



UNIVERSIDADE
FERNANDO
PESSOA

The Impact of Inflation on Household Purchasing Power in Europe (2020–2025)

Project of Graduation

[1.º ciclo de estudos em Ciências Empresariais]

Inès Mokeddem

Prof. Doutora Maria Luísa Vasconcelos

The Impact of Inflation on Household Purchasing Power in Europe (2020–2025)

Project of Graduation

1.º ciclo de estudos em Ciências Empresariais

Inès Mokeddem

Prof. Doutora Maria Luísa Vasconcelos

June 2025

Acknowledgements

I would like to express my sincere gratitude to my professor, Doutora Maria Luísa Vasconcelos, for her guidance, valuable advice, and support throughout the completion of this graduation project.

I also want to thank my family for their unconditional support, constant encouragement, and patience during this time.

Finally, I would like to thank my friends for their moral support, encouragement, and the moments of relief they provided.

Resumo

Este estudo analisa o impacto da inflação no poder de compra das famílias na Europa de 2020 a 2025, um período marcado pela pandemia de COVID-19 e pela guerra na Ucrânia. Estes acontecimentos desencadearam uma inflação significativa, especialmente nos sectores da energia e da alimentação, afetando gravemente as populações com baixos rendimentos, rurais e idosas. Este estudo examina as tendências da inflação, as respostas do BCE e as disparidades socioeconómicas a nível europeu. Utiliza-se uma metodologia descritiva assente na revisão de literatura e em dados do Eurostat ao longo do período de cinco anos. Inicia-se o estudo com as definições conceptuais de inflação e poder de compra, seguida de uma análise das causas da inflação, sua evolução e efeitos no poder de compra. Conclui-se que a mudança do BCE de uma política monetária de apoio para uma política monetária restritiva ajudou a conter a inflação, mas também aumentou a pressão sobre as famílias endividadadas. O efeito global foi regressivo, aprofundando as desigualdades sociais e comprometendo a estabilidade financeira dos mais vulneráveis. O estudo sublinha a necessidade de políticas inclusivas e bem direcionadas para restaurar o poder de compra e promover a equidade social.

Palavras-chave: Inflação, poder de compra, desigualdades socio-económicas, Europa

Abstract

This study analyses the impact of inflation on household purchasing power in Europe from 2020 to 2025, a period marked by the COVID-19 pandemic and the war in Ukraine. These events have triggered significant inflation, especially in the energy and food sectors, severely affecting low-income, rural and elderly populations. This study examines inflation trends, the ECB's responses and socio-economic disparities at European level. It uses a descriptive methodology based on a literature review and Eurostat data over a five-year period. The study begins with conceptual definitions of inflation and purchasing power, followed by an analysis of the causes of inflation, its evolution and effects on purchasing power. It concludes that the ECB's shift from a supportive to a restrictive monetary policy helped contain inflation, but also increased the pressure on indebted households. The overall effect has been regressive, deepening social inequalities and jeopardising the financial stability of the most vulnerable. The study emphasises the need for inclusive and well-targeted policies to restore purchasing power and promote social equity.

Keywords: Inflation, purchasing power, socio-economic inequalities, Europe

Index

List of Figures.....xiii

List of Tables..... xv

List of Acronyms..... xvii

1. INTRODUCTION..... 1

2. CONCEPTUAL FRAMEWORK.....3

 2.1 Inflation.....3

 2.2 Household purchasing power.....4

 2.3 Monetary policy, inflation control and interest rates.....5

3. CAUSES OF INFLATION RISE IN EUROPE..... 7

 3.1 Economic impact of COVID-19 pandemic.....7

 3.2 Geopolitics and energy and commodity prices.....8

 3.3 Recovery fueled by monetary and fiscal stimulus.....9

4. INFLATION TRENDS IN EUROPE.....13

 4.1 Inflation rates (2020-25).....13

 4.2 Effect on purchasing power and impact on households.....16

 4.3 Differences between income groups.....16

6. CONCLUSION.....17

7. BIBLIOGRAPHIC REFERENCES.....19

List of Figures

Figure 1 - The race between AS and AD.....	7
Figure 2 - Inflation, inflation by consumption purpose - Overall index, Euro area.....	13

List of Tables

Table 1 - ECB Main Refinancing Rate and Monetary Policy Changes (2020–2025).....9

Table 2 - Euro area annual inflation and its main components: weights for 2025 and rates for
May 2024 and December 2024-May 2025.....14

Table 3 - HICP all-items - annual average inflation rates, 2015-2024.....15

List of Acronyms

CPI – Consumer Price Index

ECB – European Central Bank

EU – European Union

HCPI – Harmonized Consumer Price Index

PEPP – Pandemic Emergency Purchase Program

1. INTRODUCTION

Inflation refers to the general and sustained increase in the prices of goods and services over time, while purchasing power is the amount of goods and services that a given amount of money can buy. When inflation rises, each unit of currency buys fewer goods and services, effectively eroding purchasing power. In Europe (2020-2025), inflation surged due to COVID-19's economic impact, expansive fiscal policies, and geopolitical tensions that increased energy and raw material costs (Mućk & Postek, 2025). Inflation during this period eroded European households' purchasing power, disproportionately affecting low-income groups. Government fiscal responses were often poorly targeted, reducing their effectiveness in protecting the most vulnerable (Amores et al., 2024). Many Europeans felt the loss of purchasing power was greater than official inflation statistics indicated, partly due to the visibility of price increases in essential goods (Schnabl & Sepp, 2021). The European Central Bank's monetary policy sought to curb inflation, but it also risked slowing medium term growth (Klinova & Sidorova, 2022). More recently, ongoing inflation in Europe continues to challenge household purchasing power, social equity, and economic stability (Riscado, 2023).

In this context, the main objective of this research, is to analyze how inflation between 2020 and 2025 has affected the purchasing power of households in Europe. As secondary objectives, the study aims (i) to assess the effectiveness of fiscal policies implemented between 2020 and 2025 by the European Central Bank in mitigating the impact of inflation on households across different income levels, and (ii) to identify the socio-economic groups most vulnerable to the loss of purchasing power.

The study follows a descriptive approach based upon literature review and the analysis of statistical data collect from Eurostat for the period 2020-2025. This period was chosen because it captures the significant economic fluctuations related to the COVID-19 pandemic aftermath, subsequent fiscal policies, and emerging geopolitical tensions impacting inflation and purchasing power in Europe.

The text begins with an overview of the concepts of inflation and purchasing power, setting the context for understanding their interplay in Europe between 2020 and 2025. It then explores the main drivers behind the inflation during this period, followed by an analysis of its impact on different socio-economic groups. The discussion continues with an evaluation of the fiscal and monetary policy responses and concludes with reflections on the broader social and economic implications.

2. CONCEPTUAL FRAMEWORK

2.1 Inflation

Inflation refers to the general rise in prices across an economy, which reduces the purchasing power of money and affects consumers' ability to buy goods and services. Inflation is most measured using two main indices: the Consumer Price Index (CPI) and the Harmonized Consumer Price Index (HCPI). The CPI tracks the average change over time in the prices paid by consumers for a fixed basket of goods and services within a specific country. The HCPI, on the other hand, is a standardized version used in the European Union (EU) to allow for cross-country inflation comparisons. Both indices are composed of various components such as food, energy and housing, each with its own price dynamics and volatility. Some components like energy and food are particularly volatile due to their sensitivity to global supply shocks, weather events and geopolitical factors while others such as core goods and services tend to be more stable (Barkan et al., 2020). For example, the housing component has been identified as a major contributor to CPI volatility, sometimes rising or falling much faster than the overall index and thus amplifying inflation swings (Groneau, 2019).

GDP deflator is another important measure of inflation. The GDP deflator measures the change in prices for all goods and services produced within a country, capturing a broader range of economic activity, including investment, government spending and exports while excluding imports (Chowdhury, 2008). Unlike the CPI, the GDP deflator adjusts for changes in the composition of GDP and thus offers a more comprehensive view of inflation across the entire economy.

Recent inflation in Europe and globally has been driven by a mix of supply-side disruption and shifts in demand, with government stimulus payments also playing a role in boosting spending (Eichengreen, 2024). As such, while global factors such as commodity prices and exchange rates have become increasingly important in shaping inflation, domestic economic conditions and policies still play a significant role especially for core and wage inflation (Forbes, 2019). Core inflation refers to the underlying trend in consumer prices that excludes certain volatile items (food, energy). The goal of core inflation is to provide a clearer picture of long-term inflation trends by filtering out these temporary shocks, making it a more reliable guide for monetary policy and economic analysis (Clark, 2001). It's particularly

important for understanding persistent inflationary pressures such as those driven by domestic demand or wage growth, rather than short-term fluctuations in global commodity markets.

In response to rising inflation, central banks typically raise interest rates to stabilize prices, but there is ongoing debate about the best policy responses and how long elevated inflation will persist (Gros, 2023). High inflation can have welfare costs, effectively reducing real incomes and living standards, with estimates suggesting that even moderate reductions in inflation can yield meaningful gains in real income (Lucas, 2003).

2.2 Household purchasing power

Household purchasing power refers to the ability of families to buy goods and services which is primarily determined by their income and the prices of essential items. When prices rise faster than incomes, as seen during periods of high inflation, purchasing power declines, making it harder for households to afford necessities and maintain their standard of living (Guesalaga & Marshall, 2008). Income level is a key factor: lower-income households typically allocate a larger share of their budget to essentials such as food, housing, and energy, making them more vulnerable to price increases (Chang-bin & Yu-meng, 2007). Overall, maintaining or improving household purchasing power is crucial for economic well-being and social stability.

Inflation reduces household purchasing power by making goods and services more expensive, so that disposable income buys less than before; this effect is especially severe when price increases outpace wage growth, directly lowering living standards and sometimes forcing families to cut back on essentials or take on debt (Luu et al., 2022). The impact on inflation is not uniform: lower-income households, families with more children or elderly members and those living in rural areas are hit harder because they spend a larger share of their budget on necessities like food and energy which often see the steepest price rises (Saha, 2022). Age also matters, middle aged households with more assets may face higher effective taxation on returns, while older adults on fixed income are less able to adjust (Altig et al., 2024). Geographic location influences exposure to inflation, as rural households may face higher energy costs and less access to competitive markets (Sidorova & Klinova, 2022).

Inflation expectations and perceptions also shape behavior. If household expect prices to keep rising, they may accelerate purchases or, if they feel poorer, cut back spending, both of which can influence broader economic trends (Schuffels & Lieb, 2019). Household balance

sheets- such as net worth or debt levels also affect how families respond to inflation and adjust their consumption (Schuffels & Lieb, 2019).

Public policies, including targeted income support, price caps and social welfare programs, are crucial to protect the most vulnerable and stabilize purchasing power, helping to prevent increased inequality and social unrest during periods of high inflation (Sidorova & Klinova, 2022). The effectiveness of these policies depends on careful targeting and consideration of economic and environmental goals (Luu et al., 2022).

2.3 Monetary policy, inflation control and interest rates

Central banks like the European Central Bank (ECB) use monetary policy – primarily by adjusting key interest rates – to influence borrowing costs, spending and ultimately inflation. When inflation is high, the ECB raises interest rates, making loans more expensive and savings more attractive, which tends to reduce household and business borrowing and cool demand, helping to bring inflation down (Carboni et al., 2019). However, these actions involve trade-offs: higher rates can slow economic activity and increase unemployment, while lower rates risk increase inflation (Canofari et al., 2023). For households, higher interest rates mean higher mortgage and loan payments, reducing disposable income and purchasing power, especially for those with variable-rate debt (Carboni et al., 2019). At the same time, savers may benefit from better returns on deposits. The ECB must balance these effects across diverse euro area economies, where the impact of rate changes can vary widely (Prucnal, 2025). The ECB’s policy has shown some flexibility, accepting temporary inflation overshoots to avoid stifling growth after long periods of low inflation (Hennecke, 2021). Ultimately, the ECB’s policies shape household finances by influencing both the cost of borrowing and the value of money with significant consequences for income, consumption, and economic well-being. (Canofari et al., 2023)

3. CAUSES OF INFLATION RISE IN EUROPE

3.1 Economic impact of COVID-19 pandemic

The rise in inflation in Europe following the COVID-19 pandemic was driven by several interconnected factors. Lockdowns and stay-at-home restriction disrupted supply chains and reduced labor availability, leading to shortages and higher production costs, which in turn pushed up prices, especially for food and essential goods (Akter, 2020). At the same time, uncertainty regarding the progress of the disease, how income and jobs would be affected and economic policies, led households to increase precautionary savings. As the London School of Economics put it, there was a race between aggregate demand and aggregate supply (see Figure 1).

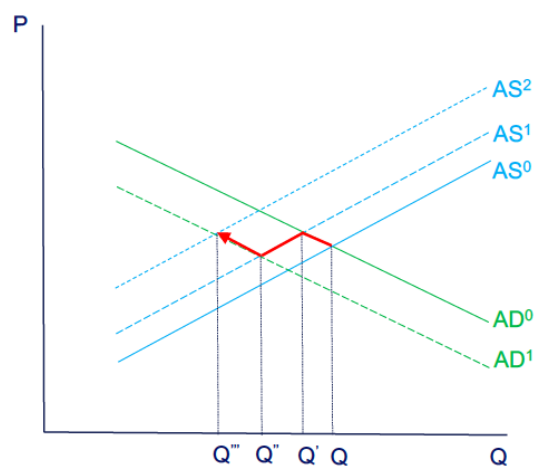


Figure 1 - The race between AS and AD

Source: Reproduced from *The economics of a pandemic: The case of COVID-19*, por P. Surico & A. Galeotti, n.d., London Business School.

Governments and central banks implemented large-scale fiscal and monetary stimulus to support households and businesses, boosting demand even as supply was constrained (Wu, Li, & Yang, 2023). These combined shocks led to a notable increase in inflation and inflation expectation across the Euro Area, with some countries particularly in Central and Eastern Europe experiencing sharper price rises than others (Dunin-Wąsowicz, 2024). The pandemic also increased uncertainty, causing households to cut back on spending, which initially dampened demand but later contributes to price volatility as restrictions eased and pent-up demand surged (Müller et al., 2020).

Empirical evidence shows that food prices rose significantly in countries with stricter lockdowns and inflation persistence increased, suggesting that the effects could last beyond the immediate crisis, though they are likely to be temporary (Akter, 2020). The economic impact was uneven, with lower-income households and those in more affected regions suffering greater losses in disposable income, though targeted fiscal policies helped cushion some of these effects (Van der Wielen et al., 2021). Overall, the pandemic's economic shock, combined with policy responses and supply disruptions, created a unique environment that fueled inflationary pressures across Europe (Wu, Li, & Yang, 2023).

3.2 Geopolitics and energy and commodity prices

Geopolitical tensions, especially the Russia-Ukraine war, have significantly contributed to rising energy and raw material prices in Europe, fueling inflation across the continent. Disruption to gas and oil supplies, combined with sanctions on Russian energy exports, have led to sharp increases in energy costs, which are quickly passed on to consumers and businesses, raising the overall Consumer Price Index (CPI) (Marangoz, 2025). These energy price shocks are particularly potent during periods of heightened geopolitical risk, amplifying inflationary pressures and making European economies more vulnerable compared to other like the US (Ben Cheikh et al., 2023).

The impact is not uniform. Countries and sectors more dependent on fossil fuels or with higher pre-existing inflation rates experience greater price surges (Martínez-García et al., 2023). Higher energy and raw material cost also drive-up food prices and production costs, further eroding household purchasing power and slowing economic growth (Cheffou et al., 2024).

The inflationary effects of these shocks are persistent and can be nonlinear with the strongest impacts occurring when geopolitical risks surpass certain thresholds (Ben Cheikh et al., 2023). Policymakers are urged to consider transitioning to renewable energy and implementing coordinated responses to mitigate these inflationary pressures and protect economic stability (Martínez-García et al., 2023).

3.3 Recovery fueled by monetary and fiscal stimulus

The table below outlines the evolution of the ECB's Main Refinancing Operations rate (Refi) a key policy instrument used to influence borrowing costs and economic activity. These changes reflect the ECB's shifting policy response to evolving macroeconomic conditions, particularly inflationary pressures over the 2020–2025 period.

Table 1 - ECB Main Refinancing Rate and Monetary Policy Changes (2020–2025)

Date	Main Refinancing Rate (Refi)	Description/Comments
Jan 2020	0.00%	Pre-pandemic steady low rate
March 2020	0.00%	PEPP launched; rates kept at zero
Throughout 2020–2021	0.00%	Continued accommodative stance with PEPP
July 2022	0.50%	First hike after long zero-rate period; inflation concerns rise
Sep 2022	1.25%	Aggressive hike to curb inflation
Dec 2022	2.50%	Continued rapid increases
Feb 2023	3.00%	Further tightening
March 2023	3.50%	Ongoing restrictive policy
June 2023	4.00%	Peak tightening phase
September 2023	4.00 %	Last notable hike, inflation still a concern
January 2024	4.25%	Possible peak rates signaled, depending on economic data
June 2024	4.00%	First rate cut considered amid economic slowdown
September 2024	3.75%	Continual gradual rate easing
February 2025	2.90%	Monetary easing continues
June 2025	2.15%	Continued easing to support growth

Source: European Central Bank, Statistical Data Warehouse, 2025

Legend:

The table uses shading to highlight different monetary policy phases during the period, with lighter colours representing accommodative policies and darker colours indicating tightening monetary policy.

Through 2020 to mid-2022, refi remained very low, staying at or below 0.00%. Beginning in July 2022, the rate rose sharply from 0.00% to 0,5%, 1,25% and then 2.50% by December 2022, marking a clear phase of monetary tightening after years of ultra-low or negative rates. Refi continued to rise steadily from 2.50% in early 2023 to a peak of 4.00% in September 2023, reflecting monetary tightening. Throughout 2024, the rate gradually declined from around 4.25% to 3.15%, continuing the easing trend. In 2025, refi is gradually declining from 2.90% in February down to 2.15% by June, indicating a continued easing of monetary policy throughout the first half of the year.

For the complete and current schedule – including refi rate changes not listed in the table – please refer to the ECB's official data portal.

The table highlights two distinct monetary policy phases. The first, from early 2020 to late 2021, was defined by an expansionary policy, as the ECB responded to the COVID-19 crisis with unprecedented stimulus, notably through the Pandemic Emergency Purchase Program (PEPP). During this period, interest rates were held at 0.00%, and quantitative easing aimed to support credit flows and protect household incomes from a sudden economic contraction.

Beginning in mid-2022, the ECB initiated a restrictive monetary policy in response to surging inflation across the euro area driven by a combination of supply-side disruptions and demand-side pressures. One of the primary factors was the sharp increase in energy prices, largely attributable to the geopolitical fallout from the war in Ukraine, which began in February 2022. The conflict led to significant disruptions in the supply of natural gas and crude oil, commodities on which many euro area economies heavily depended. These energy price shocks had widespread effects, increasing production and transportation costs and exerting upward pressure on consumer prices across various sectors (Milewski & Milewska, 2022).

In parallel, the post-pandemic economic had already triggered a strong recovery in aggregate demand. As COVID-19 restrictions were lifted, household consumption rebounded sharply, fueled by accumulated excess savings and deferred spending. This demand revival coincided with ongoing global supply chain disruptions, including logistical bottlenecks and shortages of intermediate goods, particularly in manufacturing sectors reliant on complex global value chains. The resulting supply-demand imbalances contributed to persistent cost-push inflation (Ginn & Saadaoui, 2025).

Moreover, food prices rose significantly due to reduced exports of grain and fertilizers from Ukraine and Russia, intensifying the inflationary burden, particularly on lower-income households who allocate a larger share of their income to essentials. In some sectors, tightening labor markets also began to exert mild upward pressure on wages, raising concerns about potential second-round effects and wage-price spirals (Bernanke & Blanchard, 2024).

In this context, with headline inflation in the euro area persistently breaching the ECB's 2% target, the central bank transitioned from an accommodative to a restrictive stance. The tightening cycle aimed to anchor inflation expectations, restore price stability, and prevent inflationary dynamics from becoming entrenched in the medium term. A series of successive rate hikes, reaching 4.00% by mid-2023, signaled a clear shift toward inflation

control. These measures aimed to tighten monetary conditions, reduce excess demand, and curb inflation expectations.

These measures contributed to a significant decline in inflation, which fell to around 2.4% by late 2023, indicating that monetary tightening had some success in re-anchoring inflation expectations and stabilizing price growth. Nevertheless, the policy shift carried substantial distributional consequences. While inflation fell, higher interest rates imposed greater financial pressure on indebted households, especially those with variable-rate loans and limited savings. In contrast, savers and wealthier households may have benefited from higher returns. The ECB's challenge was not only to restore price stability, but to do so without exacerbating inequality or causing a sharp economic slowdown, a delicate that continues to shape the policy debate across the euro area.

4. INFLATION TRENDS IN EUROPE

4.1 Inflation rates (2020-25)

The following graph depicts Euro area inflation, providing critical insights into the evolution of household purchasing power. From mid-2021 through early 2023, the sharp rise in inflation, peaking above 10%, significantly eroded households' purchasing power. As prices for essential goods and services soared, the same amount of money bought considerably less, forcing households to cope with higher living costs, often by cutting back on non-essentials or dipping into savings if their incomes did not keep pace. Following this peak, inflation began to decline in 2023 and stabilized around 2-3% in 2024 and 2025. While prices did not fall back to previous levels, they stopped increasing at such a rapid rate, a stabilization that offered the potential for purchasing power to stabilize and gradually recover (provided that wage growth begins to align with or exceed this lower inflation rate). This would allow households to better manage their budgets and potentially regain some of the financial ground lost during the period of high inflation.

Figure 2 - Inflation, inflation by consumption purpose - Overall index, Euro area

ECB Data Portal, 20 June 2025, 16:38 CET



Source: EUROSTAT

Source: Eurostat, via ECB Portal

The following table reveals a picture for household purchasing power in the Euro area. While the overall annual inflation rate moderated to 1.9% by May 2025, largely thanks to significant deflation in energy prices (-3.6% in May 2025), which directly boosts disposable income for essential costs like fuel and heating, challenges remain. Inflation in services, a major household expenditure, persists at a high 3.2%, still eroding purchasing power for items like housing, transport, and leisure. Furthermore, a concerning trend is the recent re-acceleration of food inflation, particularly unprocessed food (4.3% in May 2025), which disproportionately strains the budgets of lower-income households. In essence, while falling energy costs offer some relief, persistent price increases in services and renewed pressure from food prices mean that households, especially those with tighter budgets, continue to face considerable pressure on their purchasing power.

Table 2 - Euro area annual inflation and its main components: weights for 2025 and rates for May 2024 and December 2024-May 2025

Euro area annual inflation and its main components: weights for 2025 and rates for May 2024 and December 2024-May 2025
(%)

	Weight 2025 (%)	May 2024	Dec 2024	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025
All-items HICP	1000.0	2.6	2.4	2.5	2.3	2.2	2.2	1.9
<i>All-items excluding:</i>								
energy	906.0	2.8	2.7	2.6	2.6	2.5	2.8	2.5
energy, unprocessed food	863.4	2.9	2.7	2.7	2.6	2.5	2.7	2.4
energy, food, alcohol & tobacco	712.8	2.9	2.7	2.7	2.6	2.4	2.7	2.3
Food, alcohol & tobacco	193.3	2.6	2.6	2.3	2.7	2.9	3.0	3.2
processed food, alcohol & tobacco	150.6	2.8	2.9	2.6	2.6	2.6	2.4	2.9
unprocessed food	42.7	1.8	1.6	1.4	3.0	4.2	4.9	4.3
Energy	94.0	0.3	0.1	1.9	0.2	-1.0	-3.6	-3.6
Non-energy industrial goods	256.3	0.7	0.5	0.5	0.6	0.6	0.6	0.6
Services	456.5	4.1	4.0	3.9	3.7	3.5	4.0	3.2

Source: Eurostat (online data code: prc_hicp_inw; prc_hicp_manr)



Source: Eurostat

Table 2 shows the annual average HICP inflation rates and highlights a dramatic shift in household purchasing power across Europe. From 2015 to 2020, generally low inflation (often below 2%) meant a relatively stable period for what households could buy with their money. However, the years 2021-2023 saw a sharp and widespread surge, with the Euro area average reaching 8.4% in 2022. This period caused a severe erosion of purchasing power, as rising prices for everything from energy to food significantly outpaced wage growth for many, forcing them to spend more for less. The impact was uneven, with Eastern European countries like Estonia (19.4% in 2022) experiencing particularly drastic declines in real income.

By 2024, significant disinflation saw rates fall across the board (Euro area at 2.4%), which signals a stabilization and potential for purchasing power to slowly recover. As prices increase at a much slower pace, household budgets are under less pressure. However, it is crucial to note that the cumulative price increases from the high-inflation years mean the overall cost of living remains significantly higher than pre-2021, implying that households are still working to regain the purchasing power lost during the peak inflation period.

Table 3 - HICP all-items - annual average inflation rates, 2015-2024

HICP all-items - annual average inflation rates, 2015-2024

(%)

Geopolitical entity	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
EU ⁽¹⁾	0.1	0.2	1.7	1.9	1.5	0.7	2.9	9.2	6.4	2.6
Euro area ⁽²⁾	0.2	0.2	1.5	1.8	1.2	0.3	2.6	8.4	5.4	2.4
Belgium	0.6	1.8	2.2	2.3	1.2	0.4	3.2	10.3	2.3	4.3
Bulgaria	-1.1	-1.3	1.2	2.6	2.5	1.2	2.8	13.0	8.6	2.6
Czechia	0.3	0.6	2.4	2.0	2.6	3.3	3.3	14.8	12.0	2.7
Denmark	0.2	0.0	1.1	0.7	0.7	0.3	1.9	8.5	3.4	1.3
Germany	0.7	0.4	1.7	1.9	1.4	0.4	3.2	8.7	6.0	2.5
Estonia	0.1	0.8	3.7	3.4	2.3	-0.6	4.5	19.4	9.1	3.7
Ireland	0.0	-0.2	0.3	0.7	0.9	-0.5	2.4	8.1	5.2	1.3
Greece	-1.1	0.0	1.1	0.8	0.5	-1.3	0.6	9.3	4.2	3.0
Spain	-0.6	-0.3	2.0	1.7	0.8	-0.3	3.0	8.3	3.4	2.9
France	0.1	0.3	1.2	2.1	1.3	0.5	2.1	5.9	5.7	2.3
Croatia	-0.3	-0.6	1.3	1.6	0.8	0.0	2.7	10.7	8.4	4.0
Italy	0.1	-0.1	1.3	1.2	0.6	-0.1	1.9	8.7	5.9	1.1
Cyprus	-1.5	-1.2	0.7	0.8	0.5	-1.1	2.3	8.1	3.9	2.3
Latvia	0.2	0.1	2.9	2.6	2.7	0.1	3.2	17.2	9.1	1.3
Lithuania	-0.7	0.7	3.7	2.5	2.2	1.1	4.6	18.9	8.7	0.9
Luxembourg	0.1	0.0	2.1	2.0	1.6	0.0	3.5	8.2	2.9	2.3
Hungary	0.1	0.4	2.4	2.9	3.4	3.4	5.2	15.3	17.0	3.7
Malta	1.2	0.9	1.3	1.7	1.5	0.8	0.7	6.1	5.6	2.4
Netherlands	0.2	0.1	1.3	1.6	2.7	1.1	2.8	11.6	4.1	3.2
Austria	0.8	1.0	2.2	2.1	1.5	1.4	2.8	8.6	7.7	2.9
Poland	-0.7	-0.2	1.6	1.2	2.1	3.7	5.2	13.2	10.9	3.7
Portugal	0.5	0.6	1.6	1.2	0.3	-0.1	0.9	8.1	5.3	2.7
Romania	-0.4	-1.1	1.1	4.1	3.9	2.3	4.1	12.0	9.7	5.8
Slovenia	-0.8	-0.2	1.6	1.9	1.7	-0.3	2.0	9.3	7.2	2.0
Slovakia	-0.3	-0.5	1.4	2.5	2.8	2.0	2.8	12.1	11.0	3.2
Finland	-0.2	0.4	0.8	1.2	1.1	0.4	2.1	7.2	4.3	1.0
Sweden	0.7	1.1	1.9	2.0	1.7	0.7	2.7	8.1	5.9	2.0
Iceland	0.3	0.8	-1.7	0.7	2.0	1.2	3.7	5.7	8.0	4.5
Norway	2.0	3.9	1.9	3.0	2.3	1.2	3.9	6.2	5.8	2.8
Switzerland	-0.8	-0.5	0.6	0.9	0.4	-0.8	0.5	2.7	2.3	1.1
Montenegro ⁽³⁾	:	-0.1	2.7	2.6	0.5	-0.5	2.5	11.9	8.7	3.6
North Macedonia ⁽³⁾	0.1	0.2	2.1	2.3	0.7	1.2	3.4	14.0	9.0	4.2
Albania ⁽³⁾	:	:	3.2	1.8	1.7	2.2	2.3	6.6	5.3	2.6
Serbia ⁽³⁾	1.5	1.3	3.3	2.0	1.9	1.8	4.0	11.7	12.1	4.8
Türkiye ⁽³⁾	7.7	7.7	11.1	16.3	15.2	12.3	19.6	72.3	54.0	58.5
Kosovo ^{(3)(*)}	:	:	1.5	1.1	2.7	0.2	3.4	11.6	4.9	1.6

: not available

(¹) The data refer to the official EU aggregate. Its country coverage changes in line with the addition of new EU Member States and integrates them using a chain-linked index formula.

(²) The data refer to the official euro area aggregate. Its country coverage changes in line with the addition of new EA Member States and integrates them using a chain-linked index formula.

(³) Definition differs.

(^{*}) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Source: Eurostat (online data code: prc_hicp_aind)

4.2 Effect on purchasing power and impact on households

Inflation has a significant and often unequal impact on households, primarily by eroding purchasing power and altering consumption patterns. Lower-income households are typically hit hardest, as they spend a larger share of their income on essentials like food and utilities which tend to experience the steepest price increases during inflationary periods (Saha, 2022). These households often cope by using up savings, borrowing or selling assets and many expect it will take over a year to recover from inflation shocks. Middle-income households also feel the strain with rising prices pushing some to reduce their standard of living and increase indebtedness (Saha, 2022). Inflation can lead to substantial reductions in lifetime spending, with the impact varying by age, income and asset ownership; for example, middle-aged and wealthier households may face higher effective tax rates on their asset during inflation (Altig et al, 2024). Differences in spending patterns and regional price changes mean that inflation is experienced differently across households, a phenomenon known as inflation inequality (Li & Wei, & Xu, 2017).

4.3 Differences between income groups

During periods of high inflation income groups have experienced different impacts, with lower-income households facing the greatest burden. These groups are defined by income quintiles, with the lowest quintile representing the poorest 20% of households and the highest the wealthiest 20% (Stempel, 2022). Lower-income households spend a larger share of their budgets on essential goods (food, heating, electricity) that have seen above-average price increases while higher-income groups spend more on non-essentials, which have experienced lower inflation (Stempel, 2022). As a result, inflation has been regressive, disproportionately affecting those with less income, especially in poorer countries where food inflation is the main driver, and in richer countries where heating costs dominate (Loughrey et al., 2025). The inflation gap between the lowest and highest income groups has reached up to 8.5 percentage points in some cases (Stempel, 2022). These differences are persistent and have accumulated over time further widening inequality, particularly for the elderly, households with limited savings, and those with lower education levels (Fritsche et al., 2011). While there are exceptions where inflation is less regressive (eg: Finland), the overall trend is that inflation exacerbates income inequality (Loughrey et al., 2025). This highlights the need for targeted policy to protect the most vulnerable during inflationary periods (Loughrey et al., 2025).

6. CONCLUSION

This research set out to analyze how inflation between 2020 and 2025 affected household purchasing power in Europe. The findings reveal that the combined effects of COVID-19 pandemic and geopolitical tensions, particularly the war in Ukraine and subsequent policy responses, produced a sharp and uneven inflationary shock that significantly eroded purchasing power, especially between mid-2021 and late 2023 and with the most severe impacts falling on low-income groups, the elderly, and rural populations. Although inflation began to moderate in 2024 and 2025, the cumulative rise in prices has left a lasting impact, with real incomes still below pre-crisis levels for many households.

In evaluating the effectiveness of monetary policies, it is manifest that the ECB's initial accommodative policy in 2020–2021 helped cushion the economic fallout of the pandemic. However, the rapid shift to monetary tightening from mid-2022 onward, imposed uneven burdens and brought additional costs for indebted households. While inflation declined by late 2023, the distributional effects of higher interest rates and persistent price pressures in essentials, particularly food and services, meant that lower-income and financially vulnerable households continued to face significant strain.

The analysis also highlighted clear disparities across socio-economic groups. Lower-income households, who spend a greater share of their income on essentials, were hit hardest by inflation. The inflation gap between income quintiles, highlights how inflation has been regressive and has widened existing inequalities. The elderly, those with limited savings, and with lower education levels emerged as particularly vulnerable.

Although inflation has stabilized more recently, the accumulated effects are still being felt. To ensure the recovery of purchasing power and greater social equity, it is essential that future policies are better targeted and able to address the specific needs of different social groups.

7. REFERENCES

Akter, S. (2020). The impact of COVID-19 related ‘stay-at-home’ restrictions on food prices in Europe: Findings from a preliminary analysis. *Food Security*.

Altig, D., Auerbach, A., Eidschun, E., et al. (2024). Inflation's impact on American households. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4793906>

Amores, A. F., Basso, H. S., Bischl, J., et al. (2024). Inflation, fiscal policy, and inequality: The impact of the post-pandemic price surge and fiscal measures on European households. *Review of Income and Wealth*.

Amores, A. F., Basso, H. S., Bischl, J. S., et al. (2024, May 27). *Inflation, fiscal policy and inequality: The distributional impact of fiscal measures to compensate for consumer inflation* (Documentos Ocasiones). Banco de España.

Barkan, O., Benchimol, J., Caspi, I., Cohen, E., Hammer, A., & Koenigstein, N. (2020). Forecasting CPI inflation components with hierarchical recurrent neural networks. *International Journal of Forecasting*.

Ben Cheikh, N., Ben Zaied, Y., & Mattoussi, W. (2023). Oil price shocks in the age of surging inflation. *Energy Economics*.

Bernanke, B., & Blanchard, O. (2024, May 1). *An analysis of pandemic-era inflation in 11 economies*.

Carboni, G., Motto, R., Lemke, W., Montes-Galdón, C., Saint Guilhem, A., & Ferroni, F. (2019, December 1). *A tale of two decades: The ECB's monetary policy at 20* (Occasional Paper Series No. 228). European Central Bank.

Canofari, P., Messori, M., Di Bartolomeo, G., & Sbriglia, P. (2023). The ECB's new inflation target from a short- and long-term perspective. *Journal of Policy Modeling*.

Cheffou, A. I., Gnégne, Y., Jawadi, F., & Kouadio, A. (2024, July 24). Geopolitical risks and business fluctuations in Europe: A sectorial analysis. *European Journal of Political Economy*.

Chowdhury, A. (2008). Methods explained: The GDP implied deflator. *Economic & Labour*.

Clark, T. E. (2001). Comparing measures of core inflation. *Econometric Reviews*.

Dunin Wąsowicz, M. (2024, June 30). Inflation vs inflation expectations in 2020–2021 – The impact of the COVID 19 pandemic. *Acta Scientiarum Polonorum. Oeconomia*.

Eichengreen, B. (2024). The return of inflation free. *Current History*, 123(849), 9–13.

Forbes, K. J. (2019). Inflation dynamics: Dead, dormant, or determined abroad? In *Brookings Papers on Economic Activity* (pp. 257–338). Brookings Institution Press.

Fritsche, U., Colavecchio, R., & Graff, M. (2011, February 23). *Inflation inequality in Europe*. SSRN. <https://doi.org/10.2139/ssrn.1770025>

Ginn, W., & Saadaoui, J. (2025, April 18). *Do supply chain disruptions matter for global economic conditions?*

Gros, D. (2023). The political and technical aspects of controlling inflation. *Intereconomics*, 58(3).

Guesalaga, R., & Marshall, P. (2008). Purchasing power at the bottom of the pyramid: Differences across geographic regions and income tiers. *Journal of Consumer Marketing*, 25(7).

Hennecke, P. (2021). The ECB's new monetary policy strategy: Is the temporary acceptance of overshooting inflation justified? *Intereconomics: Review of European Economic Policy*.

Ke, G., Chang-bin, L., & Yu-meng, W. (2007, September). Evaluation on housing purchasing power of urban households. In *2007 International Conference on Wireless Communications, Networking and Mobile Computing*. IEEE.

Klinova, M., & Sidorova, E. (2022). Inflation in the context of geopolitics in France and the Eurozone. *International Trends / Mezhdunarodnye Protsessy*, December 30.

Li, S., Wei, L., & Xu, Z. (2017). Dynamic asset allocation and consumption under inflation inequality: The impacts of inflation experiences and expectations. *Economic Modelling*, 61, 112–122.

Loughrey, J., Linden, J., Sologon, D., O'Donoghue, C., & Kyzyma, I. (2025, March 16). Distributional impact of soaring prices in Europe: A cross-national decomposition of inflation's regressivity and progressivity.

Lucas, R. E., Jr. (2003). Inflation and welfare. *Economica*.

Luu, N., Soriolo, C., Causa, O., & OECD Economics Department. (2022). *A cost-of-living squeeze? Distributional implications of rising inflation* (OECD Economics Department Working Papers).

Marangoz, C. (2025, January 1). Geopolitical turmoil and energy dynamics: Analyzing the impact on inflation in selected European economies. *Heliyon*.

Milewski, D., & Milewska, B. (2022, September 22). Implications of increasing fuel costs for supply chain strategy.

Mućk, J., & Postek, Ł. (2025, February 21). Supply shortages and inflation in Europe. *Economica*.

Müller, G. J., Kuester, K., Schoenle, R. S., & Dietrich, A. M. (2020, April 15). News and uncertainty about COVID-19: Survey evidence and short run economic impact. *Journal of Monetary Economics*.

Prucnal, A. (2025, January 19). Inflation management in the EU: Does the Eurozone outperform non-Euro states? *International Journal of Business & Management Studies*.

Riscado, S. (2023). *Inflation, fiscal policy and inequality*. Occasional Paper Series.

Saha, A. (2022). Impact of inflation on consumption pattern of households. *PRAGATI: Journal of Indian Economy*.

Schnabl, G., & Sepp, T. (2021, August 1). Inflation target and inflation measurement in the Eurozone in transition. *Wirtschaftsdienst*.

Schuffels, J., & Lieb, L. (2019). Inflation expectations and consumer spending: The role of household balance sheets. *Empirical Economics*.

Sidorova, E., & Klinova, M. (2022). Inflation in the context of geopolitics in France and the Eurozone. *International Trends / Mezhdunarodnye Protsessy*.

Stempel, D. (2022, July 1). Household inflation inequality in the United States and Europe.

Surico, P., & Galeotti, A. (n.d.). *The economics of a pandemic: The case of COVID-19*. London Business School.

Van der Wielen, W., Almeida, V., Christl, M., De Poli, S., Tumino, A., & Barrios, S. (2021, June 1). The impact of COVID-19 on households' income in the EU. *Journal of Economic Inequality*.

Wu, J., Li, S., & Yang, Z. (2023, April 27). Impact of COVID-19 pandemic: A global inflation crisis. *BCP Business & Management*.