Black Sea Trade & Development Bank

Determinants of Inflation and Outlook for BSTDB Member Countries

Are Inflationary Pressures Permanent or Transitory?

Since early 2021 inflation has picked up both in advanced and emerging economies. In some countries it has reached the highest levels for the last decades. Up until recently, the expectations among policymakers in advanced economies were that inflationary pressures were temporary and inflation would revert to central banks' target rates in the medium term. Elevated inflation, however, has persisted for several months. Additionally, the rapid spread of the Omicron variant of the virus has further amplified uncertainty about the potential impact of the COVID-19 pandemic on commodity prices and supply bottlenecks. As a result, expectations regarding how long the inflationary pressures will persist have started to shift.

Whether inflation is a permanent or temporary (transitory) phenomenon is an important question since it will warrant different policy responses in advanced and emerging economies. While the relative importance depends on a multitude of factors and varies from country to country, in most emerging economies, including BSTDB member countries, price dynamics tend to be influenced by global factors, such as monetary policies in major economies and developments in international commodity markets. However, domestic factors still play an important role as monetary and fiscal stances, exchange rate pressures or rising inflation expectations may fuel inflationary pressures in addition to what global factors would suggest.

BSTDB member countries are no exception to the global trends and have recently experienced a surge in inflation. The present analysis will assess the causes for the recent inflationary surge in BSTDB member countries. This in turn will require measuring the impact of the supply shocks on inflation as well as the contribution of both global and domestic factors.

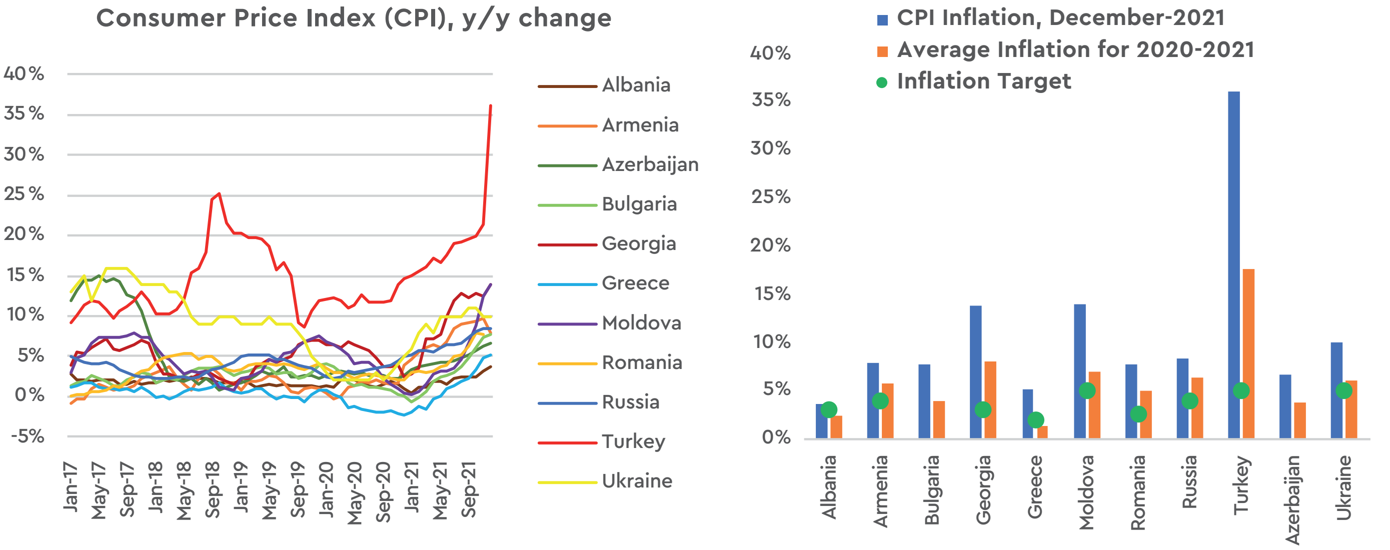
As the COVID-19 pandemic progressed and lockdown measures were implemented, authorities in many countries raised budgetary spending to address challenges faced by both the general economy and the health sector in particular. This, naturally, led to a surge in public deficits. The latter, together with the recovery of the economy, put additional demand-side pressures on inflation. To better understand these pressures, it is preferable to analyze the evolution of inflation in the non-tradable or services sector where price developments are mostly driven by domestic factors. Additionally, the pace of wage growth will be assessed to understand if inflation resulted in a growth of wages or vice versa, and thus, if the risk of development of a wage-price spiral has emerged. Finally, the analysis will discuss the evolution of inflation expectations and the outlook for inflation in BSTDB member countries.

Supply Shocks and Base Effect

Inflation accelerated in all countries in the Black Sea Region in 2021. However, the inflation rate and the underlying factors behind it vary significantly across countries. In some countries, especially those that experienced subdued inflation in 2020, inflation virtually approached central banks' target rates. In other countries, inflation exceeded significantly central bank targets. But overall, the upward trend of inflation in 2021 became a challenge for all countries in the region.

To start with, one of the reasons for the high inflation in 2021 was a low level of inflation in the previous year, that is, a low base effect. Conventionally, inflation is measured by comparing the current price levels to that from the previous year. Therefore, with subdued price growth in 2020, even recovery to the trend levels in 2021 would have yielded a higher inflation. One way to assess this base effect is to use average inflation over the last two years (2020–2021) and compare it with the latest figures (December 2021). This exercise shows that the low base effect is quite important for most countries. If we exclude the base effect, inflation would remain high but it would be much closer to central banks' targets. The base effect is evident in both the Consumer Price Index (CPI) and the Producer Price Index (PPI).

Figure 1. Annual inflation and base effect



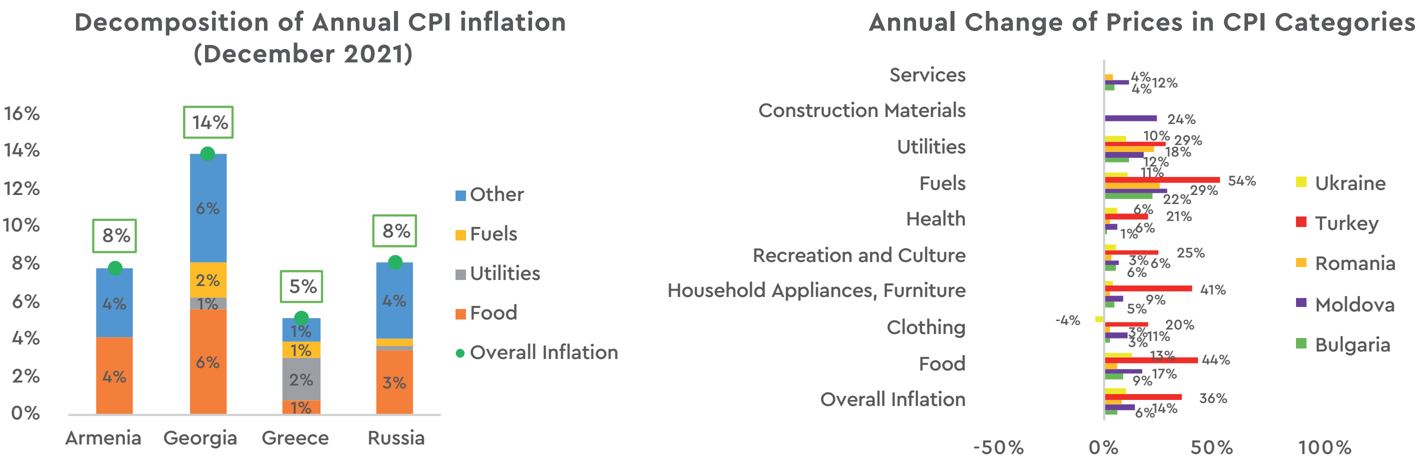
Source: National statistics offices

Other important determinants of inflation in 2021 were supply-side factors stemming from developments in global commodity markets. 2021 was marked by a sharp rise in international commodity prices, food and energy in particular. International prices of key food products, such as wheat, sugar, oils and meat rose in the range of 35%-50% y/y, thereby fueling inflation globally, including in BSTDB member countries. However, the degree of impact of international food prices on member states varied depending on the income levels of each country. Food products account for a higher share of the consumer basket in countries with low incomes. Therefore, the impact of food price increases on headline inflation was higher in relatively poorer countries. For instance, food accounted for the bulk of the rise of inflation in Armenia and Georgia in 2021.

A spike in global energy prices was another driver of inflation in countries in the Black Sea Region. International prices of crude oil rose more than 60% y/y in 2021, while those of natural gas almost tripled. Additionally, in some countries, utility prices ballooned, becoming an important contributor to overall inflation. Price growth in those categories was much higher compared to the rest of the consumer basket. This is another reason to argue that the increase in headline inflation is driven mainly by international price developments rather than domestic inflationary pressures. If we exclude the effects of these one-off supply shocks, inflation would remain high, albeit much closer to central banks' targets in most countries.

It should be noted that even if global commodity prices have a latent impact on domestic prices and feed inflation in the next year, this can be considered a temporary factor and does not require a monetary policy action.

Figure 2. Supply shocks are important determinants of inflation

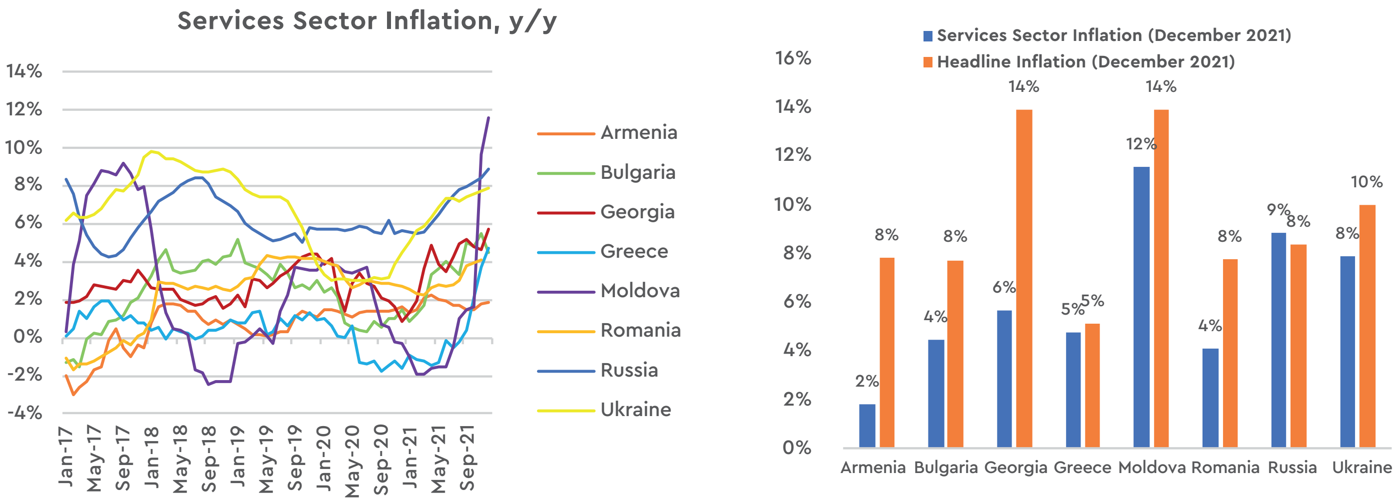


Source: National statistics offices

Inflation in Services Sector and Wage Pressures

An important indicator that could capture the underlying trend of inflationary pressures is the inflation in the services sector or the non-tradable sector, in which price dynamics depend more on domestic supply-demand interaction rather than on global factors. In most BSTDB member countries, services inflation is lower than headline inflation and hovers around central banks' target rates. This indicates that the high headline inflation is driven mostly by exogenous factors. Exceptions to this trend are Russia, Ukraine and Moldova, which have witnessed high inflation also in the non-tradable sector. Another exception is Turkey where price hikes were observed in a wide range of categories, indicating the presence of both underlying domestic inflationary drivers and exogenous price pressures.

Figure 3. In most countries inflation in the non-tradable sector shows lower underlying inflationary trend[1]



Source: National statistics offices

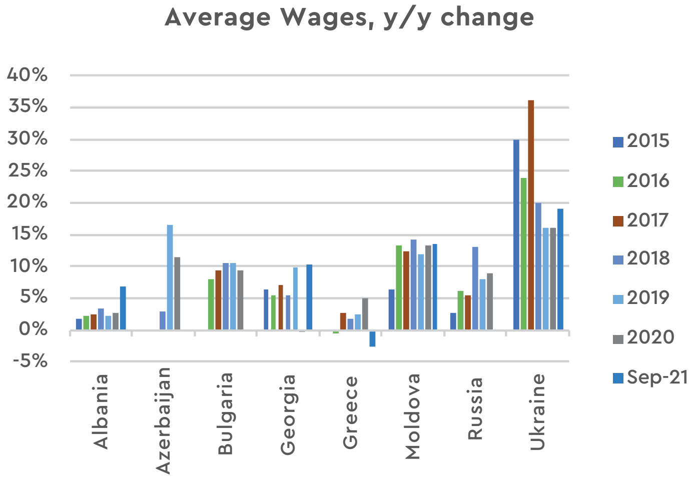
It should be noted that similar to headline inflation services sector inflation was subdued in 2020, creating a low base effect for 2021 readings. If we correct for this base effect, however, services inflation would remain low, thus suggesting minor domestic pressures on inflation. Although the current services inflation may not be worrisome, it needs to be carefully monitored in order to observe whether the trend is increasing.

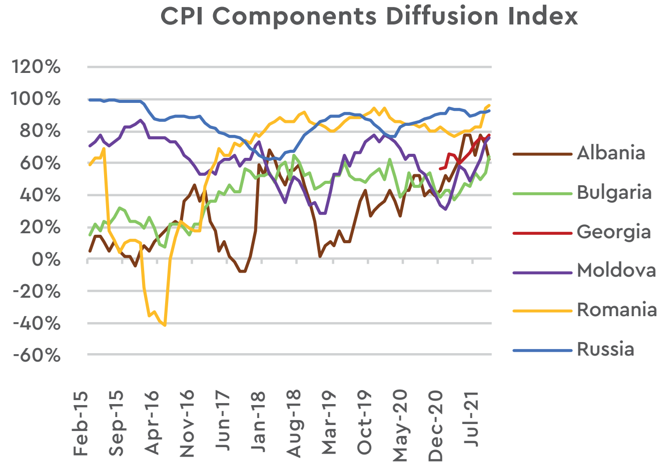
Under normal conditions, prolonged high inflation drives demand for higher wages, which in turn pushes up production costs and eventually creates additional inflationary pressures. If this process takes hold, the economy may end up in an inflation-wage spiral that may have long-term consequences. Therefore, one way to understand if rising inflation is a result of long-lasting inflationary pressures is to analyze the pace of wage growth and determine how it compares with actual inflation. In terms of wage growth, the picture is quite diverse across the countries in the region. While in some of them wage growth is limited, in others it reached double-digit rates, which can feed price pressures.

Even though in most countries the data on both services sector inflation and wages does not give strong evidence of the underlying inflationary pressures, price growth is still observed in the majority of CPI categories. In 2021, the diffusion index[2] – which measures the share of CPI components with price increases – is at one of the highest levels for the last five years. This can be a sign for forthcoming inflationary pressures.

1 For Russia and Ukraine core inflation is used as a proxy for services sector inflation.
2 The diffusion index – the share of increasing items in the total basket minus the share of decreasing items in the total basket.

Figure 4. Wage growth rates and diffusion index





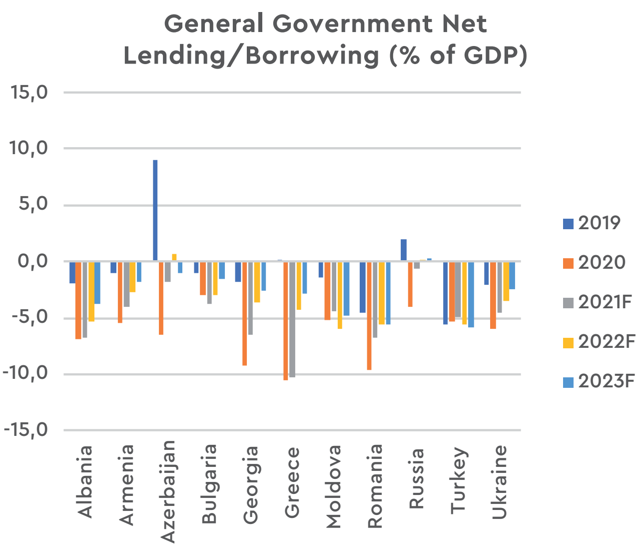
Source: National statistics offices

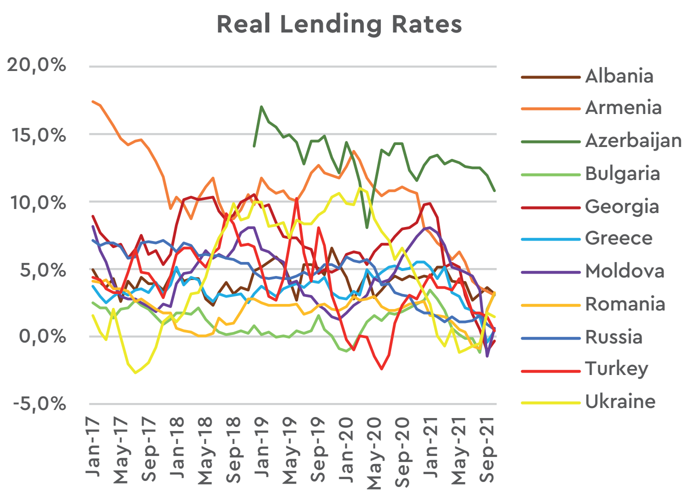
Demand-Side Pressures on Inflation

Most countries in the Black Sea Region responded to the pandemic-induced economic crisis with massive fiscal and monetary stimulus in 2020 and 2021. Budgetary spending was channeled to support the economy and meet increased healthcare costs. This, coupled with falling tax revenues, widened significantly fiscal deficits. Higher public spending prevented a collapse on the demand-side of the economy at the early stage of the pandemic. It also paved the way for a strong demand-led recovery in later stages and created additional price pressures. However, according to IMF projections from the World Economic Outlook (WEO) report from October 2021, significant fiscal consolidation is projected in the coming years. Countries have committed to bringing fiscal deficits to sustainable levels. This means that in the coming years the demand-side pressures on inflation stemming from the fiscal policy will likely weaken.

In nearly all BSTDB member countries there was also a monetary policy easing. This, together with rising inflation, pushed down real interest rates[3] on loans and in some cases real interest rates even turned negative. Lower real lending rates encouraged demand for new loans, creating additional price pressures. As inflation risks intensified, central banks in most countries began to tighten policies in 2021, ceasing quantitative easing measures and raising policy rates. Given the track record of most central banks, it is expected that monetary policies will remain tight until inflationary pressures abate. However, it will take time for the lending rates to reflect the increased policy rates. This, in a context of high inflation, means that real lending rates will remain depressed for a while.

Figure 5. Strong demand-side pressures on inflation coming from fiscal and monetary policies





Source: IMF WEO October 2021, national central banks

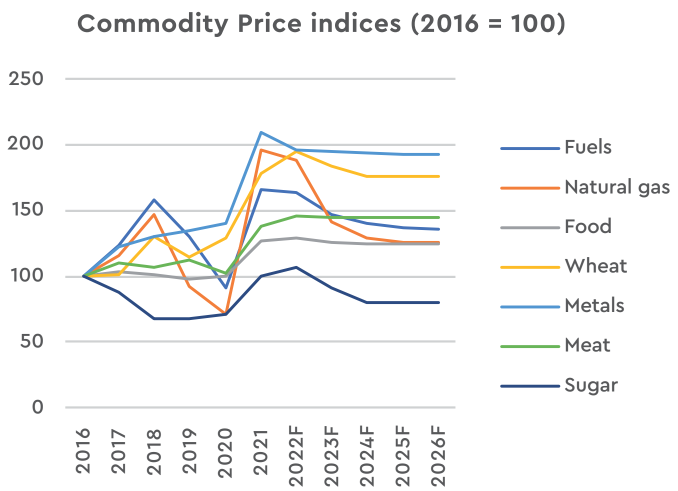
3 Real interest rate is defined as the difference between nominal interest rate and actual inflation

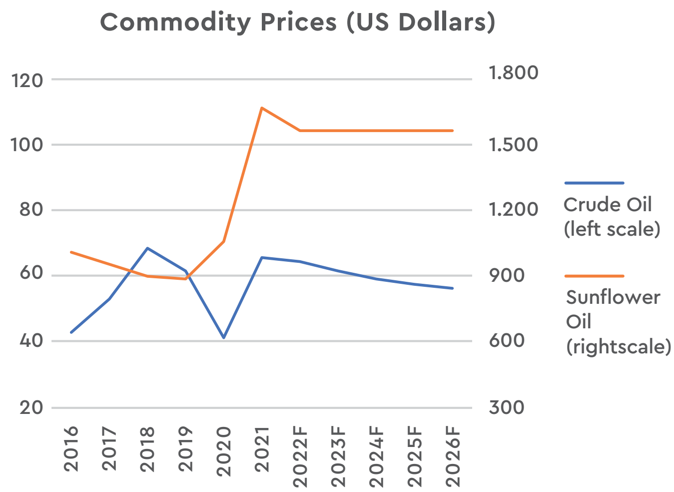
Outlook for Inflation and Risks

Based on this brief research, it is possible to conclude that the recent surge in inflation was primarily due to global factors, such as the increase in international commodity prices. For example, the global food price index calculated by the IMF was up 27% y/y in 2021. Energy and metal prices also soared during the year, thus contributing to inflation both through higher fuel prices and increased production costs.

According to the latest IMF's WEO update from January 2022, international prices of food and energy are projected to moderate in the coming years. This means that their impact on inflation in countries in the Black Sea Region is set to diminish. However, as the increase in global food prices has not been fully transmitted yet to domestic prices, we can expect high food inflation in the countries in the region over the course of 2022.

Figure 6. International commodity prices are expected to moderate in coming years

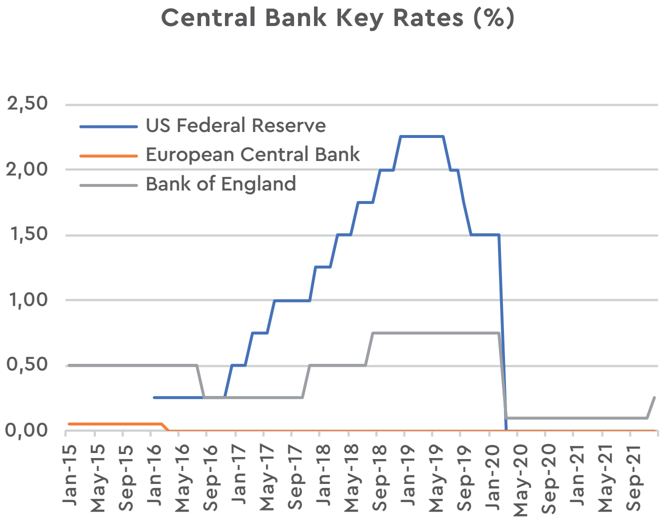


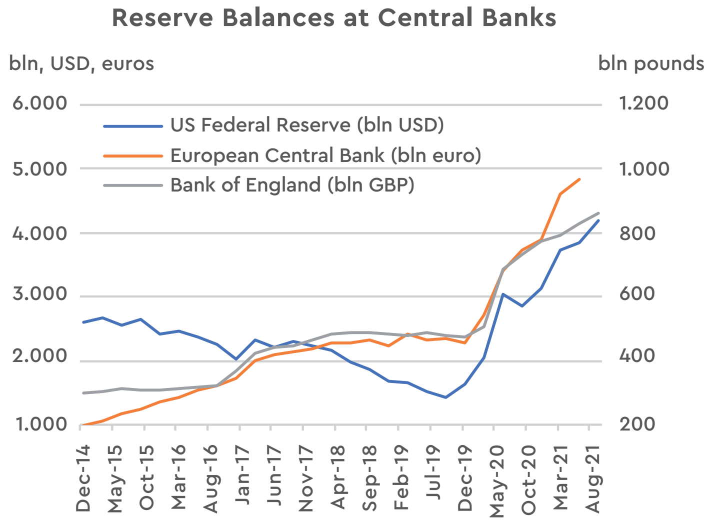


Source: IMF WEO October 2021

At present, the underlying inflationary pressures are not strong, while international commodity prices are expected to moderate. However, there are still risks for the inflation outlook stemming from various factors, including changes in monetary policies of advanced economies. Prior to the COVID-19 pandemic, the monetary policies of major advanced economies were already loose. In response to the crisis, the US Federal Reserve, the European Central Bank and the Bank of England undertook additional policy easing through both new cuts in interest rates and implementing Quantitative Easing (QE). Consequently, the key rates for the US dollar, the euro and the pound sterling approached and even went below zero, while reserve balances held by central banks more than doubled since the end of 2019.

Figure 7. Expected tapering of monetary policies in advanced economies could become a challenge for inflation in BSTDB member countries



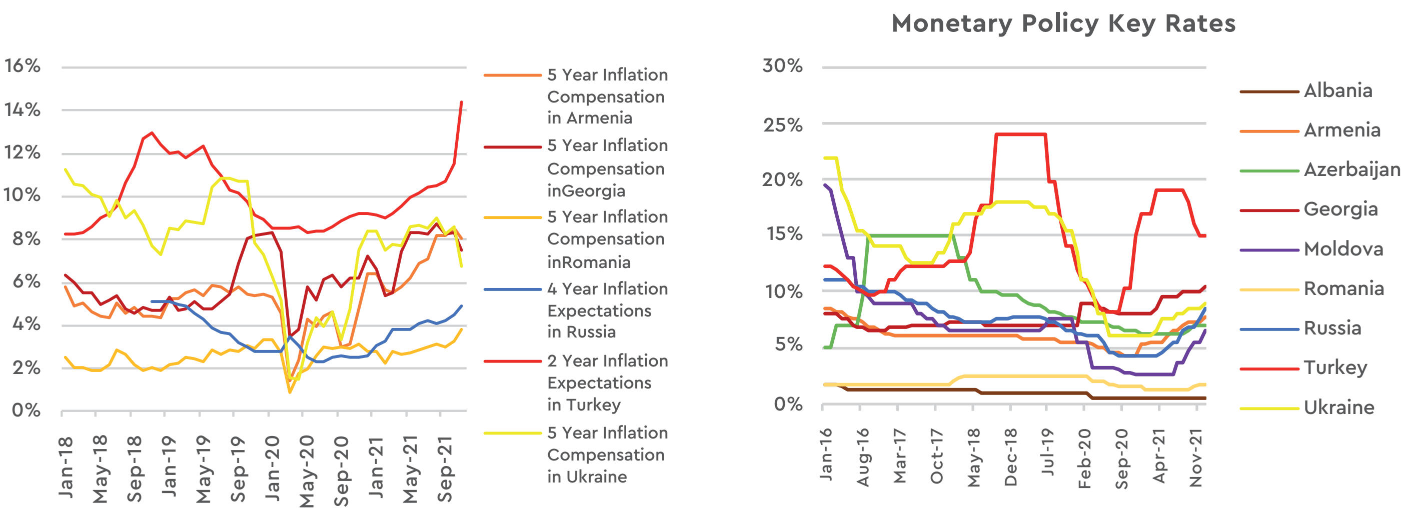


Source: National central banks

However, as advanced economies have also been negatively affected by the recent spike of inflation, central banks in these countries started to revert their dovish policy stance. In December 2021, the Bank of England raised the official bank rate from 0.1% to 0.25%, while the US Federal Open Market Committee in the last two meetings halved the size of new bond purchases. Expectations for monetary policy tapering in advanced economies further strengthen major reserve currencies. This in turn could become a challenge for emerging economies, as it may trigger currency depreciation. Currency depreciation is particularly challenging for emerging countries with high levels of dollarization of the economy, as it (i) causes an increase in imported inflation and (ii) pushes up inflation through higher debt-service costs for producers and increased inflation expectations. High dollarization is an issue for many countries in the Black Sea Region and, thus, currency fluctuations represent a challenge for these countries.

Another important determinant of inflation outlook in the region are inflation expectations, which have risen over the course of 2021 in most countries. This was due to a combination of factors. First, the current surge in inflation covers most of the consumer basket, including frequently consumed items such as food. This, in turn, increases perceptions of consumers for the current inflation and raises expectations for future price hikes. Second, when high inflation persists, consumers internalize it and become more backward looking, thereby lifting their inflation expectations. In some countries higher inflation expectations may be related also to exchange rate depreciation and/or expectations for such depreciation in the future.

Figure 8. Inflation expectations increased in most BSTDB member countries in 2021[4]



Source: National central banks, author's calculations

All in all, the current spike of inflation is mostly explained by temporary supply-side factors. Nevertheless, if (i) elevated headline inflation persists and (ii) the tapering of monetary policies in advanced economies creates depreciation pressures, then these two factors may translate into even higher inflation expectations with the respective second-round effects of inflation. Therefore, the outlook and risk for inflation, to a large extent, will depend on how successful monetary authorities in the countries in the Black Sea Region are in bringing inflation expectations down and containing currency depreciation pressures.

In the last decade, central banks in the BSTDB member countries have significantly improved monetary policy frameworks and successfully managed to keep inflation under control. Central banks gained credibility, as inflation expectations remained subdued. Improved central bank credibility in turn helped countries navigate through the COVID-19-induced economic crisis, as monetary authorities were able to play a more active role in supporting the economy through both monetary and macroprudential policies. This allowed countries to reduce the socio-economic burden of the crisis. Yet, the recent increase in inflation expectations is a challenge for central bank credibility. Therefore, most central banks in BSTDB member countries have already started to tighten policies. Monetary policies are expected to remain tight next year and as long as inflation expectations are contained.

4 For countries where data on inflationary expectations is not available, inflation compensations were calculated following Petra Gerlach-Kristen & Richhild Moessner & Rina Rosenblatt-Wisch, 2017. "Computing long-term market inflation expectations for countries without inflation expectation markets," Working Papers 2017–09, Swiss National Bank.

Key Findings

The bulk of the rise of inflation in 2021 in BSTDB member countries can be explained by temporary global supply shocks, such as increases in international commodity prices, food and energy in particular. The low base effect – stemming from subdued prices in 2020 – also played an important role for the high headline inflation in 2021. To better understand the underlying domestic inflationary trends, it is appropriate to analyze the non-tradable or services sector price dynamics, which are driven largely by domestic market forces. Services sector inflation in most countries in the Black Sea Region is still low and hovers around central banks' target rates. Additionally, there is no strong evidence of inflationary pressures coming from wage growth in most countries. However, it should be noted that price increases are observed in most CPI categories, which could be a sign for future inflationary pressures.

Economies in BSTDB member countries started to recover in 2021, mainly due to the generous fiscal and monetary incentives implemented by authorities. These incentives, however, also created strong demand-side pressures on inflation. Looking ahead, demand-side pressures on inflation are likely to subside on the back of anticipated fiscal consolidation and ongoing tightening of monetary policies across the countries in the region. The impact coming from the evolution of international commodity prices is also likely to gradually fade away, as food and energy prices are projected to moderate. Still, as the current increase of international commodity prices has not been fully transmitted to domestic prices yet, we can expect inflation – and especially food inflation – to remain high in 2022.

Although there is no evidence of long-term underlying inflationary pressures in the current price trends, there is still high uncertainty for the future. Rising inflation expectations pose risk to the outlook. Together with the rise of headline inflation, expectations for future price hikes also intensified in 2021. If headline inflation remains high in the medium term, it may fuel inflation expectations further and ultimately materialize in actual price increases with the respective second-round effects of inflation. To mitigate this risk, central banks in most countries in the Black Sea Region have already started to tighten monetary policies.

Another risk for the outlook for inflation in the BSTDB member countries is the tightening of monetary policies of major advanced economies, with some of them have already started to raise policy rates and taper bond buying. This has the potential to create new challenges for emerging economies, including those in the Black Sea Region, as currency depreciation could further weigh on inflation.