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Inflation and policy responses: the case of Italy

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Abstract

Italian inflation has reached its monthly peak (+17.9%) in October 2022, has slowed down in the following months, but was still at 7% in July 2023. Since the autumn of 2021, energy goods have been the driver of the inflation surge. The lack of price control measures over energy prices has favoured the spread of price increases to the whole economy, with 'core' inflation reaching 7% in the spring of 2023 and falling slightly in later months. Inflation has severely hit incomes and wages, with a widening gap between inflation and nominal wages; in the first nine months of 2022 real wages lost 6.6 percentage points and in the first half of 2023 there has been only a minor recovery of the purchasing power of salaries. Inflationary pressures have affected Italian households unevenly; price increases have had a much higher impact on the poorest groups of the population, due to their large share of expenditures on energy and food. Compensatory measures for supporting business and household have been relevant. From the end of 2021 to 2023, the Italian government spent about 90 billion euros, with transfers that reached 2.8% of GDP in 2022. These measures benefited households for 16.9 billion euros, firms for 23.5 billion, while 22.4 billion went to supporting the overall economy. Such transfers, however, failed to bring price dynamics under control; the polarisation of real incomes is deepening, with a growing share of the share of population under the poverty line.

1. Price increases in Italy

The most common measure of inflation in the Eurozone is the HICP (Harmonised Index of Consumer Prices at the European level), which measures the change over time of the prices of (a weighted average of) of consumer goods and services purchased by households. Figure 1 shows the dynamics of this index in the period 2019-2023 referred to all consumer goods (Overall HICP) for Italy, and the EU19 zone as a whole, along with the dynamics of the "core inflation" index (Core HICP) that is the one computed excluding energy, food, alcohol and tobacco. In both cases the index measures the annual inflation rate, that is the change in the price level between the current month and the same month of the previous year.

During 2019 and 2020, the average increase of prices of consumer goods has remained well below the ECB 2% target. In 2019, the overall HICP index (considering all consumer goods) has fluctuated between -0.5% in October to 1.4% in February. Such a low dynamics of prices has continued into 2020, with the lowest point touched in May of the same year at -1%. In 2021, the average increase in consumer prices was 1.9% in Italy, against a 2.6% in the EU19 area.

In 2021, the end of COVID restrictions, the resurgence in global demand and the presence of bottlenecks in international supply chains have pushed prices up, with inflation reaching 5.6% at the end of the year (6.3% in the EU19). From mid-2021, also core inflation has moved up, with steep

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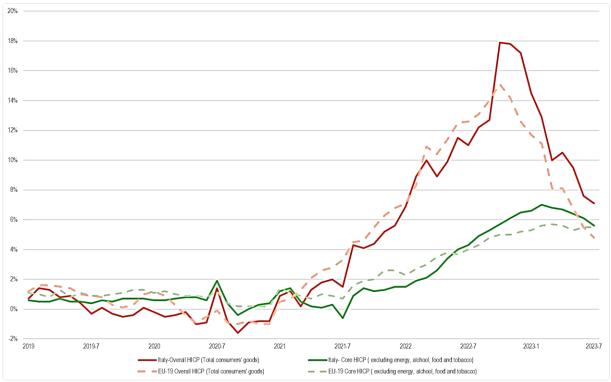
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rises in 2022 and a peak at 17.9% in October 2022. The rapid increase of imported energy prices has been the key driver of price increases, that have then spread to the rest of the economy; the "core HICP" index reached a peak at 7% in February 2023. In 2023, inflation has started to slow down, with the Italian overall HICP index decreasing from 14.5% in January to 7.1% in July. However, from mid-2022 on, Italian inflation has always been higher than the European pattern.

The evolution of inflation shown in Figure 1 suggests that in a first stage inflation was mainly fuelled by external factors - the rise of energy prices and bottlenecks in international supply chains. In a second stage, since mid-2022, inflation has spread to the whole economy, mainly driven by domestic factors.

Figure 1: The dynamics of inflation (HICP) in Italy and EU-19. Overall and core inflation. Monthly data, January 2019-June 2023



Source: Eurostat, Harmonised Indices of Consumer Prices (HICP)

2. The rise of energy prices

Between late 2021 and early 2022, the escalating tensions between Russia and Ukraine have had an impact on energy prices, especially for EU countries. Following Russia's military attack against Ukraine in February 2022, and the subsequent Western sanctions, energy prices surged dramatically. Figure 2 shows the dynamics of Gas and Electricity prices. For Italy the increase in energy prices has always been above the EU average, due to the country's structural high dependence on imports of energy products, especially natural gas, which is the main source of heating and electricity production. In February 2022, the overall HICP energy price index reached 52.6% in Italy and 44.3% in Europe. Supply constraints and volatility on energy markets, fuelled also by speculative actions, led to a 70% increase of energy prices at the end of 2022 compared to the same period in 2021 (Nascia et al., 2023).

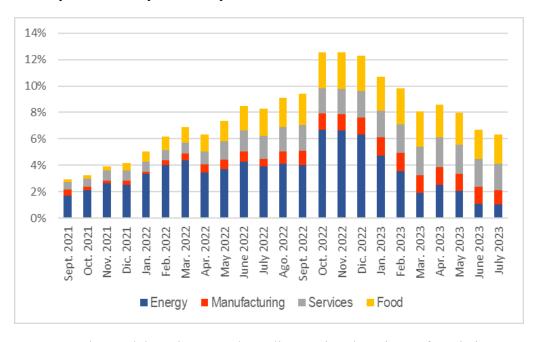
The stronger increase of energy prices in Italy, as compared to the overall EU-19 area, is clearly visible looking at the dynamics of the two main components of the HICP energy index – the prices of gas and of of electricity. In 2022 the increase electricity prices in Italy outpaced the EU-19 trend, reaching a 96% rise at the end of the year, compared to a 75% growth in the EU-19. In the case of consumer electricity, in October 2022 Italy recorded a staggering 199% increase, compared to a 45.6% rise for the EU-19 as a whole. Since the beginning of 2023 both HICP energy indexes show a sharp decline due to a reduction of the international prices of energy and the introduction of policies reducing the fiscal components of domestic prices.

Figure 2: The dynamics of HICP in Italy and EU-19 area – Gas and Electricity Monthly data, January 2019-June 2024



Source: Eurostat, Harmonised Indices of Consumer Prices (HICP)

Figure 3: Contributions to Inflation by main product (COICOP) Groups. Italy Monthly data, January 2019- July 2023



Source: Authors' elaborations on The Italian National Institute of Statistics data

The specific contribution of the main commodity groups to the dynamics of the overall HICP index is shown in Figure 3. From mid-2021 to the end of 2022, the foreign energy shock was the main driver of inflation. Since mid-2022, the contribution of food-related goods and services – products with a high weight in the household consumer basket - has increased and has not declined significantly in 2023. Figure 3 also shows how inflationary pressures have extended to "core inflation", that reached 6.8% in March 2023.

3. The distributive impact of inflation

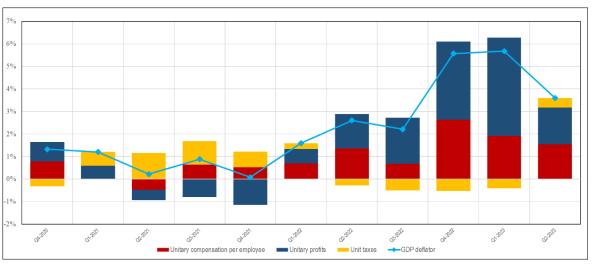
Inflation can be understood as a transfer of real income from some economic and social groups to the actors with the power of increasing their nominal prices (Pianta, 2023). This process is rooted in the distributive conflicts and in the power asymmetries among economic actors and is shaped by public policies regulating prices. An outflow of real income has taken place from European economies to the countries exporting energy products. Within a national economy, the evolution of the shares of capital, labour and taxes in real national income highlights the distributive impact of inflation.

The GDP deflator – measuring the domestic sources of inflation – can be decomposed into three components reflecting the dynamics (per unit of product) of (a) labour costs, (b) gross profits, (c) the balance between taxes and government subsidies. The result of this decomposition of the GDP deflator for Italy, for the period 2019-23, is presented in Figure 4.⁴

The figure shows that the domestic component of inflation has accelerated in 2022 and has been mainly fuelled by the growth of unit profits. By contrast, the dynamics of labour income has played a less relevant role, reflecting the reduced ability of wages to keep pace with inflation. This pattern is found also in the first two quarters of 2023, even in a context of declining inflation. This suggest that the major contribution to the current slow down of inflation has been provided by labour, through declining real wages and a fall in the labour share. In such a context, the risk of a "price-wage spiral" appears of limited relevance.

Figure 4: GDP deflator and the contributions of profits, wages and net taxes. Italy, 2019-2022

Annual percentage changes, quarterly data



Source: Authors' elaborations on The Italian National Institute of Statistics data

⁴ The GDP deflator is the ratio between GDP expressed in nominal terms and the same aggregate expressed in real terms. and shows how much of the growth of the aggregate expressed in nominal terms is due to price changes. This indicator differs from consumer price indices as it takes into account the price changes in domestically produced goods only.

This domestic, profit-driven inflation is rooted in the ability of firms to pass on cost increases to sale prices, in a context of high input price increases and local imbalances between supply and demand (Arce et al., 2023). In the case of Italy, an exceptionally high increase of profit margins in the energy sector has emerged for 2022. In such a context, limits to the speculation in international markets, government controls over the price of energy goods, slowing the spread of inflation in the economy and the extra-taxation of windfall profits of energy companies appear as appropriate tools to bring inflation under control; Italy's governments were unable to take effective steps in such directions (Nascia et al. 2023).

4. The impact of inflation on real wages

Inflation has a profound impact on wages and inequalities. The loss of purchasing power is greater for the social groups with lower incomes, less bargaining power and less unionisation, those who are unemployed or have difficulty finding a job. The Italian employment structure shows a high inactivity rate, strong gender and territorial divides, low levels of education and a large diffusion of non-standard forms of work - fixed-term or part-time (Cirillo et al., 2022). These structural weaknesses are reflected in the level and dynamics of real wages, which have fallen by 10% over the last fifteen years, the worst performance among advanced economies, as shown in Figure 5.

From the second quarter of 2021 to the second quarter of 2023 inflation has led to a 8,8% fall in the real wages per hour. Figure 6 shows that real wages in Italy have been hit more severely than in the EU average, with more than 4 percentage points of additional loss, due to the lower growth of nominal wages. This is the result of a poor wage dynamics and of the institutional setting of Italy's industrial relations.

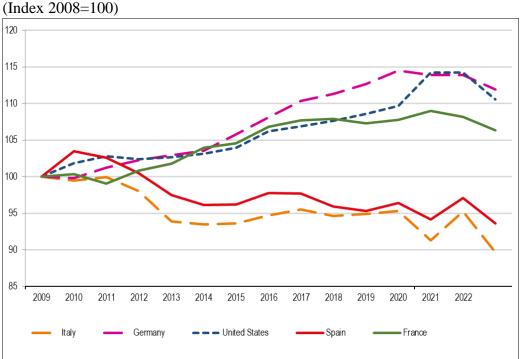
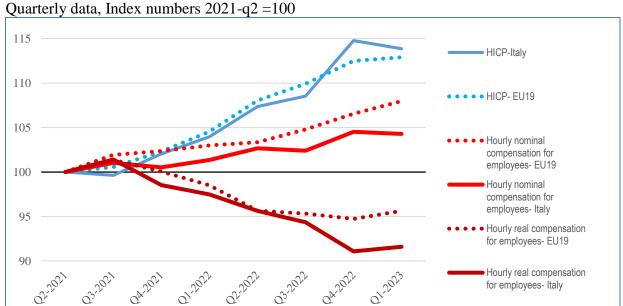


Figure 5 : Average real wage index for selected countries 2008–2022 (Index 2008=100)

Source: Authors' elaboration on Global Wage Report 2022-2023 - ILO Publications (https://www.ilo.org/digitalguides/en-GB/story/globalwagereport2022-23#data).

Since 2009, national labour contracts in Italy have included a nominal wage adjustment system that uses as a benchmark a specific inflation index (the HICP-NEI) that excludes imported energy goods; the index is estimated annually by the Italian statistical office (Istat) with a three-year horizon. It may provide a benchmark for labour contracts that may recover (with a lag, in a limited way) the loss of purchasing power of wages resulting from domestic price increases. However, this mechanism is not binding for employers' associations and its effectiveness facing the current inflation has been very limited, due to delays in labour contract renewals and to the heterogeneous approaches and timing of negotiations. Moreover, Italy's national collective contracts do not cover the entire workforce; in marginal sectors and for precarious workers, little protection exist and the generally low wages do not benefit from any type of wage indexation (Cirillo et al., 2022; 2023).

Figure 6: Wage dynamics and inflation in Italy and EU-19. Years 2021-2022.



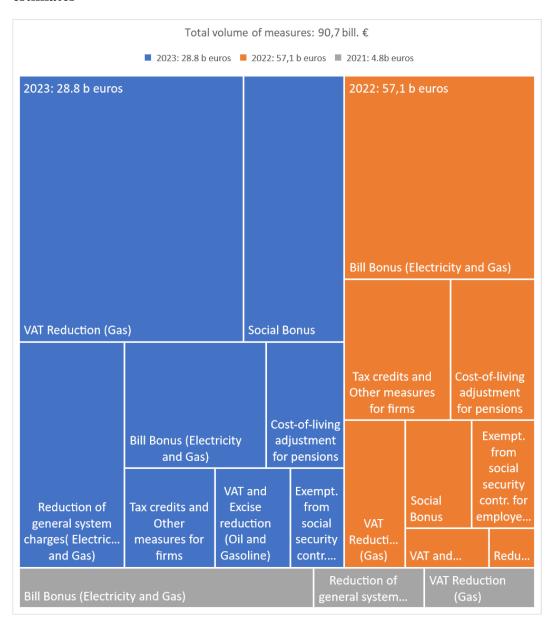
Source: Authors' elaborations on The Italian National Institute of Statistics data

5. Italy's policy responses

Between 2021 and 2023, the Italian government allocated more than \in 90 billion for measures aimed at mitigating price increases - \in 57 billion in 2022 and over \in 28 billion in 2023. The public budget allocated of these measures accounted for 2.8% of the Italian GDP in 2022 and 1.2% in 2023 (MEF, 2023). One third of these resources supported households (around \in 29 billion), while another third targeted firms (\in 33.2 billion). The remaining third (\in 31.7 billion, 34%) focused on tax reductions, including cuts in excise duties and VAT on energy-related goods, which benefitted the entire Italian economy. Additional resources supported the increasing costs of local governmental authorities (\in 2.2 billion), public administration investments (\in 13.9 billion), and the funding of the National Health Service coping with rising energy costs (\in 3 billion) (UPB, 2022).

In 2022, all these measures were partly financed through the increased tax revenues (VAT and excise duties) from the price increase of energy products. Figure 7 provides an overview of the main measures adopted in Italy over the last three years The figure shows a rather fragmented set of interventions and measures introduced in an emergency logic, largely based on the distribution of lump-sum subsidies ('bonus').

FIGURE 7. Italian government's measures to contrast inflation. Years 2021-2023. UPB estimates



Source: author elaboration on UPB (Italian Parliamentary Budget Office), 2022, 2023.

Tax reductions

In order to limit the rise of energy prices, the Italian government has reduced taxes on energy-related products. In particular, VAT on natural gas for both civilian and industrial usage has been lowered to 5% during 2022 and in the first quarter of 2023, a measure costing more than €4 billion. In addition, the government financed first the reduction and later on the elimination of the general system charges for the distribution of electricity and gas over the period of 2021-23, with an expenditure for the public finance of approximately €18 billion. Between March and December 2022, a series of other measures were introduced, including cuts to excise duties on gasoline, diesel and gas, alongside a reduction of the VAT rate applied to automotive gas consumption, with a cost of approximately €9 billion. This policy approach was shaped by the government led by Mario Draghi – who was supported by most parties of the centre-left and centre-right - and was broadly continued by the new right-wing government led by Giorgia Meloni that took power after the general elections of

September 2022. The VAT reduction to 5% was prolonged until the first semester of 2023 along with the reduction of the general system charges on gas, but not on electricity bills, leading to a 20% increase of the household gas prices. The new government has not financed further the reduction in excise duties on gasoline for 2023, resulting in significant increases of fuel prices, prompting social protests and a strike by gasoline distributors in January 2023.

Policies supporting firms

Policies supporting firms have aimed to offset the rising costs of production inputs. These measures included tax credits, VAT reductions, and specific measures for gas and electricity-intensive productions, in sectors such as manufacturing, transportation, agriculture, and fishing (Simone and Pianta, 2022).

Tax credits were granted when the price of the energy component in electricity bills (calculated as the average of the first quarter of 2023) experienced a 30% increase of the kilowatt-hour price with respect to the same quarter in 2019. In March 2023, Giorgia Meloni's government extended the tax credit to the business sector until July 2023. Overall, tax credits and sector-specific measures are expected to cost approximately €30 billion.

The rise of energy prices has led to a surge in profits for companies operating in the energy sector, prompting a heated debate on whether, and how, such extra-profits should be contained or taxed. According to the Parliamentary Budget Office (UPB, 2022), the magnitude of windfall profits is difficult to quantify, but there is clear evidence that since July 2021 energy companies have benefitted from a substantial increase in revenues and gross profits. This has induced the Draghi government to introduce in January 2022 an additional tax on companies that benefited from the increase in energy prices. This measure consisted of an additional tax rate of 10% on profits for companies that import, distribute, and sell gas or electricity, as well as for those that produce, extract, distribute, and sell petroleum products, and that increased their profits by at least 10% or by at least by €5 million from October 2021 to March 2022, compared to the same months of the previous year. This measure was subsequently reinforced, raising this extra-tax rate from 10% to 25% and extending it until April 2022. However, as of November 2022, the revenue from the taxation of energy sector companies was well below previous revenue estimates. The Meloni government introduced a new "solidarity contribution" by energy sector companies in 2023, with the prospect of raising €4 billion.

Policies supporting households

Inflation affects households unevenly, as low income households allocate a significantly larger proportion of their income to the consumption of food and energy when compared to more wealthy households. Poorer families are therefore hit hardest by inflation due to the higher price dynamics of such products. Figure 8 illustrates the differentiated impact of inflation among Italian households by dividing them into five expenditure classes and taking into account the specific HICP index of each group. In the fourth quarter of 2022, the HICP index rose by 18.4% for the poorest fifth of households, while it increased by 9.9% for the richest fifth. In the early months of 2023, these disparities have diminished, primarily due to the deceleration in energy prices.

To compensate for the way inflation was hitting the poorest households, since 2021 Italian governments have introduced a series of specific policies aiming to mitigate the loss of their purchasing power. In early 2021, an 'energy bonus' was introduced to reduce gas and electricity bills for households composed of at least four members and with an annual equivalent income (ISEE - Indicator of Equivalent Economic Situation) below $\[mathebox{\ensuremath{}}\xspace$ 0,000 in 2022, reduced to $\[mathebox{\ensuremath{}}\xspace$ 15,000 in 2023. This measure was financed with $\[mathebox{\ensuremath{}}\xspace$ 500 million in 2021, $\[mathebox{\ensuremath{}}\xspace$ 63.2 billion in 2022, and $\[mathebox{\ensuremath{}}\xspace$ 62.5 billion in 2023. The energy bonus was granted also to people already supported by social schemes such as the minimum income plan and social pensions, and to those in precarious health conditions. Giorgia Meloni's government extended this "energy bonus" until July 2023, although with important

restrictions. In June 2022, a lump sum ("social bonus") of $\[\in \] 200$ was granted to low and middle-income workers; the budged allocated to such a measure was approximately $\[\in \] 10$ billion. Several other measures supported social assistance programs such as the anticipated revaluation of social pensions and a reduction of social security contribution of employees ($\[\in \] 8,2$ billion in 2023). In 2023 the minimum income plan, a measure that had effectively protected the poorest Italians, was cancelled by the Meloni government.

Figure 8: HICP by household expenditures classes. Italy. January 2019-March 2023 Quintiles, monthly data

Source: Authors' elaborations on The Italian National Institute of Statistics data

What has been the effectiveness of such policies in offsetting the adverse effects of inflation on the poorest households? Insights in this regard come from a study by the Italian Parliamentary Budget Office (UPB, 2023), which has assessed the effects of counter-inflationary measures introduced between June 2021 and December 2022. Italian households were divided into deciles on the base of their spending capacity, and the impact of inflation was evaluated taking into account their respective consumption baskets. According to this analysis, the counter-inflationary policy measures were only partially able to offset price increases. Thanks to the compensation policies, the average increase in household expenditures (deriving from price increases) dropped from 9% to 5.4%. For the poorest 10% of the population, the increase in spending was slightly lower (4.8%). Without compensatory measures, the burden of price hikes on the poorest decile of households would have been 15.1%. Compensatory measures, therefore, have been able to offset – in a limited way - the increased cost of living for the poorest households.

However, not all policy measures have had the same redistributive effect: the reduction of VAT and excise duties on gas and electricity, as well as the elimination of general system charges provided greater benefits to richer population groups. The UPB study also highlights that the surge of inflation starting in the autumn 2022 has significantly reduced the redistributive effectiveness of the measures introduced to support lower incomes groups. Similar indications emerge from a study by the Bank of Italy (Curci et al., 2022), showing that social bonuses have been the most effective in mitigating the regressive impact of inflation, while the other measures have allocated a relevant portion of resources towards families with medium and high incomes. This study also estimates that government actions have managed to offset approximately 70% of the increased inequality in purchasing power (measured by the Gini index) resulting from the effects of inflation.

Looking at the likely future development of these policies, it is important to take into consideration the constraints in the public budget connected to economic slowdown in 2023 and 2024, and the increased burden of interest on public debt stemming from the restrictive monetary policy carried out by the ECB. In the light of this new macroeconomic scenario, the policy space for measures safeguarding incomes is likely to be more limited.

6. The outlook for policies

The main policy response to inflation in the Euro Area has come, in autumn 2022, from the radical change in monetary policies. Both the Federal Reserve and the European Central Bank have intervened by raising the interest rate on "marginal lending facility" from a level close to zero to over 5% in the United States and 4.5% in the Euro zone. Especially in the case of the EU, such restrictive monetary policies have not been particularly effective in bringing inflation rates back to the 2% announced target; conversely, they have led to a slow down in aggregate demand with signs of recession and negative effects on employment and wages. Italy's GDP has so far held up better than other EU countries, but in April 2023 the country's industrial production fell by 7% compared to the same month of the previous year; the forecast of GDP growth in 2023 has been revised by both international agencies and the Italian government to a level below 1%.

The prospects in Italy are for a continuation of the government policy offering public subsidies to firms and households to compensate – to a modest extent - for the impact of inflation (Pianta, 2023). Since 2022, the policy priority for both the Draghi and the Meloni governments has been the reduction of the 'tax wedge' between gross labour costs for firms and take-home pay by workers, reducing taxes and social security contributions, resulting in lower costs for firms and limited wage increases for workers, In the 2024 budget preparations, such a priority is expected to absorb the bulk of public resources available for policy action; little room appears to exist for compensating the effects of inflation and for redistributive measures.

On the question of protecting real wages, little debate has emerged so far on the need to reconsider the system of indexation of wages to prices, that at present does not protect wages from energy and imported price increases. In Italy wage indexation is a delicate issue, after the long struggles over the automatic link of wages to prices in the 1970s and 1980s, which ended in 1985, when a referendum confirmed the government decision to abolish the automatic wage adjustment system that had protected workers from high inflation for decades. Some labour contract negotiations – especially in manufacturing industry - are obtaining limited gains in terms of nominal wage increases, but for the large majority of employees and pensioners losses in real incomes continue to be substantial.

The focus of both the Draghi and the Meloni governments on short term compensatory measures has meant that policies having more structural and long lasting impact have not been put in place. The latter could have included the a regulation of energy markets, the development of renewable energy sources, price controls for key products, and a strengthening of the indexation of wages and pensions. Some EU countries took steps in such directions, managing to limit the expansion of inflation; Italy concentrated its policy actions on subsidies to firms and households, with the result of having a worse performance in terms of price increases than the EU-19 average.

In the new context of restrictive monetary policy, the outlook for the Italian economy is one of stagnation, with a continuing erosion of real wages and increase in poverty. The growing burden on public finance from higher interest payments on public debt will reduce the policy space for measures compensating for the impact of inflation on business costs and household real incomes. A persisting negative impact of inflation – and of related policies – can therefore be expected on Italy's growth, real incomes and inequality.

References

Arce, O., Hahn, E., Koester, G. (2023) *How tit-for-tat Inflation can Make Everyone Poorer*. The ECB Blog. https://www.ecb.europa.eu/press/blog/date/2023/html/ecb.blog.230330~00e522ecb5.en.html.

Cirillo, V., Lucchese, M., Pianta, M. (2022) I divari sul lavoro, in "Il Mulino", 4, pp. 115-22.

Cirillo, V., Evangelista, R., Lucchese, M. (2023) Le conseguenze dell'inflazione su salari, redditi e disuguaglianze. In ed. Pianta, M., *L'inflazione in Italia Cause, conseguenze, politiche*. Carrocci, Roma.

Curci, N., Savegnago, M., Zevi, G., & Zizza, R. (2022). The redistributive effects of inflation: a microsimulation analysis for Italy. *Bank of Italy Occasional Paper*, (738).

ISTAT. (2022). Annual Report. The state of the nation. Available at https://www.istat.it/it/files//2022/09/Annual-Report-2022_Summary.pdf

MEF, Ministero dell'Economia e Finanze (2023). Public Finance Documents, Ministero dell'Economia e Finanze, Roma.

Nascia, L., Pianta, M., Simone, G. (2023). Le cause dell'inflazione: prezzi dell'energia, mercati, politiche. In Pianta, M. (ed.) *L'inflazione in Italia Cause, conseguenze, politiche*. Carrocci, Roma.

Pianta, M. (ed.) (2023). L'inflazione in Italia. Cause, conseguenze, politiche. Carocci, Roma.

Simone, G. and M. Pianta (2022), *Inflation and counter-inflationary policy measures: The case of Italy*, 83-4-2022, IMK-Hans Boeckler Foundation, Macroeconomic Policy Institute.

UPB, Ufficio Parlamentare di Bilancio. (2022). Hearing as part of the examination of the 2023 Budget Bill, 5 December 2022, Rome.

UPB, Ufficio Parlamentare di Bilancio. (2023). Budgetary Policy Report, June 2023, Rome.