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## Cost-of-living Crisis Update:

# Diverging Food and Energy Prices, Diverging Policy Responses

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The first months of 2022 witnessed an accelerated spike in the international prices of food and energy as a result of the ripple effects of the war in Ukraine. In the following months, from May to September 2022, food prices dropped while natural gas and coal prices continued to surge. At present, low- and middle-income countries are primarily facing a food crisis, whereas high-income countries are predominantly challenged by an energy crisis. Policy responses have also diverged: Subsidies account for about 40 percent of responses, while cash and in-kind transfers accrue 39 percent. There are vast inequalities and inefficiencies at play: Some 53 percent of transfers and subsidies are spent in high-income countries, whereas low-income countries account for only 1 percent of the policy response. On average, for every US$1,000 spent per month, a universal subsidy would prevent one person from falling into poverty, but this number increases to 2.7 if the same amount is spent on a targeted cash transfer scheme. The cost-of-living crisis has not ended—in fact, it is further exacerbating other crises.

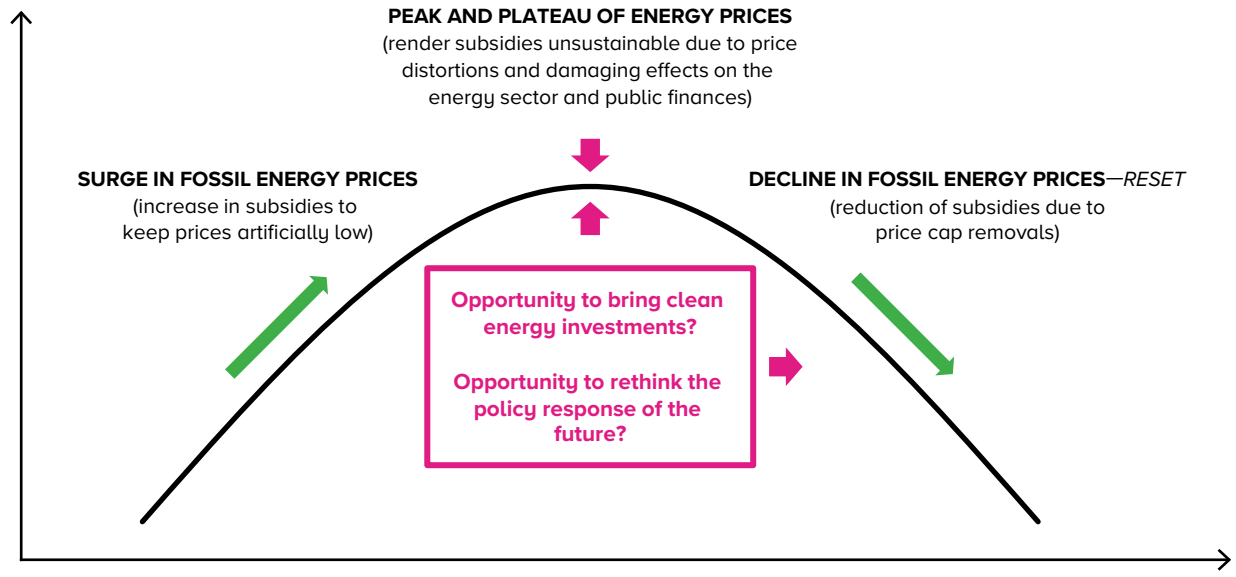
The ripple effects of the war in Ukraine have significantly disrupted energy and food markets and have accelerated the spike in the international prices of key commodities—which were already on the rise in the last quarter of 2021, driven by an increasing demand during the post-pandemic recovery coupled with a relatively constrained supply. In our previous report, *Addressing the cost-of-living crisis in developing countries: Poverty and vulnerability projections and policy responses*, we documented the potential short-term effects of the war-induced soaring food and energy prices on household welfare: Compared with a scenario in which the war did not occur, and using the food and energy inflation levels recorded between October 2021 and April 2022, the number of people falling into extreme poverty in 2022 was projected at 51.6 million globally, and up to 71 million people when using higher poverty lines—while also worsening the living conditions of the existing poor population.[2] More recent estimates suggest that at least 70 million people are expected to be living in

extreme poverty this year, in comparison to what was expected had the pandemic, war, food and energy inflation and climate-related shocks not occurred.[3]

As shown below, for the period of inflation considered in our previous report, food and energy inflation accounted, respectively, for about 40 and 18 percent of overall inflation globally. Since then, however, the relative contribution of food inflation has significantly declined, whereas the contribution of energy inflation has moved in the opposite direction. In this environment, where energy inflation is increasingly exerting pressure on households' welfare, we expect an inverted U policy response pathway in which new and existing subsidies first rise during the prices spike, followed by a gradual lifting of subsidies up to their pre-crisis levels, either because they are rendered fiscally unsustainable and distortionary or simply because energy prices have declined and thus the price caps have been removed (Figure 1).

***The current context may present an opportunity for a renewed reset in the expected policy response trajectory—one that considers the entwined climate emergency and social protection challenges.***

**Figure 1: Soaring energy prices as an opportunity for green transitions and the future of social protection**




*Source: Authors' own elaboration.*

This is the expected pathway, partially based on previous experiences, but not least because the fiscal space for bolder forms of support has been exhausted since the outset of the pandemic. Looking ahead, a policy *reset* should not imply the relatively sequenced inverted U described above. Rather, the ongoing crisis provides a unique opportunity to address entwined climate-emergency and social-protection challenges—e.g., a reset where subsidies are progressively phased out, freed resources are used to strengthen and build bolder systems of protection and investments are attracted and made in clean energy.

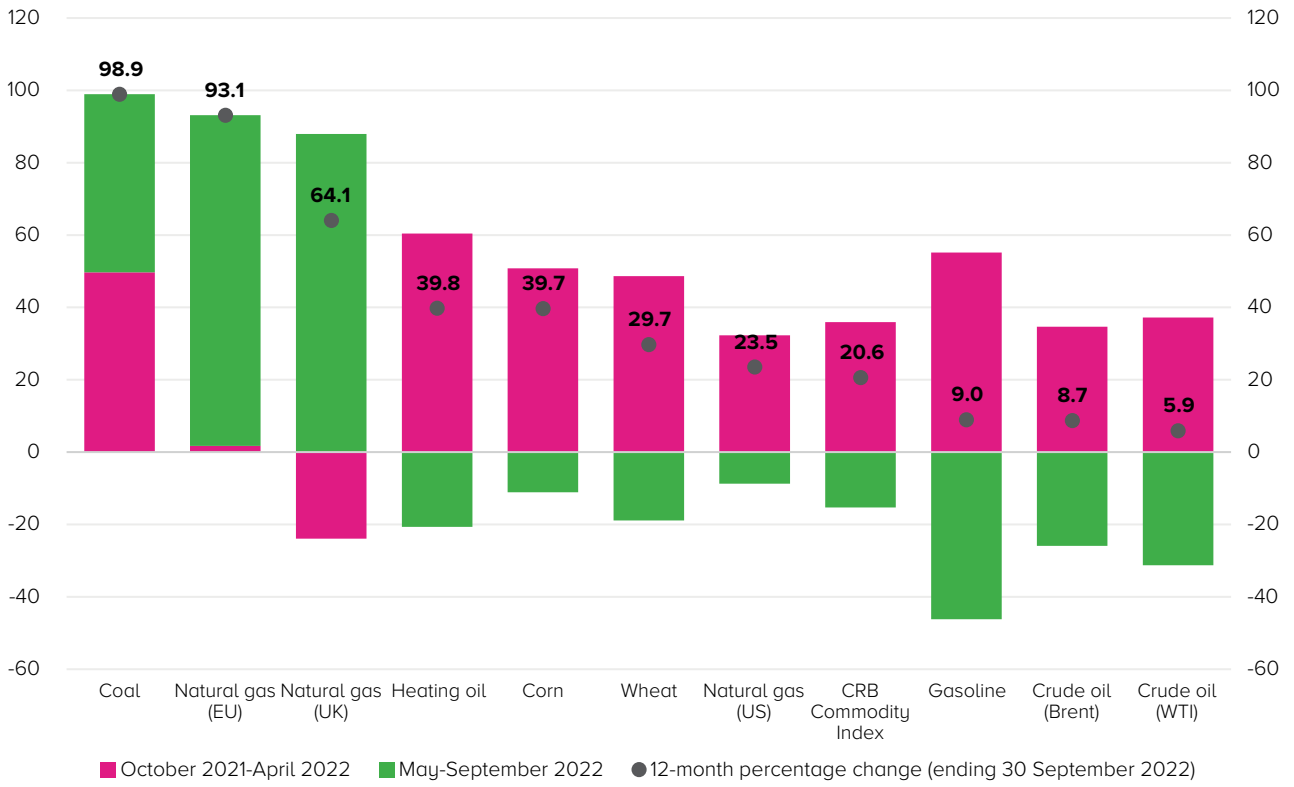
## (Still) Soaring Prices…

International prices of key commodities soared over the period considered in our previous report (October 2021–April 2022)—prices of corn and wheat, for instance, increased by almost 50 percent; those of crude oil did so by about 35 percent, while for its two main refined products, gasoline and heating oil, prices rose by more than 55 percent (Figure 2). Although most prices have followed a downward trajectory since then (steeper in the case of crude oil and gasoline), the increase in prices over the 12-month period ending on 30 September 2022 is still significant—e.g., the Thomson Reuters commodity index for 19 key commodities is still 20.6 percent higher. Moreover, European and UK natural gas prices have ballooned since May 2022, pushed by the war

in Ukraine due to Russia's position as the world's second-largest exporter of this commodity. This, in turn, has inflated the price of coal, triggered by the demand for coal as a substitute for high-priced natural gas.

***Although most prices of key commodities have followed a moderately downward trajectory since May 2022, coal prices, as well as European and UK natural gas prices, have ballooned—pushed by the war in Ukraine.***

**Figure 2: Total percentage price increases of selected commodities over the 12-month period ending on 30 September 2022 (figures at the top of each dot) and their breakdown by subperiods**




*Source: Authors' own elaboration based on daily energy and food prices from Trading Economics.*
*Notes: The CRB Commodity Index is the Thomson Reuters index comprising 19 commodities: aluminum, cocoa, coffee, copper, corn, cotton, crude oil, gold, heating oil, lean hogs, live cattle, natural gas, nickel, orange juice, gasoline, silver, soybeans, sugar and wheat. In the index, energy commodities are weighted 39 percent, while food and agriculture are weighted 41 percent.*

## … and Fossil-fuel Subsidies

Higher energy prices—first for oil, following the post-pandemic rebound of the global economy, then for natural gas due to war-induced supply disruptions and for coal to mitigate the latter—have pushed fossil-fuel subsidies (FFS) upwards. Defined as public resources that support the production or consumption of fossil fuels through direct or induced transfers, FFS amounted to US$697 billion in 2021, according to new data from OECD and IEA for 51 major economies, a figure that is similar to the levels recorded a decade ago and almost twice the amount for 2020. This rebound has been partially influenced by investments to boost the energy sector, which amounted to $1 trillion from the start of the pandemic to the end of 2021, with more than half of it allocated to fossil fuel energy.

FFS are expected to increase even more in 2022 as prices remain high—chiefly those of coal and gas (Figure 2), which are responsible for 60 percent of the global electricity generation (and for half of total energy production globally if we also consider transport and heating)—while governments around the world have introduced or expanded a number of energy support policies to shield households and firms, including blanket subsidies, carbon tax reductions or exemptions and fiscal transfers to energy companies. For reference, based on country-level data from the IMF's Energy Subsidy Template[4] and information on prices up to April 2022, our estimates suggest that FFS could reach at least $605 billion this year. However, this is clearly a lower-bound estimate, to say the least,

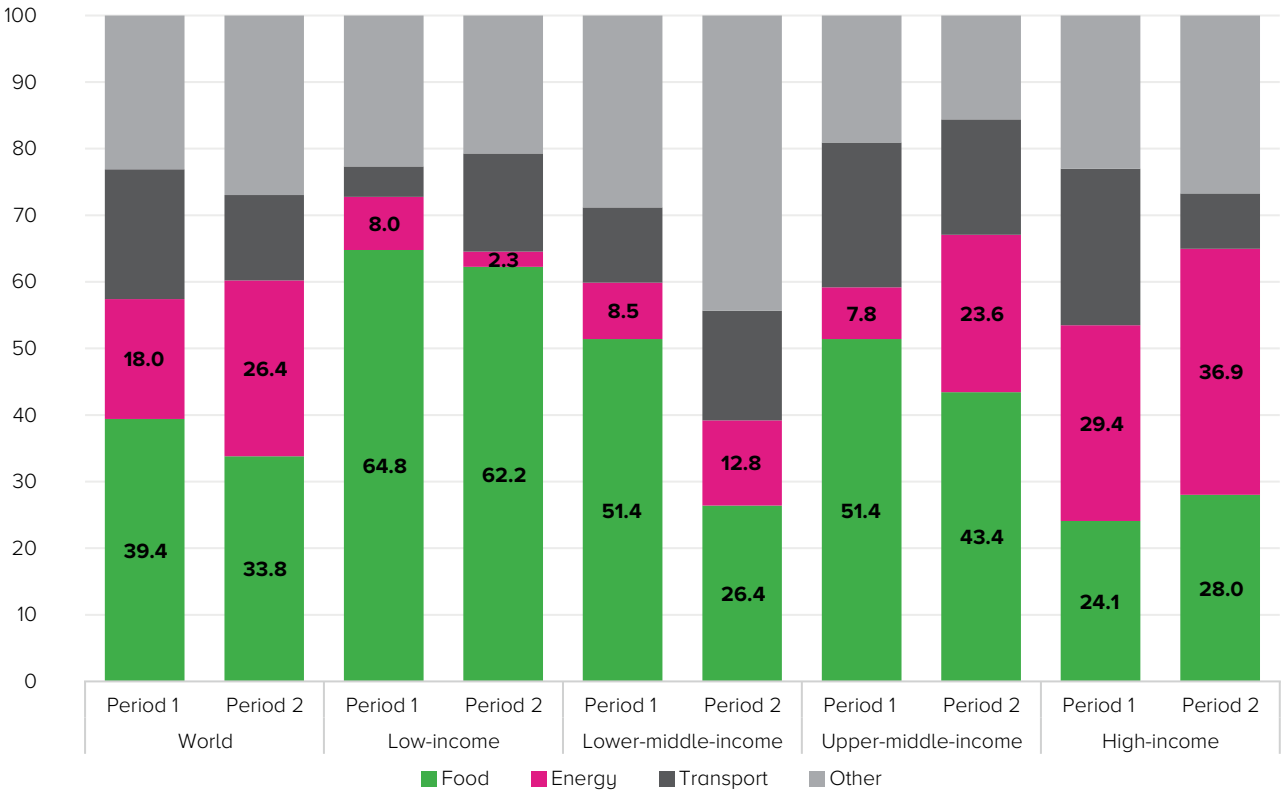
given not only that prices have changed since April but also because adjustments to electricity subsidies have been omitted due to a lack of robust data—a non-trivial assumption as these subsidies could account for up to 40 percent of global FFS. The suggestion, therefore, is that the 2022 FFS amount could be way above the previous figures.

## Pass-through to National Prices

How have soaring international prices of key commodities affected the trajectories of national inflation? To explore this, we exploit country-level data on monthly consumer price indices (CPI) and CPI components by weight from the IMF's macroeconomic and financial database[5]. As noted above, during the period October 2021–April 2022 covered in our previous report (Period 1), almost 40 and 18 percent of overall inflation were accounted for by food and energy inflation, respectively, whereas the remaining share of inflation stemmed from price increases in the 10 other components considered in the CPI—including 19.5 percent from transport inflation (Figure 3). Over May–September 2022 (Period 2), the weight of food inflation, though still high and significant, lost some ground globally in line with the declining trend in international prices of key food commodities—as has the weight of transport inflation, which is likely explained by the drop of oil prices since May. The weight of energy inflation, however, increased at a proportionally higher rate than the rates of decline in the former components, and it currently explains more than a quarter of total inflation.

***The contribution of energy and food inflation to total inflation globally has changed since May 2022, with the weight of energy inflation currently explaining more than a quarter of total inflation and thus increasingly exerting more pressure on households' welfare.***

**Figure 3: Percentage contributions of inflation in food, energy, transport and other components of the CPI to overall inflation (global and income group averages from country-level contributions)**




*Source: Authors' own elaboration based on CPI data from the IMF's macroeconomic and financial database. Notes: Period 1 and Period 2 refer, respectively, to the inflation periods October 2021–April 2022 and May–September 2022. The food component also includes non-alcoholic beverages; the energy component includes housing, water, electricity, gas and other fuels; other CPI components include alcoholic beverages; tobacco and narcotics; clothing and footwear; furnishings, household equipment and routine household maintenance; health; communication; recreation and culture; education; restaurants and hotels; and miscellaneous goods and services.*

What is the implication of these results for households' welfare? Poor and near-poor households were hit hardest over October 2021–April 2022 by soaring food prices, which are responsible for most of the documented increases in poverty—mainly due to poorer households' relatively higher food budget shares vis-à-vis richer counterparts. While this is still the case as food prices remain high, the welfare (and poverty-increasing) effect of soaring coal and gas prices, e.g., through the consumption of residential gas and electricity, has become more salient since May 2022.

This increasing (decreasing) contribution of energy (food) inflation to total national inflation, however, is not present across all countries. Figure 3 shows that the increasing weight of energy inflation is mainly a feature of middle-income countries (where the weight of food inflation has reduced significantly) and high-income countries (where the weight of food inflation continues gaining track), which concentrate the global demand for gas. In low-income countries, by contrast, the contribution of food inflation to total inflation has remained virtually unchanged, while that of energy inflation has declined, possibly driven by the drop in oil prices.

# Policy Response

The reaction of national governments since early 2022 to protect households against these inflationary pressures has been non-trivial: About 160 countries have implemented or announced a total of 609 policy measures by September 2022.[6] These measures involve fuel and energy fee subsidies (about a quarter of total measures), food and fertilizer subsidies (12 percent), social assistance in the form of cash transfers (19 percent, or 23 percent if in-kind transfers are included), tax- and trade-related measures (32 percent) and social insurance and labour market programmes (8 percent).

While data on spending is available for only a third of the measures across 90 countries, amounting to $328.2 billion (equivalent to an average of less than 0.8 percent of GDP), three findings are worth highlighting (Table 1). First, subsidies and transfers are the most relevant policies in terms of spending: Subsidies accrue more than 40 percent of total spending, while cash and in-kind transfers account for an additional 39 percent. Second, there is clear heterogeneity in countries' capacity to respond. The lion's share of the spending effort has been accounted for by high-income countries (almost 53 percent), while spending by low-income countries is just above 1 percent of the total. Finally, the cross-country heterogeneity is evident not only in countries' capacity to respond but also in their preferred policy option. High-income countries are responsible for almost 69 percent of the total spending in transfers, whereas low- and lower-middle-income countries accrue less than 9 percent. The latter two groups of countries, however, are responsible for almost half of the total spending in subsidies.

***There is a staggering heterogeneity in countries' capacity to respond to price shocks and their preferred policy options to do so.***

**Table 1: Percentage distribution of total spending in policy responses to inflation ($328.2 billion invested through 196 measures across 90 countries) across both income groups (Panel a) and broad categories of spending (Panel b)**

| | Categories of spending | | | |
|---|---|---|---|---|
| | *a. Column distribution across income groups* | | | |
| **Income groups** | Total spending | Spending in transfers | Spending in subsidies | Other spending |
| Low-income | **1.2** | 2.6 | 0.5 | 0.0 |
| Lower-middle-income | **25.5** | 6.1 | 47.7 | 17.9 |
| Upper-middle-income | **20.7** | 22.7 | 22.5 | 13.3 |
| High-income | **52.7** | 68.7 | 29.3 | 68.7 |
| Total | **100.0** | **100.0** | **100.0** | **100.0** |
| | *b. Row distribution across categories of spending* | | | |
| Total spending | **100.0** | 38.6 | 40.6 | 20.8 |

*Source: Authors' own elaboration based on Gentilini et al. (2022). Notes: Other spending includes tax- and trade-related measures, social insurance and labour market programmes.*

The fact that the recorded cumulative spending in either transfers or subsidies in 2022 is roughly the same (close to $130 billion each) permits a back-of-the-envelope calculation of the potential effectiveness of each policy option to mitigate inflation-induced poverty—at least in the short term. In our previous report, we compared the poverty-mitigation potential of two policies with similar costs across 127 developing countries: a universal subsidy on energy household consumption and a targeted cash transfer with individual delivery. The results, using the highest international poverty line (currently at $6.85 per day per person, 2017 PPP[7]), suggested that, on average, for every $1,000 spent per month, the universal subsidy would prevent one person from falling into poverty. However, this number would increase to 2.7 if the same amount were spent through the targeted cash transfer scheme. Using these results and ignoring both the targeting of actual transfers and that actual subsidies vary across the population depending on countries' inflation and households' income and budget shares, in any given month, the total spending on transfers could prevent roughly 37 million people from falling into poverty in the short term, which is almost thrice the size of the poverty-mitigation potential of subsidies (14 million people).

## Policy Choices for a Renewed Reset

Soaring energy prices impose non-trivial challenges to policymakers: protecting poor and vulnerable populations from reduced purchasing power and risks of impoverishment while not losing sight of the climate emergency. Additionally, these challenges emerge in a context of limited fiscal space and increased risk of a debt crisis in developing countries (as documented in a recent UNDP report[8]). There are several policy options to protect people's livelihoods against increased energy inflation without unravelling energy transitions in the future:

- *Encouraged*: Micro-mitigation—i.e., targeted cash relief, either one-off or time-bound transfers based on households' budget shares. *Discouraged*: Broad-based subsidies, which have been common practice this year to ensure low fossil-fuel energy prices for consumers despite likely not being the most effective poverty-mitigation tool. Additionally, such subsidies are exacerbating both inequality, given their pro-rich bias, and the climate emergency through (1) diverted fiscal resources that could otherwise be allocated to mitigation and adaptation policies and (2) higher carbon emissions from induced consumption via artificially low prices.
- *Encouraged*: Incentivise lower energy demand in the short run but ramp up renewable energy supply simultaneously—public-private partnerships and regulatory steps to attract investment in solar, wind, thermal, green hydrogen and other renewable energy sources during the price spikes and plateau. *Discouraged*: Energy policies that lock in further coal and fossil-fuel dependency, making them difficult to repeal and reset once the price spike is gone.
- *Encouraged*: Macro-mitigation—i.e., the lack of liquidity from markets (with high emerging market sovereign bond spreads) and government (with tight fiscal space) means that many developing economies will rely, in the short run, on swap lines, increased access to multilateral development banks' (MDBs') concessional lending and short-term debt relief, including revisiting debt service moratoria. *Discouraged*: Adding to unsustainable external debt, crowding out social spending to pay for fossil fuel subsidies.

The cost-of-living crisis is not over. It is, in fact, exacerbating other crises, merging into financial, fiscal and economic growth downturns on the horizon. With such a diverging policy response, the key is to *choose policy trajectories* that get countries back on track to implement comprehensive energy transitions—but also protect poor and vulnerable households along the way.

# Endnotes

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2 Gray Molina, G., M. Montoya-Aguirre, and E. Ortiz-Juarez (2022). *Addressing the Cost-of-living Crisis in Developing Countries: Poverty and Vulnerability Projections and Policy Responses.* Background Report for the High-level Political Forum on Sustainable Development (HLPF) 2022. New York, NY: United Nations Development Programme.

3 World Bank (2022). *Poverty and Shared Prosperity 2022: Correcting Course*. Washington, DC: World Bank.

4 Parry, I., S. Black, and N. Vernon (2021). *Still Not Getting Energy Prices Right: A Global and Country Update of Fossil Fuel Subsidies*. IMF Working Paper No. 2021/236. Washington, DC.: International Monetary Fund.

5 We consider the consumer price indices and components for 77 countries for which there is available information over the period under analysis.

6 Gentilini, U., M. Almenfi, H. TMM Iyengar, Y. Okamura, E. R. Urteaga, G. Valleriani, J. Vulembera Muhindo, and S. Aziz (2022). *Tracking Global Social Protection Responses to Price Shocks*. Living Paper v. 3 (23 September 2022). Washington, DC: The World Bank.

7 See World Bank (2022). *Poverty and Shared Prosperity 2022: Correcting Course*. Washington, DC: World Bank.

8 Jensen, L. (2022). *Avoiding 'Too Little Too Late' on International Debt Relief*. Development Future Series Working Papers. New York, NY: United Nations Development Programme.

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