



Inflation and Food Prices in Albania, Western Balkans and EU: A Comparative Analysis Before and After COVID-19

Azmi Stringa *, Ildir Gjata, Alban Korbi

University of Tirana, Faculty of Economy

*Corresponding author E-mail: azmi.stringa@gmail.com

Received: June 23, 2025, Accepted: September 16, 2025, Published: September 29, 2025

Abstract

By 2024, Albania's food and non-alcoholic beverage prices reached 100% of the EU average, up from 68% in 2012, despite a nearly 30% appreciation of the local currency. This was the sharpest increase in food prices recorded in the Balkans during the period, despite the country recording similar growth rates to the regional average. Food prices in Albania are today at levels higher than in countries such as the Netherlands and Spain, which have significantly higher GDP per capita and household wellbeing than Albania (GDP per capita at 35% of the EU average, second from last in the Balkans). In 2024, Albanian families, who allocate nearly 40% of their income to food, face price levels comparable to those of much wealthier EU households. This study provides a robust, regression-based comparative analysis of food price inflation in Albania from 2013 to 2024, benchmarking trends against the European Union (EU), key EU trade partners (Italy, Greece, Germany), and Western Balkan economies. It compares food inflation dynamics across two periods, pre-COVID (2013–2021) and post-COVID (2022–2024), and evaluates the role of currency appreciation in moderating domestic price pressures. Using harmonized consumer price data and exchange-rate-adjusted regression models, the study reveals that Albania's food prices have risen earlier, faster and more persistently than in its peer countries, even as the Albanian lek appreciated nearly 30% over the decade. While food price movements in Albania appear to align with EU trends, statistical modeling shows a significantly stronger elasticity and an amplified domestic response, particularly before 2021. Once exchange rate effects are accounted for, Albania's correlation with EU food prices collapses, unlike in other Western Balkan countries or EU trade partners, indicating that FX gains were not passed on to consumers. These findings provide strong empirical evidence that Albania's inflation outcomes are not simply imported but are domestically amplified due to weak market competition, non-transparent pricing, and limited regulatory oversight. The paper concludes that internal structural issues have muted the pass-through benefits of currency appreciation to consumers, while price increases closely followed the trend observed in the EU. This underscores the need for stronger competition policy and more inclusive market mechanisms to ensure that macroeconomic gains support household welfare. The paper is especially relevant to policymakers, central banks, international institutions, and researchers seeking to understand how structural inefficiencies can offset macroeconomic advantages in small economies.

Keywords: Economic Growth; Foreign Currency Exchange; Covid-19; Household Index of Consumer Prices; Household Welfare.

1. Introduction

The post-COVID period has witnessed an unprecedented surge in inflation across the globe, driven by a combination of disrupted supply chains, energy market instability, and shifting global demand. Albania has not been immune to these pressures. Beginning in late 2021, consumer prices, especially food, accelerated rapidly, exposing households to significant cost-of-living challenges. Yet unlike many of its regional peers, Albania entered this inflationary cycle with a uniquely vulnerable position: food already accounted for close to 40% of household consumption (Bank of Albania, 2024, p. 34), and food prices had already risen substantially in the pre-COVID period. Albania, while experiencing similar external pressures, followed a distinctly more rapid increase in food prices, despite relatively similar levels in overall inflation. At the end of 2024, food prices in Albania are at the same level as the EU average (in 2012: 68% of the EU), despite a nearly 30% appreciation of the Albanian lek over the decade, which should have reduced imported inflation.

The importance of this topic extends beyond Albania. In the United States, food inflation has become central to political debate (World Economic Forum, 2023), while in Greece and Serbia, concerns over “greedflation” have prompted high-profile policy responses, including supermarket agreements and profit margin caps (Euronews, 2024; To Vima, 2024; Reuters, 2025). In Albania, food prices have also become a matter of public concern (Scan TV, 2022), yet sharper increases despite currency appreciation have not triggered comparable political responses. This makes the Albanian case particularly relevant for understanding how institutional and market structures shape household welfare.

This paper explores the evolution of food price inflation in Albania between 2013 and 2024, using comparative regression and trend analysis against the European Union (EU), Albania's major EU trade partners (Italy, Greece, and Germany), and Western Balkan economies. It examines two distinct periods, pre-COVID (2013–2021) and post-COVID (2022–2024), to evaluate changes in inflation dynamics

and the impact of a nearly 30% appreciation of the Albanian lek. It distinguishes itself by deploying a rigorous regression-based approach and using exchange-rate-adjusted models to measure the pass-through of external inflation and the effect of currency appreciation. Regression and trend analysis reveal that food prices in Albania, Albania's regional peers, and key EU trade partners mostly track average EU food prices closely and in a statistically significant manner, both during the pre-COVID (2013–2021) and post-COVID (2022–2024) periods. However, Albania emerges as a clear outlier when accounting for currency appreciation and price increases in the pre-COVID (2013–2021) period. During the pre-COVID period (2013–2021), Albania experienced the sharpest increase in food prices among its regional and EU peers, despite facing similar external inflationary pressures. While the EU and Albania's main trading partners, Italy, Greece, and Germany, recorded low food inflation during these years, Albania's food prices rose rapidly and persistently. Notably, this occurred alongside a 14% appreciation of the Albanian lek, which theoretically should have made imports cheaper and dampened inflation. Regression analysis confirms that food prices in Albania were highly sensitive to EU trends during this period, yet the benefits of currency strength were not passed on to consumers. Instead, domestic structural inefficiencies, such as weak competition, opaque pricing, and potential market capture, appear to have amplified prices independently of external conditions. This early divergence from EU and regional patterns laid the foundation for Albania's current elevated food price levels, even before the global inflationary shock of 2021. Despite substantial FX gains, Albania's food prices rose by 61% over the decade, far surpassing the EU average increase of 43%. When adjusted for currency appreciation, the picture becomes starker: imported EU food price inflation for Albania would amount to just 4%, confirming that almost none of the FX-related benefits reached consumers, while prices increased in line but faster than in the EU. In fact, once FX gains are factored in, Albania surpasses even Serbia in food price increases relative to the EU. Regression analyses suggest that while external inflationary pressures are transmitted effectively to Albanian consumers, the benefits of a stronger currency are largely captured by domestic market actors. Albania's divergence from both EU and Balkan trends, especially in the pre-COVID period, underscores the role of weak competition, regulatory gaps, and possible market capture in food supply chains. This paper is especially relevant for researchers, policymakers, central banks, and economic institutions seeking to evaluate the inflationary impact of FX regimes and for policymakers aiming to protect household welfare in economies where food comprises a large share of consumption. It offers a valuable lens for comparing the inflation experience of countries with floating currencies to those with pegged or euroized regimes. Ultimately, the findings suggest that exchange rate appreciation alone is insufficient to protect households in the absence of competitive market structures and robust consumer protection. By situating Albania's experience alongside cases such as regional peers, this paper highlights that the inflation challenge is not confined to macroeconomic shocks but is fundamentally shaped by the quality of domestic institutions. As food prices in Albania converge toward Western European levels, without a corresponding rise in incomes or welfare, the burden of inflation falls disproportionately on low- and middle-income households. Addressing this requires not only sound monetary policy but also stronger regulatory oversight of food markets, improved competition policy, and more inclusive economic institutions. The lack of price transmission from currency appreciation has negatively contributed to the cost-of-living burden in Albania, eroding purchasing power and increasing economic vulnerability, especially in a country where GDP per capita remains among the lowest in Europe (35% of the EU average), the poor heavily rely on remittances in euros, and almost half of the citizens' savings are in euros.

2. Literature Review

The post-COVID economic recovery and the onset of the war in Ukraine significantly influenced global inflation trends. Beginning at the end of 2021, consumer prices surged globally, with Albania experiencing similar pressures. These events disrupted supply chains, altered demand patterns, and triggered commodity price surges, fundamentally altering the inflation landscape across the region. Both domestic and international factors have shaped the inflation landscape in the country. Rising inflation became a global concern as consumer prices surged to levels not seen in four decades, with cost-of-living pressures dominating public discourse from Albania (Scan TV, 2022) to the United States (World Economic Forum, 2022).

In the case of Albania, the Bank of Albania identified increases in global food and energy prices as the primary external drivers of inflation (Bank of Albania, 2022, p. 34). However, the central bank also highlighted mitigating factors, including the increased domestic production of unprocessed foods and the appreciation of the Albanian lek, both of which tempered imported inflationary pressures. These insights underscore the complex interplay between external shocks and domestic economic conditions in shaping inflation outcomes.

A critical factor in Albania's inflation dynamics is the composition of its consumer basket. Food and non-alcoholic beverages comprise close to 40% of household consumption (Bank of Albania, 2024, p. 34). This renders the country particularly vulnerable to supply-side shocks in these categories. Additionally, imported inflation, driven by price trends in Albania's trading partners, has further amplified inflationary pressures.

The structure of household consumption has far-reaching implications for individual wellbeing. Like Albania, poorer households allocate a significantly larger share of their expenditure to food and are thus disproportionately affected by food price shocks. As FAO (2008) highlights, most low-income urban and rural households are net food buyers. When food prices rise, these households are not only forced to alter their dietary patterns, consuming less diverse, lower-quality foods, but may also cut spending in critical non-food areas such as healthcare and education. This vulnerability is both a food security and a broader human development concern.

In 2023, the Bank of Albania emphasized the exchange rate's crucial role in maintaining low inflation relative to regional neighbors. According to estimates, absent this exchange rate appreciation, inflation would have been 2.5 percentage points higher (Albanian Association of Banks, 2023). According to the central bank, this monetary development not only partially shielded households from external price shocks but also contributed to maintaining lower interest and financing costs, thus contributing to overall economic stability.

The European Union, Albania's main trading partner, reported price increases between 2013 and 2023, especially significant after 2021. Specifically, prices for food and non-alcoholic beverages rose by 36.3%, while overall consumption prices increased by 23.4% (Eurostat, 2024). This trend aligns with a 26.6% increase in the harmonized index of consumer prices (HICP) and a 40.5% the HICP for food and beverages over the same period. The significant price increases recorded in the European Union starting in 2021 are evidence of the presence of imported inflation in post-COVID Albania. Before the COVID-19 pandemic, imported inflation pressures from Europe were relatively low and stable, largely influenced by subdued global commodity prices and moderate economic growth.

A similar inflationary pattern is evident in the United Kingdom. The Office for National Statistics (ONS, 2023) reported that the surge in prices from late 2021 to 2023 was driven primarily by post-COVID economic recovery, supply chain disruptions, and the energy price crisis following Russia's invasion of Ukraine. The UK's experience reinforces the notion that inflation in recent years has been shaped by a confluence of supply-side shocks and global economic realignments.

3. Methodology

This study employs a quantitative research design to analyze the evolution of food prices and inflation from 2013/2015 to 2024, with a particular focus on Albania, its key EU trade partners (Italy, Greece, and Germany), and Western Balkan economies (Serbia, North Macedonia, Kosovo, and Montenegro). The research is structured around two key periods: the pre-COVID period (2013–2021) and the post-COVID period (2021–2024), to investigate changes in inflationary dynamics and the role of currency appreciation. Key trade partners of Albania were determined using trade flow data from INSTAT.

The analysis is based on time series data covering economic growth, inflation, the Harmonized Index of Consumer Prices (HICP) for all items and specifically for food and non-alcoholic beverages, exchange rates, and comparative price levels. All time series data were rebased to a common starting point in 2013 or 2015 (for Western Balkans) to enable consistent cross-country and temporal comparisons. Data on economic growth and overall inflation were drawn from the IMF World Economic Outlook Database 2024 edition. Exchange rate data were retrieved from the official websites of the respective national central banks, including the Bank of Albania, the National Bank of Serbia, and the National Bank of the Republic of North Macedonia.

To assess inflation trends and food price developments, HICP data for Albania were sourced from INSTAT, while HICP data for the EU and Western Balkan countries were obtained from Eurostat. Since the mid-1990s, EU member countries have compiled Harmonized Indices of Consumer Prices (HICP) that are used as an aggregate measure of inflation for the euro area and to compare consumer price inflation across member countries, and for monetary and economic policy purposes of the EU. According to INSTAT, the CPI is the official measure of inflation in Albania, while the HICPs enable international comparisons of inflation rates to be made between European Countries. To ensure data reliability, we calculated changes in overall prices and for food and non-alcoholic beverages for the period 2013–2024 using the CPI and HICP, and no material differences were noted for Albania.

The methodology includes a comparative analysis of the growth rates in overall inflation and food prices across countries and time periods to identify convergence or divergence trends. Emphasis is placed on comparing national food price inflation to the average food price inflation across the European Union. The analysis also identifies which Western Balkan countries benefited from currency appreciation during the observed period and assesses whether this appreciation mitigated inflationary pressures, particularly in food prices, compared to key trading partners or neighboring countries. The study further contrasts the inflation performance of countries with stable or appreciating currencies against those without such exchange rate advantages, to examine how exchange rate dynamics influenced domestic price stability in the face of global inflationary shocks.

This study combines descriptive statistics and regression-based empirical methods to evaluate the dynamics of food inflation in Albania relative to the EU average, its EU trade partners, and Western Balkan neighbors. We conducted simple linear regressions using indices to model elasticities. Food inflation trends were benchmarked and analyzed across two periods: pre-COVID (2013/2015–2021) and post-COVID (2022–2024). A series of regressions was conducted to assess the pass-through of EU food price inflation to domestic prices. Regressions were run: (a) between each country's food price index and the EU index, (b) between Albania and its key trade partners (Germany, Italy, and Greece), and (c) using adjusted EU indices that account for currency appreciation. All regression models were tested for significance using p-values and Significance F-statistics. Models were validated through R^2 values and visual correlation in graphs. Analyses were conducted using standard techniques in Excel and cross-validated for robustness.

For the exchange-rate-adjusted regressions, we built an adjusted EU food price index based on exchange rate changes to simulate the imported inflation pressure net of currency effects. To investigate the relationship between Albania and Serbia (the two countries in our study that don't use the Euro or don't have their currency pegged to the Euro), food price inflation, and imported inflationary pressures from the EU, we constructed two regression models. The first model used the unadjusted EU food inflation index as the independent variable, while the second model used an adjusted version of the EU food inflation index that incorporates changes in the exchange rate. The foreign exchange-adjusted EU food inflation index was created to isolate the inflationary component net of currency effects. The adjusted EU food inflation monthly index was calculated using the following methodology, as detailed below.

- Exchange rate percentage change was computed as:

$$ER\ Change\ t_n = \frac{Rate\ t_n}{Rate\ t_{n-1}} - 1$$

- The adjusted EU index was then computed recursively:

$$Adjusted\ EU\ t_n = Adjusted\ EU\ t_{n-1} \times \frac{Unadjusted\ EU\ t_n}{Unadjusted\ EU\ t_{n-1}} \times (1 + ER\ Change\ t_n)$$

- To ensure the balancing of the index at the first available data:

$$Adjusted\ EU\ t_0 = 100$$

- For countries that use the Euro or have currencies pegged to the Euro, the adjusted EU index equals the unadjusted EU index, since $ER\ Change = 0$.

The adjusted EU food inflation monthly index would be the same even if we used the following methodology as described below.

- Calculate the unadjusted EU price index equivalent in national currency each period:

$$Adjusted\ EU\ t_n = Unadjusted\ EU\ t_n \times Rate\ t_n$$

- To ensure rebalancing of the index at the first available data:

$$Adjusted\ and\ rebalanced\ EU\ t_0 = 100$$

- The adjusted and rebalanced EU index was then calculated using the following formula:

$$Adjusted\ and\ Rebalanced\ EU\ t_n = Adjusted\ and\ Rebalanced\ EU\ t_{n-1} \times \frac{Adjusted\ EU\ t_n}{Adjusted\ EU\ t_{n-1}}$$

- For countries that use the Euro or have currencies pegged to the Euro, the adjusted EU index equals the unadjusted EU index, since the exchange rate is equal to 1.

We also employed multiple regression models to test our findings on the relationship between food and non-alcoholic beverage prices in Albania and the EU average HICP for food and non-alcoholic beverages, and the EUR/ALL exchange rate. The EU HICP serves as a proxy for external price trends and import cost pressures, while the exchange rate (expressed as how many Albanian Lek (ALL) equal one Euro) captures currency-driven price changes. A higher exchange rate indicates a weaker ALL, making imports from the Eurozone more expensive, whereas a lower exchange rate reflects a stronger ALL and potentially cheaper imported goods. For countries that use the Euro or have currencies pegged to the Euro, there is no need for multiple regression models, since the exchange rate is equal to 1.

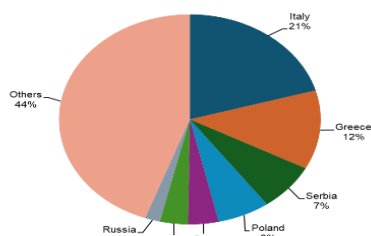
4. Analysis and Discussion

4.1. Albania's key European trade partners on food, drinks, and tobacco

As food and non-alcoholic beverages make up close to 40 percent of the consumer basket, supply-side shocks for this category can influence overall inflation. As such, fluctuations in international and domestic food prices over the years have affected inflation levels in the country (IMF, 2016, p. 111). In addition, imported inflation in Albania is influenced by inflation levels recorded in its trade partners (Bank of Albania, 2024, p. 38).

The European Union is Albania's main trade partner (Instat, 2024). Similarly, trade of food, drinks, and tobacco by Albania is mostly conducted with countries from Europe (Figures 1 and 2). Albania runs a trade deficit on this category of goods, with imports being approximately three times higher than exports in value (Instat, 2024). Together, the EU and Western Balkan countries accounted for 77% of the total value of imports of food, drinks, and tobacco by Albania in 2024.

Value imports of Food, Drinks, and Tabaco by top countries, 2024



Value imports of Food, Drinks, and Tabaco by top countries, 2013

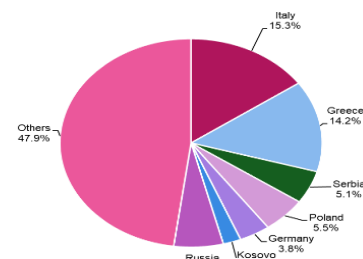


Fig. 1-2: Albania, Value of Food, Drinks, and Tobacco Imports by Country, 2013 and 2024.

Source: Instat.

In 2024, imports of food, drinks, and tobacco from EU countries to Albania account for 64% (2013: 57%) of the total value of such imports (Instat, 2024). Imports for the same category from Western Balkan countries account for 13% (2013: 11%) of the total value for the year (Instat, 2024). The figures below show the top countries from which Albania imports food, Drinks, and tobacco for 2013 and 2024. During the period, except for the reduction of imports from Russia due to the war, the top trade partners have remained the same, with Italy and Greece making up 33% (2013: 29.5%) of total imports of Food, Drinks, and tobacco in Albania. In the Western Balkans, the top trade partners are Serbia and Kosovo, making up 11% (2013: 7.3%) of total imports of Food, Drinks, and tobacco in Albania.

4.2. EU and Western Balkans: comparative growth and price levels for food and non-alcoholic beverages

In 2012, food and non-alcoholic beverage price levels in Albania were at 68% of the average EU price levels for this category (Kurkowiak, 2013). In 2024, despite the currency appreciation by close to 30% against the Euro over the decade (Bank of Albania, 2025), food and non-alcoholic beverage price levels in Albania are reported at 100% of the average EU price levels for this category (Eurostat, 2025). In Table 1, comparative price levels for food and non-alcoholic beverages are shown for the EU, key EU trading partners, and Balkan countries in 2012 and 2024. The data show that over the decade, prices for this category in Albania have increased significantly more than in the EU. Data for Kosovo for 2024 was not published by Eurostat when Table 1 was prepared and is therefore reported as 'N/A'.

Table 1: Comparative Price Levels for Food and Non-Alcoholic Beverages (EU=100), 2012 and 2024.

Countries	2012	2024
Greece	104	106
Croatia	92	104
Germany	106	103
Italy	111	102
European Union	100	100
Albania	68	100
Serbia	71	96
Bulgaria	68	89
Poland	61	87
Montenegro	76	84
Bosnia & Herzegovina	76	83
Romania	67	76
North Macedonia	58	73
Kosovo	72	N/A

Source: Eurostat.

Food and non-alcoholic beverages prices for Albania's key EU trading partners, like Italy and Germany, have increased by less than the EU average. In the Balkans, Albania's food and non-alcoholic beverages price levels in 2024 are exceeded only by Croatia, with EU countries like Bulgaria and Romania reporting lower price levels than Albania (in 2012, their price levels relative to the EU were close to Albania). While the Balkan region food prices have moved closer to the EU average during the decade, Albania has reported the highest price increase relative to the EU since 2012, followed by Serbia and Bulgaria.

Figure 3 shows the real GDP per capita growth rate over the decade for the EU and the Balkan countries under purchasing power parity. Albania and the Balkan countries have grown faster than the EU during this period, with Albania's growth rate being close to the regional average and EU countries like Romania and Bulgaria. Albania's GDP per capita, constant prices under purchase power parity, is equal to 35% of EU in 2024 (IMF, 2025), continuing to be second to last among Balkan countries (Kosovo: 30% of EU), while Albania has food prices at the comparable levels to EU average and has overpassed countries like Spain, Czechia, Hungary and the Netherlands (Eurostat, 2025).

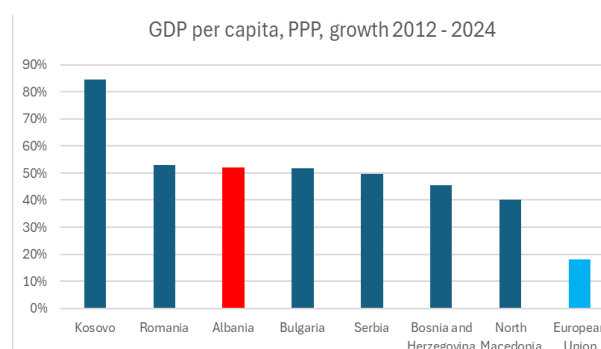


Fig. 3: Comparative GDP Per Person, Growth Constant Prices, 2012 – 2024.

Source: IMF World Economic Outlook.

4.3. Inflation and food prices in Albania, Western Balkans, the EU, and key EU trading partners

This section of the paper analyses the changes in the Overall Harmonized Index of Consumer Price and the Harmonized Index of Consumer Price for Food and Non-Alcoholic Beverages from 2013 to 2024. This covers two periods: the period from 2013 (2015 for Western Balkans) to 2021, when reported inflation levels were moderate, and 2022-2024, when high overall inflation and especially increases in food prices were recorded in Europe, Western Balkans, Kosovo, and Albania.

4.3.1. Albania and the EU

From 2013 to 2024, in Albania, overall consumer prices have increased by 31.2% and food and non-alcoholic beverages prices have increased by 63.2%. So, food prices have increased by twice as much as overall consumer prices during the period in Albania from 2013 to 2024. In addition, from Figure 4, it can be observed that in Albania, food and non-alcoholic beverage prices have increased faster than overall consumer prices even before the start of the inflationary shock of late 2021. In 2021, the spread between the increase in food and non-alcoholic beverage prices and overall consumer prices was 15.5% in Albania, with food prices rising from 2013 by twice as much as overall consumer prices. A smaller spread but still large in magnitude of 11.5% between overall inflation and food prices was observed in Albania, also in the period 2022-2024, due to the inflation shock post-COVID-19, with food prices again rising close to twice as much compared to overall consumer prices.

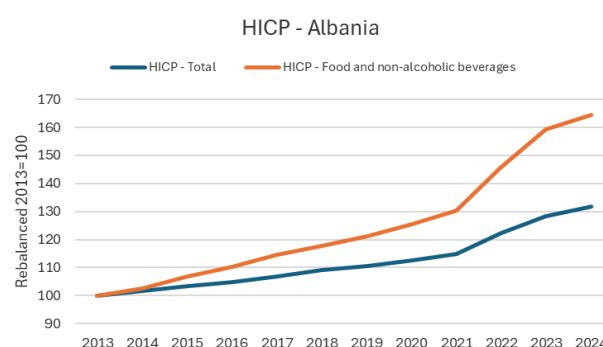


Fig. 4: Albania, Harmonized Index of Consumer Price, 2013-2024.

Source: Instat, Authors' Compilation.

Figures 5-8 present the change in overall consumer prices and the change in food and non-alcoholic beverage prices for the EU and Albania's key EU trading partners. The overall change in the HICP in the EU during the period 2013-2024 was 30.3% (Eurostat, 2024). The change in overall consumer prices in the EU during the period 2013-2024 is similar to that of Albania (31.2%) and Germany (30.8%). Italy (22.7%) and Greece (16.4%), our two largest EU trading partners, have reported overall consumer price increases lower than the EU and Albania during the decade.

Albania (14.7%) has reported higher inflation than the EU (9.5%) in the period from 2013 to 2021, while the country (14.7%) has reported lower inflation than the EU (19.2%) after 2021. In mid-2010, inflation levels in EU countries were low as Europe was leaving behind the European debt crisis, and austerity measures were implemented in several countries. For the period 2013 – 2021, Germany, Italy, and Greece reported inflation of 10.8%, 5.3%, and -0.8%, respectively. As such, inflationary pressures from Albania's key trade partners were

low. In addition, during that period, Albania experienced the first wave of currency appreciation against the Euro, thus reducing imported inflationary pressures even further. In the period after 2021, when the inflation shock was manifested, Albania (14.7%) recorded lower levels of inflation than the EU (19.2%), Germany (18.1%), Greece (17.2%), and Italy (16.5%). Lower inflation rates reported by Albania in the post-COVID-19 period were attributed mainly to the currency appreciation (Albanian Association of Banks, 2023).

Food prices in the EU have increased by only 43.4% compared to 63.2% in Albania since 2013. In Italy and Greece, our two largest trading partners, food and non-alcoholic beverage prices have increased close to 32.5% or by just half as much as the increase recorded in Albania since 2013. Albania (30%) has reported higher food and non-alcoholic beverage prices than the EU (11%) in the period from 2013 to 2021, while the country (26%) has reported slightly lower price increases than the EU (29%) in this category for the period after 2021. For the period 2013 – 2021, Germany, Italy, and Greece reported food and non-alcoholic beverages price increases of 15%, 7%, and 3%, respectively. As such, imported inflationary pressures for food and non-alcoholic beverages from Albania's key trade partners were low. As mentioned above, during that period, Albania experienced the first wave of currency appreciation against the Euro, thus further reducing imported inflationary pressures on food and non-alcoholic beverage prices. In the period after 2021, when the inflation shock was manifested, Albania (26%) recorded lower levels of food and non-alcoholic beverages price increase than the EU (29%), Germany (30%), and Greece (29%), but higher levels when compared to Italy (23%). Currency appreciation is said to have contributed to limiting further increases in food and non-alcoholic beverages in Albania post-COVID-19 (Bank of Albania, 2024, p. 38).

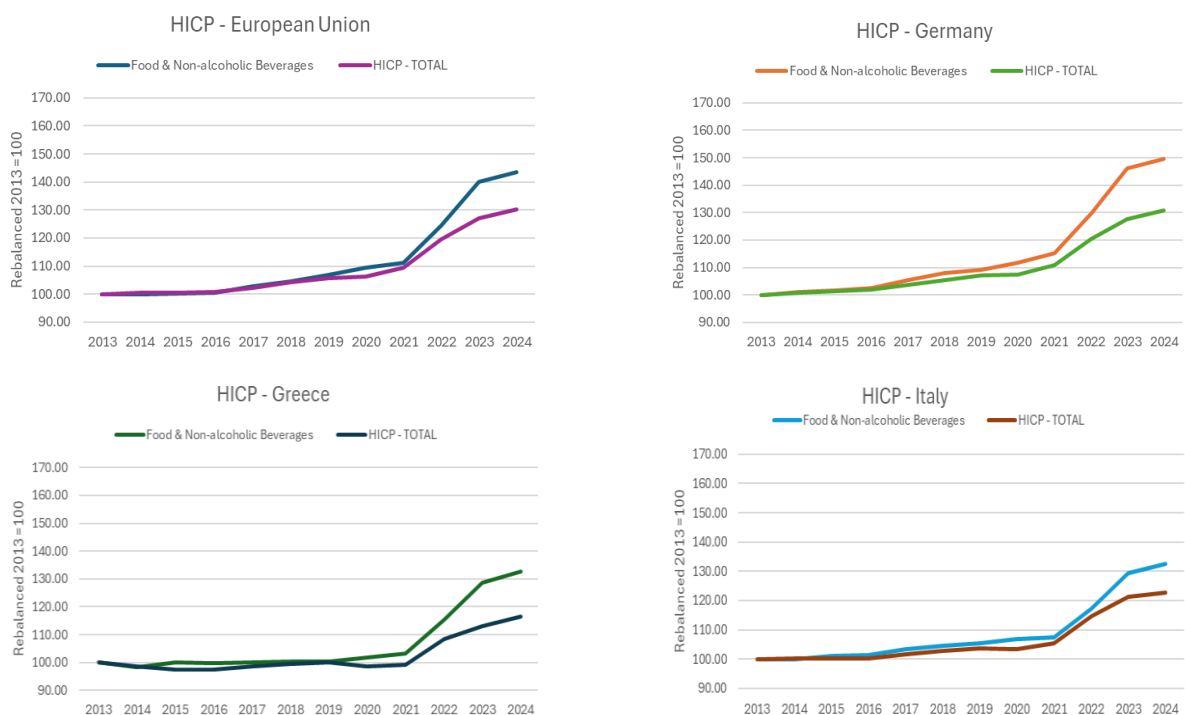


Fig. 5-8: EU, Germany, Italy, & Greece, Harmonized Index of Consumer Price, 2013-2023.

Source: Eurostat, Authors' Compilation.

While in Albania, food and non-alcoholic beverage prices have diverged from overall consumer prices even before the start of the inflationary shock of late 2021, this is not the case for the EU and our key EU trading partners. Food prices in the EU and our key trading partners have stayed mainly in line with overall prices up to 2021 and diverged only during the inflation shock that hit food and energy prices. Table 2 and Table 3 present the overall consumer price changes and food and non-alcoholic beverage price changes, respectively, for each period.

Table 2: HICP – All Items Change 2013-2024

Country	2013 - 2021	2021 - 2024	2013 - 2024
Albania	14.7%	14.7%	31.6%
European Union	9.4%	19.2%	30.3%
Germany	10.8%	18.1%	30.8%
Greece	-0.8%	17.3%	16.4%
Italy	5.3%	16.5%	22.7%

Source: Eurostat, Authors' Calculations.

For the period from 2013 to 2021, the spread between the increase in food and non-alcoholic beverage prices and overall consumer prices is 1.6% in the EU (Germany: 4.2%, Greece: 3.8%, Italy: 1.7%) compared to Albania's 15.3%. In the post-COVID-19 period from 2022 to 2024, the spread between the increase in food and non-alcoholic beverage prices and overall consumer prices is 9.8% in the EU (Germany: 11.9%, Greece: 11.7%, Italy: 6.5%) compared to Albania's 11.3%.

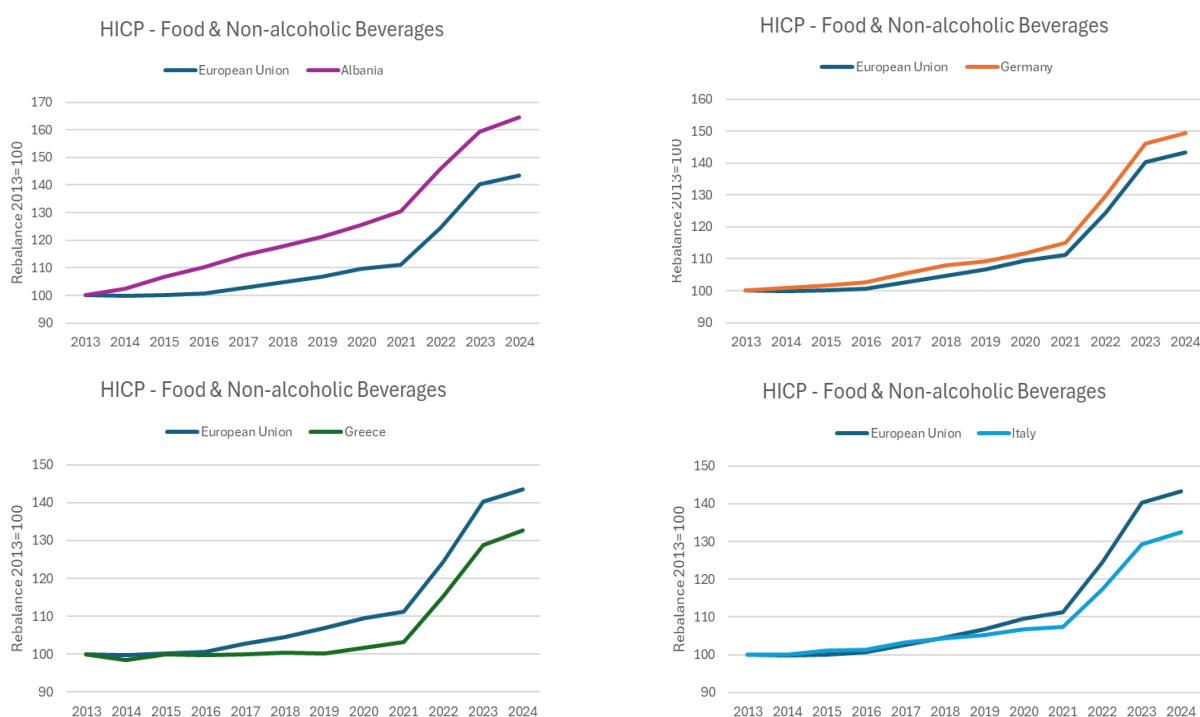


Fig. 9-12: EU, Germany, Italy, Greece, and Albania, Food and Non-Alcoholic Beverages HICP, 2013-2024.

Source: Eurostat, Instat, Authors' Compilation.

Figures 9-12 show the behavior of food and non-alcoholic beverages prices in Albania and its key EU trading partners as compared to the EU average. Germany and Italy move in a similar pattern with the EU average, with Greece being below the EU average due to the impact of the European Debt crisis. In the period 2013-2021, food prices in Albania increased more than the EU average (Albania's spread with the EU: +19%). For the same period the EU spread with Germany was +4%, while in Italy and Greece, food prices increased by less than in the EU, with spreads of -4% and -8% respectively.

Table 3: HICP - Food and Non-Alcoholic Beverages Change 2013-2024

Country	2013 - 2021	2021 - 2024	2013 - 2024
Albania	30%	26%	64%
European Union	11%	29%	43%
Germany	15%	30%	49%
Greece	3%	29%	33%
Italy	7%	23%	33%

Source: Eurostat, Authors' Calculations.

In the period 2022-2024, food prices in Albania increased by less than the EU average (Albania's spread with the EU: -3%). For the same period, the EU spread with Germany was +1% and with Greece was 0%, while in Italy, food prices increased by less than in the EU, with a spread of -6% compared to the EU.

4.3.2. Albania and the western Balkans

Tables 5 and 6 present the change in overall consumer prices and the change in food and non-alcoholic beverage prices for Albania, Western Balkan countries, and the EU. The change in overall consumer prices in the EU (30%) during the period 2015-2024 is similar to that in Albania (30%), and lower than the average change in the Western Balkans (40%). Of our two largest trading partners in the Western Balkans, Kosovo has reported overall inflation of 30% and Serbia has reported the highest levels of overall inflation at 51%.

In the period from 2015 to 2021, Albania (13%) reported higher overall inflation compared to Western Balkan countries' average (10.5%) and the EU (10%), surpassed only by Serbia (15%). In the period 2022-2024, Albania (15%) has reported significantly lower overall inflation compared to Western Balkan countries' average (26.5%) and lower levels compared to the EU (19%), with Serbia reporting the highest levels in the region at 31%. In 2023 Bank of Albania assessed that the exchange rate has been one of the main factor for the inflation levels in the country in the post-COVID-19 period, which have been and have remained the lowest in the region, by reducing the negative effects of foreign shocks on the buying power of Albanian households (Albanian Association of Banks, 2023).

Table 5: HICP - All Items Change 2015-2024

Country	2015 - 2021	2021 - 2024	2015 - 2024
Albania	13%	15%	30%
European Union	9%	19%	30%
North Macedonia	10%	30%	43%
Kosovo	9%	19%	30%
Montenegro	8%	26%	36%
Serbia	15%	31%	51%

Source: Eurostat, Authors' Calculations.

The change in food and non-alcoholic beverages price levels in the EU (45%) during the period 2015-2024 is lower than in Albania (61%) and lower than the average change in the Western Balkans (58%). For the period 2015-2024, the change in food and non-alcoholic beverages price levels in Albania (61%) is higher than the average change in the Western Balkans (58%), surpassed only by Serbia (76%). In the period from 2015 to 2021, Albania (29%) reported a significantly higher change in food and non-alcoholic beverages price levels compared to other Western Balkan countries (18%) and the EU (13%), followed by Serbia (26%). In the period 2022-2024, Albania (25%) has reported a lower change in food and non-alcoholic beverages price levels compared to other Western Balkan countries' average (33%) and lower levels compared to the EU (28%), with Serbia reporting the highest levels in the region at 40%.

Table 6: HICP - Food and Non-Alcoholic Beverages Change 2015-2024

Country	2015 - 2021	2021 - 2024	2015 - 2024
Albania	29%	25%	61%
European Union	13%	28%	45%
North Macedonia	12%	37%	53%
Kosovo	19%	25%	50%
Montenegro	15%	31%	50%
Serbia	26%	40%	76%

Source: Eurostat, Authors' Calculations.

While in Albania, food and non-alcoholic beverage prices have diverged from overall consumer prices even before the start of the inflationary shock of late 2021, this is not the case for the EU and other Western Balkan countries. Food prices in the EU and other Western Balkan countries have stayed mainly in line with overall prices up to 2021 and diverged only during the inflation shock that hit food and energy prices.

For the period from 2015 to 2021, the spread between the increase in food and non-alcoholic beverage prices and overall consumer prices is 4% in the EU and 7.5% for other Western Balkan countries' average (North Macedonia: +2%, Kosovo: +10%, Montenegro: +7%, Serbia: +11%) compared to Albania's 16%. In the post Covid-19 period from 2022 to 2024, the spread between the increase in food and non-alcoholic beverage prices and overall consumer prices relatively the same for the EU (+9%), Western Balkan average (7%) (North Macedonia: +7%, Kosovo: +6%, Montenegro: +5%, Serbia: +9) and Albania's (10%).

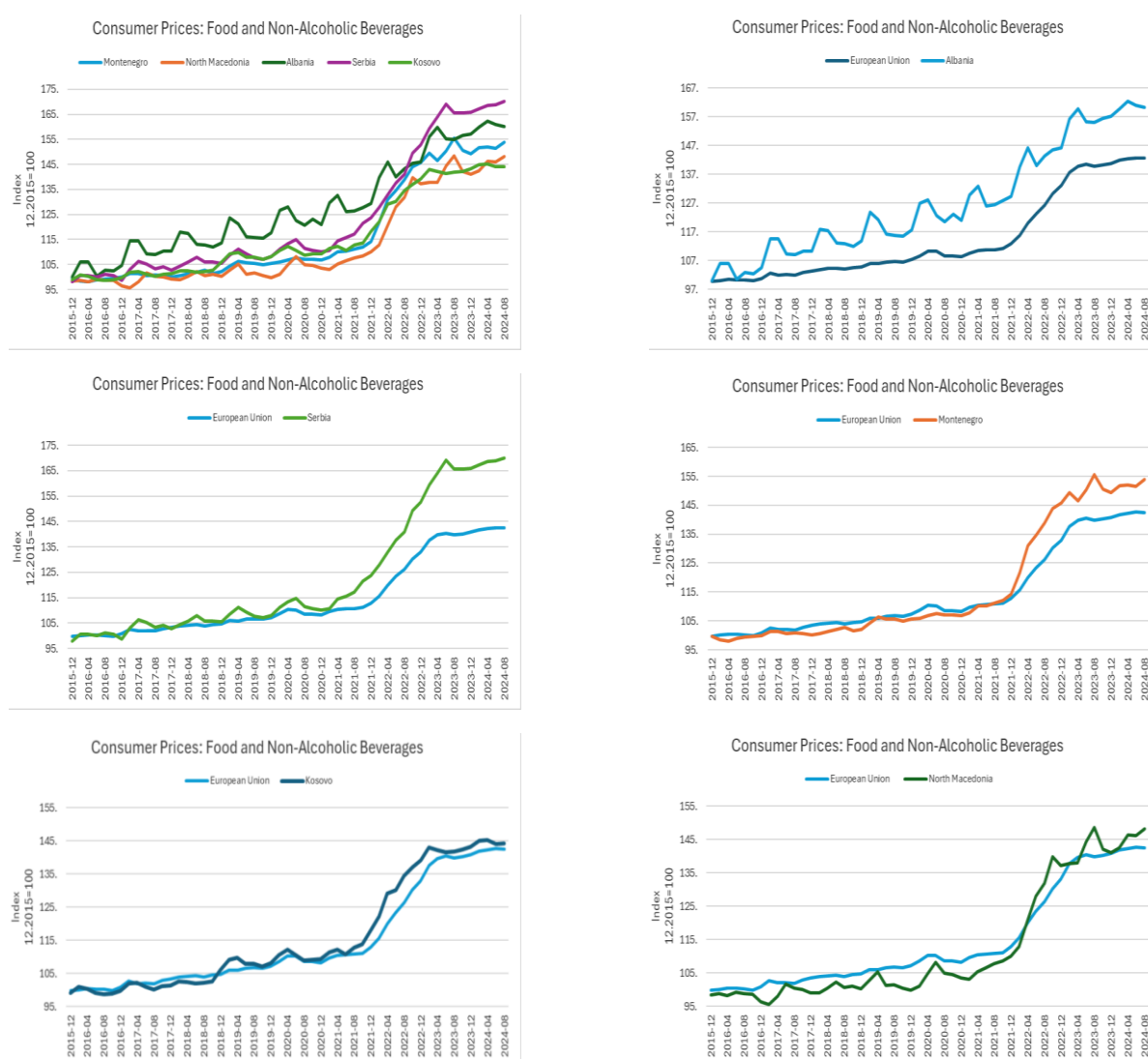


Fig. 13-18: Comparative Countries' Food and Non – Alcoholic Beverages HICP 2015-2024.

Source: Eurostat, Authors' Compilation.

Figures 13-18 show the behavior of food and non-alcoholic beverages prices in Albania and Western Balkan countries as compared to the EU average. Unlike Albania, other Western Balkan countries move in a similar pattern with the EU average until 2021, with Serbia and, to a lesser degree, Montenegro diverging from the EU average in that year.

In the period 2015-2021, food prices in Albania increased by more than the EU average (Albania's spread with the EU: +16%). For the same period, the average Western Balkan countries spread with the EU average was only +0.75%, with Serbia recording a spread of +13%. In the period 2022-2025, food prices in Albania increased by less than the EU average (Albania's spread with the EU: -3%). For the same period, the average Western Balkan countries spread with the EU average was only +8.5%, with Serbia recording a spread of +12%.

For the period 2015-2024, food price increases in Albania (61%) have been surpassed only by Serbia (76%) in the Western Balkans; however, they have been growing faster in Albania in the period until the end of 2021 and faster for Serbia during the inflationary shock period 2022-2024.

4.4. Currencies' role in inflation and food prices in Albania and the Western Balkans

4.4.1. Albania

In 2023, the Bank of Albania assessed that the exchange rate has been the main factor in the inflation levels in the country, which have been and have remained the lowest in the region, by reducing the negative effects of foreign shocks on the buying power of Albanian households. The central bank estimated that, in the absence of the strengthening of the exchange rate over the last two years, the inflation rate would have been 2.5 percentage points higher (Albanian Association of Banks, 2023). Bank of Albania assessed that, in the presence of strong inflationary pressures in foreign markets, the strengthening of the lek has helped to maintain the purchasing power of Albanian households, in maintaining low levels of interest rates and financing costs (Albanian Association of Banks, 2023).

Figure 19 shows the Euro to Albanian Lek (ALL) Exchange rate for the period from 2014 to 2024, per the Bank of Albania. The Albanian Lek has strengthened against the Euro over the decade, recording an appreciation of around 30%. This currency appreciation has made imports cheaper, including food and non-alcoholic beverages, thus reducing imported inflationary pressures. Despite that, food prices in Albania over the decade have increased by 61%, much higher than the EU average of 43% and the Western Balkan average of 53.5%, to be surpassed only by Serbia (70%).

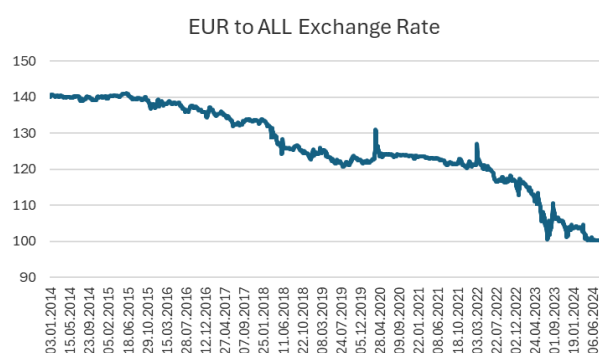


Fig. 19: Euro to Albanian Lek (ALL) Exchange rate 2014-2024.

Source: Bank of Albania.

The currency appreciation against the Euro of 19% in the period 2022-2024 has contributed to Albania recording lower overall inflation and food price increases compared to other Western Balkan countries. However, in the period 2013-2021, when the currency appreciated against the Euro by 14% and food price pressures from EU trading partners were low, Albania recorded the highest increase in food prices in the Western Balkans.

4.4.2. Serbia

Figure 20 shows the Euro to Serbian Exchange rate for the period from 2014 to 2024 per the National Bank of Serbia. The Serbian Dinar has slightly weakened against the Euro over the decade, recording a depreciation of around 4%. This currency depreciation has made imports more expensive, including food and non-alcoholic beverages, thus slightly increasing imported inflationary pressures.

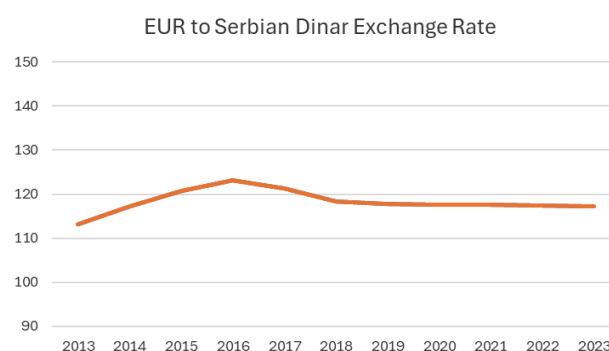


Fig. 20: Euro to Serbian Dinar Exchange rate 2013-2024.

Source: National Bank of Serbia.

Serbia has reported food price increases of 70% over the decade, followed by Albania at 61%. However, unlike Albania, which benefited from a 30% appreciation of local currency, Serbia has not benefited from currency appreciation against the Euro; on the contrary.

4.4.3. North Macedonia

Figure 21 shows the Euro to North Macedonia Dinar Exchange rate for the period from 2013 to 2024, per the National Bank of the Republic of North Macedonia. The North Macedonia Dinar is pegged to the Euro.

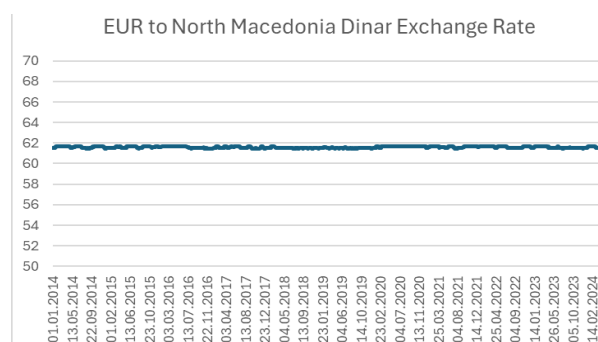


Fig. 21: Euro to North Macedonian Dinar Exchange rate 2014-2024.

Source: National Bank of the Republic of North Macedonia

North Macedonia has reported food price increases of 47% over the decade, compared to Albania at 61%. However, unlike Albania, which benefited from a 30% appreciation of local currency, North Macedonia has not benefited from currency appreciation as its currency is pegged to the Euro.

4.4.4. Kosovo

Per the Central Bank of the Republic of Kosovo, the official currency of Kosovo is the Euro. Kosovo has reported food price increases of 45% over the decade, compared to Albania at 61%. However, unlike Albania, which benefited from a 30% appreciation of local currency, Kosovo has not benefited from currency appreciation as its currency is the Euro.

4.4.5. Montenegro

Per the Central Bank of Montenegro, the official currency of Montenegro is the Euro. Montenegro has reported food price increases of 52% over the decade, compared to Albania at 61%. However, unlike Albania, which benefited from a 30% appreciation of local currency, Montenegro has not benefited from currency appreciation, as its currency is the Euro.

4.4.6. Summary

Table 7 presents the currency appreciations/depreciations against the Euro for the Western Balkan countries, detailed for the period up to the inflationary shock of the end of 2021 and the period thereafter. As can be seen, Albania is the only country to have benefited from currency appreciation over the decade. In addition, Albania has benefited from such appreciation in both periods.

Table 7: Currency Appreciation / (Depreciation) Against the Euro

Country	2013 - 2021	2021 - 2024	2013 - 2024
Albania	14%	19%	30%
Eurozone	0%	0%	0%
North Macedonia	0%	0%	0%
Kosovo	0%	0%	0%
Montenegro	0%	0%	0%
Serbia	-4%	0%	-4%

Source: Eurostat, Authors' Calculations.

4.5. Regression results and interpretation: cross-country comparison and bilateral regressions

To deepen the analysis, we conducted a series of regressions linking the food price indices of Western Balkan countries and Albania's key EU trade partners to the EU food inflation index, excluding exchange rate adjustments. This allowed us to assess the degree to which domestic food prices in each country respond to EU-level food inflation and how Albania's sensitivity compares regionally. The results of the regressions for each period are presented in Tables 8-10.

The regression results indicate that all Western Balkan countries and Albania's key EU trading partners demonstrate a positive and statistically significant relationship with EU food prices. Despite having a lower R^2 than its peers, possibly due to seasonal index methodology noise, especially when the periods are analyzed separately, Albania still shows a very strong model fit. For the period 2015 – 2021, Greece has an R^2 of 0.51, suggesting Greece's food prices were more influenced by other factors in this period, which corresponds with the aftermath of the Greek financial crisis and austerity measures.

Table 8: Regression Indicators, Country and EU Food Price Index, 2015 – 2024

Country	Slope Coefficient	R-squared	p-Value	Significance F
Albania	1.224158155	0.941761050	6.88559E-68	6.88559E-68
Kosovo	1.087362063	0.981348097	2.36557E-94	2.36557E-94
North Macedonia	1.193552532	0.977122976	1.31535E-89	1.31535E-89

Montenegro	1.31571531	0.981391038	2.09109E-94	2.09109E-94
Serbia	1.645957017	0.994579446	4.5575E-123	4.5575E-123
Greece	0.806402655	0.971467993	1.78929E-84	1.78929E-84
Italy	0.711920768	0.994268400	9.0203E-122	9.0203E-122
Germany	1.076572067	0.998094942	2.3E-147	2.3E-147

Source: Eurostat, Authors' Calculations.

As seen in Table 9, Albania exhibits the highest elasticity in the pre-COVID period, suggesting that its domestic food prices responded more strongly and disproportionately to movements in EU and key EU trading partners' food inflation compared to its peers. These findings position Albania as a regional outlier in terms of inflation sensitivity. Despite experiencing substantial currency appreciation in the pre-COVID period, Albania's food prices exhibit the steepest response to EU food inflation, highlighting underlying inefficiencies in the transmission of external price advantages to domestic consumers.

Table 9: Regression Indicators, Country and EU Food Price Index, 2015 – 2021

Country	Slope Coefficient	R-squared	p-Value	Significance F
Albania	2.161465173	0.866240621	9.76246E-33	9.76246E-33
Kosovo	1.28293379	0.928777604	1.81242E-42	1.81242E-42
North Macedonia	0.75564951	0.732607365	5.05831E-22	5.05831E-22
Montenegro	1.031622673	0.924968403	1.15453E-41	1.15453E-41
Serbia	1.45676127	0.89318955	3.26881E-36	3.26881E-36
Greece	0.297776106	0.512566483	1.08496E-12	1.08496E-12
Italy	0.556824332	0.934067419	1.16742E-43	1.16742E-43
Germany	1.076337134	0.969530413	1.44071E-55	1.44071E-55

Source: Eurostat, Authors' Calculations.

In the post-COVID period, Albania has a slope coefficient lower than one with the EU, as shown in Table 10. During this period, Albania experienced the second wave of currency appreciation that might explain this fact; however, other countries in the Western Balkans (Kosovo and Montenegro) and our two key trading partners (Italy and Greece) that use the Euro have similar slope levels, indicating that currency appreciation might not be a significant factor. Greece in the 2022-2024 period has an R^2 of 0.95, showing a very strong relationship with the EU average food prices.

Table 10: Regression Indicators, Country and EU Food Price Index, 2022 – 2024

Country	Slope Coefficient	R-squared	p-Value	Significance F
Albania	0.843928144	0.875003331	6.4205E-17	6.4205E-17
Kosovo	0.758769228	0.96214171	9.32506E-26	9.32506E-26
North Macedonia	1.107212081	0.900060877	1.41269E-18	1.41269E-18
Montenegro	0.971620417	0.917353308	5.53977E-20	5.53977E-20
Serbia	1.622028899	0.990502954	5.67505E-36	5.67505E-36
Greece	0.888359849	0.954024603	2.54438E-24	2.54438E-24
Italy	0.768122575	0.989562913	2.82493E-35	2.82493E-35
Germany	1.046652891	0.99499735	1.04818E-40	1.04818E-40

Source: Eurostat, Authors' Calculations.

To further explore Albania's food inflation dynamics, we performed bilateral regressions between Albania's food price index and those of its major EU trade partners, Italy, Greece, and Germany. The results presented in Table 11 revealed even higher slope coefficients, particularly for Italy and Greece, which together account for close to one-third of Albania's food imports.

Table 11: Regression Indicators, Albania's Food Prices with Those of Key Trading Partners

Country	Slope Coefficient	R-squared	p-Value	Significance F
EU				
2015 - 2024	1.224158155	0.94176105	6.88559E-68	6.88559E-68
2015 - 2021	2.161465173	0.866240621	9.76246E-33	9.76246E-33
2022 - 2024	0.843928144	0.875003331	6.4205E-17	6.4205E-17
Germany				
2015 - 2024	1.137675067	0.944531628	5.06782E-69	5.06782E-69
2015 - 2021	2.006758365	0.892210717	4.52132E-36	4.52132E-36
2022 - 2024	0.794305254	0.853408702	9.75481E-16	9.75481E-16
Italy				
2015 - 2024	1.697620357	0.923222758	1.83311E-61	1.83311E-61
2015 - 2021	3.744924424	0.863150175	2.20024E-32	2.20024E-32
2022 - 2024	1.095620373	0.879299067	3.53491E-17	3.53491E-17
Greece				
2015 - 2024	1.441885825	0.874586581	4.74424E-50	4.74424E-50
2015 - 2021	3.867098916	0.479669507	1.1376E-11	1.1376E-11
2022 - 2024	0.903480318	0.829572653	1.28027E-14	1.28027E-14

Source: Eurostat, Authors' Calculations.

These bilateral regressions reinforce the conclusion that Albania's food prices are rising at a disproportionately fast rate compared to those of its primary food import partners. The elevated elasticities suggest not only a strong pass-through of imported price shocks but also potential domestic amplification due to market inefficiencies or markup practices.

4.6. Regression results and interpretation: exchange rate adjustment analysis

When regressing the Albanian food price index on the unadjusted EU food inflation index, the model yielded a very strong fit, with an R-squared value of 0.86-0.95. This indicates a very tight correlation between food price movements in Albania and the nominal EU food price trend.

However, when using the exchange rate-adjusted EU inflation index as the explanatory variable, the R-squared value dropped significantly to 0.53, while the slope coefficient increased (theoretically should have flattened, getting closer to 1) despite currency appreciation. This result is striking and highly informative. It implies that once Albania's currency appreciation is accounted for, the explanatory power of EU food price movements diminishes substantially, and its elasticity increases. Albania's food prices only correlate with EU prices when not adjusted for currency appreciation, suggesting that consumers receive almost none of the FX benefit.

Table 12: Regression Indicators, Albania's Food Prices and EU Food Price Index, Adjusted for Exchange Rate

Albania	Slope Coefficient	R-squared	p-Value	Significance F
2015-2024				
Unadjusted	1.224158155	0.94176105	6.88559E-68	6.88559E-68
FX Adjusted	2.708738192	0.528843377	3.43109E-19	3.43109E-19
2015-2021				
Unadjusted	2.161465173	0.866240621	9.76246E-33	9.76246E-33
FX Adjusted	-0.867910834	0.042474551	0.080238435	0.080238435
2022-2024				
Unadjusted	0.843928144	0.875003331	6.4205E-17	6.4205E-17
FX Adjusted	-0.030060471	0.000210048	0.933140991	0.933140991

Source: Eurostat, Bank of Albania, Authors' Calculations.

As seen from Table 12, when computing the regression with adjusted EU prices for each of the two periods separately, the model moves from a strong fit (see R-squared values, Significance F, and P-values) to showing no significant relationship. Albania shows statistical significance in all raw models but loses explanatory power entirely when adjusted for FX in recent years. Other countries retain robust statistical relationships even after adjusting for currency effects.

North Macedonia, Montenegro, and Kosovo (which use the EURO or are pegged to the Euro) have the same regression results with EU unadjusted and foreign exchange adjusted food price indexes. And as shown above, they and other EU countries are highly correlated and record significant relationships with average EU prices. When adjusted for the exchange rate, only Albania's indicators deteriorate, meaning that while prices in the country move in line with the EU and faster (unadjusted), little to no significant gains have been transmitted to customers from domestic currency appreciation. In the case of Serbia, as shown in Table 13, the model remains statistically significant even when accounting for the currency exchange movements.

Table 13: Regression Indicators, Serbia's Food Prices and EU Food Price Index, Adjusted for Exchange Rate

Serbia	Slope Coefficient	R-squared	p-Value	Significance F
2015-2024				
Unadjusted	1.645957017	0.994579446	4.5575E-123	4.5575E-123
FX Adjusted	1.821307958	0.989489271	1.1113E-107	1.1113E-107
2015-2021				
Unadjusted	1.45676127	0.89318955	3.26881E-36	3.26881E-36
FX Adjusted	2.171593475	0.765660156	4.57613E-24	4.57613E-24
2022-2024				
Unadjusted	1.622028899	0.990502954	5.67505E-36	5.67505E-36
FX Adjusted	1.715562924	0.989969206	1.43805E-35	1.43805E-35

Source: Eurostat, NBS, Authors' Calculations.

This finding supports the conclusion that currency appreciation has not effectively shielded Albanian consumers from food price increases, as economic theory would suggest. In fact, the persistent rise in domestic food prices despite cheaper imports (due to a stronger lek) suggests the presence of structural domestic inefficiencies, such as limited market competition, weak regulatory enforcement, and potential markup pricing by dominant actors in food supply chains.

From using the model described, we have calculated the imported EU food price inflation for Albania and Serbia (other countries use the EURO or are pegged to the Euro), adjusted for their respective currency fluctuations for the pre- and post-COVID period. In Table 14, you can see that if we account for currency depreciation, the imported EU food prices in Albania have increased only 3% in the last decade, while food prices in the country have increased by 61%, thus proving once more that almost no benefits have been passed to Albanians from currency appreciation.

Table 14: Food Price Increased 2015 – 2024, with EU Adjusted and Unadjusted Levels

Country	2015-2021	2022-2024	2015-2024
Albania	29%	25%	61%
Serbia	26%	40%	76%
North Macedonia	12%	37%	53%
Montenegro	15%	31%	50%
Kosovo	19%	25%	50%
Italy	8%	23%	32%
Greece	5%	25%	32%
Germany	15%	29%	49%
EU	13%	28%	45%
EU Adjusted (FX Albania)	0%	4%	3%
EU Adjusted (FX Serbia)	10%	27%	39%

Source: Eurostat, BoA, NBS, Authors' Calculations.

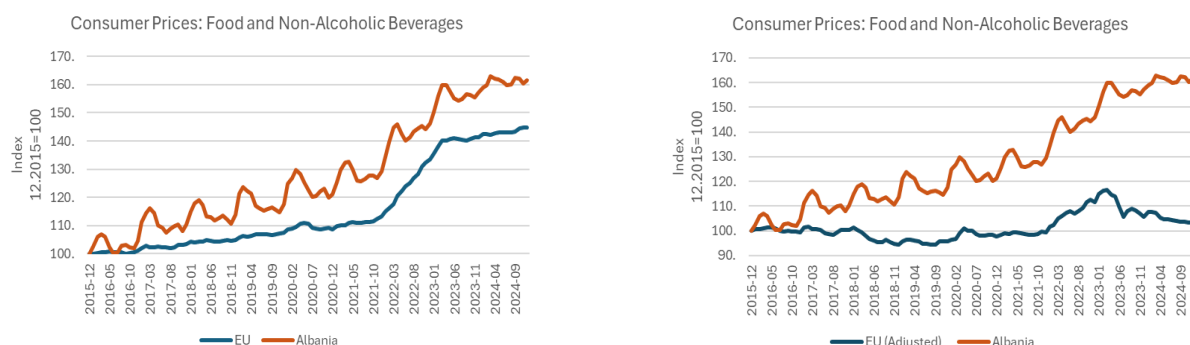
If we account for the domestic currency appreciation as presented in Table 15, the spread between price increases in the EU and Albania becomes even more significant, surpassing Serbia on price increases, and recording the highest food price increase in the region when compared to the EU. Albania's key EU trading partners, like Greece and Italy, report price increases below the EU average.

Table 15: Country Food Price Index Change, Spread with EU Adjusted Index for Foreign Exchange Rate

Country	2015-2021	2022-2024	2015-2024
Albania	30%	21%	58%
Serbia	17%	13%	37%
North Macedonia	-2%	9%	8%
Montenegro	1%	3%	5%
Kosovo	6%	-2%	5%
Italy	-5%	-5%	-12%
Greece	-8%	-3%	-13%
Germany	2%	2%	4%

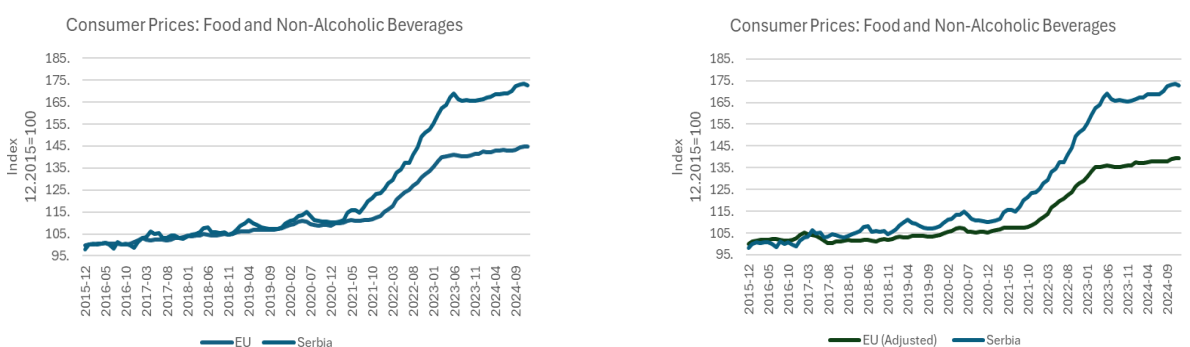
Source: Eurostat, BoA, NBS, Authors' Calculations.

Figures 22-25 show a comparison of unadjusted and FX-adjusted food price movements for Albania and Serbia compared to EU prices. As it can be seen, and supported by statistical analysis, the trend and relationship of food prices in Serbia remains relatively in line with the EU, regardless of using adjusted or unadjusted data for any currency appreciation.

**Fig. 22-23:** Albania and EU comparative Food and Non – Alcoholic Beverages HICP 2015-2024, EU Index Unadjusted and Adjusted for Currency Appreciation.

Source: Eurostat, Bank of Albania, Authors' Calculations.

In the case of Albania, when we account for currency appreciation, we can see that food prices in the country not only move out of line with EU prices, but the gap with EU prices widens. Once again proving that not only Albania experienced the highest/fastest price increase in the region when accounting for currency appreciation, but that almost no benefits have ever been transmitted to consumers over the decade. This shows that food prices in Albania increase when they increase in the EU (the spread is maintained) and they are transmitted to consumers; however, benefits from currency appreciation are retained in the most part by Albania's market players.

**Fig. 24-25:** Serbia And EU Comparative Food and Non – Alcoholic Beverages HICP 2015-2024, EU Index Unadjusted and Adjusted for Currency Appreciation.

Source: Eurostat, NBS, Authors' Calculations.

4.7. Multiple regression results and interpretation

The multiple regression results presented in Table 16 show a consistently strong model fit across all time periods, with R^2 values ranging from 0.869 to 0.947, indicating that the EU HICP for food and exchange rate jointly explain a substantial portion of the variation in Albanian food prices. The EU HICP is statistically significant in all periods, with highly robust coefficients and p-values well below 0.001, confirming its dominant role in influencing Albanian food price trends. In contrast, the exchange rate is only statistically significant over the full 2015–2024 period, while in shorter intervals (2015–2021 and 2022–2024), it does not reach conventional significance thresholds. These findings confirm the strong pass-through effect from EU food prices to Albanian food prices, while the exchange rate, despite being statistically significant for the 2015-2024 period, is confirmed to have brought little to no benefits to consumers.

Table 16: Multiple Regression Results, Albania Food Prices with EU Index and FX Rate

Multiple Regression	2015-2024	2015-2021	2022-2024
Significance F	3.85249E-68	1.22595E-31	4.32E-16
Multiple R	0.972902625	0.932275717	0.939590223
R Square	0.946539518	0.869138012	0.882829788
Slope coefficients			
Intercept	54.32320845	-161.0313573	81.91463601

EU HICP Food	0.996809314	2.41033434	0.684455718
Albanian Exchange Rate	-0.337659129	0.174513824	-0.197503429
P-values			
Intercept	0.01595187	0.000169758	0.010228743
EU HICP Food	8.41307E-23	1.64009E-16	2.34669E-06
Albanian Exchange Rate	0.002652307	0.217308247	0.147120725

Source: Eurostat, BoA, Authors' Calculations.

A closer look at the exchange rate coefficient in the 2015–2024 regression reveals a counterintuitive result: the slope is negative (-0.3377), which implies that as the lek appreciated (the rate goes down), Albanian food prices increase (prices go up). This contradicts economic theory and expectations outlined in the literature review and methodology, where a stronger lek should make imports less expensive, thereby reducing prices. Interestingly, although the exchange rate became more favorable for Albania over the 2015–2024 period, meaning the lek strengthened and the EUR/ALL rate declined, domestic food prices continued to rise in line with EU food prices. This contradiction confirms once again that the exchange rate had little to no mitigating effect on domestic food prices. Overall, the findings confirm the dominance of EU price trends in shaping Albanian food inflation, regardless of favorable currency movements. In other words, when EU food prices rise, Albanian consumers feel the full impact, even when the exchange rate movement should, in theory, offer some relief.

4.8. Summary discussion

4.8.1. Summary of regression analysis

The regression and multiple regression analyses both point to consistent conclusions. First, food prices in Albania, key EU trading partners (Italy and Greece), and other Western Balkan economies move closely with EU food prices, underscoring the high degree of integration and import dependence. Second, Albania stands out: food prices increased faster and earlier than in other Western Balkan countries and its two EU trading partners, Italy and Greece, as reflected in the regression slope for 2015–2021. This indicates that Albanian food prices rose more than EU benchmarks even before the COVID crisis and the subsequent global inflation shock. Third, once exchange rates are included, the correlation with EU prices collapses only for Albania, showing that the appreciation of the Lek has not translated into consumer relief. On the contrary, when accounting for currency appreciation, Albania has experienced the highest food price increase in the region compared to the EU, followed by Serbia. Finally, even the multiple regression results confirm that currency appreciation has had no measurable impact on reducing prices, pointing instead to domestic explanations such as institutional and market inefficiencies, including weak competition, rent-seeking intermediaries, and fragmented supply chains.

4.8.2. Domestic analysis and regional response

As agriculture weakens and becomes less competitive, Albania has grown increasingly reliant on imports from the EU (Erebara, 2025). Local food production has traditionally acted as a buffer, keeping staple prices affordable and insulating households from global shocks. But the sector's declining productivity and loss of competitiveness have eroded this buffer, aligning domestic price dynamics more closely with external cycles. At the same time, the appreciation of the Lek has not been fully transmitted into lower consumer prices, leaving producers squeezed and households exposed.

Between 2019 and 2024, Albania experienced a sharp decline in domestic food production: dairy output fell by about 30%, while meat production contracted by 16.7%. During the same period, imports of dairy, eggs, and honey rose by 51%, and meat imports by 18% (Erebara, 2025). These trends highlight the erosion of local productive capacity and a growing dependence on foreign markets, with implications for both household welfare and macroeconomic stability.

The troubled performance of the agricultural sector is not solely the result of structural inefficiencies, but also of institutional choices. Former Prime Minister Erion Braçe (Braçe, 2025) has argued that the 2018 VAT amendments disincentivized purchases from local producers, undermined rural incomes, and competitiveness. This episode illustrates how weak or misaligned policies can amplify inequality and disempower rural communities, reinforcing the structural inefficiencies already present in Albania's food economy.

As shown in this paper, Albania has experienced a sharper increase in prices, despite currency appreciation, compared to regional peers. In those neighboring countries, the issue has increasingly gained political attention. Serbia, in 2025, introduced caps on consumer goods profit margins and limits on personal loan rates to shield households from inflation (Reuters, 2025). Greece, responding to public concerns over "greedflation," negotiated supermarket agreements to reduce food prices and launched high-profile campaigns against excessive markups (Euronews, 2024; To Vima, 2024). These measures typically emerge in moments of political or economic stress, providing short-term relief but often at the cost of competition and investment incentives.

The underlying issue is not simply "greedflation" but the conditions that make it possible: weak competition, concentrated markets, and dysfunctional institutions. In such contexts, firms can sustain higher margins even after input costs decline. While populist measures like price caps or tax cuts are politically attractive, they rarely ensure lasting affordability. In colluding or highly concentrated markets, tax cuts may not be passed through to consumers; instead, they consolidate profits, like foreign exchange gains, which have not been transmitted to households in Albania, as shown in this paper.

This dynamic is consistent with the broader institutional argument of Acemoglu and Robinson (Acemoglu & Robinson, 2012), who show that prosperity depends on inclusive institutions that create incentives for investment and innovation. By contrast, extractive institutions, where narrow elites or intermediaries capture economic rents, suppress competition, disconnect producers from consumers, and entrench inequality. Albania's case, where foreign exchange gains are not transmitted to consumers and middlemen retain disproportionate power, reflects the risks of extractive arrangements that undermine long-term welfare.

Durable solutions, therefore, require market-based instruments, strengthening competition policy, enforcing antitrust rules, increasing transparency through the routine publication of wholesale-retail margins, and investing in supply-side capacity.

5. Conclusions and Recommendations

This paper provides strong empirical evidence that Albania's food price inflation over the past decade has been unusually high compared to both the EU and regional peers, despite the country benefiting from nearly 30% currency appreciation against the euro. Regression and trend analyses confirm that food prices in Albania and its neighbors follow EU price movements in a statistically significant way. However,

Albania uniquely diverges once exchange rate adjustments are introduced—its correlation with EU food price inflation breaks down, indicating that FX gains have not been passed on to consumers. Instead, domestic food prices rose by 61%, compared to just 4% for imported EU prices when adjusted for the stronger lek, making Albania the only country in the region where the benefits of currency appreciation have been almost entirely absorbed by dominant market actors.

This failure of price transmission has wide-reaching consequences. For Albanian households, among the poorest in Europe, with close to 40% of consumption allocated to food, the erosion of purchasing power is more severe. This is exacerbated by the fact that many Albanians hold lifetime savings or receive remittances in euros, whose domestic value declines as the lek strengthens while prices keep rising. At the same time, rising tourism and foreign capital inflows are likely to maintain upward pressure on the currency and food prices, further disconnecting macroeconomic gains from household welfare and increasing the cost-of-living burden unless structural issues in domestic markets are addressed.

Importantly, the distortion also damages Albania's food and agriculture sector. As the stronger lek makes Albanian products more expensive abroad, exporters face reduced competitiveness in external markets. Simultaneously, domestic producers are squeezed by middlemen, often large wholesalers or retailers, who can import cheaper food from abroad due to FX advantages and then pressure local producers to match these lower prices. When the benefits of a strong currency, cheaper imports, and higher food prices to end consumers are retained by a few intermediaries rather than passed on to either consumers or producers (who are not allowed to sell directly to consumers under strict regulatory control), the entire domestic value chain is weakened, discouraging local investment and production capacity in food and agriculture, while impoverishing both consumers and farmers.

These findings underline the urgent need for policy action. Policymakers should ensure that economic growth is inclusive and supports household and rural well-being. Strengthened competition policies and regulatory oversight are essential to prevent market capture and reduce inflated margins in the food sector. Measures must also be taken to protect domestic producers from asymmetric price pressures and ensure that FX gains support rather than distort local supply chains. Without such reforms, Albania risks undermining both its economic resilience and social equity.

Finally, this paper offers a valuable tool for researchers and institutions evaluating the impact of exchange rate regimes on domestic inflation and price transmission. By highlighting the disconnect between macroeconomic strength and real-world outcomes, the Albanian case provides a critical lesson for small, open economies managing strong currency environments without sufficient institutional safeguards.

6. Policy Implications and Recommendations

The analysis suggests that Albania's food price dynamics are shaped not only by global shocks but also by domestic institutional weaknesses. Many regulations already exist on paper, but the challenge lies in consistent enforcement and the creation of institutions that align incentives across producers, consumers, distributors, and regulators.

First, Albania should strengthen antitrust enforcement and competition policy, ensuring that concentrated market players or colluding collectors/distributors/importers cannot capture exchange-rate gains or fiscal incentives without passing benefits to consumers. Second, the government should invest in price transparency mechanisms, such as publishing wholesale-retail margins by product and region. This would make it harder for intermediaries to maintain unjustified markups and would empower consumers and policymakers alike. Third, policies should focus on connecting producers directly with consumers through cooperative platforms, digital marketplaces, improved logistics infrastructure, and potentially through a dedicated market player organization with its own collection and distribution system. Such an entity could enforce competition by setting minimum purchase prices for local agricultural products and reselling them at competitive rates. This model, however, requires careful management and safeguards to prevent government collusion with existing market players. Reducing dependence on rent-seeking intermediaries would improve farmer incomes, lower consumer prices, and support rural development. Fourth, reforms should reduce red tape and incentivize agricultural producers, with the dual aim of increasing productivity and raising product quality to meet foreign market standards. Stronger export capacity would reduce the bargaining power of local middlemen while opening new opportunities for farmers in international markets. Finally, reforms must emphasize the application of existing rules rather than constant regulatory redesign. Institutions should be capable of enforcing fair competition and protecting against capture.

By embedding these recommendations within a framework of institutional strengthening, Albania can address current market inefficiencies while also laying the foundation for sustainable and inclusive growth.

7. Directions for Further Research

The comparative evidence in this paper suggests that currency regimes themselves warrant closer scrutiny. Countries that adopted the euro or maintained a close peg experienced more stable and aligned food price dynamics, while free-floating exchange-rate regimes, such as Albania and Serbia, faced the sharpest increases. Future research could examine whether exchange-rate arrangements systematically influence the transmission of global price shocks into domestic food markets, and under what institutional conditions floating regimes can deliver stability without exacerbating volatility.

References

- [1] Acemoglu, D., & Robinson, J. A. (2012). *Why nations fail: The origins of power, prosperity, and poverty*. Crown Business. <https://doi.org/10.1355/ae29-2j>.
- [2] Albanian Association of Banks (2023). *BSH: Forcimi i Lekut e ka ulur inflacionin me 2.5 pikë, i ka kursyer ekonomisë 92 miliardë lekë në dy vjet*. Albania: <https://aab.al/bsh-forcimi-i-lekut-e-ka-ulur-inflacionin-me-2-5-pike-i-ka-kursyer-ekonomise-92-miliarde-leke-ne-dy-vjet-2/>.
- [3] Bank of Albania (2014-2024). *Kursi zyrtar i këmbimit në Shqipëri*. Tirana, Albania: https://www.bankofalbania.org/Tregjet/Kursi_zyrtar_i_kembimit/.
- [4] Bank of Albania (2022). *Raporti Tremujor i Politikës Monetare, 2022/IV*. Albania: https://www.bankofalbania.org/Politika_Monetare/Raportet_Periodike/Raporti_Tremujor_i_Politikes_Monetare_2022_IV.html.
- [5] Bank of Albania (2024). *Raporti Tremujor i Politikës Monetare, 2024/IV*. Albania: https://www.bankofalbania.org/Politika_Monetare/Raportet_Periodike/Raporti_Tremujor_i_Politikes_Monetare_2024_IV_40375.html.
- [6] Braçe, E. (2025). *Erion Braçe's accusations: Arben Ahmetaj destroyed Albanian agriculture*. Gazeta Tema.
- [7] Central Bank of Montenegro (2025). *Currency, Money in Circulation*. Podgorica, Montenegro: <https://www.cbcbg.me/en/currency/money-in-circulation>.

- [8] Central Bank of the Republic of Kosovo (2025). *Money in Circulation*. Prishtina, Kosovo: <https://bqk-kos.org/operacionet-bankare/paraja-ne-qarkullim/>.
- [9] Erebara, G. (2025). *Albania abandons domestic production of dairy and meat, imports rise*. Reporter.al.
- [10] Euronews. (2024, January 12). *Greece tackles greedflation and wages war against high prices on basic food products*. <https://www.euronews.com/business/2024/01/12/greece-tackles-greedflation-and-wages-war-against-high-prices-on-basic-food-products>
- [11] Eurostat (2025). *Comparative price levels for food, beverages and tobacco*. Luxembourg: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Comparative_price_levels_for_food,_beverages_and_tobacco.
- [12] Eurostat (2013 - 2024). *Harmonised index of Consumer price, monthly data (index)*. Luxembourg: https://ec.europa.eu/eurostat/data-browser/view/prc_hicp_midx_custom_16311217/default/table?lang=en.
- [13] Food and Agriculture Organization (2008). *The State of Food Insecurity in the World 2008: High food prices and food security*. Italy: <https://www.fao.org/4/i0291e/i0291e03.pdf>.
- [14] Instat (2013 - 2024). *Annual Change of Harmonised index of Consumer price*. Albania: <https://www.instat.gov.al/en/themes/prices/harmonized-index-of-consumer-price/#tab3>.
- [15] Instat (2013 - 2024). *Foreign Trade*. Albania: <https://www.instat.gov.al/al/temat/tregtia-e-jashtme/tregtia-e-jashtme-e-mallrave/#tab3>.
- [16] International Monetary Fund (2025). *World Economic Outlook Database 2025*. Washington, D.C.: <https://www.imf.org/en/Publications/WEO/weo-database/2025/april>.
- [17] International Monetary Fund (2016). *Albania: Staff Report for the 2016 Article IV Consultation, Seventh Review Under the Extended Arrangement, and Request for Waiver of Applicability and Modification of Performance Criteria-Press Release; Staff Report; and Statement by the Executive Director for Albania*. Washington DC: <https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Albania-Staff-Report-for-the-2016-Article-IV-Consultation-Seventh-Review-Under-the-Extended-43938>. <https://doi.org/10.5089/9781475519426.002>.
- [18] Kurkowiak, B. (2013). *Statistics in focus 15/2013; Comparative price levels for food, beverages and tobacco - data 2012*. Luxembourg: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Comparative_price_levels_for_food,_beverages_and_tobacco_-_data_2012&oldid=174880.
- [19] National Bank of Serbia (2014-2024). *Dinar Exchange rate*. Belgrade, Serbia: <https://nbs.rs/en/indeks/>.
- [20] National Bank of the Republic of North Macedonia (2025). *Foreign Exchange Rates*. Skopje, North Macedonia: https://www.nbrm.mk/kursna_lista-al.nspix.
- [21] Reuters. (2025, August 24). *Serbia caps consumer goods profit margins and personal loan rates*. <https://www.reuters.com/markets/europe/serbia-cap-consumer-goods-profit-margins-personal-loan-rates-2025-08-24/>
- [22] Scan TV (2022). *Çmimet e konsumit, problemi kryesor i shqiptarëve/ Barometri Ekonomik Scan: Ndjekin taksat dhe papunësia, situata politike renditet e fundit*. Albania: <https://scantv.al/cmimet-e-konsumit-problemi-kryesor-i-shqiptareve-barometri-ekonomik-scan-ndjekin-taksat-dhe-papunesia-situata-politike-renditet-e-fundit>.
- [23] To Vima. (2024). *Greece secures supermarket deal to cut prices*. <https://www.tovima.com/society/greece-secures-supermarket-deal-to-cut-prices/>
- [24] World Economic Forum (2022). *This is the biggest concern for Americans right now, according to a new survey*. Switzerland: <https://www.weforum.org/stories/2022/06/inflation-is-americans-top-concern/>.