

State of the Art

Understanding the Inflation and Social Policy Nexus

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The cost-of-living crisis that began in the aftermath of the COVID-19 crisis and the attempted Russian invasion of Ukraine has major implications for social policy. In advanced industrial countries, this is the most dramatic cost-of-living crisis since the mid-late 1970s and early 1980s. In this contribution, we explore the inflation and social policy nexus to identify the nature and sources of inflation, its redistributive and policy implications, and the specific nature of the current cost-of-living crisis compared to two other recent crises: the 2008 financial crisis and the COVID-19 pandemic. Focusing on advanced industrial countries and drawing on the available scholarship about these topics, we offer the background necessary to understand the challenges facing welfare states in times of dramatically high inflation. As a way to provide broad context to the present themed section, our discussion stresses the economic, social, and political dynamics shaping social policy adaptation to inflationary pressures.

Keywords: inflation, cost-of-living, crisis, COVID-19, social policy, welfare state.

Introduction

The cost-of-living crisis that began in the aftermath of the COVID-19 crisis and the attempted Russian invasion of Ukraine has major implications for social policy. In advanced industrial countries, this is the most dramatic cost-of-living crisis since the mid-late 1970s and early 1980s, when ‘stagflation’ (a combination of economic stagnation and high inflation) became a central policy puzzle (Blinder, 1979; Starke & Hooren, 2013: 53–91). In this contribution, we explore the inflation and social policy nexus to identify the nature and sources of inflation, its redistributive and policy implications and, finally, considering this crisis specifically, the nature of the inflationary shock that nations currently face and the types of social policy responses that have been drawn on to try to deal with it. The focus on advanced industrial countries by drawing on the available scholarship about these related topics, offers the necessary background to understand the current challenges facing welfare states in times of higher-than-average inflation. As a way to provide broad context to the substantive comparative articles featured in this themed

section of *Social Policy and Society*, our discussion stresses the economic, social, and political dynamics shaping social policy adaptation to inflationary pressures.

Inflation: measurement, sources, and policies

Ha et al. (2021) define 'inflation' as the 'sustained and broad-based increase in the overall price level' (Ha et al., 2021) of goods and services. Understood in this way, inflation is 'sustained, in the sense that price increases are not simply temporary fluctuations and is 'broad-based' in that such increases relate to the cost of living in a general sense rather than being limited to one or two goods or services only.

Inflation so conceived has an impact on the cost of living, which concerns the 'income required to achieve a given living standard' (Somerville, 2004). Governments have come to rely on some form of Consumer Price Index (CPI) to measure inflation. These types of indexes record changes in the price of an average basket of goods and services over time (Colgan & Callan, 2015). In order to determine the composition of this typical basket, statistical agencies look at expenditure data to identify the set of goods and services that are more commonly purchased by families, and also the relative weight of each type of good/service in the overall consumption of households (Eurostat, 2022).

While ubiquitous, this approach is not without limitations (Colgan & Callan, 2015).¹ First, it does not acknowledge the possibility that, if faced with a significant rise in prices on a given product, consumers might opt to replace that good for an alternative good – or for a cheaper option. Second, it assumes that high- and low-income households face the same prices for the same category of goods. In that sense, it provides a biased measurement of the changes in the cost of living faced by individuals and their families where actual consumption baskets diverge from those used in the calculation of inflation indices (see Somerville, 2004; Crawford & Smith, 2002; Lokshin et al., 2023). Other factors may also affect the validity of the CPI. During the energy crisis, it was found that inflation was overestimated in many countries because inflation barometers only consider the price of new energy contracts, as a function of market prices. That gave an overestimate of energy inflation because many households continued to enjoy lower prices linked to fixed contracts.

Another important aspect to bear in mind in the measurement of inflation is the existence of goods where prices are more volatile, such as food or energy. Acknowledging this, statistical agencies and policymaking institutions tend to produce both 'headline measures' of inflation, which cover all goods and services in a typical basket; and measures of 'core inflation', which exclude more volatile goods and can therefore provide a more solid estimate of how prices are evolving (Ha et al., 2021; Haubrich & Millington, 2014). Amongst other options, Clark (2001) identifies three popular ways of measuring core inflation: the CPI excluding food and energy, the trimmed mean (CPI), and the median CPI.

In order to understand how countries have responded to the ongoing cost-of-living crisis, we need to bear in mind that policymakers choices reflect either differences in understanding of what inflation is and where it comes from²; or cross-country differences in the way in which inflation is integrated to the design of the government in power's social and fiscal policies.

While this is not the place for an in-depth review of the different streams in the theory of inflation³, policymakers' understandings of inflation are structured around two critical issues. The first is whether inflation is perceived as driven by demand or supply-side factors (Shapiro, 2022). Demand-pull inflation is the result of an increased demand for goods that is not matched by the increase in the (aggregate) supply of such goods. In line with this, an increase in prices require the intervention of monetary authorities with the aim of reducing the supply of money in the economy (Kibritçioğlu, 2002). Cost-push inflation is driven by a steady increase in firms' costs, be it as a result of temporary economic shocks like currency devaluations or more structural processes such as changes in the productivity of a given sector (Kibritçioğlu, 2002).

The second issue concerns the perceived impact of labour market dynamics on the setting of prices in the overall economy, because the impact shapes policymakers preferences concerning the use of wage-moderation policies as a means to counteract the increase in prices. Much of the debate around this issue has evolved around the Phillips Curve. Originally developed by William Phillips (1958), the Phillips Curve suggests that there is a negative trade-off between inflation and unemployment, in the sense that higher inflation leads to lower unemployment (Abel *et al.*, 2020). Later developments, introduced by Friedman (1968) and Phelps (1970), have come to refine the terms under which this negative trade-off would occur. A particularly relevant refinement was the introduction of the notion of 'natural rate of unemployment',⁴ which acts as a threshold at which there is no negative trade-off between inflation and unemployment (Abel *et al.*, 2020).

Policy responses to rising inflation are influenced by assumptions about the nature and source of inflationary pressures but also by the degree to which welfare institutions are designed to automatically adjust to changes in prices, particularly in three key areas: the definition of wage policy, the upgrading of social security benefits and the taxation of individual/household incomes.

Acknowledging that inflation undermines the real value – and adequacy – of wages over time, governments and social partners have sought to introduce mechanisms within wage setting institutions to secure the adequacy of wages. However, looking specifically at Eurozone countries, Koester and Grapow (2021) show that only a minority of workers in the Eurozone benefit from some kind of direct wage-indexation mechanism. The most common formulas of wage-indexation are the automatic indexation of minimum wages to inflation, the use of inflation as a formal benchmark in wage negotiations, and the cost of social services. The transversal automatic indexation of private sector wages is but a minority practice. As Koester and Grapow (2021) also point out, the use of inflation as an indexation benchmark also varies across countries, with some using forward-looking measures of inflation, and others using backward-looking measures, while others use a combination of these two types of measures. In relation to social benefits, automatic indexation is especially common in the fields of old-age pensions (Whitehouse, 2009; Fernandez, 2012) and of social assistance (Wang & van Vliet, 2016), which should not conceal the fact that some countries decided to automatically index all their social benefits. In the absence of indexation, automatic or not, inflation will undermine the real value and thus adequacy of social security benefits (see Sutherland *et al.*, 2008; Paulus

et al., 2020), also implying a possibility of that more people will be at risk of living in poverty.

Another key issue to consider is that the rise in prices can impose important distortions in the taxation of individual/household incomes⁵, governments (particularly in advanced economies) have come to adopt measures for adjusting tax brackets to inflation – going all the way from partial to full adjustment, to the setting of triggering mechanisms by which tax brackets are adjusted if inflation exceeds a given level (see Peter et al., 2008; Immervoll, 2000).

The redistributive and social policy consequences of inflation

There is a full body of literature on the impact of inflation on the distribution of resources and economic development. This is in standard textbooks in economics (Acemoglu et al., 2019; Stiglitz & Rosengard, 2015). The literature identifies that, due to both a higher proportion of income spent on consumption as well as variation in consumption patterns, inflation has a higher impact on low-income groups (Jaravel, 2021). It is also commonly considered that younger people typically fare better vis-à-vis inflation than older people, who will have savings reduced due to inflation.

There will also be winners and losers due to changes in the level of unexpected inflation. The expected adjustment to inflation is included in most countries in the way wages, social benefits and tax brackets are adjusted to a certain extent. However, at the end of the day, the degree of impact of change in inflation is an empirical question depending on many interacting factors such as the differential impact of price increases across households and the mechanisms used to adapt wages, social benefits, the cost of services, and tax breaks (Sandmo, 1995). As inflation also influences the level of happiness and subjective wellbeing in a society (Glatz & Eder, 2020; Blanchflower et al., 2014), it is important to explore the societal and policy impact of sudden changes in inflation.

The effects of inflation can be different depending on existing policy legacies, especially how public income transfers, tax breaks, and the cost of services are regulated over time, including whether it is constantly done in the same way and using the same index. Thus, it requires a discussion of which index best captures the evolution of prices. The issue of the impact of indexation on social security benefits is not new (Weaver, 1988). As Kent Weaver (1988: 4) argues, in the United States, automatic indexation of Social Security benefits was enacted by Congress in the early 1970s, just before the major inflation crisis that materialised in the aftermath of the 1973 oil crisis. This policy ‘also takes away important [political] opportunities for policymakers’, as they can no longer claim credit for ad hoc benefit hikes. Yet, we can argue that, if automatic indexation lags behind prices or there is no automatic indexation at all, policymakers might pursue credit claiming strategies by raising social benefits to compensate for the negative effects of inflation. This logic is discussed in the contribution on Canada and the United States featured in this themed section.

Conversely, a possible argument in favour of using automatic indexation has been that this approach reduces the need for constant policy battles over how and to what degree governments should regularly increase benefit to compensate for the effects

Table 1. Development in consumer prices in the EU from August 2021 to August 2022

	All items	Food and non-alcoholic beverages	Housing, water, electricity, gas, and other fuels	Electricity, gas, and other fuels
EU	10,1	14,0	20,5	48,8

Source: Eurostat, PRC_HICP_MANR, accessed the 25th of September 2022, Statistics | Eurostat (europa.eu).

inflation. At the same time, like fiscal welfare, automatic indexation is a typically lower profile component of the welfare state (Hacker, 2004; Greve, 1994; Morel *et al.*, 2019 Howard, 1999). Because automatic indexation can ensure that those who receive social benefits continue to maintain their existing standard of living, the lack of social benefits or the reliance on a flawed index could lead to a gradual decline in the real value of the benefits over time. This situation is a typical example of policy drift, a logic according to which the absence of proper updates to existing programs in a changing socio-economic environment can render these less effective over time (Hacker, 2004).

More generally, the perceived negative impact of inflation depends on whether it is assessed in relationship to the overall population, or with regard to some economically vulnerable constituencies that face greater risk of falling into poverty. This issue is not only related to the indexation of social benefits but also to the development of wages on the labour market. In this context, making sure wages are properly adjusted to inflation, perhaps through the use of regulatory policy, may help ensure workers and their families are better protected against the negative impact of inflation. Regardless of what its root causes are, a decline in the population's (or even a selected social group's) purchasing power over time can have adverse distributional consequences and a negative impact on the quality of life of people (Ejrnæs and Greve, 2017; A. Ejrnæs, 2020). The recent surge in inflation seems, in fact to a certain extent, to have influenced selected social groups much harder than others.

From the above discussion we can conclude that the nature of existing indexation mechanisms and its impact on social benefits across and within welfare states is a crucial issue for comparative social policy. As the substantive contributions in this themed section point out, the automatic indexation of social benefits typically occurs with a certain time lag, often one to two years after changes in prices and/or wages have taken place. In periods of rapidly changing prices, this entails the risk for many people living up to two years with lower real benefits and then having access to higher benefits after the inflation rate goes down. This points to the importance of timing in institutional and policy change (Campbell, 2004).

Simultaneously, it is important to understand whether and how different price elements are included in the index used to automatically adjust social benefits. If, as is the case with the recent inflation crisis, energy is especially instrumental in the rise of inflation, this might have a detrimental impact on low-income families who are strongly reliant on social benefits and/or those with higher energy costs. Table 1 illustrates the distribution of inflation in three distinct areas, including energy in the European Union.

Even if there is a full indexation of social benefits in line with the price index, it still means a decline in the standard of living for presumably all recipients of a number of income transfers. This is especially true for low-income individuals/families who may have a high level of spending on electricity, gas, and other fuels – the prices of which have increased by nearly fifty per cent. This can be due to the fact that these families have to spend a higher proportion of their income on necessities such as energy and food, poor housing conditions, or a high level of use and/or dependent on natural gas instead of other forms of heating. Thus, the causes of an increased level of inflation in themselves become an indicator of who will be the biggest losers of the current developments, and why different types of intervention can be necessary to reduce a strong decline in the population's standard of living and/or an increase in the number of people at risk of living in poverty due to their particular circumstances, including heavy reliance on energy, such as fuel which is subject to particularly dramatic inflationary pressures. This situation also explains why types of energy subsidy programs might differ from ordinary distributional approaches, as shown by an overview of responses in a number of countries to the recent price shocks (Gentilini et al., 2022).

At the same time, policymakers face the risk that, if they want to fully compensate people for rising energy costs, it might be difficult to know exactly who shall receive what, such as due to difference in heating costs for houses with different degrees of insulation or types of heating as all types of heating have not, to the same degree, been influenced by the price increase. However, at the same time strong economic support to these households might from a climate perspective be counterintuitive as higher price should help in reducing consumption of energy. This refers to the different instruments that governments have at their disposal to react to price increases: either through increases in household incomes or by subsidising prices (e.g., reduction of a Value Added Tax (VAT), price limits, and price subsidies). For ecological reasons some countries have introduced price subsidies linked to the volume of energy consumption. This issue is discussed in the contribution about Belgium and the Netherlands featured in this themed section. There is further the issue that benefits meant to address the negative effects of inflation on households might also end up exacerbating inflation itself because it would keep demand up. This point is raised by the Organization for Economic Cooperation and Development (OECD), which claims that fiscal support to reduce the negative effects of inflation should be temporary (OECD Economic Outlook, Interim Report September 2022, 2022). Thereby, a classic social policy dilemma arises (how much more to spend and for how long), a situation complicated by the fact that some countries have a much lower fiscal capacity than others that could impede their capacity to respond to the current inflation crisis. Issues that further make the discussion difficult include whether the support should be a one-time lump sum or a permanent increase, as well as what data should be used to decide the level of assistance.

We can add the pre-existing and well-documented increase in the level of inequality and poverty in many OECD countries to this cross-national fiscal inequality among states (Cohen & Ladaïque, 2018; Avram, 2018; Ebbinghaus, 2021). The situation in these states could be a challenge in terms of political stability, as the rise of populism remains a major issue in a context of acute economic uncertainty exacerbated by the current inflationary crisis (for an account of economic grievance and political instability in historical context,

see Eichengreen, 2018). Yet, like the COVID-19 pandemic suggested, this crisis might lead to a more generous understanding of social policy deservingness, as those in need are more clearly in that state without fault of their own, in the aftermath of a sudden and powerful external shock (Oorschot, 2000; Crabtree & Wehde, 2022). Naturally, one might not be able to know how stable such a change in understanding will be, also given that the variation in impact differs highly dependent on type of heating in different countries and households within a country so that the more positive attitude risk being mainly towards those most strongly hit by the inflation and not more generally those receiving welfare state benefits.

Responding to recent cost-of-living crisis

Beyond our discussion about the nature, measurement and distributional impact of inflation, we might also ask: what sort of crisis *is* the inflationary crisis of 2021 to 2023, and how might this influence social policy responses to this crisis?

First, there is the nature of an inflationary shock. As the previous sections have detailed, inflation poses a significant threat to living standards. A key concern amongst policymakers has unsurprisingly been to avoid contributing to inflationary pressures – in the case of this crisis, to prevent price spikes in energy (and food) passing through the economy. Unlike in the COVID-19 crisis, where supporting furloughed workers and others contributed to stimulating demand (Moreira & Hick, 2021), the concern this time around was that supporting households might intensify inflationary pressures. There was also a hope, in 2021 and early 2022 especially, that price rises might be temporary, could largely be limited to energy and food, and might not become more widespread. These factors created pressures for a limited fiscal response to inflationary pressures in many nations, at least initially.

Second, another key aspect of the current inflationary shock concerns *timing*. If inflation is predictable – if it is broad-based and sustained, as per the definition above, and, ideally, modest, then indexation mechanisms, where they exist, can play a major role in ensuring that population living standards do not deteriorate. Indexation mechanisms face greater challenges when inflation is concentrated heavily on particular items, where consumption baskets for some households may diverge significantly from the CPI and, thus, indexation, may not reflect actual price changes experienced by many households. Moreover, there remains the issue that indexation mechanisms typically operate retrospectively, so living standards can suffer in the interim, but if inflation is limited, this too will not pose too great a problem. In this crisis, however, the inflationary shock was substantial in terms of its magnitude, variable across countries, broad-based in terms of the population affected, but also lopsided in terms of the items of expenditure affected, concentrated initially on energy and food items.

Third, there is the question of who is affected: unlike recent crises, such as the Global Financial Crisis and even the COVID-19 pandemic, where support could be concentrated on those who lost work (or were furloughed), rising prices are experienced by all – bearing down hardest on the poorest, but not at all limited to those in receipt of social security or who are out of work. This provided an opposing pressure – namely, for a broad policy response. Allied to this was the experience of the last crisis (the pandemic), where welfare

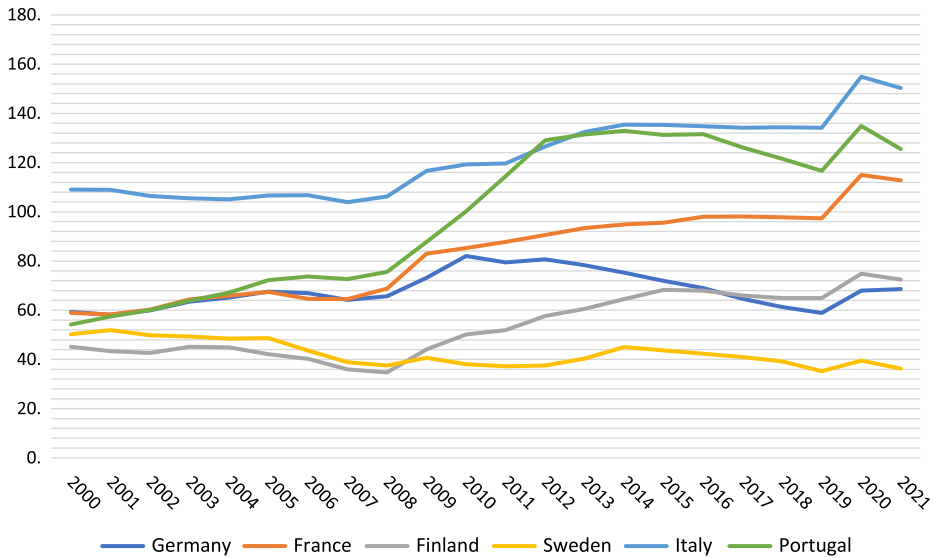


Figure 1. General government debt to GDP.

Source: Eurostat

states responded in a rapid and supportive fashion (Béland et al., 2021; 2023) and this responsiveness was largely seen to have met the moment. It has been argued (e.g. by Moreira & Hick, 2021; Hemerijck & Huguenot-Noël, 2022: 123) that the proactive and substantial policy responses to the COVID-19 pandemic were, in part, a result of learning lessons from the cost of inaction during the Great Recession.

This combination of a broad-based and lopsided inflationary shock, the desire not to contribute further to inflationary pressures and the retrospective nature of indexation mechanisms can be seen to have incentivised ad hoc responses, especially in the early phase of the inflationary crisis.

Another important potential influence of policy responses is *the economic circumstances that form the backdrop to this crisis*. First, a number of governments are entering this inflationary crisis with high debt burdens which might, all things being equal, be expected to act as a brake on policymaker responsiveness. Figure 1 presents debt levels for six European countries and shows that, in most countries (Sweden being the exception here), debt ratios increased during the Global Financial Crisis, especially in countries such as Portugal, which required help from the so-called Troika, composed of the European Commission, the European Central Bank, and the International Monetary Fund. In the years following the crisis, debt dynamics evolved in various directions in different countries, but they notably continued to rise in France and, to a lesser extent, Finland and Italy. By the onset of the pandemic, debt levels remained above pre-financial crisis levels – sometimes, significantly so. But when the pandemic hit, government spending increased everywhere with welfare states demonstrating their responsiveness and resilience (Béland et al., 2021; Hemerijck & Huguenot-Noël, 2022), increasing debt levels

further. Since the pandemic, government borrowing costs have increased in many nations from their historically low levels, adding pressure on government finances.

Yet, when inflation began to increase sharply as nations emerged from the pandemic and, especially, following Russia's attempted invasion of Ukraine, governments moved again to act promptly to support the living standards of citizens in a variety of ways that we explore in the papers in this themed section. Economic considerations did not prevent expansive policy packages. Arguably, the speed with which cost-of-living packages were enacted in various countries reflect lessons about the (expected) political gains that can be made from a significant and supportive policy response. We observe a wide range of policy responses across – indeed, often within – nations. It seems clear that we can organise policy responses around two fundamental goals: (a) limit the passthrough of international market prices, namely with regards energy goods; and (b) compensate families for the increase in the cost of living.

Measures to limit the passthrough of rising international market prices were implemented in many nations and included the introduction of price caps/limitations on energy price increases (e.g., in Italy, the United Kingdom, and the Netherlands), reductions/exemptions of taxes on oil and energy goods (e.g., Belgium, the Netherlands, and Finland), rebates on the purchase of energy (e.g., Sweden, Italy, and Belgium), or the expansion/strengthening social energy tariffs (e.g., in Belgium). There have also been responses that reduce costs outside of core energy markets, such as reductions in local taxes (e.g., the UK) or VAT (e.g., Greece).

In addition, many of the countries covered here have introduced temporary/extraordinary benefits, targeting either the purchase certain types of products (notably energy goods price supports, e.g., Ireland); or particular groups, as pensioners (e.g. Portugal) or social assistance recipients generally (e.g. the UK and the Netherlands). In some countries there has also been the expansion of existing benefits (e.g., the expansion of the Canada Workers Benefit, a refundable tax credit for low-income workers). The indexation of existing benefits also played an important role in adjusting welfare (and, in some cases, wage) supports to price increases, but given the typically retrospective nature of indexation, this was often a secondary response rather than one of the first order (thanks to the automatic indexation of wages and social benefits Belgium was a notable exception). Overall, even this schematic overview demonstrates that a wide range of policy instruments were used to respond to rising prices – the papers in this themed section explore these policy packages in greater detail. A major challenge for policymakers everywhere has been to decide on a balance between universal and targeted support and, in relation to one-off or ad hoc elements especially, to target these appropriately.

What, then, are the specific challenges of making sense of the social policy responses to the cost-of-living crisis? One challenge concerns the potential functional equivalence between different elements in appreciating the significance of policy packages. There is an analytic challenge if different types of instruments in different countries meet similar policy ends and one analytic requirement is to make sense of the similarities and differences in the instruments that have been implemented. A second, related, issue is that an inflationary crisis is arguably one which is highly dependent on the economic contexts and policy instrument settings. A recent OECD study stresses the highly variable impact of inflation on living standards in different nations, both in aggregate terms and amongst vulnerable

groups (Causa et al., 2022); analysis of the instruments adopted in responding to this inflationary shock will need to be complemented in time with econometric analysis of their distributional impacts, analysis of the evolution of poverty rates, and so forth. Such an econometric will complement the policy analysis we present in this themed section.

Conclusion

Drawing on the existing scholarship, this article has explored the definition, measurement, and sources of inflation before discussing the potential impact of high inflation on redistribution and social programming and, finally, examining the nature the current cost-of-living crisis and the measures that have been enacted to respond to it. Certainly, these themes are not the only ones that could have been discussed in the context of a synthetic article on the inflation and social policy nexus, which leads to the recognition of its two main limitations and the potential ways in which future scholarship could address them.

First, this article did not directly explore the social policy responses to previous cost-of-living crises, especially the one that took place in the mid-late 1970s and early 1980s. In the future, historically minded scholars could compare the current social policy responses to high inflation to responses to past inflationary crises, especially the one that began in the aftermath of the 1973 oil crisis. This work could contribute to the existing scholarship on the role of the welfare state as a ‘crisis manager’ (Starke & Hooren, 2013).

Second, just like this themed section as a whole, our discussion of the inflation and social policy nexus focuses exclusively on *Western* advanced industrial societies. Future scholarship could compare social policy responses to the current cost-of-living crisis in these democracies to the responses taking place in the Global South. This is the case because the current crisis is global in nature and scholars from different regions of the world could learn from social policy developments taking place in other regions. Although our article and themed section are comparative in nature, future research could take a more global perspective on the economic, social, and policy issues under consideration above. The article has also highlighted that this type of inflation has a very different impact depending not only on income, but also on accommodation type and heating cost.

Still, the above discussion does map and stress important issues that scholars should consider when studying the inflation and social policy nexus. In conclusion, we can mention three of them, which should remain central to future research on this understudied nexus. First, how the nature and the sources of inflationary pressures are understood is a key factor to understanding social policy responses to these pressures. Second, inflation has massive potential redistributive effects, which are shaped at least partly by existing policy legacies, including how income and tax transfers and their potential indexation mechanisms evolve over time. Finally, the analysis of the ongoing cost-of-living crisis should take into consideration not only these existing policy legacies but the nature of the inflationary shock at hand and the broader economic and ecological context in which it takes place.

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Notes

1 A good example of this has been the difficulties of traditional measures in capturing the impact of the COVID-19 pandemic on consumption patterns (see Kouvavas *et al.*, 2020).

2 For a good discussion of link between economic theory and policy practice in this domain, see Nelson (2022) and Primiceri (2006).

3 For a good overview of key streams in this field see Alvarez *et al.* (2022) and Saad-Filho (2019).

4 Yet, one should note that there is no agreement on what the natural rate of unemployment is.

5 According to (Immervoll, 2000), given that the tax that is based on nominal incomes, inflation will increase the tax burden on capital gains. At the same time, in the absence of any kind of adjustment, inflation may lead some individuals to be automatically moved into a higher income tax bracket – the ‘bracket creep’ effect (Peter *et al.*, 2008).

References

- Abel, A., Bernanke, B. and Croushore, D. (2020) *Macroeconomics*. New York: Pearson.
- Acemoglu, D., Laibson, D. and List, J. (2019) *Economics*, Global Edition EBook. Harlow: Pearson Higher Ed.
- Alvarez, F., Hansen, L. P. and Abel Sargent, T. (2022) ‘Detecting fiscal-monetary causes of inflation.’ In T. Kehoe and J. P. Nicolini (eds.), *A Monetary and Fiscal History of Latin America, 1960–2017*. Minneapolis: University of Minnesota Press.
- Avram, S. (2018) ‘Who benefits from the ‘hidden welfare state’? The distributional effects of personal income tax expenditure in six countries.’ *Journal of European Social Policy* 28(3): 271–293. <https://doi.org/10.1177/0958928717735061>
- Béland, D., Cantillon, B., Hick, R. and Moreira, A. (2021) ‘Social policy in the face of a global pandemic: policy responses to the COVID-19 crisis.’ *Social Policy & Administration* 55(2): 249–260.
- Blanchflower, D. G., Bell, D. N. F., Montagnoli, A. and Moro, M. (2014) ‘The Happiness trade-off between unemployment and inflation.’ *Journal of Money, Credit and Banking* 46(S2): 117–141.
- Blinder, A. S. (1979) *Economic Policy and the Great Stagflation*. New York: Academic Press.
- Campbell, J. L. (2004) *Institutional Change and Globalization*. Cambridge: Cambridge University Press.
- Causa, O., Soldani, E., Luu, N. and Soriolo, C. (2022) *A Cost-of-Living Squeeze: Distributional Implications of Rising Inflation*, OECD Economics Department Working Paper No. 1744. Paris: OECD.
- Clark, T. (2001) ‘Comparing measures of core inflation.’ *Federal Reserve Bank of Kansas City Economic Review* 86(2): 5–31.
- Cohen, G. and Ladaique, M. (2018) ‘Drivers of growing income inequalities in OECD and European countries.’ In R. Miguel Carmo, C. Rio and M. Medgyesi (eds.), *Reducing Inequalities: A Challenge for the European Union?* Cham: Springer International Publishing, 31–43. https://doi.org/10.1007/978-3-319-65006-7_3
- Colgan, B. and Callan, T. (2015) ‘The Distributional Impact of Inflation: 2003–2014.’ ESRI Research Notes 2015/3/1. <https://www.esri.ie/publications/the-distributional-impact-of-inflation-2003-2014> [accessed 11.10.2023].

- Crabtree, D. I. and Wehde, W. W. (2022) 'Who deserves what and why during the COVID-19 pandemic: applying the CARIN principles of deservingness to the American welfare state.' *Social Policy & Administration* 57(3): 433–453.
- Crawford, I. and Smith, Z. (2002) 'Distributional Aspects of Inflation', in Commentary 90 of the Institute for Fiscal Studies. <https://ifs.org.uk/publications/distributional-aspects-inflation> [accessed 11.10.2023].
- Ebbinghaus, B. (2021) 'Inequalities and poverty risks in old age across Europe: the double-edged income effect of pension systems.' *Social Policy & Administration* 55(3): 440–455. <https://doi.org/10.1111/spol.12683>
- Eichengreen, E. (2018) *The Populist Temptation: Economic Grievance and Political Reaction in the Modern Era*. Oxford: Oxford University Press.
- Ejrnæs, A. (2020) 'Relative deprivation and subjective social position.' In B. Greve (ed.), *The Routledge International Handbook of Poverty*, 1st ed. Oxon: Routledge, 78–95.
- Ejrnæs, A. and Greve, B. (2017) 'Your position in society matters for how happy you are.' *International Journal of Social Welfare* 26(3): 206–217. <https://doi.org/10.1111/ijsw.12233>
- Eurostat (2022) 'Beginners: Inflation', Statistics Explained. (<https://ec.europa.eu/eurostat/statisticsexplained/>). <https://ec.europa.eu/eurostat/statistics-explained/SEPDF/cache/63284.pdf>
- Fernandez, J. (2012) 'Explaining the introduction of automatic pension indexation provisions in 17 OECD countries, 1945–2000.' *Journal of European Social Policy* 22(3): 241–258.
- Friedman, M. (1968) 'The role of monetary policy.' *American Economic Review* 1–17.
- Gentilini, U., Almenfi, M., Iyengar, H. T. M. M., Okamura, Y., Urteaga, E. R., Valleriani, G., Muhindo, J. V. and Aziz, S. (2022) *Tracking Global Social Protection Responses to Price Shocks*. 2208. Social Protection & Jobs. Washington, DC: World Bank.
- Glatz, C. and Eder, A. (2020) 'Patterns of trust and subjective well-being across Europe: new insights from repeated cross-sectional analyses based on the European Social Survey 2002–2016.' *Social Indicators Research* 148(2): 417–439. <https://doi.org/10.1007/s11205-019-02212-x>
- Greve, B. (1994) 'The Hidden welfare state, tax expenditure and social policy A comparative overview.' *Scandinavian Journal of Social Welfare* 3(4): 203–211. <https://doi.org/10.1111/j.1468-2397.1994.tb00227.x>
- Ha, J., Kose, M. and Ohnsorge, F. (2021) *One-Stop Source: A Global Database of Inflation*. Policy Research Working Paper 9737. Washington, DC: World Bank. <https://www.worldbank.org/en/research/brief/inflation-database>
- Hacker, J. S. (2004) 'Privatizing risk without privatizing the welfare state: the hidden politics of social policy retrenchment in the United States.' *American Political Science Review* 98(2): 243–260. <https://doi.org/10.1017/S0003055404001121>
- Haubrich, J. and Millington, S. (2014) 'PCE and CPI Inflation: What's the Difference?' Economic Trends. <https://www.clevelandfed.org/publications/economic-trends/2014/et-20140417-pce-and-cpi-inflation-difference> [accessed 11.10.2023].
- Hemerijck, A. and Huguenot-Noël, R. (2022) *Resilient Welfare States in the European Union*. Newcastle Upon Tyne: Agenda Publishing.
- Howard, C. (1999) *The Hidden Welfare State: Tax Expenditures and Social Policy in the United States*, vol. 171. Princeton, NJ: Princeton University Press.
- Immervoll, H. (2000) *The Impact of Inflation on Income Tax and Social Insurance Contributions in Europe*, EUROMOD Working Paper, No. EM2/00. Colchester: University of Essex, Institute for Social and Economic Research (ISER).
- Jaravel, X. (2021) 'Inflation inequality: measurement, causes, and policy implications.' *Annual Review of Economics* 13: 599–629.
- Kibritçioğlu, A. (2002) 'Causes of inflation in Turkey: a literature survey with special reference to theories of inflation.' In A. Kibritçioğlu, L. Rittenberg and F. Selçuk (eds.), *Inflation and Disinflation in Turkey*. Aldershot: Ashgate, 43–76.

- Koester, G. and Grapow, H. (2021) 'The Prevalence of Private Sector Wage Indexation in the Euro Area and its Potential Role for the Impact of Inflation on Wages.' ECB Economic Bulletin, 7/2021. https://www.ecb.europa.eu/pub/economic-bulletin/focus/2021/html/ecb.ebbox202107_07~f555b70c47.en.html
- Kouvavas, O., Trezzi, R., Eiglsperger, M., Goldhammer, B. and Gonçalves, E. (2020) 'Consumption Patterns and Inflation Measurement Issues during the COVID-19 Pandemic', ECB Economic Bulletin, 7/2020. https://www.ecb.europa.eu/pub/economic-bulletin/focus/2020/html/ecb.ebbox202007_03~e4d32ee4e7.en.html
- Lokshin, M., Sajaia, Z. and Torre, I. (2023) Who Suffers the Most from the Cost-of-Living Crisis? Policy Research Working Paper 10377. Washington, DC: World Bank.
- Moreira, A. and Hick, R. (2021) 'COVID-19, the Great Recession and social policy: is this time different?' *Social Policy & Administration* 55(2): 261–279.
- Morel, N., Touzet, C. and Zemmour, M. (2019) 'From the hidden welfare state to the hidden part of welfare state reform: analyzing the uses and effects of fiscal welfare in France.' *Social Policy and Administration* 53(1): 34–48. <https://doi.org/10.1111/spol.12416>
- Nelson, E. (2022) 'How Did It Happen? The Great Inflation of the 1970s and Lessons for Today,' Finance and Economics Discussion Series 2022-037. Washington: Board of Governors of the Federal Reserve System. <https://doi.org/10.17016/FEDS.2022.037>
- OECD Economic Outlook, Interim Report September 2022 (2022) 'OECD Economic Outlook'. OECD. <https://doi.org/10.1787/ae8c39ec-en> [accessed 11.10.2023].
- Oorschot, W. V. (2000) 'Who should get what, and why? On deservingness criteria and the conditionality of solidarity among the public.' *Policy & Politics* 28(1): 33–48.
- Paulus, A., Sutherland H. and Tasseva I. (2020). 'Indexing out of poverty? Fiscal drag and benefit erosion in cross-national perspective.' *Review of Income and Wealth* 66(2): 253–473.
- Peter, K., Buttrick, S. and Duncan, D. (2008) 'Global Reform of Personal Income Taxation, 1981-2005: Evidence from 189 Countries', UWRG Working Papers, 11. <http://aysps.gsu.edu/publications/2008/index.htm>
- Phelps, E. (1970) 'Money wage dynamics and labor market equilibrium.' In E. Phelps (ed.), *Microeconomic Foundations of Employment and Inflation Theory*. New York: W. W. Norton, 124–166.
- Phillips, A. (1958) 'The relation between unemployment and the rate of change of money wage rates in the United Kingdom, 1861–1957.' *Economica* 25(100): 283–299.
- Primiceri, G. (2006) 'Why inflation rose and fell: Policymakers' beliefs and US postwar stabilization policy.' *The Quarterly Journal of Economics* 121: 867–901.
- Saad-Filho, A. (2019) *Value and Crisis Essays on Labour, Money and Contemporary Capitalism*. Boston: Brill.
- Sandmo, A. (1995) 'Welfare economics of the welfare state.' *Scandinavian Journal of Economics* 97(4): 469–476.
- Shapiro, A. (2022) 'How much do supply and demand drive inflation?' *FRBSF Economic Letter, Federal Reserve Bank of San Francisco* 2022(15): 1–06. <https://www.frbsf.org/economic-research/publications/economic-letter/2022/june/how-much-do-supply-and-demand-drive-inflation/>
- Somerville, R. (2004) 'Changes in relative consumer prices and the substitution bias of the Laspeyres Price Index: Ireland, 1985-2001.' *The Economic and Social Review* 35(1): 55–82.
- Starke, P. A. K and Hooren, F. (2013) *The Welfare State as Crisis Manager: Explaining the Diversity of Policy Responses to Economic Crisis*. London: Palgrave Macmillan.
- Stiglitz, J. and Rosengard, J. (2015) *Economics of the Public Sector*, 4th ed. London: W. W. Norton & Company.
- Sutherland, H., Hancock, R., Hills, J. and Zantomio, F. (2008) 'Keeping up or falling behind? The impact of benefit and tax uprating on incomes and poverty.' *Fiscal Studies* 29(4): 467–498.

- Wang, J. and van Vliet, O. (2016) 'Social assistance and minimum income benefits: benefit levels, replacement rates and policies across 26 OECD countries, 1990–2009.' *European Journal of Social Security* 18(4): 333–355.
- Weaver, R. K. (1988) *Automatic Government: The Politics of Indexation*. Washington: Brookings Institution Press.
- Whitehouse, E. (2009) 'Pensions, Purchasing-Power Risk, Inflation and Indexation', OECD Social, Employment and Migration Working Papers, 77, Paris: OECD Publishing. https://www.oecd-ilibrary.org/social-issues-migration-health/pensions-purchasing-power-risk-inflation-and-indexation_227182142567 [accessed 11.10.2023].