-Brexit values are included.

In the baseline scenario, a return back up to the levels of participation recorded in 2021 is unlikely. Tighter financial constraints, lower-than-expected GDP growth than in previous spring forecasts, and the need for more sustainable fiscal policies after the expansionary measures after the COVID-19 pandemic – particularly for highly indebted EU Member States – are likely to keep SMEs' participation in public procurement slightly lower than has been observed over the past three years. Indeed, discretionary fiscal support, including expenditures on public procurement, is projected to decline in 2024, thus shrinking national public budget balances.[31] Under more adverse conditions, the participation of SMEs in public procurement is likely to drop still further, because they face more rigid financial constraints, their access to credit is further reduced, and there is increased risk aversion with regard to taking on new projects or investments.[32]

Along with capital investments, skilled labour is key to SMEs' growth. **Higher inflation, in terms of increased labour and production costs, was found to be associated with SMEs finding it more difficult to access skilled labour**. It is thus unsurprising that SMEs' inability to compete against offers by other (presumably larger) employers in terms of wages, work benefits and working flexibility, was the third most important reason for skill shortages reported by SMEs in 2023.[33] As a result, and to help address labour shortages, firms stepped up their automation efforts in 2022. A 2022 survey of US business executives found that around 7 in 10 executives plan to increase their investments in automation tools

[31] The general escape clause of the Stability and Growth Pact, which provides for a temporary deviation from the budgetary requirements that normally apply in the event of a severe economic downturn, will be deactivated at the end of 2023. See: European Fiscal Board (2023). Assessment of the fiscal stance appropriate for the euro area in 2024. European Fiscal Board report, 28 June 2023. Available at: https://www.consilium.europa.eu/media/65609/2023-06-21-efb-assessment-of-euro-area-fiscal-stance-final_0.pdf.
European Commission (2023). Fiscal policy guidance for 2024: Promoting debt sustainability and sustainable and inclusive growth. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1410.
[32] Di Mauro, C., Ancarani, A., & Hartley, T. (2020). Unravelling SMEs' participation and success in public procurement. *Journal of Public Procurement*, 20(4), 377-401.
Pircher, B. (2020). EU public procurement policy: the economic crisis as trigger for enhanced harmonisation. *Journal of European Integration*, 42(4), 509-525.
[33] European Commission (2023). Flash Eurobarometer 537: SMEs and skills shortages, summary. Available at: https://europa.eu/eurobarometer/surveys/detail/2961, p. 7.

compared with 2021; 78 % reported being very likely or somewhat likely to invest more in automation to offset the impact of labour shortages.[34]

Despite growing wage costs, the risk of a price-wage spiral is found to be modest in the EU overall, although the risk may be higher in some countries where wages are indexed to inflation. Accessing skilled staff remains a long-standing, structural barrier for SMEs, which is only marginally linked to the economic cycle. Therefore, it is also expected to remain an obstacle in the near future, in each of the three scenarios considered in this analysis.

When studying separately the effect of inflation on late payments, bankruptcies, investments, participation in public procurement and access to skilled labour, it is difficult to grasp the overall extent to which inflation affects SMEs, given that all of these effects hit SMEs at the same time. Therefore, the final impact explored in the present study is profitability. Profitability affects all other of the impacts: less profitable firms are more likely to make payments late, given that their cushion for absorbing delayed payments is smaller; firms that are not making profits are also at a higher risk of bankruptcy. Investment – both in green and digital innovations, and in the resources required to bid for public procurement contracts – is more difficult for less profitable firms due to their reduced internal financing capacity. Lower profits also mean that a company's ability to offer higher wages deteriorates, leading to difficulties in accessing skilled labour. By exploring the effect of inflation on profitability, therefore, the report sheds light on how SMEs are faring in general in the environment of high inflation.

Results show that the effect of inflation on firms' profitability is dual: **inflation initially reduces profitability as production costs rise, but subsequently increases it when (and if) firms pass costs on to consumers**. In particular, average profit margins for small, medium-sized and large businesses are found to decrease initially by 0.6 percentage points, and then to increase by 0.5 percentage points, given the changes in the inflation rate in 2022. Even though the initial directly negative effect of inflation is slightly greater than the positive, a substantial increase in gross profit shares has been observed over the last two years because some firms increased their mark-ups more than was needed to offset cost increases (see Figure 9). The European Economic Forecast, too, suggests that in 2022, unit profits grew at the fastest rate since 2005, with an annual change of 9.3 %.[35] As a result, some members of the ECB have highlighted the risk of a **profit-price spiral**.[36] In the US, firms have begun to post record high profits as well.[37] Exploiting inflation to achieve excessive profits has been referred to as '**greedflation'**.

However, this general upward trend in profitability masks substantial differences between firms. The overall trend captures both those firms that benefitted from the high-inflation environment, using it to charge greater markups, as well as those firms that have been unable to pass increases in costs on to their consumers – the latter group more often comprising SMEs.

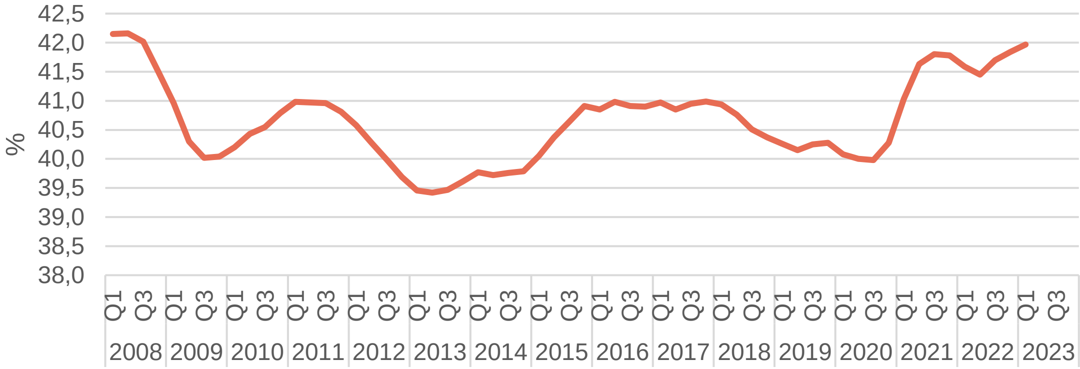
[34] Business Wire (2022).Survey Reveals Businesses Are Doubling Down on Automation to Balance Against the Global Labor Shortage. Available at: https://www.businesswire.com/news/home/20220119005323/en/Survey-Reveals-Businesses-Are-Doubling-Down-on-Automation-to-Balance-Against-the-Global-Labor-Shortage.

[35] For details, see: https://ec.europa.eu/economy_finance/forecasts/2023/spring/Box_I_2_3-Profit%20margins%20and%20their%20role%20in%20euro%20area%20inflation.pdf.

[36] The profit-price spiral functions in a similar way to the wage-price spiral. Essentially, inflation becomes driven by the fact that firms are continually raising prices to maintain their profit margins. For more information, see: European Central Bank (2023). *New York Times* Interview with Fabio Panetta, Member of the Executive Board of the ECB. Available at: https://www.ecb.europa.eu/press/inter/date/2023/html/ecb.in230401~ec65174af7.en.html.

[37] Axios (2021). Corporate profit margins at record high despite rising costs. Available at: https://www.axios.com/2021/08/11/profit-margins-record-high-rising-inflation.

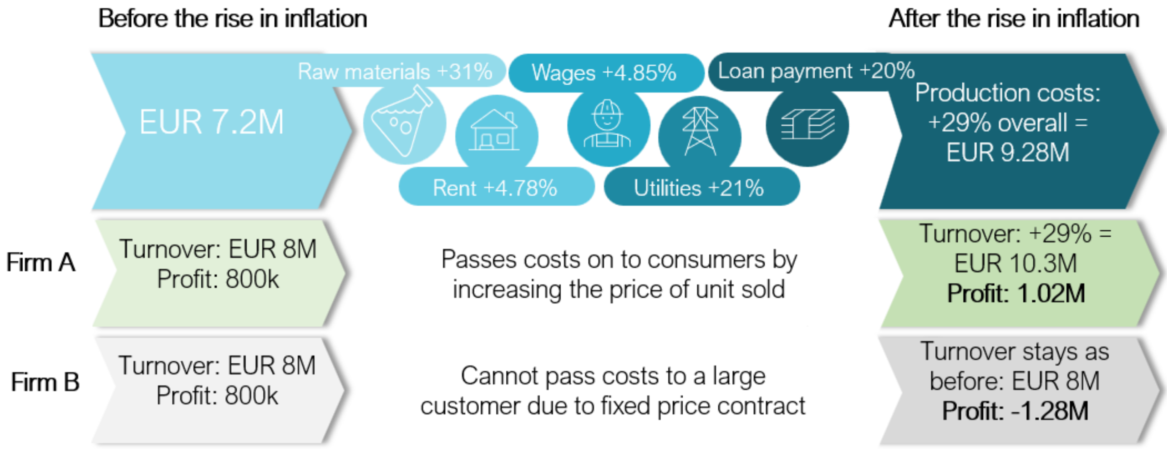
Figure 9. Gross profit share of non-financial corporations in the EU



Source: Eurostat/ECB.
Note: gross profit share is defined as the gross operating surplus divided by gross value added, based on four-quarter-cumulated sums.

To illustrate the **cumulative effect of inflation on both of the above types of businesses**, consider the example in Figure 10 below, which shows how firms working on fixed-price contracts can see markedly reduced profits compared with those firms that are able to pass cost increases on to consumers. The two example firms in the figure have the same turnover and production costs prior to the rise in inflation. For both companies, the costs of raw materials, rent, wages and utilities rise along with the interest they pay on loans, so the total production cost of the goods sold also increases (by a cumulative 29 % in the example below). To deal with these cost increases, the firm that sells to consumers (firm A) increases the price of the units sold, thus increasing its turnover. However, firm B, which sells to a large business on a fixed-price basis, is unable to charge its client more. As a result, while firm A sees an increase in its profits, the second firm experiences a loss, thus affecting its ability to pay suppliers on time, as well as reducing investment in digitalisation, greening and in the labour force, and even putting the firm at the risk of insolvency if the situation does not improve in the short term.

Figure 10. Cumulative impact of inflation on firms that can pass costs on to consumers, and those that cannot



Source: authors' own elaboration.

Firms' ability to pass on costs depends on their position within the value chain; how sensitive the demand for specific products is to price changes; types of clients; the size of firms and the ecosystems in which they operate. Qualitative evidence shows that SMEs that signed fixed contracts two or three years prior to the recent increase in inflation were unable to increase their prices, and suffered the most from higher production costs – which in turn squeezed their profit margins. Furthermore, a survey of retailers shows that current price hikes are concentrated among big companies, with 63 % of large firms using inflation to more than offset costs, compared with 52 % of small and medium-sized businesses. Of those firms that increased their prices, 28 % of large enterprises increased their prices by 50 % or more, compared with 6 % of small and medium-sized enterprises.[38] Regression analysis also confirms that inflation erodes the profit margins of SMEs more than those of large firms.

Overall, the findings of the present study suggest that policy action is needed to ensure that vulnerable SMEs remain competitive during the period of high inflation, especially in light of the negative effects of rising interest rates and the slow-down in economic growth.

3. Policy actions

This section provides an overview of policy actions implemented in 2022 in response to rising inflation, as well as a 'to-do' list of measures to be implemented moving forward. It also includes a list of measures to avoid (see Table 2 for a summary). The analysis focuses on fiscal policy, but monetary policy actions are summarised in Box 1. Insufficient time has passed to allow the evaluation of the policies that have been implemented by the Member States, so the overview draws on lessons from previous episodes of high inflation, feedback from the stakeholders consulted, as well as the existing literature.

Policy responses should be **coordinated among different government agencies** to account for the various ways in which inflation affects SMEs, as previously discussed. **Non-targeted measures may result in market-distorting effects – and, in the context of high inflation, could stand in the way of bringing it down**. This is why measures aimed at helping SMEs, such as providing funds to support the twin digital and green transition, should be counterbalanced against the need to reduce public spending as a means to reduce inflation.

Box 1. ECB actions in response to high inflation since 2022[39]

Keeping prices stable is the primary goal of the ECB. Stable prices are essential for economic growth and job creation. The ECB aims to bring down inflation by raising interest rates. Higher interest rates make it more expensive to borrow money, while also making it more lucrative to save money. As a result, when interest rates are raised, people and businesses spend less money and demand drops. Prices then rise less sharply, bringing inflation down.

In October 2023, the Governing Council of the ECB decided to keep the three key ECB interest rates unchanged after 10 consecutive hikes that began in July 2022. Over the course of these increases, the ECB has raised rates by a cumulative total of 4.5 percentage points – exceeding the highest interest rates applied during the peak of the 2008 financial crisis.[40] Although inflation is still expected to remain high throughout the first half of 2024, and price pressures in the Euro area remain strong, the ECB's decision not to intervene in interest rates was motivated by the fact that inflation dropped markedly in September 2023. At the same time, past interest rate increases are expected to continue to be transmitted forcefully into the financing conditions under which consumers and firms borrow money from financial intermediaries. This will further dampen down demand and thereby push down inflation.[41] In October 2023, the Governing Council considered the ECB's key interest rates to be at levels which, if maintained for a sufficiently long duration,

[38] Stoller, M. (2021). *Corporate Profits Drive 60 % of Inflation Increases*. Available at: https://mattstoller.substack.com/p/corporate-profits-drive-60-of-inflation.

[39] European Central Bank (2023). Monetary policy decisions. Available at: https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.mp231026~6028cea576.en.html.

[40] In July 2022, prior to the decision to increase interest rates taken on 27 July 2022, the three main interest rates stood at 0.00 % (main refinancing operations); 0.25 % (marginal lending facility); and -0.50 % (deposit facility).

[41] Higher interest rates make it more expensive to borrow money, while also making it more lucrative to save money. As a result, when interest rates are raised, people and businesses spend less money and demand drops. Prices then rise less sharply, bringing inflation down.

would contribute substantially to the ECB's goal of reducing inflation to its 2 % target in the medium term.

Table 2. Summary of policy actions

Policy action	SME-specific	Time horizon	EU vs national
Actions to address the causes of inflation			
Promote EU energy independence by developing its own energy sources, investing in renewables, and promoting awareness about energy savings.		Short term and long term	Both
Ensure a sustainable supply of raw materials and production components by encouraging SMEs to consider the joint procurement of chips and components when these require minimum volume orders; monitoring and anticipating raw material shortages; and helping affected firms to find new markets.	Yes	Short term and long term	Both
Actions to mitigate the negative effects of inflation			
Create central monitoring units at national level to observe various inflationary impacts on SMEs and to build resilience against future crises.	Yes	Short and medium term	Both
Enhance access to external finance for SMEs using a mix of different financial instruments such as credit guarantees, subsidised loans, and equity investments.	Yes	Short and medium term	Both
Limit the support provided to unviable companies, while also reinforcing the restructuring mechanisms for viable companies by strengthening early warning systems and the lowering administrative costs of bankruptcy proceedings.		Short and medium term	Both
Promote timely payments by investigating the reasons for delay in government-to-business transactions		Short and long term	Both
Ease access for SMEs to investments available to support the twin transition by lowering the co-financing rates for SMEs and incentivising the use of tax credits.	Yes	Short term	National
Measures appropriate under crisis circumstances such as in 2022			
Target the most vulnerable businesses only by exploring the extent to which firms can successfully pass increased costs on to consumers. This can be achieved by looking at trends in their profitability and turnover.		Short term	National
Promote the use of extensions for payment obligations only to those companies that can clearly demonstrate they have a viable business plan.		Short term	National
Avoid broad-based indexation of public procurement contract values, although indexation may be necessary in a limited range of cases to avoid contract cancellations.		Short term	Both
Measures to avoid in the medium term			
Non-targeted and price-distorting measures to support households and businesses		Medium term	National

Note: Short term = within the next year or two; medium term = within the next five years; long term = longer than five years.

3.1. Measures to address the causes of inflation

3.1.1. Promote EU energy independence

At the heart of the inflation shock in 2022 were rising energy prices. As this occurred in the context of high dependence on Russian energy, the EU is promoting its energy independence in order to avoid another energy shock. While Russian energy imports have already been reduced significantly thanks to the REPowerEU programme, this has mostly been accomplished by importing energy from other third countries.[42] For the EU to be truly independent, it must develop its own energy sources by investing in renewables and reducing the amount of energy consumed. These goals have already been set out in individual Member States' recovery and resilience plans, due to be implemented by 2026. At the Member State level, the successful implementation of these measures is key to ensuring energy independence and keeping energy prices low in the context of political turmoil. Examples of measures to promote energy independence are presented in the 2022 SME Envoy Network report.[43] Meanwhile, at EU level, it is key to focus on the smooth implementation of new trade agreements with third-country energy suppliers and on additional opportunities to diversify, as well as on coordinating Member States' actions when purchasing energy supplies.

3.1.2. Increase a sustainable supply of raw materials and production components, simultaneously helping affected firms to find new markets

In addition to the energy shock, SMEs are suffering from increases in the prices of raw materials and production components due to shortages that resulted from the supply chain disruptions that followed both the pandemic and the Russian war of aggression against Ukraine. The proposed **Critical Raw Materials Act**[44] aims to address these shortages, and includes provisions to diversify the EU's supply of raw materials; to reduce the administrative burden required by raw materials projects; to monitor critical raw material supply chains; to invest in research, innovation and skills with regard to breakthrough technologies in critical raw materials; to enhance recycling efforts with respect to critical raw materials, and so on. Several examples of good practice were also identified in selected Member States. These combine a diversification in the suppliers of raw materials suppliers, with efforts to help firms find new markets.

Box 2. Examples of national actions taken to assist companies in accessing raw materials

Germany

At the beginning of January 2023, the German Federal Ministry for Economic Affairs and Climate Action (BMWK) published the policy paper 'Pathways to a sustainable and resilient supply of raw materials'.[45] The aim of this raw materials policy is to provide companies with better support in diversifying their raw material supplies. While many of the measures proposed mirror those outlined in the proposed EU Critical Raw Materials Act, these are accompanied by additional measures that include quotas for recycling raw materials, support for the warehousing of raw materials by companies, and the

[42] European Commission (2023). REPowerEU at a Glance. Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en.
[43] SME Envoy Network (2022). SMEs and rising energy prices – First findings & recommendations. Available at: https://single-market-economy.ec.europa.eu/smes/sme-strategy/sme-envoys-network_en.
[44] European Commission (2023). Critical Raw Materials: ensuring secure and sustainable supply chains for EU's green and digital future. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1661.
[45] BMWK (2023). Key issues paper: Ways to a sustainable and resilient supply of raw materials. Available at: https://www.bmwk.de/Redaktion/DE/Downloads/E/eckpunktepapier-nachhaltige-und-resiliente-rohstoffversorgung.html.

establishment of a raw materials fund to increase production capacities. This fund is intended to provide grants, equity, loans and guarantees to finance projects for raw material extraction, processing and recycling in the EU and beyond, in accordance with the highest environmental, social and governance Standards.

Lithuania

Through the country's Public Institution Innovation Agency, Lithuanian companies are invited to make use of pre-paid access to international market research (Statista) as well as millions of business contacts databases (Orbis) in order to find new raw materials and components suppliers in other countries. Furthermore, the Republic of Lithuania's network of commercial attachés and its trade representative in Taipei (Taiwan) also provide assistance to companies seeking new trading partners.

Poland

Due to Russia's war of aggression against Ukraine, the Polish Development Fund (PFR), together with the Ministry of Foreign Affairs and the Ministry of Economic Development and Technology, launched a special hotline for Polish companies operating in eastern markets. Entrepreneurs received information on both sanctions regulations and forms of assistance for companies affected by the current situation, including help with searching for new sales markets and access to alternative sources of raw materials and components.

In addition, Poland's Ministry of Economic Development and Technology engaged in bilateral contacts with representatives of the administrations of third countries to analyse possibilities in relation to the delivery and price conditions of raw materials and other products important for the Polish economy. Artificial fertilisers are one such example.

More generally, through the State Raw Materials Policy, cooperation agreements can be concluded between the geological services of Poland and other countries, providing the basis for research in those other countries. The geological information about mineral deposits obtained in this way is the foundation for an investment process relating to the use of natural resources, including specific mining investments. These measures are aimed at reducing the risks associated with undertaking investments in a given country. So far, Poland has concluded agreements with geological services in the Democratic Republic of Congo, Mongolia, Uzbekistan, Ukraine, Slovakia and the Dominican Republic.

The Supply Chain Resilience platform[46]

The Supply Chain Resilience Platform, developed in cooperation with the European Cluster Cooperation Platform and the European Commission, aims to mitigate the effects of trade contacts lost as a result of the Russian war of aggression against Ukraine. It does so by establishing new business partnerships that can maintain the supply of specific goods by acquiring them from other sources. The platform connects companies looking for specific goods with companies that can supply them. It is designed for both businesses and humanitarian organisations. By the end of October 2023, 967 businesses from as many as 45 countries have registered on the platform.

Furthermore, the **European Chips Act**[47] sets out a strategy to reduce shortages of chips and semiconductors by strengthening research and technological leadership; building and reinforcing Europe's capacity to innovate in the design, manufacturing and packaging of advanced chips; putting in place an adequate framework to increase production by 2030;

[46] Enterprise Europe Network (n.d.). The Supply Chain Resilience Platform. Available at: https://supply-chain-resilience-platform.b2match.io/home.
[47] European Commission (2023). European Chips Act. Available at: https://digital-strategy.ec.europa.eu/en/policies/european-chips-act.

addressing skills shortages and attracting new talents; and developing an in-depth understanding of global semiconductor supply chains. An additional option would be to **encourage SMEs to consider the joint procurement of chips and components that require minimum volume orders.** Placing orders for volumes higher than an individual company needs is an issue for SMEs even when inflation is low – but the problem becomes acute when the prices of these excess components rise substantially. This could be accomplished, for example, by providing coordination support through the Enterprise Europe Network and the European Cluster Cooperation Platform, so that orders could be placed by clusters of SMEs at national or EU level.

Lastly, a number of SMEs interviewed for the present study stressed the need to **monitor and anticipate raw material shortages** at national level, because SMEs rarely have the resources to do so themselves. While this is one of the priorities included in the proposed Critical Raw Materials Act, it is important to stress that the Joint Research Centre (JRC) has already developed a Raw Materials Information System (RMIS).[48] **Additional awareness-raising actions relating to the RMIS, targeted at SMEs,** could be a useful way to enable SMEs to take full advantage of the information provided through the RMIS system.

3.2. Measures to mitigate the negative effects of inflation

3.2.1. Create centralised national monitoring units to observe the impacts of inflation on SMEs

The present study has highlighted that inflation can affect the performance of SMEs in a variety of ways, and via different channels. The effects of inflation also vary between different industrial ecosystems and countries. As such, it would be useful to create **central monitoring units** within national governments, with the goal of monitoring the impacts of inflation on SMEs.

In particular, monitoring units could be made up of all relevant stakeholders, such as representatives from the national economy and finance ministries, central banks, business development agencies, statistical offices, business associations, and national experts. Each national monitoring unit would be in charge of identifying, within each country, those sectors and businesses most at risk with regard to different impacts of inflation, as well as estimating its effects in the short and medium terms. These monitoring units could then convene EU-wide meetings to periodically discuss their findings and alert each other about potential risks within certain ecosystems.

Central monitoring units would enable a coordinated response to the current environment of high inflation. This response could be similar to the comprehensive actions enacted in response to COVID-19, which tackled different aspects of the pandemic, ranging from emergency preparedness to digital health, gender issues and economic issues. For example, during the pandemic, a number of countries established emergency 'command centres' (e.g. the Inter-Ministerial Crisis Unit in France) to oversee and coordinate other entities involved in the pandemic response.[49] Such a solution would ensure that the dangers presented by persistent inflation are consistently monitored and not chronically underestimated, thereby laying some groundwork for future responses and promoting policy best practice.

[48] European Commission (n.d.). RMIS – Raw Materials Information System. Available at: https://rmis.jrc.ec.europa.eu/.

[49] UCLG, Metropolis, LSE Cities, & LSE (2021). Multi-level Governance and COVID-19 emergency coordination. Analytics note 04. Available at: https://gold.uclg.org/sites/default/files/analytics_note_04_december_2021_0.pdf.

3.2.2. Enhance SMEs' access to external finance using a mix of different financial instruments, including loans, subsidised loans and equity investments

Deteriorating expectations concerning access to finance were found to be one of the key factors slowing down planned investment. Therefore, it is important to ensure that SMEs can obtain external finance. Different forms of finance offer different advantages. For example, **loan guarantees** – which use public resources to share a portion of the risks associated with lending – offer the advantage of being easily and quickly deployed through the existing network of credit institutions. This enables such arrangements to reach a high number of enterprises. **Publicly supported loans** (e.g. with lower interest rates) can be used to target enterprises that cannot be reached through the more standardised credit supported by partial guarantees. Such enterprises include those which lack a track record, such as start-ups, as well as SMEs, which find it more difficult to access commercial finance. Some examples of loans and loan guarantees implemented nationally as a response to recent events are provided in Box 3.

Box 3. Examples of loans and loan guarantees established in response to recent events

Germany

The KfW-Special-Program-Ukraine-Belarus-Russia-(UBR)-2022-SMEs enabled the provision of low-interest financing to German SMEs, sole proprietorships and freelancers that are affected by Russia's military aggression against Ukraine and by the sanctions implemented. The particular impacts on the companies affected can be demonstrated by declines in sales, losses of production, the closure of production facilities, or increased energy costs.[50]

Hungary

The Széchenyi Card Programme MAX+ promotes the competitiveness of Hungarian SMEs. The support available to enterprises includes interest rate subsidies (e.g. loans to enterprises at a fixed net interest rate of 5 %), guarantee fee subsidies, and management cost subsidies. Various MAX+ loan products are offered by the Széchenyi Card Programme, with different goals. These include:

- securing day-to-day operating expenses;
- supporting businesses in the tourism sector;
- purchasing working capital needed for the operation of the business;
- implementing green investment loan objectives to improve energy efficiency and technology change;
- supporting the smallest micro- and small enterprises, as well as start-ups, to achieve their agricultural and non-agricultural investment objectives; and
- helping agricultural enterprises to realise their development goals.[51]

Lithuania

The Ministry of Economy and Innovation, together with National Promotional Institution for Investment and Business Guarantees (INVEGA),[52] have accepted applications for direct loans to business entities affected by the war.[53] The maximum loan term length is three

[50] KfW (2022). Ukraine war and sanctions: KfW special program for companies. Available at: https://www.kfw.de/inlandsfoerderung/Unternehmen/KfW-Sonderprogramm-UBR/.
[51] For details, see: https://www.kavosz.hu/.
[52] INVEGA is the National Promotional Institution for Investment and Business Guarantees, established by the Government of the Republic of Lithuania. See: https://www.invega.lt/.
[53] INVEGA (2023). Direct loans to business entities affected by the war. Available at: https://invega.lt/verslui/visos-priemones/25/tiesiogines-paskolos-nuo-karo-nukentejusiems-verslo-subjektams-122.

years for working capital loans, and six years for investment loans. Interest rates are set at not less than 5 %. Businesses were considered to be affected by war if:

- the share of the company's imports/export that were made to Ukraine and/or its imports to Russia and/or Belarus was not less than 25 % of its total imports/exports in year 2021; or
- the cost of the company's natural gas, heating and electricity supply made up at least 8 % of its annual costs (based on data from 2021);
- one or more of the company's economic activities was included in the Annex I of the European Commission Communication No. 2022/C 131 I/01 on the Temporary State Aid Framework.

Aid guarantees are also provided for loans and leasing transactions.[54] Companies can apply to receive aid guarantees until the end of 2023. Maximum terms are the same as above. Guarantees are provided for companies where:

- the share of the company's imports/exports to Ukraine and/or Russia and/or Belarus was not less than 25 % of its total imports/exports in the year 2021;
- the company's expenses for fuel, electricity and/or gas in 2021 accounted for at least 3 % of all company expenditure.

Netherlands

To increase financing options for investments in sustainability by SMEs, the SME credit guarantee scheme BMKB has been expanded with a green component: BMKB-Green (BMKB-G). By making use of this measure, SMEs can reduce their often sharply increased (energy) costs. In total, up to EUR 200 million in guarantees can be provided. Through the use of this expanded measure:

- The size of the surety loan available was increased from 50 % to 75 % of the loan amount in the BMKB-G. As a result, financiers could provide loans more easily and quickly, and SMEs could borrow more money and at an earlier stage.
- The term of the guarantee on the financing has been extended. For all financing using BMKB-G, it is possible to apply a guarantee with a maximum term of 12 years.
- The level of commission charged was also reduced. For financing under BMKB-G, commission is 2 % for a term up to and including 24 quarters, and 3 % for a term of between 25 and 48 quarters.

Companies in agriculture and fisheries, as well as large enterprises, are excluded.

Equity investments are another financial product that policymakers could consider promoting as part of a broader mix of access to finance measures. These are a niche financial product that is best suited to a small minority of SMEs – namely, innovative enterprises that have the potential for high growth. Despite being highly specialised, equity investments can cover a diverse range of enterprises over the course of their lifecycle, and can provide significant amounts of finance in the medium to long term. In general, public resources are especially necessary in supporting early-stage financing and in the scaling-up stage of SMEs' development. At the same time, publicly supported equity investments can help to develop financial markets by attracting business angels and venture capital investors – for example, through co-investment schemes.[55]

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[54] INVEGA (2023). Assistance guarantees for loans and leasing transactions. Available at: https://invega.lt/verslui/visos-priemones/25/pagalbos-garantijos-paskoloms-ir-lizingo-sandoriams-116.

[55] t33, EPRC - University of Strathclyde, Metis (2015). Ex post evaluation of cohesion policy programmes 2007-2013, focusing on the European Regional Development Fund (ERDF) and Cohesion Fund (CF) Work Package 3: Financial instruments for

The use of financial instruments has accelerated significantly in recent years. In the context of the Cohesion Policy Programmes supporting SME competitiveness, the share of funds allocated in the form of financial instruments increased from around 20 % in the 2007-2013 period, to 33 % in the 2014-2020 period.[56] The COVID-19 crisis provided a test-bed to experiment with new forms of support, and an opportunity to rapidly build capacities for the use of such instruments.[57] However, publicly supported loans and other financing tools that involve public expenditures need to be counterbalanced against the need to reduce inflation via fiscal instruments (e.g. by reducing public expenditures). As far as possible, they should not be employed as long-term industrial strategies.

3.2.3. Limit the support provided to unviable businesses, and strengthening national early warning systems

The increase in bankruptcies observed in 2022 marked a return to pre-pandemic levels of bankruptcy, which had in part been artificially postponed by pandemic-related support measures. **A return to pre-pandemic bankruptcy levels should be considered appropriate,** and it is not necessary to postpone further bankruptcies using additional targeted support. The rate at which businesses exit the market is one of the drivers of endogenous economic growth.[58] Nevertheless, it is too early to tell whether or not the recent rise in bankruptcies will significantly exceed pre-pandemic levels – especially in the light of monetary tightening and the worsening economic outlook. Therefore, **national early warning systems – systems designed to detect insolvency risks at company level, and to assist companies in addressing them – could be strengthened** to ensure that viable businesses are saved.

Among other actions, **Directive 2019/1023/EU** already imposes requirements on the Member States to establish early warning tools; restructuring frameworks; the appointment in certain circumstances of a practitioner in the field of restructuring; and pauses in enforcement action, all of which will help to identify and help struggling SMEs. Member States have largely transposed the Directive into national law. Nevertheless, **significant challenges remain in the design and implementation of early warning systems**. Some Member States impose additional costs on companies that are already struggling, or share the alert information with creditors, reducing the companies' chances of accessing further credit and potentially, their chances of survival. Other Member States are only just piloting early warning tools, or only provide such services in certain regions. Different elements of existing early warning systems are often fragmented – making it difficult for entrepreneurs to understand where they should seek help, or which procedures to follow in their particular circumstances. Lastly, some Member States alert companies of the risk they are in without offering any advisory services, while others offer advice without having a functioning alert mechanism. [59]

Box 4 illustrates the early warning system in operation in Belgium, which combines both the alert and advice components, as well as an example from Portugal, which received the Grand Jury Prize at the 2023 SME Assembly. Additional examples can be found through Early Warning Europe[60] – a network helping companies in distress and advising Member

enterprise support. *Final Report of the evaluation carried out on behalf of the European Commission DG REGIO No. 2014CE16BAT032*.

[56] Elaborations based on DG REGIO 2007-2013 Cohesion data from closure reports and 2014-2020 EC categorisation data.

[57] This issue is specifically tackled in an ongoing evaluation on behalf of the European Commission – DG Regional and Urban Policy (Ex post evaluation of Cohesion policy programmes 2014-2020 financed by the ERDF. Work package 6 – SME support. Contract N° 2021CE16BAT064). Results will be published by the end of 2023.

[58] Ahmad, N. (2006). A Proposed Framework for Business Demography Statistics. OECD Statistics Working Papers, No. 2006/3, *OECD Publishing*, Paris.

[59] Unpublished analysis shared by Early Warning Europe.

[60] Early Warning Europe (n.d.). A European Network Helping Companies in Distress. Available at: https://www.earlywarningeurope.eu/.

States on the design of their early warning tools – as well as in a 2019 PPMI study on flanking measures in the context of business insolvency.[61]

Box 4. Examples of early warning systems that integrate both the alert and advice features

Belgium[62]

The Chamber for Companies in Financial Difficulty within the Court for Enterprises in Belgium is responsible for collecting and synthesising information to identify struggling companies. This includes information about unpaid taxes and social security contributions, court judgements relating to debt, companies' annual accounts, whether a company uses a fictitious address, etc. External accountants and auditors may also choose to report company managers to the court if they think the company is not taking appropriate steps to ameliorate its financial difficulties. Lastly, a private credit assessment firm, Graydon, also delivers the Chamber for Companies in Financial Difficulty a list of potentially at-risk companies. Graydon uses 13 indicators to identify companies at risk of insolvency. These consider company profitability, liquidity, indebtedness, the manager's previous experience with insolvencies, and others.

Based on the information received, the Chamber for Companies in Financial Difficulty determines whether to invite the company's managers for an interview. Managers must appear at the court in person, although they may be accompanied by other persons of their choice, including counsel and accountants. Appearance at the court is mandatory, and the interview is conducted by judges with expertise in accounting and banking.

Depending on the result of this interview, judges can make one of the three decisions:

1. The Chamber can send the case to the public prosecutor. The latter may initiate bankruptcy proceedings.

2. The Chamber can appoint an administrator, who has a maximum of four months to complete restructuring. Otherwise, bankruptcy or liquidation proceedings are initiated.

3. As of May 2018, the Court of Enterprises, after advice from the Chamber, also has the power to liquidate companies.

Although the Court cannot advise struggling companies, entrepreneurs can seek counselling services from organisations that provide specialist services such as Dyzo, Road to growth, Enterprises en Rebond, Centre for Companies in Difficulty. Dyzo, for example, is a non-profit organisation that helps entrepreneurs in difficulty. Entrepreneurs can contact Dyzo for an assessment of their company's chances of survival. If follow-ups are needed after the initial call, a further meeting can be held to analyse the situation in greater depth. Following this situation analysis, Dyzo specialists and company managers make a plan of action to restructure the company, terminate activities, sell the business, merge with another company, or declare bankruptcy. The services available include legal, accounting and social security advice; negotiations with creditors; budget management; the filing of paperwork for judicial protection with the Court for Enterprises; social security benefits claims; and bankruptcy filings. Services are provided free of charge thanks to public funding.

Portugal[63]

MAP (Portuguese: *Mecanismo de Alerta Precoce*) is an early warning mechanism in Portugal enabling more effective business restructuring processes. This mechanism aims

[61] PPMI (2019). The use of flanking measures in the EU and their implementation to the Lithuanian context. Available at: https://finmin.lrv.lt/uploads/finmin/documents/files/Flanking%20measures%20study(1).pdf.
[62] *Ibid*.
[63] IAMPEI (2023). MAP | Mecanismo de Alerta Precoce. Available at: https://www.iapmei.pt/PRODUTOS-E-SERVICOS/Revitalizacao-Transmissao/Revitalizacao-Empresarial/MAP-Mecanismo-de-Alerta-Precoce.aspx.

to go further than the existing financial self-diagnosis tool[64] already available in the country. MAP is an information provision tool that provides companies with economic and financial indicators compiled from the Bank of Portugal's Balance Sheet Centre, based on data contained in the Simplified Business Information (IES) system, and analysed by IAPMEI.[65] In 2023, IAMPEI received the Grand Jury Prize at the SME Assembly for the MAP tool.[66]

It is important to recognise that insolvency or restructuring proceedings impose **additional costs on businesses** – costs that struggling SMEs in particular may find it difficult to shoulder. Member States should therefore seek to reduce such administrative costs. A good example of this comes from Ireland, which amended its Companies (Rescue Process for Small and Micro Companies) Act in 2021 to provide a dedicated rescue process for small and micro-companies, the so-called 'Small Companies Administrative Rescue Process'. This complements the existing examinership[67] process, through which the protection of the Court is obtained to assist the survival of a company. However, the costs associated with examinership may put it beyond the reach of small and micro-enterprises. The new rescue process is designed to make rescue and restructuring more accessible and affordable to companies that are fundamentally viable, but are experiencing temporary difficulties.

3.2.4. Investigate the reasons for delays in government-to-business transactions

Early warning tools can help to detect and address the risk of insolvency, but to reduce this risk, the factors leading to business insolvency – such as late payments – should be reduced or eliminated. The Commission is currently revising the **Late Payments Directive** precisely with this goal in mind.[68] The new proposal introduces a maximum payment term of 30 calendar days for all transactions involving B2B or public authorities. The present study shows that payment delays remain prevalent when governments procure goods and services, and that they vary strongly depending on the country concerned. Hence, **additional research is needed to investigate the country-specific reasons for these delays**. One of the responses to the public consultation that accompanied the revision of the Late Payments Directive, for example, highlighted that payment delays from Italian municipalities had been reduced through institutional re-organisation, the computerisation of invoices and payments, and by ensuring the availability of cash at the municipal level. Some of the delays were caused by delays in payments from the state to local governments.[69]

In recent years, Member States have recently taken diverging approaches to the issue of late payments, some of which are summarised in Box 5.

Box 5. Actions recently taken by several Member States with regard to late payments

Netherlands

On 1 July 2022, the Act 'Shortening legal payment term to 30 days' entered into force in Netherlands, which obliges large enterprises to pay SMEs within a maximum of 30 days. In addition, the country has been investigating whether it would be appropriate to

[64] IAMPEI (2023). Autodiagnóstico Financeiro. Available at: https://www.iapmei.pt/PRODUTOS-E-SERVICOS/Revitalizacao-Transmissao/Revitalizacao-Empresarial/Autodiagnostico-financeiro.aspx.
[65] IAMPEI, an agency under Portugal's Ministry of the Economy and Maritime Affairs, is responsible for business competitiveness and growth, with a special focus on small and medium-sized businesses.
[66] European Commission (2023). SME Assembly Day 2: Celebrating Success in Bilbao. Available at: https://single-market-economy.ec.europa.eu/news/sme-assembly-day-2-celebrating-success-bilbao-2023-11-14_en.
[67] Examinership is a process in Irish law whereby the protection of the Court is obtained to assist the survival of a company. It allows a company to restructure with the approval of the High Court.
[68] European Commission (2023). Late payments – update of EU rules. Available at: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13665-Late-payments-update-of-EU-rules_en.
[69] *Ibid*.

establish public supervision of compliance with payment terms governing payments from large companies to SMEs.

Spain

Law 18/2022 of 28 September, on the creation and growth of enterprises, established several measures to reduce late payments:

i) the obligation to issue and send electronic invoices in commercial relations was extended to all companies and self-employed persons;

ii) that companies not complying with the payment terms established in the Law against Late Payment are ineligible to access a public subsidy or to be a collaborating entity in its management. Public procurement regulations have been reinforced to guarantee that the awardees pay subcontractors the price agreed, on time;

iii) The creation of a 'State Observatory on Late Payment' in charge of monitoring the evolution of payment data, and the promotion of good practices in this area.

3.2.5. Make it easier for SMEs to access investments that are available to support the twin transition

The present study shows that SMEs are motivated to invest in the twin transition, but that longer-term and more substantial investments may be delayed as firms face higher immediate production costs and adjust to an environment of higher interest rates. In this context, government funding for the twin transition appears appropriate, especially in light of findings that it is effective in increasing the investments firms make in order to become more energy-efficient, to innovate and to adopt digital technologies.

Significant funding in relation to the twin transition, often in the form of non-repayable grants, is already available to SMEs via the Temporary Crisis Framework, the Recovery and Resilience Facility, and the European Structural and Investment Funds (ESIF). Nevertheless, according to business associations and SMEs interviewed for the present study, **small businesses are struggling to absorb these funds.** This is because usually, only a share of the investment is co-funded by public resources, and SMEs facing increases in their production costs that are unable to provide matching funding. Similar issues have been identified with the UK's Digital scheme – a government programme designed to provide free and impartial advice to 100,000 SMEs on how technology can help their business, as well as vouchers each worth up to GBP 5,000 to cover up to 50 % of the costs of buying pre-approved software. Despite a marketing campaign, the expanded eligibility of the scheme and positive feedback from previous users, it did not achieve the expected take-up, with fewer than 1,000 vouchers being redeemed by SMEs.[70]

Lowering the rate of co-financing required from SMEs in order to access funds available to support green and digital investments is one of the potential options to assist with fund absorption. Another option is to make available alternative forms of finance. More specifically, **tax credits** or publicly supported financial instruments with a repayable component could be considered, instead of non-repayable grants and subsidies. Indeed, tax credits are the primary means provided for small businesses to fund energy efficiency improvements by the US Inflation Reduction Act[71] In the context of the ESIF, financial

[70] UK Government (2022). Final opportunity for businesses to access help to grow digital scheme. Available at: https://www.gov.uk/government/news/final-opportunity-for-businesses-to-access-help-to-grow-digital-scheme.
[71] The White House (2022). Fact sheet: How the Inflation Reduction Act will help small businesses. Available at: https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/12/fact-sheet-how-the-inflation-reduction-act-will-

instruments are already promoted as a preferred form of finance to support investment projects that are expected to generate net revenues or savings. Both tax credits and financial instruments generally entail a lower administrative burden on SMEs than grants and subsidies, and may therefore be better suited to their needs and capacities, while at the same time being more targeted and requiring fewer public resources.

3.3. Measures that are appropriate under crisis circumstances

Public policies (at both national and EU levels) are expected to play an important anti-cyclical role in response to a crisis. This happened in the aftermath of the 2008/2009 crisis, and also after the COVID-19 pandemic (e.g. through the REACT-EU programme). Public policies can assist in **avoiding losing too many companies and jobs, helping businesses to resist and reinforce their structural resilience** in order to weather the challenges. Nevertheless, **non-targeted expansionary fiscal policy can result in market-distorting effects and, in the context of high inflation, could stand in the way of bringing down inflation**. Hence, the following discussion reviews which measures should be considered and which should be avoided, drawing on the variety of policies implemented by EU Member States in 2022.

3.3.1. Targeted support measures for businesses

Any fiscal support provided during episodes of high inflation should be **targeted at the most vulnerable businesses** which, despite being viable, would not otherwise be able withstand the price shock. Although broad measures support a greater number of businesses, they require increased public spending, which further stimulates inflation.

Across the EU, the **measures to support businesses implemented in 2022 and 2023 were most often targeted by sector**, prioritising those sectors with the highest energy intakes or those most exposed to fluctuations in the price of raw materials (e.g. energy-intensive industries, agri-food, construction). This is an effective approach in the short term. Nevertheless, the present study shows that even within those sectors most exposed to price fluctuations, firms vary greatly in terms of their ability to pass on costs to consumers. As a result, some firms report decreased profitability, while others are achieving record profits. **To avoid a situation in which governments further subsidise companies that are already profiting from inflation, public authorities should explore how much price increases have affected firms' costs, and what proportion of those increases firms were able to successfully pass to consumers.** The latter could be assessed by, for example, exploring whether firms' turnover and profitability have deviated significantly from historical trends. Alternative indicators – used to select firms eligible for support in Germany – could refer to declines in sales, losses of production, or the closure of production facilities.[72] Firms that raise prices more than is needed to offset increases in production costs should not be further supported, as this could fuel a profit-inflation spiral. Box 6 provides examples of recently adopted measures aimed at supporting vulnerable businesses.

Box 6. Targeted measures implemented in 2022 and 2023 to support businesses

Austria

help-small-businesses/#:~:text=The%20Inflation%20Reduction%20Act%20will%20reduce%20costs%20for%20small%20businesses,Small%20Business%20Health%20Care%20Costs.

[72] KfW (2022). Ukraine war and sanctions: KfW special program for companies. Available at: https://www.kfw.de/inlandsfoerderung/Unternehmen/KfW-Sonderprogramm-UBR/.

Several targeted actions have been implemented to assist firms:

- Extraordinary credit for **self-employed persons and farmers** of up to EUR 500 each;
- Energy subsidy for **energy-intensive companies**. Companies whose energy procurement costs amounted to at least 3 % of their production value in 2021, and whose national energy tax amounted to 0.5 % of their added value in 2021, were able to apply for a subsidy in 2022.
- Relief for domestic **SMEs with high fuel expenses**, especially in the **craft sector**, as well as **one-person enterprises**, via a fuel allowance with a volume of approximately EUR 120 million.
- Support for businesses to **switch over quickly to alternative, decarbonised forms of propulsion**: a total of EUR 120 million for the years 2022 and 2023.

Ireland

Enterprise Ireland assists viable but vulnerable firms of all sizes in the **manufacturing** and **internationally traded services** sectors. Two streams of funding are available under the scheme: the first assists firms suffering **liquidity problems** as a result of Russia's war against Ukraine, with total funding of up to EUR 2 million. The second stream has supported eligible companies experiencing **severe increases in energy costs** (which were at least 1.5 times higher in 2022/23 compared with 2021).[73]

Lithuania

At the end of 2022, the measure 'Subsidies to companies operating in the most affected sectors in order to mitigate the effects of energy price increases' (2022/C 131 I/01) was implemented on the basis of the Temporary Crisis Framework for state aid measures to support the economy following the Russian war of aggression against Ukraine. EUR 30 million was allocated for this measure. Subsidies were distributed to almost 1,300 companies operating in the following sectors: the **mining of metal ores;** the **manufacture of textile products; clothing sewing production;** the **production of wood and cork products** (except for the manufacture of furniture and products made from straw and other woven materials); the **paper industry and products made from paper**; the **manufacture of coke and refined petroleum products** (with certain exceptions); the **production of chemicals and chemical products**; the production of other **non-metallic mineral products**; and the production of **base metals**.

The amount of subsidies was linked to the taxes paid by the company in 2021. The estimated maximum amount of support was 30 % of the company's gross income and profit tax paid in 2021. The maximum subsidy that can be received by an individual firm was EUR 500,000, and the minimum EUR 500.

3.3.2. Extensions with regard to payment obligations

To help SMEs to address short-term liquidity issues, extensions for tax and social security obligations were implemented in several EU countries (see Box 7). In addition, SMEs can seek loan extensions and holidays from their banks, which could be facilitated through government guarantees (see Section 3.2.2). Nevertheless, such measures should only be

[73] For more information, see: https://www.enterprise-ireland.com/en/funding-supports/company/esetablish-sme-funding/ukraine-enterprise-crisis-scheme.html.

extended to companies that are able to clearly demonstrate that they have a viable business plan, in order to avoid a situation in which bankruptcies are artificially postponed.

Box 7. Examples of measures allowing the deferment of payment obligations

Belgium

Companies experiencing difficulties in paying social security contributions can request an amicable repayment plan in response to problems related to the crisis. In addition to a classic amicable repayment plan, special repayment plans without penalties being applied to certain contributions can be used to cover this situation.[74]

Furthermore, the standard tax payment deadlines were increased from two to four months for all assessment notices within the assessment year 2022. A deferral of two months could also be applied to the payment of payroll tax deductions by businesses,[75] with similar provisions available for the self-employed.

Germany

Several relevant measures have been introduced, including:

- the maximum amount for loss carry-back[76] was increased until the end of 2023;
- a permanent extension of the option to carry-back losses to a two-year period;
- options for accelerated depreciation[77] for movable assets in 2022.

France

France introduced a deferral of tax and social security payments to relieve the cashflow of SMEs. This temporary measure could be considered at the request of companies. These deferrals did not apply to VAT, ancillary taxes or the payment of withholding tax. With regard to social security contributions, SMEs could request a payment deferral from the Urssaf (the French social security agency).[78] A similar measure was implemented with regard to customs duties.[79]

3.3.3. Indexation of public procurement contract values

The present study found that inflation has only a small effect on firms' participation in public procurement, on average resulting in 1 % of potential offers being lost. Nevertheless, interviews with representatives of the Member States highlight that some SMEs that have already signed contracts with public authorities are struggling to deliver the services at the fixed prices agreed. As a result, several Member States (Bulgaria, Germany, Hungary,

[74] Social Security Company (n.d.). Amicable Instalment Plan. Available at: https://www.socialsecurity.be/site_nl/employer/applics/paymentplan/index.htm

[75] Federal Public Service Finance (2022). Reminder: energy crisis - general deferral of payments for the tax of natural persons, corporate tax, tax of non-residents and tax of legal persons (tax year 2022). Available at: https://financien.belgium.be/nl/Actueel/energiecrisis-algemeen-betaaluitstel.

[76] A loss carry-back describes a situation in which a business experiences a net operating loss (NOL) and chooses to apply that loss to a prior year's tax return. This results in an immediate refund of taxes previously paid by reducing the firm's tax liability for the previous year in question.

[77] Accelerated depreciation refers to any one of several methods by which a company, for financial accounting or tax purposes, depreciates a fixed asset in such a way that the amount of depreciation taken each year is higher during the earlier years of an asset's life.

[78] Ministry of Economics and Finance and Industrial and Digital Sovereignty (2023). Business Owners, Are You Facing Difficulties? Available at: https://www.economie.gouv.fr/files/files/2023/guide_crise_chef_entreprise_DGE.pdf?v=1674488932.

[79] *Ibid*.

Lithuania, Malta, Poland, Portugal, Slovakia) have created options to index the value of public contracts that depend on energy and raw material prices (for examples, see Box 8).

These measures are associated with certain trade-offs. By indexing public contract values to inflation, public authorities are contributing to keeping inflation high (since this diminishes incentives to reduce the use of energy and raw materials that are in short supply). Furthermore, the indexation of contract value reduces firms' motivation to innovate or to use more sustainable energy sources that might allow them to deliver the contract within the fixed price. Nevertheless, in some cases, contract cancellations may be unavoidable in the short term in the context of high inflation, which could in turn diminish the results achieved in return for the money spent, and may entail additional administrative costs for public authorities when they have to re-contract. Such measures are also clearly beneficial to SMEs. Due to these mixed effects, such measures should gradually be phased out as the inflation outlook improves.

Box 8. Examples of measures adopted to assist companies struggling to deliver on their public contract commitments due to inflation

Belgium

In response to the current economic situation, the federal government created a possibility for the contracting authority in a public contract to support its contractor by granting an advance payment. According to the terms of a royal decree, the contracting authority could grant an advance of up to 20 %.[80]

Germany

In 2022, the Federal Ministry for Housing, Urban Development and Building and the Federal Ministry for Digital and Transport issued circulars addressed to contracting authorities at federal level, with regard to procurement relating to the construction of infrastructure projects:

- The first, issued on 25 March 2022, established a link between some of the economic upheaval and price increases. Price indexation clauses could be used with regard to specifically indicated raw materials/product groups. The circular also offered some facilitation with regard to the use of price indexation clauses. It was addressed towards contracting authorities at federal level, and was limited to the procurement of construction works. This circular was limited in time until 30 June 2022. Other contracting authorities/entities in the Länder or at municipal level were not bound by this, but such ministerial circulars generally also provide guidance at Länder and municipality level.

- The second circular was issued on 22 June 2022. This established a prolongation until 31 December 2022, and a slight modification of the terms above. In general, it established a mechanism for calculating for price indexation clauses for construction procurement. However, in order to use this, the contracting authorities and the successful bidder needed to establish a so-called 'Basiswert 1', which formed the baseline for the indexation mechanism. Some aspects of the economic situation, however, were in such upheaval that construction undertakings simply could not reliably provide such a baseline value. This situation was not covered in the circular of 25 March. Accordingly, a mechanism (for such exceptional cases) was added (Formblatt 225a). Aside from this, the circular contained some additional clarifications with regard to that issued on 25 March.

[80] Federal Public Service Economy (2022). Temporary arrangement - Advances in public procurement. Available at: https://economie.fgov.be/nl/themas/ondernemingen/situatie-oekraine/tijdelijke-regeling.

- Based on a third circular released on 6 December 2022, the circulars above (in the version of 22 June) were extended once more until 30 June 2023.
- Since price fluctuations/increases also occurred in other branches of industry, the Federal Ministry for Economic Affairs and Climate Action issued a circular on 24 June 2022. Unlike the circulars above, this was not binding in nature, but was meant to provide guidelines for contracting authorities, and to some extent encouraged the use of price indexation clauses.[81]

Portugal

An extraordinary price review mechanism was introduced in Portugal. Among its various measures, the following ones stand out:

1) The possibility for the contractor to submit a request for an extraordinary price revision whenever a certain material, type of labour or equipment is subject to an increase of at least 3 % in the contractual price, and the year-on-year rate of change in the cost was equal to or greater than 20 %.
2) In addition to the extraordinary price revision regime, the contracting authority was granted the possibility to extend the deadline of the contract.
3) Furthermore, at a pre-contractual stage, contracting entities were allowed to select as winners proposals with a price higher than the base price of the procedure.
4) Lastly, it was expected that the price revision would be supported by funds entered into the budget programme for the respective sectoral area.

3.4. Measures to avoid in the medium term

3.4.1. Non-targeted and price-distorting support measures

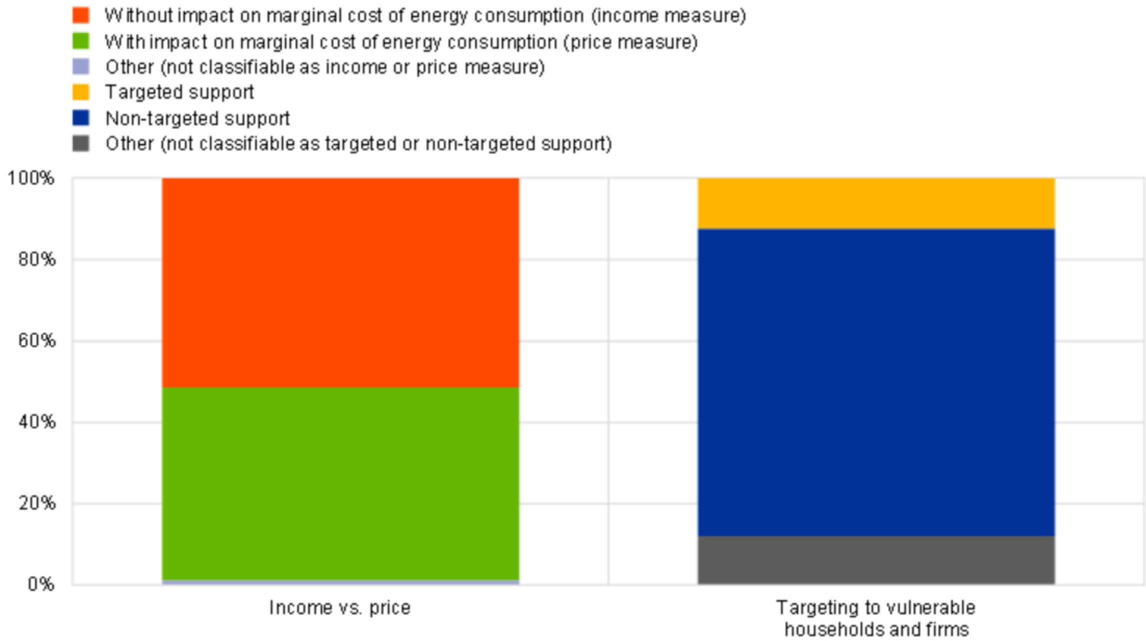
Non-targeted support measures may not be appropriate as a sustained response in times of high inflation. Such measures increase aggregate demand for goods and services, countering the efforts of central banks to lower it (see Box 1). Central banks are in turn pushed to continue increasing interest rates, which enhances the risk of driving the economy into a recession. Furthermore, indiscriminate measures imply significant windfall profits for firms that are already benefitting from high inflation because they are able to pass any cost increases on to their customers, or even increase their prices in excess of such increases. This, in turn, hurts the competitiveness of those firms that are unable to charge their clients more.

The majority of support provided by the Member States in response to the events of 2022 was non-targeted, as illustrated by the blue bar in Figure 11. **Examples of non-targeted support include price caps on electricity, gas, petrol and diesel; tax reductions on certain foods; postponing the payment of VAT, social security taxes and pandemic-related loans for all SMEs or businesses; VAT tax reductions; broad-based wage indexation, and others**. Governments opted to introduce these measures because they are quick to implement, and provided immediate relief to households and businesses when energy prices skyrocketed.

[81] Federal Ministry for Economic Affairs and Climate Action (2022). BMWK circular on dealing with price increases in public procurement (supplies and services). Available at: https://www.bmwk.de/Redaktion/DE/Artikel/Europa/auslegungsrundschreiben-preissteigerungen-ukr-rus.html.

Although such measures immediately lowered inflation (by effectively reducing prices), they did not address the root causes of inflation. Worse, by lowering the price of goods of which there was a shortage, such policy actions disincentivise households and businesses from reducing their consumption of energy and raw materials that are in short supply, further fuelling inflation. As illustrated by the green bar in Figure 11, slightly less than half of all fiscal support distributed in the EU in 2022-23 affected energy prices, motivating greater energy consumption.[82] An alternative response that is more appropriate as the inflationary outlook improves is not to change prices, but to supplement incomes (for example, through one-off payments or increases in non-taxable income – but ideally targeted towards the most vulnerable groups, rather than the general population).

Figure 11. Targeting of fiscal support in 2022-23, as a percentage of total support



Source: ECB calculations, based on the December 2022 Eurosystem staff macroeconomic projections for the euro area.[83]
Notes: left-hand panel: the size of the bars denotes the impact of stimulus measures on budget balance (in gross terms); 'net support' denotes the gross budget support, adjusted for discretionary financing measures (mostly taxes on windfall profits in the energy sector); 'other transfers' mostly denotes transfers to households. Right-hand panel: the shares are calculated on the basis of total policy measures in 2022 and 2023. The categories 'Other (not classifiable as income or price)' includes, for example, government purchases to fill gas storage. 'Other (not classifiable as targeted or non-targeted)' includes, in addition, equity support to gas dealers. For households, a measure is considered to be targeted if there is some form of means-testing. For firms, a measure is considered to be targeted if it applies to specific energy-intensive activities, as defined by the European Commission.

[82] European Central Bank (2023). Fiscal policy and high inflation. Available at: https://www.ecb.europa.eu/pub/economic-bulletin/articles/2023/html/ecb.ebart202302_01~2bd46eff8f.en.html.
[83] *Ibid*.

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