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Navigating Inflation Trends & Strategies: Select G20 Economies

Research Report

Theme: Trade, Investment and Resilient Supply Chains

Introduction

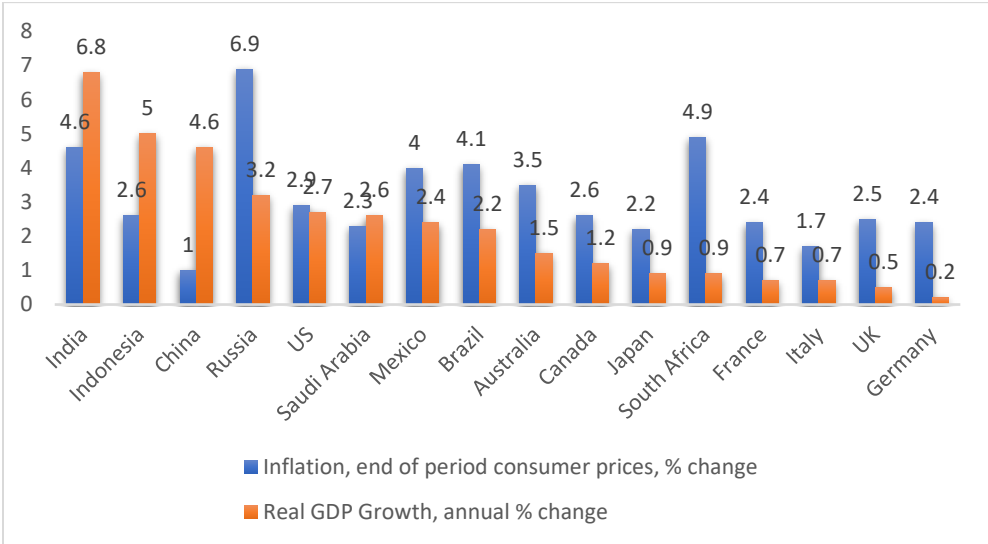
The Covid-19 pandemic caused widespread disturbances across the world economy leading to global lockdowns, supply chain disruptions and reduced production capacity. Beyond the health crisis, the pandemic posed challenges including labour and supply shortages, coupled with rising transportation costs due to mobility restrictions. This in turn led to elevated prices for essential commodities, including food and energy.

To contain the adverse impacts of the Covid 19 pandemic, Governments around the world implemented coordinated policy action which included a mix of fiscal and monetary policy interventions. The global economy embarked on a recovery path, with the easing of mobility restrictions as the pandemic subsided and the aid of supportive policy measures aimed at boosting liquidity and stimulating economic growth. The flood of stimulus measures coupled with the surge in demand due to pent-up consumption led to an unprecedented spike in inflation across the world.

Since July 2022, global inflation also steadily declined and general optimism prevailed with the resumption in economic activity and easing of supply side disruptions.

However, recent global events, including the ongoing geopolitical tensions have posed significant challenges and constraints to global growth. With the moderation of energy prices and expectations that central banks around the world will ease monetary policy, current global inflation trends present a positive outlook with expected decline in headline inflation in 2024 and 2025. At the same time, rising global vulnerabilities and escalating trade and geopolitical tensions can add to inflationary pressures, necessitating cautious policy action for achieving price stability.

Chart 1: Projected Inflation & Real GDP Growth Rates for Select G20 Economies, 2024



Source: IMF

Note: Turkey & Argentina not included as these are outliers; for full list of countries, see Annex

Given this backdrop, effective inflation management continues to be a key priority for achieving global economic stability. This note examines inflation trends and inflation management policies deployed by select G20 economies during Covid and its aftermath. As the G20 represents around 85% of global GDP, 75% of global trade¹ and two-thirds of the world population, the diverse strategies employed by these economies continue to have critical implications for the global economy.

¹ <https://www.weforum.org/agenda/2023/09/african-union-g20-world-leaders/>

Thus, understanding these approaches can provide valuable insights and important policy directions for inflation management going forward.

Factors driving inflation during & post-Covid

The unprecedented impact of the Covid-19 pandemic entailed a range of combative measures including global lockdowns and halt of business operations that triggered widespread economic and sector wide shocks. One of the key outcomes from the combined impact of these shocks and counter measures to tackle the crisis was persistent and high inflation that reached record high levels not seen in the past several decades. This section throws light on some important underlying causes that led to high inflation during the Covid period as well as in the post-Covid years.

Supply chain disruptions

While both demand and supply related factors contributed significantly to high inflation since 2021, it has been argued that supply chain disruptions were the primary driver of rising inflation in the aftermath of the pandemic². Worldwide lockdowns disrupted manufacturing and reduced industrial production, with the temporary stoppage of raw materials and inputs leading to supply side bottlenecks. Mobility restrictions also led to labour shortages constraining production capacities.

The pandemic brought to the forefront the vulnerabilities associated with global supply chain dependence, as firms increasingly sourced necessary inputs and key raw materials along different stages of production from countries around the world based on their comparative advantage in a product. These supply side constraints led to unmet demand as firms could not scale up production and put further pressure on prices leading to increased production costs.

Food inflation

The supply chain disruptions led to increased food prices globally, contributing to higher inflation. Lockdown and movement restrictions disrupted both demand and supply sides of food markets. For example, the price of rice, a staple food for both the world and India, increased by 25-30% as compared to the pre-Covid

² <https://www.brookings.edu/articles/covid-19-inflation-was-a-supply-shock/>

period³. With reduced availability in markets due to labour shortages coupled with excess demand as a result of panic buying, food prices increased significantly. However, the extent of food inflation varied across countries, with the inflation more pronounced in developing or emerging countries where food is a relatively higher proportion of the inflation basket.

Energy inflation

Similarly, heightened energy prices also contributed to elevated inflation levels from late 2021 to the middle of 2022. The Russia-Ukraine war in 2022 further exacerbated the supply chain bottlenecks and severely impacted energy markets, with Russia being the second largest oil producer globally. The war led to a surge in oil prices through increased costs of productions and higher transportation costs. The increased volatility in energy prices due to the intertwined effects of both Covid and the war led to increased prices of virtually all goods and services, further fuelling inflation expectations.

Shipping disruptions

The pandemic profoundly impacted international trade. Shipping is a critical mode of transport in international trade. The unavailability of shipping vessels during Covid-19 was also a significant driver of higher freight costs and added to inflationary pressures⁴. Further, containerized seaborne trade accounts for around 46% of global trade⁵ and port congestion during the pandemic was another factor that led to significant delays as wait times increased from two to three hours to two to three days, driving up shipping costs.

Some of these impacts persist even today. In fact, a recent study finds that inflation lags arising from lingering impacts from supply chain disruptions, such as heightened delivery times during the Covid period continued to play an important role in driving core inflation, even as late as 2022⁶.

Trade restrictions

³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8893685/>

⁴ <https://etr.springeropen.com/articles/10.1186/s12544-022-00566-x>

⁵ <https://www.nber.org/digest/202404/supply-chain-disruptions-and-pandemic-era-inflation>

⁶ <https://www.iif.com/Publications/ID/5337/The-COVID-Inflation-Shock-Monetary-Policy-Gradualism-and-Lingering-Supply-Chain-Effects>

Trade restrictions, especially with exports to contain the spread of the virus during the pandemic also significantly impacted inflation. Export restrictions were imposed during the pandemic to ensure sufficient domestic supply of essential commodities. As per a World Trade Organization (WTO) report, as many as 80 countries introduced export prohibitions to mitigate critical supply shortages⁷. Given the high degree of uncertainty even today, trade restrictive measures including high tariff barriers are implemented leading to higher input costs. The geopolitical conflicts including the Russia-Ukraine war have exacerbated the impacts of supply chain shocks and led to price increases in industries.

Fiscal measures

Fiscal policy measures to boost economies impacted by Covid also contributed to significant overheating during and post the pandemic. Large fiscal stimulus packages pushed the consumption demand for goods. However, due to strained supply chains, and without any noticeable impact on production, excess demand pressures in large markets contributed to raising inflation rates. An analysis finds that countries with large fiscal stimulus or with exposure to foreign stimulus through international trade experienced more pronounced inflation outbursts through 2022, which were not related to the Ukraine war related disruptions⁸.

The combined effects of all these factors contributed to high inflation levels during and the post-Covid period. In the next section, some of the inflation trends and the policy measures to tackle high inflation are examined in greater detail for select G20 economies.

Inflation management in select G20 economies during & post-Covid

This section provides an analysis of inflation trends and the inflation management policies adopted in select G20 economies over the last decade, with specific focus during the pandemic and the subsequent recovery phase. The focus is on a range of economies at different stages of development, to account for how inflation impacted these economies differentially as per their unique characteristics. Emerging and developing economies had much higher spikes in inflation rates,

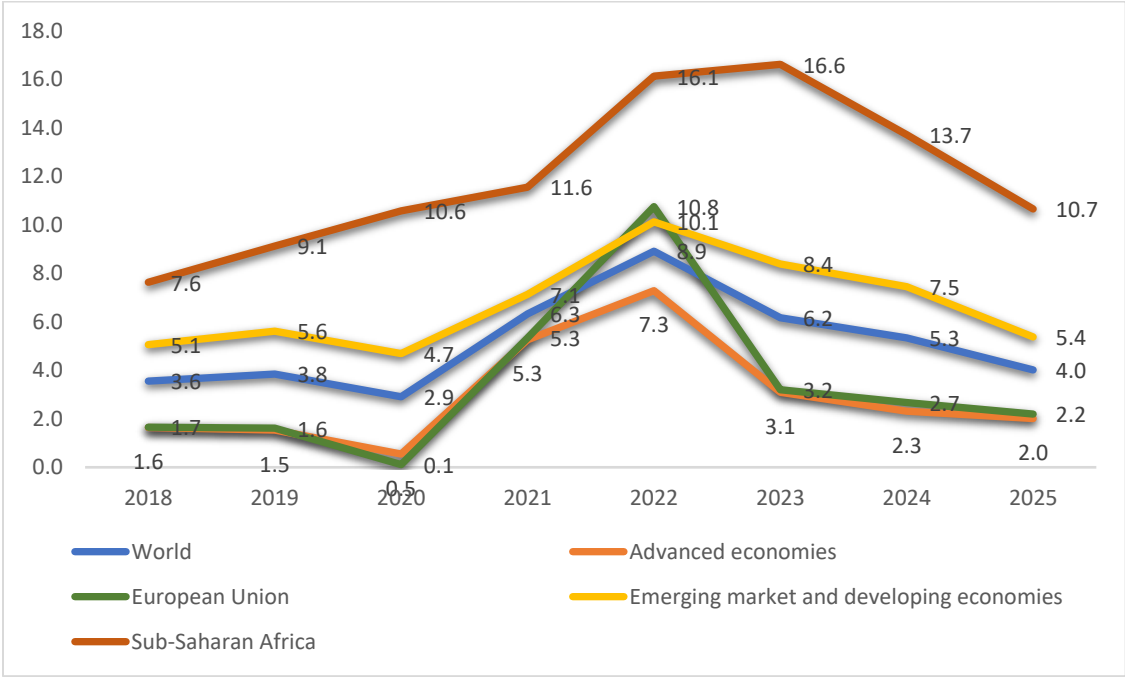
⁷ https://www.wto.org/english/news_e/news20_e/rese_23apr20_e.htm

⁸ <https://www.federalreserve.gov/econres/notes/feds-notes/fiscal-policy-and-excess-inflation-during-covid-19-a-cross-country-view-20220715.html#:~:text=Our%20back%2Dof%2Dthe%2D,ppt%20in%20the%20United%20Kingdom.>

mainly on account of the developing countries for whom the problem of inflation was exacerbated by the Covid-19 shock and other geopolitical events (see Chart 2) while advanced economies were able to control inflation better through their policy responses. The study also analyses two different regional blocks in this context, the European Union and the African Union, the latest addition to the G20.

Further, the analysis highlights the various policy measures introduced by these economies to combat high inflation during the post-pandemic period. The focus is specifically on the fiscal and monetary interventions undertaken in select G20 economies as both types of policies impact inflation through various channels.

Chart 2: Regional inflation rates in the last decade & inflation projections for 2024-25



Source: International Monetary Fund, World Economic Outlook Database

For ease of comparison, inflation data for various countries have been sourced from the International Monetary Fund (IMF). The analysis includes Germany and US as advanced economies, India and China as emerging market economies and

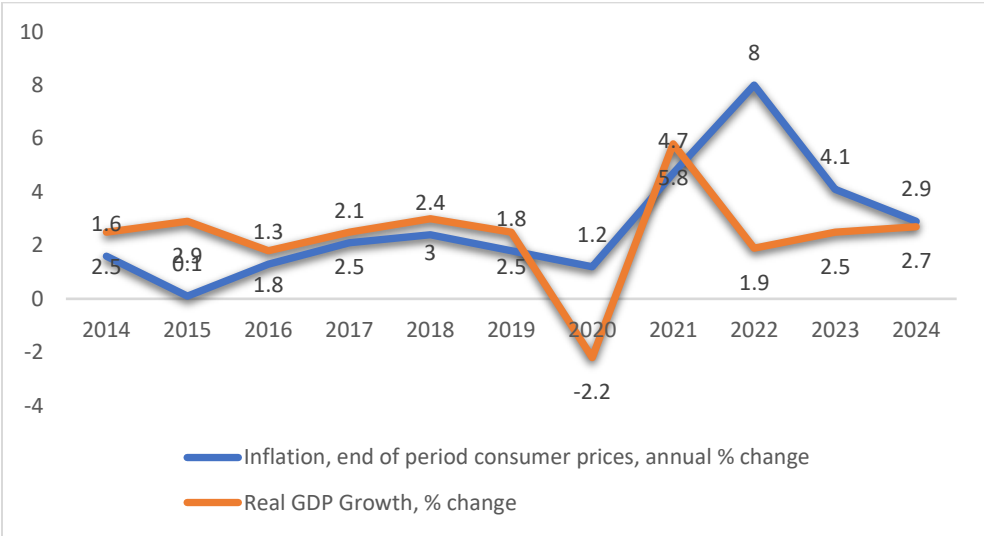
the African Union - the most recent member of the G20, which includes countries in various stages of development ranging from least developed, developing, emerging and developed nations.

United States

After decades of low inflation, high inflation became a serious concern in the United States (US) during and in the aftermath of the Covid-19 pandemic. US inflation increased from 1.2% in 2020 to 5.8% in 2021, peaking at 8% in 2022.

The US experienced a surge in inflation in 2021 and 2022 as a result of the supply chain disruptions and the combination of strong demand and supply shortages that put further pressure on prices, particularly on durable commodities. While excessive aggregate demand contributed to higher inflation, increased wages drove up commodity prices in the aftermath of the Russia Ukraine conflict, which further exacerbated the situation by increasing the demand for goods for which supply was inelastic.

Chart 3: Inflation & Real GDP growth rates in US



Source: IMF; Data for 2024 is IMF forecasts

Real GDP growth in the US stood at 2.5% in 2019. As a result of the pandemic induced disruptions, real GDP growth sharply contracted and moved into the negative territory to (-)2.2% during 2020.

The US responded to the Covid-19 pandemic with a series of stimulus packages including the American Rescue Plan and the Coronavirus Aid, Relief and Economic

Security (CARES) Act that collectively injected around USD 5 trillion in government spending. This led to higher consumer and business demand coupled with tighter labour markets (measured by the ratio of the number of job vacancies to the number of unemployed persons) putting upward pressure on wages and prices leading to high inflation⁹. As per findings of a US Federal Reserve (Fed) study¹⁰, US fiscal stimulus during the pandemic contributed to an increase in inflation of about 2.5 percentage points.

On the monetary policy side, the Fed maintained an accommodative monetary stance to support economic growth with the onset of the pandemic during 2020. The Fed's target range was at the effective lower bound, i.e. close to zero interest rate, while it engaged in the purchase of enormous amounts of securities (treasury and mortgage-backed securities)¹¹ to infuse liquidity into the system and stimulate borrowing and spending.

With the help of robust policy measures as well as vaccine support, the US economy was on a recovery path in 2021. With the strengthening of economic indicators and employment, real GDP growth rebounded to 5.8% during 2021. However, resurfacing supply chain disruptions and higher energy costs, with the advent of the Russia-Ukraine conflict led to high inflation which reached 4.7% in 2021 and further increased to 8% in 2022.

To address elevated inflation levels and tight labour market conditions, the Fed's Federal Open Market Committee (FOMC) shifted course from its earlier accommodative monetary policy and embarked on a restrictive monetary policy stance and aggressively raised interest rates to lower inflation.

In a historic adjustment in policy rate in 2022, the Fed raised the target range by a total of 425 basis points from 0.0-0.25% to 4.25-4.5%. The Fed also reduced its holdings of securities and followed a faster tightening stance by raising the target range for the federal funds rate at each FOMC meeting between March 2022 and May 2023¹², with subsequently larger moves. Inflation declined to 4.1% in 2023

⁹ <https://www.nber.org/digest/20239/unpacking-causes-pandemic-era-inflation-us>

¹⁰ <https://www.federalreserve.gov/econres/notes/feds-notes/fiscal-policy-and-excess-inflation-during-covid-19-a-cross-country-view-20220715.html#:~:text=Our%20back%2Dof%2Dthe%2D,ppt%20in%20the%20United%20Kingdom.>

¹² <https://www.federalreserve.gov/econres/notes/feds-notes/the-federal-reserves-responses-to-the-post-covid-period-of-high-inflation-20240214.html>

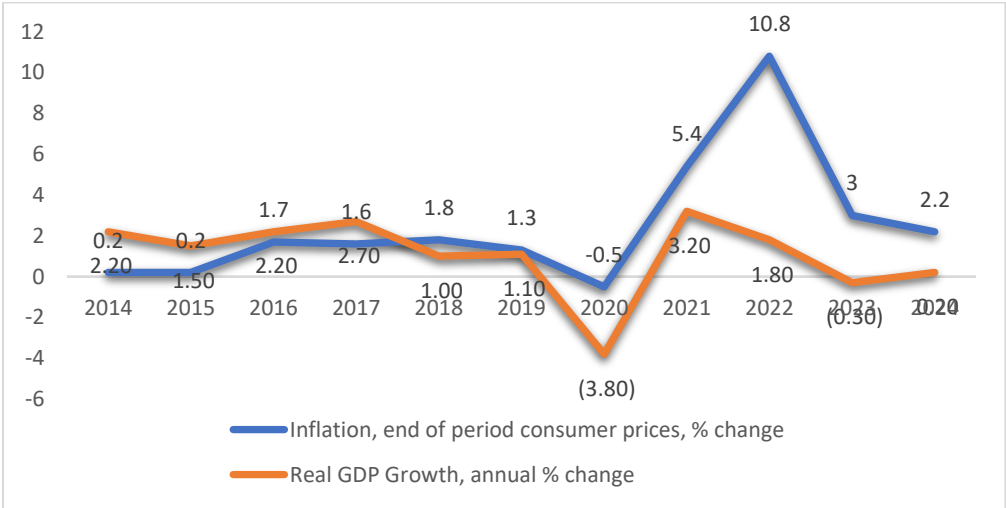
and is expected to decline further to 2.9% in 2024, still a little above the Fed's target range.

With the US economy growing at a robust rate and recording real GDP growth of 2.5% in 2023 and projected growth of 2.7% in 2024, the Fed lowered interest rates significantly, by a half percentage point in September 2024, for the first time in the last four years¹³. The move is expected to promote jobs and ease borrowing and stimulate the US economy further.

Germany

Among the G20 economies, Germany is one of the few countries which tackled inflation relatively well during the pandemic era. Established fiscal capacity, sustainable debt levels, a robust labour market, and a resilient banking sector along with a strong industrial sector were some of the factors that helped Germany implement successful measures for containing the adverse impacts of the pandemic.

Chart 4: Inflation & Real GDP Growth Rates in Germany



¹³ <https://www.bbc.com/news/articles/cz04md0zdrno>

Source: IMF; Data for 2024 is IMF forecasts

Germany had maintained low and stable inflation for a very long period until the Covid-19 pandemic. Inflation in Germany was around 0.2% during 2015 which increased to 1.3% in 2019. Germany recorded negative inflation in 2020 on account of the temporary reduction in the value added tax (charged on almost every product or service leading to a fall in wholesale prices)¹⁴ as part of the Federal Government's stimulus package during the pandemic.

Inflation in Germany increased to 5.4 % in 2021 and increased further to reach a peak of almost 11% in 2022. Rise in inflation in Germany and the Euro area was primarily driven by energy price shocks, food price shocks and supply chain bottlenecks in the aftermath of the Russia-Ukraine war. Apart from the supply side factors, high demand for goods and pent-up demand for services also created price pressures.

In terms of size, Germany's relief measures to combat the pandemic was one of the largest among advanced economies. This included large scale fiscal measures such as tax cuts to boost demand, increased public spending on digital infrastructure, healthcare and the green economy, and financial support for local governments. The Economic Stabilisation Fund (Wirtschaftsstabilisierungsfonds, WSF) was set up in 2020 with an initial funding of € 600 billion¹⁵, to address the negative impacts of the pandemic. The Government expanded the volume of available guarantees through the WSF and the public development bank KfW, increasing the total volume to around € 757 billion¹⁶, accounting for almost 24% of GDP.

Germany provided expanded access to short-term work through its social insurance programme 'Kurzarbeit', which has been widely credited for supporting domestic demand by protecting worker incomes during the pandemic¹⁷. Income support to families and expanded credit guarantees for exporters were also

¹⁴ <https://www.imf.org/en/News/Articles/2021/01/15/na011921-germanys-post-covid19-recovery-in-five-charts>

¹⁵ <https://www.deutsche-finanzagentur.de/en/stabilisation-measures/economic-stabilisation-fund/overview>

¹⁶ <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>

¹⁷ <https://www.imf.org/en/News/Articles/2020/06/11/na061120-kurzarbeit-germanys-short-time-work-benefit>

provided. Small businesses and self-employed persons impacted by the pandemic were provided financial support to the tune of €50 billion in grants.¹⁸

On the monetary side, a mega expansionary monetary policy stance was followed by the European Central Bank (ECB). In addition to measures at the Eurozone level¹⁹ which included actions aimed at stimulating the economy through maintaining affordable borrowing rates, credit support to firms and households for business continuity and increasing bank's lending capacity for greater financial flexibility, the German monetary authorities implemented additional measures to safeguard the economy from the impacts of the pandemic. Three key measures adopted to boost liquidity included - releasing the bank's anti-cyclical capital buffer from 0.25% to 0%, an additional € 100 billion to refinance expanded short-term liquidity support to companies through KfW, and allocation of € 100 billion to the WSF to strengthen the capital positions of affected companies.

The stimulus packages enhanced demand and the overall policies in Germany were successful in combating inflation and mitigated rising inequalities and unemployment.

On account of these measures, inflation in Germany decelerated steadily to 3% in 2023 and is further projected to reduce to 2.2% in 2024, which is close to the ECB's target of 2%.

The pandemic and other global events weighed down economic activity in Germany, as reflected in the sharp contraction of real GDP growth from 1.3% in 2019 to -3.8% in 2020. Germany's successful policy response is expected to boost economic growth with real GDP recorded at 1.8% in 2022 before falling again in 2023 because of resurfacing of supply chain bottlenecks with the Russia-Ukraine war. The easing of energy prices is expected to bring down inflation while economic growth is also expected to grow as a result of the stimulus packages.

However, while positive consumer sentiment can drive higher consumption and investment and boost economic growth, downside risks remain as global uncertainties prevail with escalating geopolitical tensions.

¹⁸ <https://www.imf.org/en/Publications/WP/Issues/2021/10/01/The-Effectiveness-of-Job-Retention-Schemes-COVID-19-Evidence-From-the-German-States-474182>

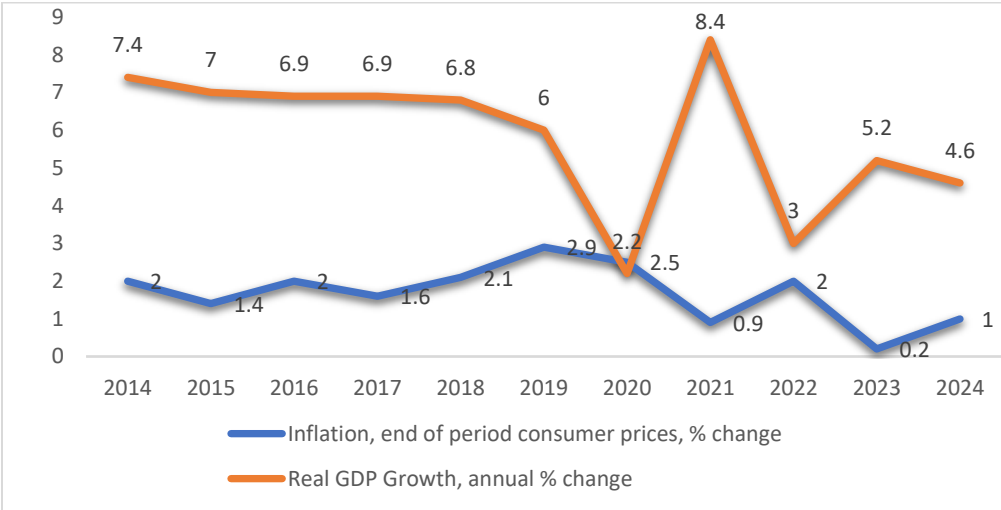
¹⁹ file:///D:/Main%20Data%20Folder/OneDrive%20-%20Confederation%20of%20Indian%20Industry/C%20Drive%20DATA/Downloads/Analysis_of_Germans_Monetary_Policy_and_Social_Imp.pdf

China

In contrast to the advanced economies, inflation in emerging markets, particularly in Asia was relatively muted, primarily on account of use of unconventional fiscal policy tools and stable exchange rates during the period.

China, the second largest economy in the world, was able to maintain a positive real GDP of 2.2% in 2020 which rebounded to 8.4% in 2022. Since the outbreak of the pandemic in 2020, China employed a series of targeted measures to stimulate the economy and protect vulnerable businesses and communities. During the post-Covid era, the fiscal and monetary authorities in China implemented large scale macroeconomic restructuring measures to combat the adverse impacts of the pandemic.

Chart 5: Inflation & Real GDP growth rates in China



Source: IMF; Data for 2024 is IMF forecasts

While the advanced economies resorted to large scale fiscal and monetary support measures to boost their economies in response to the Covid shock, the Chinese economy’s approach was significantly different.

China implemented an expansionary fiscal policy during 2020, briefly switching to policy tightening in 2021 due to concerns regarding fiscal sustainability, before reversing back again to its expansionary stance in 2022. In contrast to the advanced economies that provided direct financial support and broad-based direct cash benefits to households, China implemented a targeted Government and business focused approach. This encompassed preferential tax policies

including fee cuts and increased government spending and investments aimed at boosting job creation and promoting business growth. The Chinese Government believed that supporting businesses would indirectly benefit households through job creation and by maintaining stable household incomes.

Around 28 new tax and fee reduction policies were introduced in 2020 comprising of measures such as reduced value-added tax rate, special additional deductions for personal income tax and lowering corporate pension insurance rate. The Government also launched tax rebate programmes to support manufacturing and smaller enterprises. Around RMB 838 billion was spent on supporting enterprises through the direct fiscal fund allocation system in 2020²⁰. Additionally, subsidies to consumers were issued in the form of consumer vouchers to boost consumer demand and compensate the drop in income from job losses.

To mitigate the impact of the Covid-19 pandemic, the People's Bank of China (PBC) adopted an expansionary monetary policy stance to provide sufficient liquidity to the Chinese market. Key monetary tools implemented included cuts in reserve requirement ratio, central bank lending and discounts, among others. Monetary support measures adopted by PBC in 2020 are estimated to be around RMB 9 trillion²¹. Further, additional credit support was provided by Chinese banks to enterprises which included small and micro credit loans issued by financial institutions and deferring of debt repayments on loans. China also employed additional financial support measures aimed at strengthening the bond market through increased bond market financing and development of supply chain finance.

A combination of these policies largely prevented business failures in China during the pandemic and kept employment stable. With many businesses resuming normal operations within a short span of time, quick recovery in production outpaced domestic demand. This in turn restored investments and goods trade. As a result of these measures, China was able to maintain low inflation during the pandemic which stayed in the range of 2.5-2% during the 2020-22 period.

However, muted demand and slower consumption and services sector growth has impeded growth, with China's projected real GDP estimated at 4.6% in 2024,

²⁰ <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>

²¹ https://unctad.org/system/files/official-document/BRI-Project_RP24_en.pdf

much below pre-pandemic levels. The recent real estate and property sector crisis in China has slowed overall investment growth. The sector is one of the key drivers of China's economic growth, accounting for around 25% of GDP²². Falling property prices has significantly reduced local government revenues, while local government debt has increased significantly and was close to USD 12.8 trillion in 2022²³.

On account of these factors, China has witnessed reduced and persistently low inflation or disinflation which was recorded around 0.2% in 2023. As a result, currently the Chinese economy faces disinflationary risks which can raise financing costs while reducing consumer spending and private investment, further slowing the economy.

The Chinese central bank has recently unveiled a slew of monetary stimulus measures aimed at reviving the Chinese economy which includes lower reserve requirement ratios, lower interest rates for existing mortgages, and lowering minimum down payment requirements, among others.

India

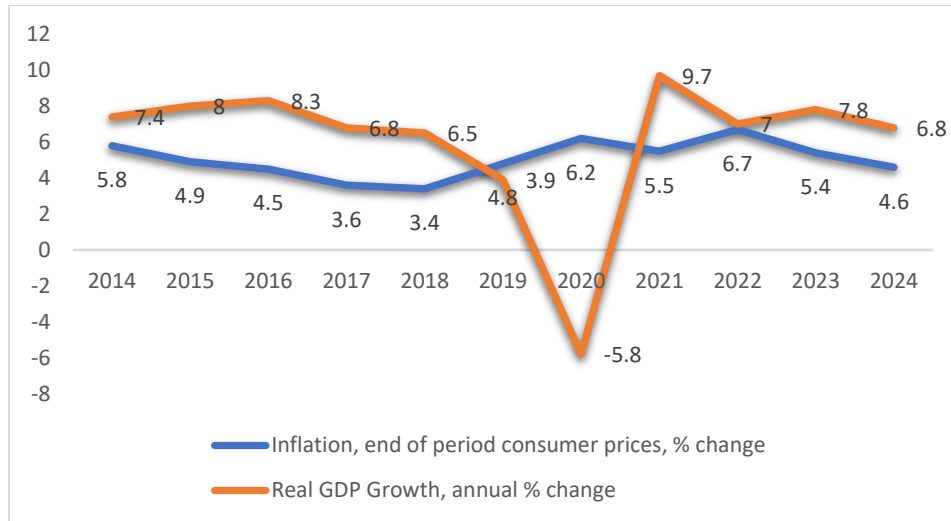
After recording a period of robust growth over the last decade, the Indian economy faced one of the largest contractions with the onset of the Covid-19 pandemic. As a result of the lockdown measures imposed to contain the pandemic, the economy's real GDP declined from 6.5% in 2019 to (-) 5.8% in 2020.

Inflation levels hovered in the range of 3-4% in India during the pre-Covid period. The Reserve Bank of India's (RBI's) successful adoption of inflation targeting created a stable inflation regime in India. However, due to the global supply chain disruptions in the aftermath of the pandemic, the economy witnessed elevated inflation levels which increased to 4.8% in 2019 and further to 6.2% in 2020, exceeding the Reserve Bank of India's upper tolerance level of 6%, for its inflation target of 4%.

Chart 6: Inflation & Real GDP Growth Rates in India

²² <https://www.prcleader.org/post/china-s-economy-after-covid-19>

²³ <https://www.jpmorgan.com/insights/global-research/international/china-deflation>



Source: IMF; Data for 2024 is IMF forecasts

The Indian Government and the RBI introduced a judicious combination of fiscal and monetary policy measures to address the negative impacts of the pandemic.

A host of fiscal support measures was employed by the Government during Covid-19 including a mega stimulus package of USD 275 billion, accounting for around 10% of India's GDP - the second largest in Asia after Japan. The package included a slew of measures focused on social protection and healthcare infrastructure, direct cash transfers to lower income households, and wage support and employment provision to low wage workers.

In 2020, more than INR 367 billion (USD 4.4 billion) was disbursed via Direct Benefit Transfer (DBT) to 160 million beneficiaries²⁴. Additional measures included credit support to businesses, measures to ease the tax compliance and tax filing extensions to promote business continuity. However, in contrast to several developed economies, the fiscal stimulus measures in India had a limited and temporary impact on inflation. This is primarily because fiscal support measures largely targeted the vulnerable segments of the population, with a focus on social protection and healthcare. As a result, such relief measures did not sufficiently boost demand to have a long term and sustained impact on prices.

On the monetary policy side, the RBI's Monetary Policy Committee (MPC) continued with an accommodative monetary policy stance to revive growth while ensuring effective inflation targeting through 2021 and 2022. RBI slashed the

²⁴ <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1616555>

policy repo rate by 75 basis points to 4.4% and lowered the cash reserve ratio (CRR) by 100 basis points to 3% to infuse additional liquidity and maintain financial stability²⁵.

An unconventional monetary policy tool used by the RBI was the conduct of Open Market Operations (OMO) through 'Operation Twist'²⁶, a quantitative easing programme that engaged in the simultaneous sales and purchases of government securities (bonds) to lower long term interest rates, while stimulating the economy. Further, the RBI also provided additional liquidity support through several measures such as short-term credit facility, overdraft scheme for state governments, special long term repo operations for small finance banks for encouraging lending, and extending credit to MSME entrepreneurs, among others.

The combination of monetary, fiscal and macroprudential measures helped India achieve its broad target of maintaining stable inflation and growth. As fiscal responses were primarily aimed at cushioning the impact of the pandemic on the vulnerable sections and supporting business growth, this helped stabilize demand while monetary measures ensured sufficient liquidity in the system.

However, as the world economy was impacted due to major global supply chain disruptions and multiple sanctions on Russia with the advent of the Russia Ukraine war, surging global crude oil prices led to high inflation across major economies. This impacted inflation in India as well which increased to 6.7% in 2022.

Inflation in India soon declined to 5.4% in 2023 and is expected to decline further to 4.6% in 2024. This can primarily be credited to the RBI's monetary policy stance which responded to the price pressures by raising lending rates by 250 basis points during an off cycle meet of the MPC²⁷.

While India's inflation outlook is expected to remain stable with core inflation (excluding food and fuel) remaining subdued, the RBI has raised concerns about food inflation. As food inflation depends on climatic factors and cannot be

²⁵ <https://economictimes.indiatimes.com/markets/stocks/news/rbi-bites-the-bullet-cuts-repo-rate-by-75-bps-to-4-40-to-mitigate-covid-19-impact/articleshow/74840559.cms?from=mdr>

²⁶ <https://www.livemint.com/industry/banking/in-a-first-rbi-announces-operation-twistcumomo-11614871545753.html>

²⁷ <https://timesofindia.indiatimes.com/business/india-business/one-year-of-russia-ukraine-war-how-the-conflict-impacted-indian-economy/articleshow/98214568.cms>

influenced by monetary policy decisions, it has the potential to raise overall inflation, by raising household inflation expectations. Hence, the RBI is likely to adhere to its tightening stance to achieve its goal of price stability, while balancing economic growth.

It is important to note in this context that in contrast to developed countries, where food constitutes a smaller percentage of the inflation basket, food inflation poses greater challenges for developing and emerging markets such as India.

Regional Blocs

This section looks at the inflation trends and inflation management measures adopted during and post the Covid-19 era in the two regional blocs of the European Union (EU) and the African Union (AU).

European Union

The Covid-19 pandemic was one of the most severe economic shocks the European Union (EU) faced since the Great Depression. Robust pent-up demand due to lockdown restrictions during the pandemic, unexpected strong demand exacerbated by supply shortages, expansionary fiscal and monetary policies to mitigate the negative impacts of the pandemic – all these factors contributed to elevated inflation rates in the EU during the post-pandemic era.

Chart 7: Inflation & Real GDP Growth Rates in the European Union



Source: IMF; Data for 2024 is IMF forecasts'

Before the pandemic struck, the EU maintained a relatively stable and low inflation regime with inflation hovering around 1.6%-1.4% between 2017 and 2019. Post the pandemic, inflation almost doubled and reached 3% in 2021. As a result of the pandemic related disruptions, real GDP growth in the region sharply contracted from 2% in 2019 and moved to the negative territory at (-)5.5% in 2020.

In the aftermath of the pandemic, the ECB adopted comprehensive fiscal as well as monetary measures to support the economic recovery of the EU. Some key fiscal measures that were undertaken by the region are highlighted below.

In response to the downturn in the aftermath of the pandemic, the EU implemented large scale fiscal measure packages for all member states. The European Commission in March 2020 amended its State Aid rules to allow member states to provide direct assistance to severely affected businesses. Measures included direct grants (or tax advantages), subsidised state guarantees on bank loans, public and private loans with subsidised interest rates, support to small and medium enterprises and provision of short-term export credit insurance. Around €3.05 trillion²⁸ in national aid was approved by June 2021 under the amended state rules.

The EU institutions also agreed to activate the General Escape Clause of the Stability and Growth Pact during the pandemic, which allowed for fiscal flexibility during severe economic shocks. This allowed member states to deviate from

²⁸ <https://webapps.ilo.org/static/english/covid-19/country-policy-responses/covid-EU-response-2023-03-01.pdf>

budgetary objectives and expand public expenditure. By October 2021, around €524 billion in national measures were undertaken by the member states under the General Escape Clause²⁹.

The European Commission also introduced the Coronavirus Response Investment Initiative (CRII) with €37 billion³⁰ in public investments to combat the crisis, which helped EU member states to address the most urgent challenges with the help of financial support. Further, a Pandemic Crisis Support was established under the European Stability Mechanism (ESM)³¹ to help provide emergency funding for healthcare costs related to Covid-19 crisis. This allowed member states to request assistance for up to 2%³² of their GDP.

On the monetary side, comprehensive monetary measures adopted by the EU focused on aspects such as market stabilisation, provision of sufficient liquidity and maintaining an effective overall accommodative stance.

To facilitate lending and reduce borrowing costs, the ECB launched the €1850³³ billion Pandemic Emergency Purchase Programme (PEPP), a programme for purchase of public and private sector bonds in March 2020. The programme served as a powerful market stabilising tool and encouraged more favourable growth and inflation dynamics in the Euro area by significantly easing financing conditions.

Another key monetary policy instrument adopted by the ECB was the easing of the collateral framework to ensure adequate liquidity to banks. The Targeted Longer-term Refinancing Operations (TLTROs) (under which banks received conditional funding basis meeting certain targets) was modified during the pandemic to offer more attractive rates, enabling banks to secure funding at interest rates as low as -1%³⁴. This revision proved effective, with participating banks receiving a record high of €1.31 trillion, in the Eurosystem's refinancing operations³⁵.

²⁹ <https://webapps.ilo.org/static/english/covid-19/country-policy-responses/covid-EU-response-2023-03-01.pdf>

³⁰ <https://eufunds.ie/covid/coronavirus-response-investment-initiative/>

³¹ The ESM is a permanent rescue fund set up in 2012 to provide loans to financially distressed euro area countries

³² <https://webapps.ilo.org/static/english/covid-19/country-policy-responses/covid-EU-response-2023-03-01.pdf>

³³ <https://www.ecb.europa.eu/home/search/coronavirus/html/index.en.html>

³⁴ <https://www.bis.org/review/r210304g.pdf>

³⁵ www.bis.org/review/r210304g.pdf

In addition to the above measures, the ECB also undertook a set of supportive supervisory measures to encourage favourable financial conditions.

The accommodative monetary policy stance adopted by the ECB created sufficient fiscal space in the EU to expand public expenditures. The mix of expansionary fiscal and monetary policies to counteract the microeconomic impacts of the pandemic proved effective and reduced the recessionary impacts of the pandemic in the EU. With the help of these measures, the economy briefly rebounded and recorded real GDP growth of 6.1% in 2021.

Following easing of restrictions as the pandemic subsided, pent up demand coupled with high energy and commodity prices with the advent of the Russian Ukraine war, inflation surged again in the EU post 2021 and peaked at 9.3% in 2022. For taming inflation, the ECB ended its accommodative monetary stance and increased the short-term interest rates. Over the four quarters between Q3 2023 and Q4 2024, the interest rate was increased from -0.5% to 4%³⁶. The inflation level reduced to 3.6% in 2023 as a result of the restrictive monetary stance.

However, inflation risks remain on account of energy price volatility amidst global uncertainties as well as on account of pick-up of wage growth, which can lead to persistent inflation levels. This, tighter monetary policies in the face of uncertainties are likely to continue in the region to ensure price stability.

African Union

While the Covid-19 pandemic had serious economic consequences for both developed and developing nations, the impacts were particularly severe in less developed and developing nations. While developed countries as well as some emerging markets had large fiscal capacities to manoeuvre the challenges of the pandemic, lesser developed economies were confronted with many developmental challenges even before the pandemic hit, such as limited fiscal space and high debt levels coupled with high inflation rates. A case in point is Africa.

The African Union's recent inclusion to the G20 has significant global implications for policymaking. Some of the world's most pressing challenges, including those

³⁶ <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2935~639250ee2b.en.pdf>

stemming from the Covid-19 pandemic and other geopolitical conflicts adversely impacted the least and the underdeveloped countries of the world, many of which are in Africa.

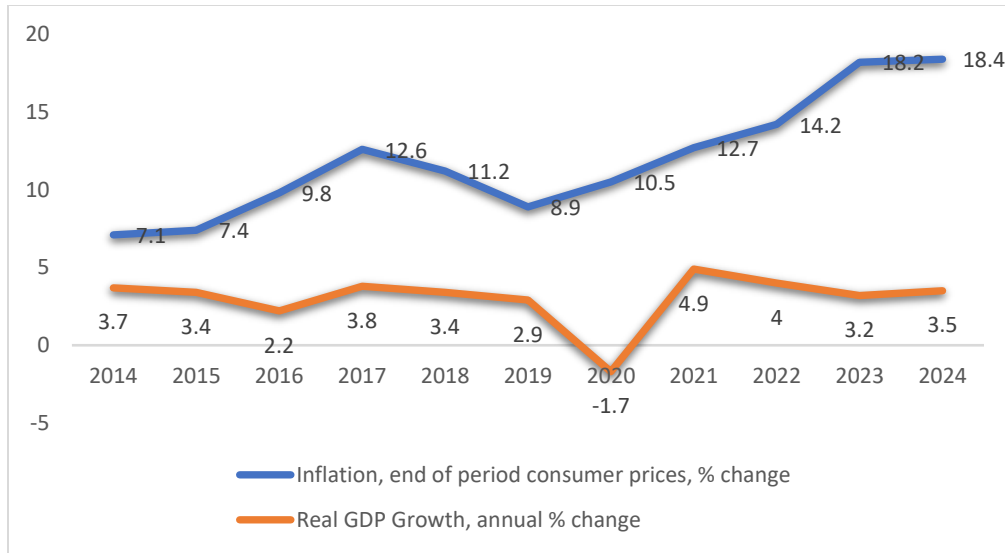
Africa has faced the challenge of tackling decadal high inflation rates. Weaker national currencies against the dollar and fluctuating exchange rates, economic instability, logistical and infrastructural challenges, food shortages and natural disasters contributed to elevated inflation rates in Africa before Covid.

The Covid-19 pandemic further exacerbated the problem of high inflation in the region, particularly for many regions that faced high debt levels. High energy and food prices as a result of global supply chain disruptions and the fallout of the Russia-Ukraine war also contributed significantly to high inflation. Food and energy accounts for almost half of household consumption in sub-Saharan Africa³⁷ and rising food and energy prices have escalated costs of living in the region, impeding growth. The process of economic recovery has been slow – tackling inflation while promoting growth has therefore emerged as the foremost challenge for the region.

Africa's inflation rate more than doubled over the ten-year period between 2014 and 2023. The region's inflation rate increased from 7.1% in 2014 to 11.2% in 2018, during the pre-Covid period. Post Covid, Africa has recorded elevated inflation rates consistently for the last five years. The inflation rate increased from 10.5% in 2020 to 18.2% in 2023 and is projected to stay at 18.4% in 2024.

Chart 8: Inflation & Real GDP Growth Rates in African Union

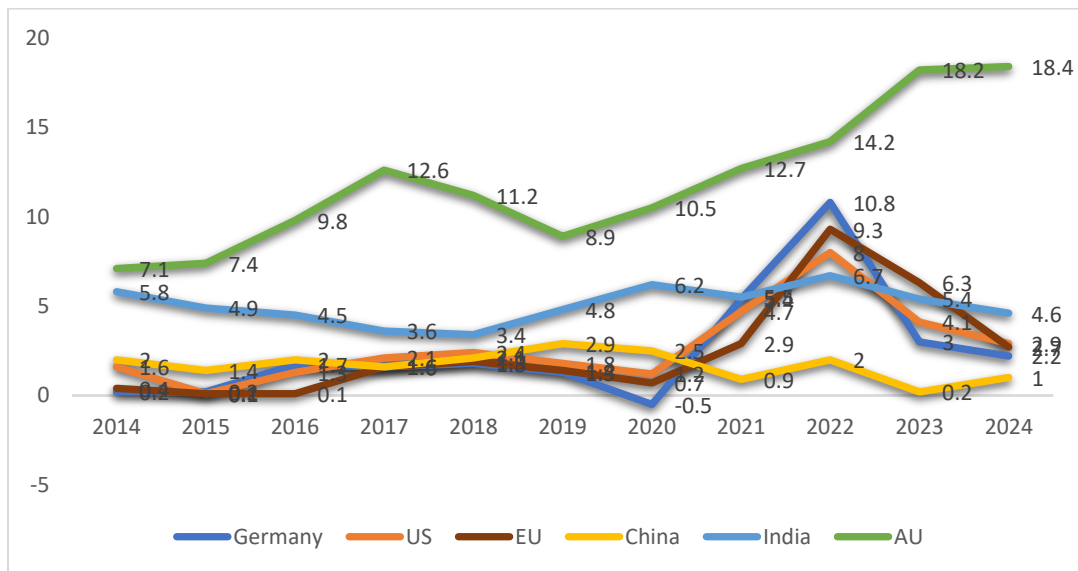
³⁷ <https://www.imf.org/en/Blogs/Articles/2022/10/20/africas-inflation-among-regions-most-urgent-challenges#:~:text=One%20of%20the%20most%20urgent,almost%209%20percent%20in%20August.>



Source: IMF; Data for 2024 is IMF forecasts

As can be seen from the chart below, decadal inflation rates of Africa are much higher than those in the select G20 economies considered in this note. This also brings out the stark differences in inflation rates between economies at various stages of development.

Chart 9: Inflation rates for African Union and select G20 economies over the last decade, annual % change



Source: IMF; Data for 2024 is IMF forecasts

Note: Inflation rate is measured as end of period consumer prices, % change

The Covid-19 pandemic triggered a recession in the African Union, not seen in decades, leading to high inflation and an increasing debt burden for the member states. Real GDP growth in the African region sharply contracted from 2.9% in 2019 to (-) 1.7% in 2020. However, with the help of stimulus measures to boost the economy, African growth rates increased to almost 5% in 2021 before declining again to pre-pandemic levels in 2023, with the advent of the Russia-Ukraine war.

The policy response in Africa was wide-ranging. Fiscal support in Africa was much limited in comparison to emerging economies and averaged about only 3% of GDP³⁸. Financial support was offered primarily through off budget measure that included provision of credit guarantees to firms for supporting business growth and use of mobile money deposit accounts to households.

Most central banks adopted a stronger monetary response to the pandemic due to limited fiscal space in Africa as a result of high debt levels. Almost half of African central banks resorted to monetary policy expansion to support economic growth with reduction in policy rates, comparable to that of other emerging market economies³⁹. Some central banks lowered reserve requirements for promoting greater liquidity and maintaining financial stability. Several unconventional monetary policy tools were also employed including asset purchases, primarily of central government claims, to facilitate market functioning.

While an accommodative monetary policy was adopted to support economic growth across countries, some central banks across the region followed tighter monetary policies and raised interest rates to curb high inflation. Examples include Ghana, Malawi, Mozambique, Nigeria, Uganda and the Central and Western African monetary unions.

While most economies in the region are still contending with the lingering impacts of multiple shocks, the combination of these measures have made the African economy more resilient. Further, with the improvement in global conditions and

³⁸ <https://www.bis.org/publ/bppdf/bispap121.pdf>

³⁹ www.bis.org/publ/bppdf/bispap121.pdf

effective policy measures, the economic outlook is expected to improve soon. As per the latest African Economic Outlook⁴⁰ estimates, real GDP growth in the region is projected to increase from 3.7% in 2024 to 4.3% in 2025.

Conclusion

A low and stable inflation regime is critical for achieving robust economic growth. Various global disruptions in the recent past have further necessitated strong central bank action as well as fiscal consolidation measures. Thus, achieving price stability has become a key priority for global policymakers to guide the global economy towards a soft landing.

Given this backdrop, this note examined the inflation trends and the various policy responses to inflation management across select G20 economies during the pre and post Covid period. The G20 economies were selected to highlight how the inflation trends and policy responses varied across developed, emerging and less developed markets.

Investigating the underlying causes of inflation is critical for developing effective policy response. The note highlights key underlying causes of inflation during and in the aftermath of the pandemic.

The analysis also offers valuable insights for policymakers in shaping future inflation management strategies. These are briefly summarized below:

- Strengthening social security and greater public investments, specifically for the vulnerable sections of society
- A convergence of effective macroeconomic and robust financial sector policies for building resilience
- Prioritizing investments in health and education sectors for boosting job creation and creating a healthy workforce
- Effective trade strategies for enhancing exports, developing competitiveness and building greater supply chain resilience
- Building capacities and greater skill development across sectors, including in developing countries

⁴⁰ <https://www.afdb.org/en/knowledge/publications/african-economic-outlook>

- Building greater food supply chain resilience for enhancing food security and reducing risks associated with food price shocks
- Greater research and discussions on trade restrictions including tariff and non-tariff measures and their impact on increased prices
- Strengthening disaster preparedness and building resilient infrastructure to minimize impact of natural disaster

The combined monetary, fiscal, and structural reforms helped G20 economies address inflationary pressures while supporting long-term recovery.

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Annex

Projected Inflation and real GDP growth rates in G20 economies, % change, 2024

Country	Inflation, end of period consumer prices	Real GDP Growth
India	4.6	6.8
Indonesia	2.6	5
China	1	4.6
Russia	6.9	3.2
Turkiye	59.5	3.1
US	2.9	2.7
Saudi Arabia	2.3	2.6
Mexico	4	2.4
Brazil	4.1	2.2
Australia	3.5	1.5
Canada	2.6	1.2
Japan	2.2	0.9
South Africa	4.9	0.9
France	2.4	0.7
Italy	1.7	0.7
UK	2.5	0.5
Germany	2.4	0.2
Argentina	249.8	-2.8

Source: IMF