

# Children and the Cost-of-living Crisis:

*How food and energy inflation has increased  
poverty in households with children  
in the European Union*

## About this brief

This research brief presents the first results of an analysis of how the cost-of-living crisis has affected the poverty experienced by households with children in the European Union (EU). It takes account of sharply increasing food and energy prices to calculate the additional number of children living in poverty,<sup>1</sup> in real terms, due to the crisis.

### Key findings

- By the end of 2022, the cost-of-living crisis had eroded living standards to such an extent that up to an additional 3 million children in 26 EU countries<sup>2</sup> were living in conditions equivalent to relative income poverty<sup>3</sup> – an increase of 3.9 percentage points from 19.5 per cent over an 18-month period.
- The crisis had also significantly worsened the situation of over 15 million children in the EU who were already living in income poverty.
- Government actions, including cash benefits for families, appear to have been partially effective in reducing the burden of food and energy inflation.
- These responses, however, have not been as fast or as wide-ranging as those to the COVID-19 pandemic. This means many families with children are foregoing meals or heating, which has long-term negative consequences for children as well as broader social costs.
- Many of the measures are only temporary in nature and more extensive, long-lasting action will be needed if the crisis continues.

## Key recommendations

This brief makes the following recommendations to policymakers in order to ensure they protect children's well-being and reach the EU target to lift at least 5 million children out of poverty by 2030:

- Expand child cash benefits to cover the needs of families living in poverty, ensuring such benefits are adequate and increase in line with inflation.
- Implement the EU Child Guarantee recommendation to provide, for children in need, at least one healthy, free school meal each day and effective access to healthy nutrition.
- In the immediate future, over the summer months, provide services and food to children when schools are closed in order to prevent 'holiday hunger'.
- Provide cheap, monthly, public-transport tickets for all and greater access to indoor public spaces for children and families, so they can save on energy costs at home.
- Ring-fence existing child and family benefits and services and ensure they are not subject to cuts as part of austerity measures.

## An overview of the cost-of-living crisis from early 2021

The current cost-of-living crisis in Europe originated in early 2021, at a time when many countries were relaxing COVID-19 restrictions (see *Figure 1*).

- Energy prices began increasing in about January 2021 and continued on an upward trajectory until about October 2022. While they have reduced somewhat since then, they remain high compared to pre-2021 levels.
- Food prices began increasing in late 2021 and have followed a steady upward trend.
- At the end of 2022, annual energy and food inflation rates were 25.5 per cent and 18.2 per cent respectively,<sup>4</sup> while hourly wages increased by only 2.8 per cent over the same period.<sup>5</sup>

## What does the cost-of-living crisis mean for children in the European Union?

For families and children in the EU, the cost-of-living crisis is being experienced primarily through higher prices for food and energy. In addition, increasing interest rates make borrowing less affordable, placing a growing strain on the sustainability of businesses, mortgages (thus, housing), loans and government debt.

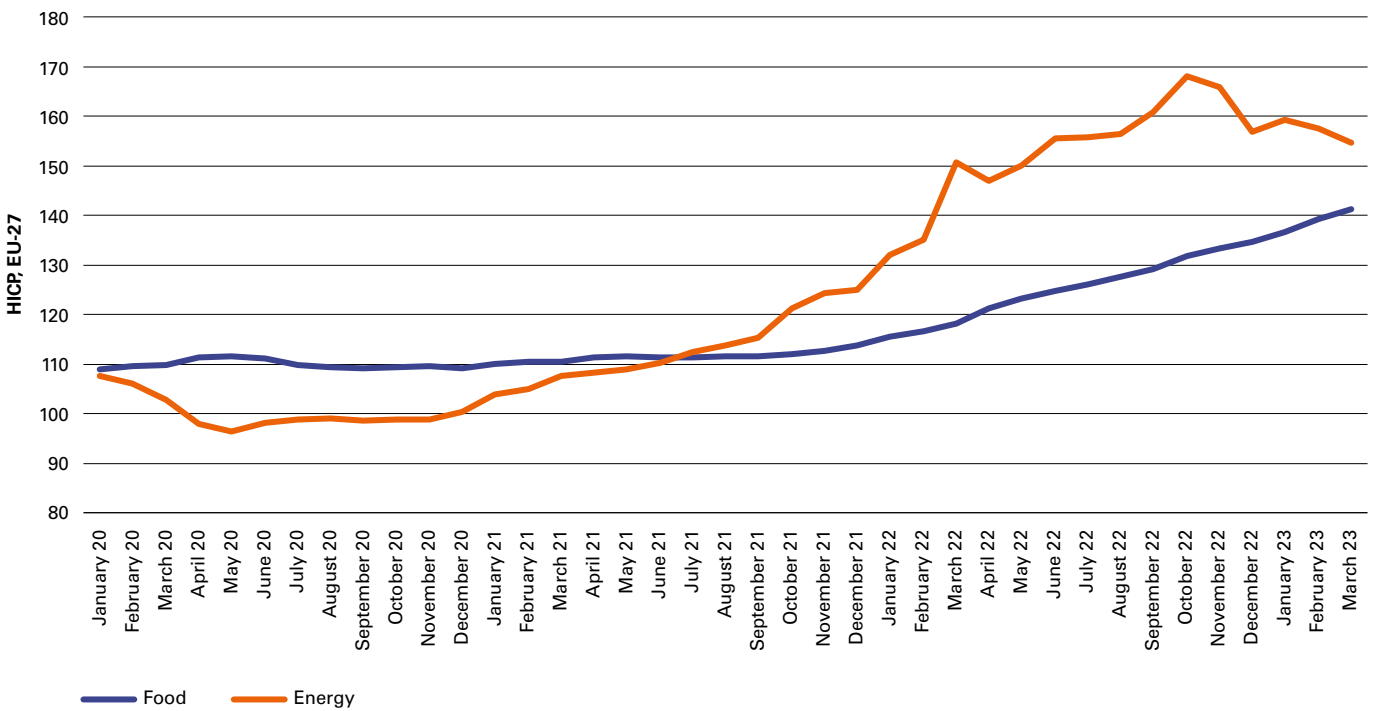
There is a long-standing need to address persistently high rates of child poverty in the EU, which the COVID-19 pandemic has accentuated. The recent records of EU-27 countries show how reducing child income poverty has been a difficult task.<sup>6</sup> Overall, between 2011 and 2021, the average child income poverty rate in the EU fluctuated between around 18 and 21 per cent. Moreover, the effectiveness of tax and transfer systems across the EU has been largely unchanged, fluctuating between average reductions in child poverty of 12 to 13 percentage points.<sup>7</sup>

Our estimates show that the current cost-of-living crisis will only worsen this situation. As with the global financial crisis of 2007/08, the current situation will mean increasing demand for benefits and services at a time when government expenditure is likely to be most constrained. In high-income countries, even before the current inflationary crisis, child poverty rates were predicted to rise and stay significantly above pre-COVID-19 levels for at least five years.<sup>8</sup>

## What have governments in the EU done to tackle the cost-of-living crisis?

In response to the crisis, national governments across the EU have taken a range of actions. Some of these – such as reductions in VAT, price caps and subsidies – affect the prices of household goods and services. These types of action are reflected in

Figure 1: The persistence of energy and food inflation in the EU since 2021



Source: Eurostat, 'HICP – monthly data (index)', Luxembourg, 2023, <[https://ec.europa.eu/eurostat/databrowser/view/PRC\\_HICP\\_MIDX\\_\\_custom\\_6118867/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/PRC_HICP_MIDX__custom_6118867/default/table?lang=en)>, accessed 23 May 2023.

Note: HICP is the Harmonised Index of Consumer Prices. Reference year 2015 = 100.

the calculation of inflation and are therefore already taken into account in our estimates, meaning that, in the analysis, the projected level of additional hardship without government actions may be an underestimation. Other government actions include one-off or recurring cash transfers to individual households – some on a universal basis and others on a targeted basis.

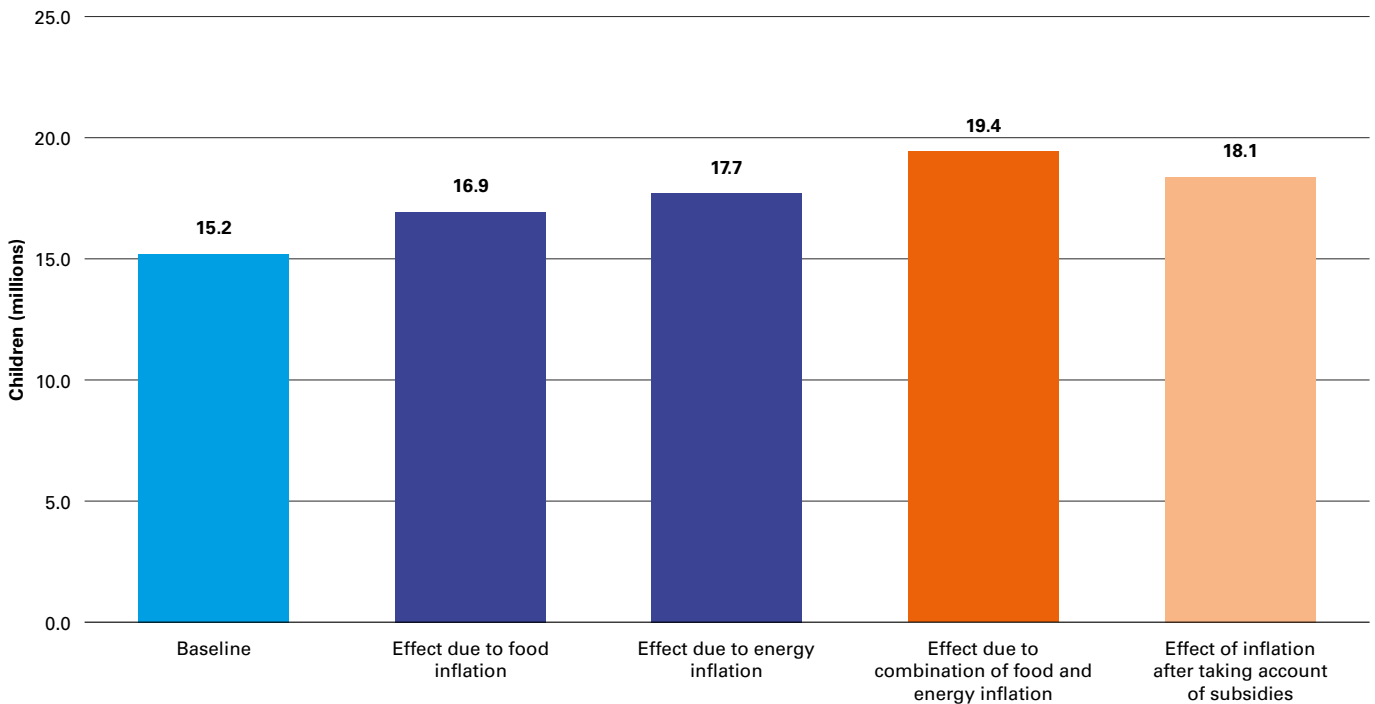
### The analysis presented in this brief

This brief uses data from national sources, Eurostat, the European Survey of Income and Living Conditions (EUSILC)<sup>9</sup> and other European data sources to analyse how price inflation for food and energy may be affecting the living standards of families with children in the EU, as the cost of basic necessities rises and incomes do not keep pace. It takes into account government energy subsidies and other relief measures at the household level and data on wage inflation.

The analysis is important because one of the headline poverty measures used in the EU is based solely on household income. This does not capture the effect of high inflation on household living standards. By taking into account these price increases, as well as government actions, this brief better represents the day-to-day reality faced by families with children in the EU.

The aim of this analysis is to help policymakers *effectively* tackle a child poverty crisis by recognising that existing child income poverty measures, based on disposable income, cannot capture these unique pressures on family living standards. The analysis can inform child policy decisions at a time of impending risk of austerity by providing up-to-date estimates of the number of children living in households in poverty in real terms (i.e., taking account not only of income but also of sharply increasing prices) and evidence-informed guidance on what works to protect children in poverty.

Figure 2: The potential impact of the cost-of-living crisis up to December 2022



Source: Authors' calculations based on analysis of data as described in the Appendix.

In low-income households with limited savings, disposable income (after taxes and transfers) is the main resource available to families to achieve basic living standards and to invest in efforts to help children access their rights and promote their development. When more disposable income is taken up meeting the cost of necessities, less is available for addressing children's other needs. Although efforts to make savings, such as substituting basic food items, eating less, heating less or wearing extra layers of clothes, may help mitigate the increases in costs, these efforts require changes in behaviour that need time, information and agency in order to be effective. Furthermore, without suitable national public policy efforts (e.g., benefits, tax reforms and subsidies) to help households, governments that advise people to reduce their costs put the burden of enduring the crisis on those least able to do so.

Further details of the analytical methods used are provide in the Appendix.

### The estimated impacts of the cost-of-living crisis on the living conditions of children in the EU

Figure 2 presents a summary of numerical estimates based on our analysis. The baseline sample includes just over 15.2 million children living in relative income poverty.

It is estimated that, without government cash transfers to families, by the end of 2022:

- Food-price inflation alone would have meant that around 1.7 million children would have been living in conditions of poverty (i.e., in real terms, equivalent to the baseline relative income poverty rate).
- Energy-price inflation would have had a bigger impact, increasing the number of children in poverty by around 2.4 million.
- The combined effect of food and energy prices would have led to a total of 4.2 million children living in conditions of poverty.

Government cash transfers to families have mitigated this potential situation, but we still estimate that, over an 18-month period, the additional number of children in 26 EU countries who are facing living conditions equivalent to income poverty is around 2.8 million – or allowing for some margin of error in our estimates, between 2.5 and 3 million children.

## Helping children and families in the future

In summary, the analysis estimates that, even acknowledging the partial success of government actions, an additional 2.5 to 3 million children were living in households in poverty, in real terms, during an 18-month period to the end of 2022.

In the aftermath of the global financial crisis, which began at the end of 2007, child poverty rates have decreased only slightly. Indeed, child poverty continued to decrease only slightly from 2011 to 2021. The cost-of-living crisis described in this brief arrived in the midst of the COVID-19 pandemic. However, this financial crisis has not been met with the same support for children and families that the response to the COVID-19 pandemic inspired. That said, direct help for families during the pandemic was small in comparison to the assistance provided to businesses.<sup>10</sup>

Despite the slow progress in child income poverty reduction in most EU countries, the post-tax and transfer poverty rates show the meaningful anti-poverty effects of child cash transfers.<sup>11</sup> Efforts to increase the coverage and adequacy of existing child and family benefits will reduce income poverty, alongside additional support to meet specific needs for parents with infants, poorer families, disabled children, marginalized groups, parents with weak labour market attachment or living in in-work poverty, and intergenerational or split-family households.

In addition to coverage, adequacy and categorical targeting (e.g., by family type or social demographics), policy design is important for attaining poverty reduction and – fundamental to achieving equity for children – supporting the most at risk. Indeed, global evidence from systematic reviews of what works in supporting children and families through economic crises clearly shows that direct-to-family, social-assistance cash benefits are most effective for supporting family incomes, children's education and health, and the work status of parents. In addition, family social services also have positive effects on children's health and education outcomes.<sup>12</sup>

To protect children's health, education and futures during the cost-of-living crisis outlined in this brief, governments and decision makers are urged to:

- Build on the evidence of 'what works' in supporting children and families through economic crises by prioritizing direct-to-family, social-assistance cash benefits and strengthening family-focused social services.
- Make coverage of family cash benefits universal or increase coverage to include households that are above but near the poverty line, where this is not already the case. As necessary, expand child cash benefits to cover the needs of large, poor and near-poor families – ensuring they are adequate today and in the future – through index-linking them to consumer prices (or, in the case of countries with minimum income guarantees and minimum wages, also increasing these in line with inflation) and adjusting them regularly (monthly). This will help families to keep up with rising food and energy costs.
- Incorporate means-testing of cash benefits into existing income support schemes for the general population (e.g., unemployment benefits). Such adaptations can outlive the present crisis, building resilience for future crises.
- Increase the provision of free school meals, food subsidies and childcare food subsidies through methods that do not stigmatize the children who receive them. At a time of increased risk of food poverty, public provisions cost-effectively reduce this risk and promote continued school attendance for children who might leave school early for work or who are already marginalized. These actions should include implementing the EU Child Guarantee recommendation that all children in need should have access to a daily, free, healthy meal at school. In addition to expanding food subsidies, providing subsidies for school and preschool supplies and equipment will also help families meet the cost of education.
- Take action over the summer months to prevent 'holiday hunger' among children when schools are closed. Measures could be adapted from those taken by some countries during the COVID-19 pandemic, such as keeping school premises open to provide food and activities.<sup>13</sup>

- Promote greater use of the public transportation system (e.g., by providing cheap monthly tickets for local buses and trains) and provide more opportunities for children and families to access indoor public spaces (e.g., afterschool clubs, family centres, libraries and museums) so they can save on energy costs at home.
- Implement closer case management for families in touch with social services, including families that: live in income poverty; include children with disabilities (such as children who have home care of specific dietary needs); and include children with mental and physical health needs. Manage the spillover of increased family stresses so that children are not disproportionately affected by the crisis.
- Seek to avoid austerity or fiscal consolidation in the area of child and family policies. Child income poverty is costly for children today and for current and future societies. The

adoption of austerity policies following the global financial crisis of 2008 had severe ramifications for children, including detrimental impacts on childcare and parental caregiving. Some EU countries lost a decade or more of progress in living standards.

- Use existing forums in the EU, such as the relevant European Parliament committees or the European Commission directorates and taskforces, to build collaborations in research, policy and practice across countries to yield greater results for children. Building on the consensus for action that drives the European Child Guarantee would be a useful starting point.

Through the above measures, governments can minimize the impacts of the current crisis on children and ensure that EU countries remain focused on the target to lift at least 5 million children out of poverty by 2030.

## Appendix

### 1. How we estimated increases in the rates and numbers of children living in income-poor conditions

This study estimates changes in child income poverty related to food-price and energy-price inflation *after* imputing wage inflation and cash benefits to households in support of rising energy costs, by country, and by using relative income poverty measures.

Relative income poverty is defined as living in a household with an income below 60 per cent of the median equivalized household income in the population, using the modified Organisation for Economic Co-operation and Development (OECD) equivalization method. This method is the main child income poverty measure in the EU. Child poverty rates are calculated as the number of children (aged 0–17 years inclusive) in poverty divided by the number of children in the population.

The data reported in this brief compare estimates in changes to poverty rates against a baseline measure: child income poverty, as defined above, in 2019 (when food-consumption estimates are shown in the EUSILC). First, we compared the effects of food-price inflation, then, energy-price inflation – before and after cash benefits to households in support of rising energy costs – and finally, child income poverty, after imputing both food and energy price inflation effects.

To estimate the potential impact of rising food and energy costs on child poverty, the spending levels of food and energy at the household level have to be adjusted based on price and consumption levels. Wage inflation and cash benefits received were also imputed to account for increases in earned income and government direct-to-families support. Subsidies to businesses for price controls are accounted for in inflation rates, as are VAT reductions and other measures that reduce prices paid by consumers. We used data from various sources, with the microdata from the 2020 EUSILC being the main source.

EUSILC is the survey used to calculate the baseline income poverty rate at the individual child level and to estimate increases in food costs, which are deducted from disposable income at the household level. To impute the increase in energy costs for

households in the EUSILC, we used data from the Eurostat Household Budget Survey, which presents the aggregate structure of consumption expenditure by income quintile. This allows for estimates of the increase in energy costs for different income groups in each country. Food and energy prices have been adjusted for inflation using the Eurostat Harmonised Indices of Consumer Prices, which is a reliable and widely used measure of inflation. Additionally, the OECD’s average annual wages data were used to adjust wage levels.

To simulate the post-inflation scenario on which our model relies, we calculated the following key parameters at country level: the share of consumption expenditure on food and energy, the changes in food and energy prices between June 2021 and December 2022, the changes in wage levels during this period and the main subsidies (one-off or perpetual social-assistance and social-insurance transfers) and other monetary transfers implemented by governments to support families in response to inflation. To ensure greater precision in the model’s ability to isolate the impact of price shocks, we employed autoregressive models to remove trends from prices. To minimize the high volatility in wage growth indicators caused by the pandemic and subsequent government labour-market responses,<sup>14</sup> we opted to adjust wages by considering the average year-over-year percentage change at constant prices between 2010 and 2019.

The analysis focuses on changes in the relative child income poverty risk after adjusting for wage changes and subsidies in each country. To calculate poverty risk, we used the at-risk-of-poverty rate indicator, which is defined as the proportion of children living in households with an income below 60 per cent of the median equivalized household income in the population. We can represent the change in poverty risk as follows:

$$\Delta AROP = \frac{\sum_{i=1}^q \rho(y_i^l; z^l)}{n} - \frac{\sum_{i=1}^q \rho(y_i; z)}{n}$$

where, for the individual  $i$ ,  $z$  is the poverty line pre-inflation,  $z^l$  is the poverty line post-inflation,  $y_i$  is the equivalized household income pre-inflation,  $y_i^l$  is the equivalized household income after imputing wage inflation and subsidy transfers,  $q$  is the number

of children in poverty pre-inflation,  $q'$  is the number of children in 'effective poverty' post-inflation and  $n$  is the total number of individuals. Given the poverty line ( $z$ ) and the equivalized household income ( $y$ ), the function  $\rho()$  returns the value of 0 (non-poor) when  $y > z$  and the value of 1 (poor) when  $y \leq z$ .

## 2. How to interpret the effective poverty estimates

The results in this report are estimates based on increases in the cost-of-living over a period of 18 months in a sample of nationally representative households in each EU country in 2020. Families who are homeless or in temporary accommodation and recent refugee families, who also face increases in food and energy prices, are not included in these results. Two points are relevant here: (1) Income poverty estimates in all cases are likely to be underestimated given that vulnerable families are more likely to be missing from the sample, and (2) in line with Article 2 of the Convention of the Rights of the Child, any response – national or international – to mitigate these effects on children needs to include all children and their families.

The microsimulation model has certain limitations. It is a static representation of the potential impact of rising food and energy costs on child poverty risk. Thus, it does not capture potential consumption substitution effects or other changes in consumer behaviour that may arise as a result of changing prices. We interpret

these estimations as having an 'overnight' distributional effect: We assume that households consume the same quantities of food and energy regardless of higher prices. Moreover, the study exclusively focuses on food and energy price increases, neglecting other price increases or further macroeconomic impacts. Additionally, there is no information on non-food expenditure in the EUSILC, so we cannot neutralize other idiosyncratic price movements.

To gather information on energy consumption, we relied on the aggregated Eurostat Household Budget Survey database because isolated data on energy consumption are not available in the EUSILC. These data present the structure of consumption expenditure by income quintile. Therefore, the simulations assign the same cost increase for people of the same income quintile, which can introduce distortions, especially for those in the bottom and top areas of the distribution of each quintile.

Finally, it should be noted that the subsidy simulations are based on the main responses from national governments. We did not include local or regional level responses. Additionally, several of the simulations relied on proxies for subgroups, such as minimum guaranteed beneficiaries, and we did not account for certain benefits that were impractical to calculate, such as those based on household-level energy consumption. Given these limitations, the effective child income poverty estimates after cost-of-living cash transfers can be considered as an upper bound.



## Endnotes

- 1 In this brief, we use the term 'in poverty' to describe the situation of households whose purchasing power has fallen below the previous income poverty threshold in real terms due to the sharp increase in prices.
- 2 Estimates include all EU countries except Hungary, for which the analysis is still subject to validation and robustness tests.
- 3 Here we refer to relative income poverty, which is the main EU income poverty measure, and is defined as living in a household with an income below 60 per cent of the median equalized household income in the population, using the modified Organisation for Economic Co-operation and Development equalization method.
- 4 Eurostat, 'HICP – monthly data (annual rate of change)', Luxembourg, 2023, <[https://ec.europa.eu/eurostat/databrowser/view/PRC\\_HICP\\_MANR\\_custom\\_6221171/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/PRC_HICP_MANR_custom_6221171/default/table?lang=en)>, accessed 23 May 2023.
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- 7 Ibid.
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- 13 Guio, Anne-Catherine, Frazer, Hugh and Marlier, Eric, eds., 'Study on the Economic Implementing Framework of a Possible EU Child Guarantee Scheme Including Its Financial Foundation', Final Report, European Commission, Brussels, 2021, p. 42.
- 14 Bodnár, Katalin, et al., 'Wage Developments and Their Determinants since the Start of the Pandemic', Economic Bulletin Articles, vol. 8, European Central Bank, Frankfurt am Main, 2023.

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