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Divergent Recoveries in Turbulent Times





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Acknowledgments

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The analysis in this report was coordinated under the general supervision of Jihad Azour (Director of MCD). The project was directed by Taline Koranchelian (Deputy Director in MCD), S. Pelin Berkmen (Chief of MCD's Regional Analytics and Strategy Division), Yasser Abdih (Deputy Chief of MCD's Regional Analytics and Strategy Division), and Cesar Serra (Deputy Chief of MCD's Regional Analytics and Strategy Division).

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Country Groupings

The April 2022 *Regional Economic Outlook (REO): Middle East and Central Asia* covers countries and territories in the Middle East and Central Asia Department (MCD) of the International Monetary Fund (IMF) referred to as ME&CA countries and territories. It provides a broad overview of recent economic developments and prospects and policy issues for the medium term. To facilitate the analysis, the 32 ME&CA countries and territories covered in this report are divided into three (nonoverlapping) groups, based on export earnings and level of development: (1) Oil Exporters (OE), (2) Emerging Market and Middle-Income Countries (EM&MI); and (3) Low-Income Developing Countries (LIC). Additional analytical and regional groups provide more granular breakdown for analysis and continuity. The country and analytical group acronyms and abbreviations used in some tables and figures are included in parentheses.

ME&CA OE include Algeria (ALG), Azerbaijan (AZE), Bahrain (BHR), Iran (IRN), Iraq (IRQ), Kazakhstan (KAZ), Kuwait (KWT), Libya (LBY), Oman (OMN), Qatar (QAT), Saudi Arabia (SAU), Turkmenistan (TKM), and United Arab Emirates (UAE).

ME&CA EM&MI include Armenia (ARM), Egypt (EGY), Georgia (GEO), Jordan (JOR), Lebanon (LBN), Morocco (MAR), Pakistan (PAK), Syrian Arab Republic (SYR), Tunisia (TUN), and West Bank and Gaza (WBG).

ME&CA LIC include Afghanistan (AFG), Djibouti (DJI), Kyrgyz Republic (KGZ), Mauritania (MRT), Somalia (SOM), Sudan (SDN), Tajikistan (TJK), Uzbekistan (UZB), and Yemen (YEM).

Caucasus and Central Asia (CCA) countries include Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.

CCA OE include Azerbaijan, Kazakhstan, Turkmenistan.

CCA OI include Armenia, Georgia, the Kyrgyz Republic, Tajikistan, and Uzbekistan.

CCA EMMI include Armenia and Georgia.

CCA LIC include Kyrgyz Republic, Tajikistan, and Uzbekistan.

Middle East and North Africa (MENA) includes Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen.

MENA OE include Algeria, Bahrain, Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, and United Arab Emirates.

MENA OI include Djibouti, Egypt, Jordan, Lebanon, Mauritania, Morocco, Somalia, Sudan, Syrian Arab Republic, Tunisia, and West Bank and Gaza, and Yemen.

MENA EMMI include Egypt, Jordan, Lebanon, Morocco, Syrian Arab Republic, Tunisia, and West Bank and Gaza.

MENA LIC include Djibouti, Mauritania, Somalia, Sudan, and Yemen.

MENAP includes MENA, Afghanistan, and Pakistan.

MENAP OI include MENA OI, Afghanistan, and Pakistan.

Arab World includes Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen.

The Gulf Cooperation Council (GCC) comprises Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

The Non-GCC oil-exporting countries are Algeria, Iran, Iraq, and Libya.

North Africa countries include Algeria, Djibouti, Egypt, Libya, Mauritania, Morocco, Sudan, and Tunisia.

Fragile states and conflict-affected countries (FCS) include Afghanistan, Djibouti, Iraq, Lebanon, Libya, Somalia, Sudan, Syrian Arab Republic, Tajikistan, West Bank and Gaza, and Yemen.

Conflict-affected countries include Libya, Somalia, Syrian Arab Republic, and Yemen

Assumptions and Conventions

A number of assumptions have been adopted for the projections presented in the April 2022 *Regional Economic Outlook: Middle East and Central Asia.* It has been assumed that established policies of national authorities will be maintained, that the price of oil will average US\$106.83 a barrel in 2022 and US\$92.63 a barrel in 2023, and that the six-month London interbank offered rate (LIBOR) on US dollar deposits will average 1.3 percent in 2022 and 2.8 percent in 2023. These are, of course, working hypotheses rather than forecasts, and the uncertainties surrounding them add to the margin of error that would in any event be involved in the projections. The 2022 and 2023 data in the figures and tables are projections. These projections are based on statistical information available through late March 2022.

The following conventions are used in this publication:

- In tables, ellipsis points (. . .) indicate "not available," and 0 or 0.0 indicates "zero" or "negligible." Minor discrepancies between sums of constituent figures and totals are due to rounding.
- An en dash (–) between years or months (for example, 2011–12 or January–June) indicates the years or months covered, including the beginning and ending years or months; a slash or virgule (/) between years or months (for example, 2011/12) indicates a fiscal or financial year, as does the abbreviation FY (for example, FY 2012).
- "Billion" means a thousand million; "trillion" means a thousand billion.
- "Basis points (bps)" refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).

As used in this publication, the term "country" does not in all cases refer to a territorial entity that is a state as understood by international law and practice. As used here, the term also covers some territorial entities that are not states but for which statistical data are maintained on a separate and independent basis.

The boundaries, colors, denominations, and any other information shown on the maps do not imply, on the part of the International Monetary Fund, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.

¹Simple average of prices of U.K. Brent, Dubai Fateh, and West Texas Intermediate crude oil.

1. Regional Developments and Outlook: Divergent Recoveries in Turbulent Times

The war in Ukraine and sanctions on Russia are exacerbating the divergence in recovery prospects for the Middle East and Central Asia (ME&CA). Despite better-than-expected upside momentum in 2021, the economic environment in 2022 is defined by extraordinary headwinds and uncertainties, particularly for commodity importers, with higher and more volatile commodity prices, rising inflationary pressures, faster-than-expected monetary policy normalization in advanced economies, and a lingering pandemic. Prospects for oil exporters in the Middle East and North Africa (MENA) region have improved, while countries in the Caucasus and Central Asia (CCA) region face a particularly challenging outlook given their linkages to Russia and Ukraine. Downside risks dominate the outlook and include a prolonged war and further sanctions on Russia, tighter-than-expected global financial conditions, possible deanchoring of inflation expectations, a sharper slowdown in China, and new pandemic outbreaks. Policymaking has become increasingly complex, with dwindling macro policy space to deal with these extraordinary shocks, amid high debt and inflation. Given divergent outlooks, policies will need to be calibrated carefully to country circumstances to manage uncertainties, maintain macroeconomic stability, and support the recovery while protecting the most vulnerable and ensuring food and energy security. Structural reforms have become even more urgent to prevent scarring from the pandemic and the war, and ensure a private sectorled and inclusive recovery, including by embracing digitalization and investing in a greener future.

Prepared by Olivier Bizimana and Jeta Menkulasi under the guidance of Yasser Abdih and Cesar Serra, with excellent research assistance from Azhin Ihsan Abdulkarim and Vizhdan Boranova.

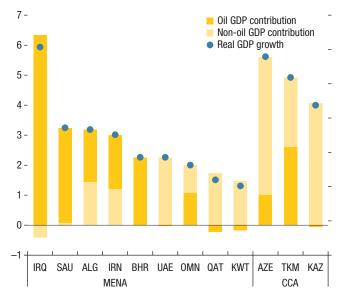
1.1. Before the War: A Stronger-than-Expected Yet Fragile Recovery

Growth in 2021 Surprised on the Upside but So Did Inflation

The rebound of economic activity strengthened in the second half of 2021, mainly driven by strong domestic demand, especially consumption. This was supported by continuing buoyant remittance flows (Armenia, Egypt, Georgia, Kyrgyz Republic, Morocco, Pakistan, Tajikistan) and a revival of non-oil GDP for oil exporters (Figure 1.1). Growth, however, has not translated into better labor market outcomes—with unemployment rates still well above pre-pandemic levels in many countries. High-frequency data indicate continued growth momentum in early 2022, despite a temporary pandemic-induced slowdown in January.

Inflation surged in 2021 and remains elevated (Figure 1.2). The surge has been driven mostly by external factors, particularly higher food prices, except for in Gulf Cooperation Council (GCC) countries (see Chapter 2). Despite the significant increase in international energy prices, only a subset of countries experienced a passthrough into domestic energy prices (for example, Georgia). Others were less affected because of energy subsidies and/or reliance on long-term gas contracts. Pass-through from exchange rate depreciations has also contributed to inflation in some countries (Algeria, Iran, Tajikistan). In a few, domestic supply-chain constraints (Armenia, Kyrgyz Republic) and stronger domestic demand (some CCA countries, Pakistan) have added to inflation pressures. Inflation in GCC countries inched up from a low base and because of the strength of the non-oil recovery. While food and energy price contributions have been limited in

Figure 1.1. ME&CA OE: Real GDP Growth, 2021 (Contributions in percentage points)



Source: IMF World Economic Outlook database.

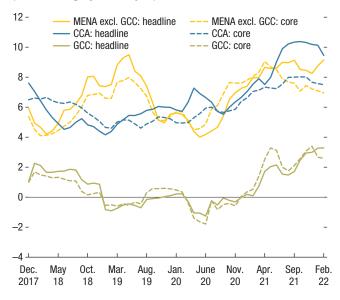
Note: Country abbreviations are International Organization for Standardization country codes. ME&CA = Middle East and Central Asia; OE = oil exporter.

the GCC so far—reflecting lower shares of food in domestic consumption and the prevalence of administered prices and subsidies—signs of passthrough from higher global prices are beginning to emerge (Bahrain, Kuwait, Qatar, UAE).

Adjusting to Pandemic's "New Normal"

COVID-19 infections spiked temporarily in most countries in January, reflecting the spread of the highly transmissible Omicron variant, but countries have reported far fewer deaths. Countries in the region have not imposed broad mobility restrictions, which helped maintain the recovery momentum. While several countries have increased their vaccination rates by at least 20 percent of their populations since October 2021 (Armenia, Egypt, Iran, Mauritania, Pakistan, Tajikistan, Tunisia, Uzbekistan), inoculation campaigns have remained rather sluggish in others, particularly low-income countries (LICs), reflecting supply constraints, subdued absorption capacity, and administration bottlenecks (Figure 1.3). As a result, half of the countries in

Figure 1.2. Average Headline and Core Inflation (Percent change, year-over-year)



Sources: Haver Analytics; national authorities; IMF Consumer Price Index database; and IMF staff calculations.

Note: CCA = Caucasus and Central Asia; GCC = Gulf Cooperation Council; MENA = Middle East and North Africa. MENA includes ALG, BHR, EGY, IRN, IRQ, JOR, KWT, MAR, OMN, QAT, SAU, SOM, TUN, UAE, and WBG. CCA includes ARM, AZE, GEO, KAZ, KGZ, TJK, and UZB. GCC includes BHR, KWT, OMN, QAT, SAU, UAE. Latest data: Feb. 2022. Country abbreviations are International Organization for Standardization country codes.

ME&CA did not meet the target of a 40 percent vaccination rate by the end of 2021.

Reduced Policy Space

Macroeconomic policy remained broadly supportive in 2021, despite the gradual phase-out of pandemic policy measures in many countries. Still, the rapid increase in inflation and higher post-pandemic public debt in most countries have reduced policy space further.

Fiscal policy. Primary balances improved in 2021 across most of the region, with only a few countries seeing their balances deteriorate (Algeria, Iraq, Mauritania, Somalia, UAE, Uzbekistan, and Yemen) relative to 2020. This predominantly reflects the withdrawal of pandemic-related spending and a cyclical rebound in revenues. Nonetheless, the stance continued

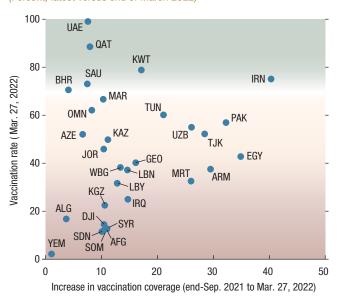


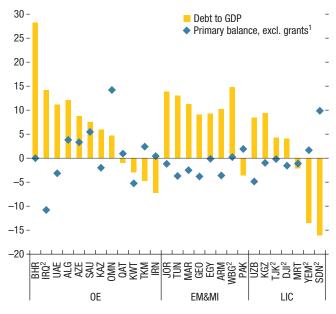
Figure 1.3. ME&CA: Vaccination Progress (Percent, latest versus end of March 2022)

Sources: Our World in Data; and IMF staff calculations. Note: Country abbreviations are International Organization for Standardization country codes. ME&CA = Middle East and Central Asia.

> to be expansionary relative to 2019, except for some oil exporters that have fully reversed their pandemic-related fiscal expansion (Figure 1.4). Among emerging markets and middle-income (EM&MI) countries, public debt in 2021 increased by about 4 percentage points of GDP in Egypt and Jordan, whereas it declined in Armenia, Pakistan, and Georgia (about 3, 6, and 11 percent of GDP, respectively). Overall, debt increased by 3 percentage points of GDP in 2021, adding to the pandemic-induced increase in 2020 and an already pre-pandemic high public debt, further reducing fiscal space.

Monetary and macro-financial policy. In countries with flexible exchange rates, central banks have tightened monetary policy in response to higher inflation pressures. CCA countries have reversed the interest rate cuts made in 2020, leading to a tight monetary policy stance in many of them (Figure 1.5). Pakistan has also increased policy rates since September 2021, but its monetary policy stance remained accommodative. In countries with fixed exchange rates and relatively low inflation rates, monetary policy remained

Figure 1.4. 2021 Fiscal Stance and Debt: Changes from 2019 (*Percentage points of GDP*)



Sources: Haver Analytics; national authorities; and IMF staff calculations. Note: CCA = Caucasus and Central Asia; EMMI = emerging market and middle-income countries; GCC = Gulf Cooperation Council; LIC = low-income country; MENA = Middle East and North Africa; OE = oil exporter. Country abbreviations are International Organization for Standardization country codes. Numbers refer to changes in percent of GDP between 2021 and 2019. ¹Non-oil balances used for oil exporters. ²Fragile states and conflict-affected countries.

supportive, as reflected in negative real policy rates. Macro-financial policy support measures introduced in response to the pandemic have remained in place in a few countries (Bahrain, Kuwait, Oman, UAE) but have been mostly phased out in others (some CCA countries, Iran, Iraq, Morocco, Saudi Arabia).

1.2. The War in Ukraine: Significant Spillovers to the Region

The War Amplified Preexisting Global Pressures

The war in Ukraine and sanctions on Russia have worsened global growth and inflation prospects, adding to the already high uncertainty about

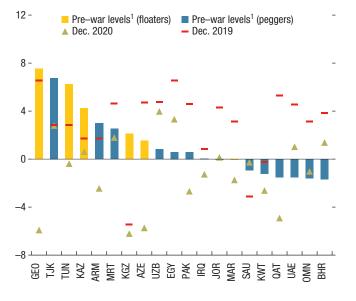


Figure 1.5. ME&CA: Real Policy Rates (Percent)

Sources: Haver Analytics; and IMF staff calculations.

Note: Real policy rate is calculated as nominal policy rate minus one-year-ahead inflation projection. Country abbreviations are International Organization for Standardization country codes. ME&CA = Middle East and Central Asia. ¹Pre-war levels are as of February 23, 2022.

the world outlook (April 2022 *World Economic Outlook*).

Commodity prices surged and volatility has increased. Average petroleum spot prices have fluctuated between \$98–\$130 per barrel since the Russian invasion of Ukraine and are expected to settle at around \$107 per barrel in 2022 (an increase of about \$43 per barrel compared to October) before pulling back toward \$72.5 by 2027—above the 2019 average of \$61.4. Food prices are expected to increase by about 14 percent in 2022 on top of the 28 percent increase in 2021, and decrease by 5.7 percent in 2023.

Global financial conditions have tightened

significantly. Broad price pressures had led major central banks to tighten monetary policy and indicate increasingly hawkish future stances, starting prior to the invasion. Against the backdrop of a declining risk appetite with the war, financial market volatility has increased, and global financial conditions further tightened (April 2022 *Global Financial Stability Report*).

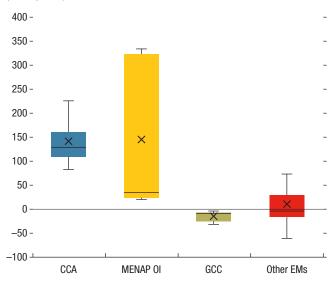


Figure 1.6. Change in Spreads Since February 23, 2022 (*Basis points*)

Source: Bloomberg Finance L.P.

Note: CCA = Caucasus and Central Asia; EM = emerging markets; GCC = Gulf Cooperation Council; MENAP = Middle East, North Africa, Afghanistan, and Pakistan; and OI = oil importer.

Region's Financial Conditions Impacted

While the war in Ukraine has quickly reverberated through global financial and commodity markets, the impact on CCA countries and MENA oilimporters has been particularly pronounced. Currencies have depreciated, with the biggest impact felt in the CCA region and Egypt, prompting policy rate hikes (Egypt, Kazakhstan, Kyrgyz Republic), foreign exchange intervention, and liquidity support. Some governments also announced fiscal packages (including wage increases and/or new subsidies) to support vulnerable populations.

Despite some variation across countries, sovereign bond spreads have risen significantly above other emerging markets, on average, reflecting direct linkages to Russia and Ukraine, concerns about the impact of a rapid surge in food and energy prices and tightening global financial conditions on highly indebted countries, and other countryspecific factors (Figure 1.6). Meanwhile, financial conditions for oil exporters remained unchanged or improved as oil and gas prices surged. With the global risk-off mode already preceding the

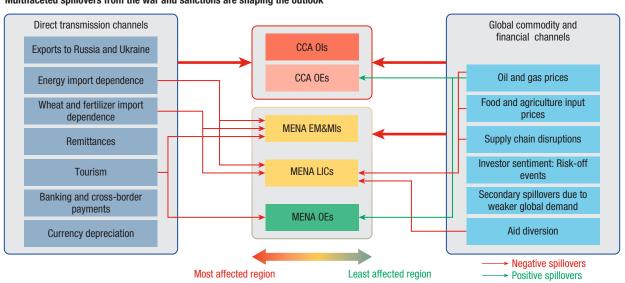
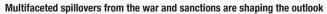


Figure 1.7 Propagation Channels of the War in Ukraine and Sanctions



Source: IMF staff.

Note: CCA = Caucasus and Central Asia; EM&MI = emerging market and middle-income countries; GCC = Gulf Cooperation Council; LIC = low-income country; MENA = Middle East and North Africa; OE = oil exporter; OI= oil importer.

invasion, portfolio outflows intensified in the second half of 2021, particularly for oil-importing emerging markets. After a record \$2.8 billion in inflows to portfolio funds in the region in the first half of 2021, fund outflows in the second half of the year reached \$1.2 billion, and \$0.9 billion in the first quarter of 2022. Sovereign issuances in international capital markets declined from \$24.5 billion during the first half of 2021 to \$13.8 billion in the second half, mainly reflecting lower issuances by GCC countries. So far, only Egypt and the UAE have issued \$0.5 billion and \$0.8 billion, respectively, in international markets in 2022.

War Spillovers Shaping Outlook and Risks

Countries in the region are being affected by the ongoing war and sanctions through a multitude of direct and indirect channels (Figure 1.7).

CCA countries are among the most exposed, given geographic proximity, close trade and financial linkages with Russia, reliance on remittances and tourism, and exchange rate spillovers (Box 1.1).

In addition to these direct linkages, they are also exposed to global spillovers, in particular from higher commodity prices in the context of already high domestic inflation.

Oil-importing emerging markets and low-income countries in MENA are vulnerable through global commodity prices and supply chain disruptions, as well as their reliance on wheat and energy imports from Russia and Ukraine, and on tourism in some countries. Financial market uncertainty and tighter financial conditions may significantly impact countries with high debt through reduced capital flows and rising borrowing costs. In addition, a slowdown in Europe would amplify the negative effects on trade and tourism. If donors redirect support to emerging urgent needs and to countries that are directly impacted by the war, LICs could face aid diversion.

In contrast, *MENA oil and gas exporters*, and to a lesser extent those in CCA, would benefit from a rise in energy prices, offsetting the impact of tighter global financial conditions. They will, however, be exposed to higher volatility in oil and gas markets and, in some cases, lower tourism revenues.

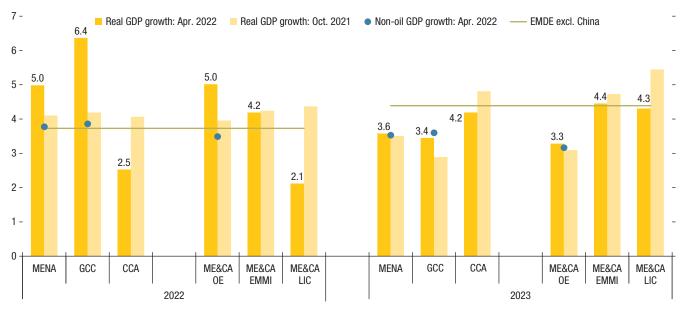


Figure 1.8. Real GDP Growth Projections (Percentage change, year-over-year)

Sources: IMF World Economic Outlook database; and IMF staff calculations.

Note: CCA = Caucasus and Central Asia; EMDE = emerging market and developing economies; EMMI = emerging market and middle-income countries; GCC = Gulf Cooperation Council; LIC = low-income economies; ME&CA = Middle East and Central Asia; MENA = Middle East and North Africa; and OE = oil exporter. Country abbreviations are International Organization for Standardization country codes.

1.3. Outlook: Diverging Recoveries

A Confluence of Factors Shaping the Outlook

The war in Ukraine will be the dominant factor shaping the region's recovery in 2022 (Figure 1.9). Most countries will focus on preventing inflation from becoming entrenched, while EM&MI countries and LICs will have limited or no macro policy space to effectively counter shocks. The faster-than-anticipated normalization of *monetary policy in advanced economies*, compounded by heightened market volatility, will likely affect capital flows, borrowing costs, domestic interest rates, and the pace of the recovery. China's *slowdown* will add to a less-supportive external environment, especially for EM&MI countries. Meanwhile, in countries with weak vaccination rates, potential new pandemic waves remain a drag on growth, although the impact is expected to

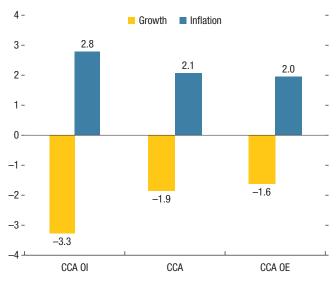
be weaker than in earlier waves. Thus, ME&CA's recovery is set to lose steam, with increasing divergence across sub-regions and countries.

The multifaceted impact of the war in Ukraine has considerably darkened the CCA outlook (Figure 1.9). Real GDP is forecast to grow 2.6 percent in 2022, a downgrade of 1.5 percentage points from October, after a strong recovery of 5.6 percent in 2021 (Figure 1.8). The downgrade to oil importers' growth is substantial (2.4 percentage points relative to October), given expected trade and payment system disruptions, lower remittances and tourism, and higher commodity prices. The oil windfall would help cushion the war's effect on oil exporters. Inflation in the CCA is expected to increase from 9.2 percent in 2021 to 10.7 in 2022, reflecting depreciation pressures and the rise in commodity prices.

Mirroring the diversity of its economies, the recovery in the *MENA region* is expected to be uneven (Figure 1.8). The region's growth is expected to moderate from 5.8 percent in 2021

Figure 1.9. Cost of War: Output Loss and Inflation Surge in 2022





Sources: IMF World Economic Outlook database; and IMF staff calculations. Note: CCA = Caucasus and Central Asia; OE = oil exporter; and OI = oil importer.

to 5.0 percent in 2022, still an upward revision of 0.9 percentage point from October. The upgrade reflects the improved outlook for oil exporters and better-than-expected growth in the first half of fiscal year 2022 for Egypt. Inflation in the region is foreseen to remain elevated at 13.9 percent in 2022 (following 14.8 percent in 2021), due to significant increases in food and energy prices, and in some cases, exchange rate depreciations and lax monetary and/or fiscal policies.

A Disrupted Recovery for Emerging Market and Middle-Income Countries

Growth in ME&CA's EM&MI countries is projected to slow from 4.5 percent in 2021 to 4.2 percent in 2022. Many countries are facing strong headwinds from the Russia-Ukraine war, as they face a negative terms-of-trade shock, tightening global financial conditions, and limited macro policy space amid elevated debt and inflation. Growth for the group excluding Egypt is set to decelerate even faster, from 5.2 percent in 2021 to 3 percent in 2022, reflecting significant downgrades for Armenia and Georgia, because of the war's impact (Figure 1.9). Elsewhere, downgrades to 2022 also reflect continued weakness in the tourism sector (Jordan, Morocco) and a severe drought in North Africa (Morocco). With strong growth momentum in the first half of fiscal year 2022, Egypt's GDP growth for the whole fiscal year is expected to increase to 5.9 percent from 3.3 percent in 2021, before cooling off to 5 percent in 2023, reflecting a 0.6 percentage point downgrade because of the war's impact. Pakistan's growth is projected to moderate from 5.6 percent in 2021 to 4 percent in 2022.

Inflation is forecast to accelerate from 8.4 percent in 2021 to 11.1 percent in 2022, an upgrade of 3.4 percentage points from October. Higher inflation will be driven primarily by surging food prices and, to a lesser extent, by energy costs and an acceleration in core inflation. This is notwithstanding measures in some countries to contain the pass-through from global prices through existing subsidies, administered prices, or new measures (for example, Egypt and Pakistan). Given historical trends, the impact of global food and energy prices on headline inflation is expected to be felt in about 4–5 months, particularly in countries with lower subsidies (see Chapter 2).

The external current account deficit for EM&MI countries is expected to widen from 3.7 percent of GDP in 2021 to 5.6 percent of GDP in 2022, reflecting higher commodity prices and lower remittances in CCA. External balances will deteriorate significantly for Armenia and Georgia because exports to Russia and Ukraine constitute a large share of their total exports.

In 2022, EM&MI countries are expected to tighten fiscal policy (Figure 1.10). Primary balances will likely see an average improvement of 0.7 percentage point of GDP from 2021, as pandemic-related fiscal measures continue to be withdrawn. Debt, however, is set to moderately increase for Egypt, Georgia, and Morocco, whereas the increase is more considerable for Armenia and Tunisia (about 4 percentage points) relative to 2021 reflecting the impact of depreciation on foreign currency debt. This leaves debt in EM&MI countries 13 percentage points of

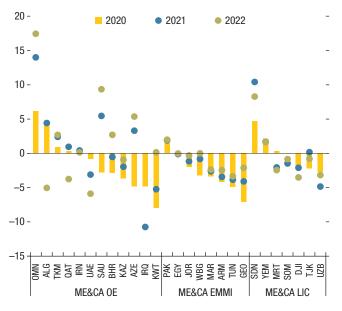


Figure 1.10. Change in Primary Balance, Relative to 2019 (Percentage points of GDP; non–oil balances for oil exporters)

Sources: IMF World Economic Outlook database; and IMF staff calculations. Note: EMMI = emerging market and middle-income economies; LIC = low-income economies; ME&CA = Middle East and Central Asia; OE = oil exporter. Country abbreviations are International Organization for Standardization country codes. Numbers refer to changes in percent of GDP relative to 2019.

GDP above pre-pandemic levels, on average, in 2022, except for Pakistan whose debt level is projected at 6 percentage points of GDP below pre-pandemic levels. Public gross financing needs are expected to increase from \$537 billion over 2020–21 to \$584 billion over 2022–23, mirroring higher debt-service costs and measures to counter inflation pressures. By 2024, the faster-thanexpected tightening of global financial conditions is projected to increase annual budgetary interest expenses in EM&MI countries by about 4½ percent of fiscal revenues.

Brighter Prospects for Oil Exporters, despite Some Headwinds

Oil exporters will see better prospects because of higher oil production in line with the Organization of Petroleum Exporting Countries and other major oil producers (OPEC+) agreement, higher-than-expected oil prices, and successful mass vaccination campaigns in several countries. Growth in GCC countries is projected to accelerate from 2.7 percent in 2021 to 6.4 percent in 2022, an upgrade of 2.2 percentage points from October, mainly due to upward revisions for Saudi Arabia (2.8 percentage points) and, to a lesser extent, other economies (Kuwait, Oman, UAE), reflecting higher oil production in line with the OPEC+ agreement, base effects, and a recovering non-oil sector. Non-oil GDP in the GCC, despite a gradual slowdown relative to 2021, is expected to continue growing at a healthy pace in 2022-23 (about 31/2-4 percent). This will sustain the outlook for these economies as oil GDP slows down after 2022. In other MENA oil exporters, country-specific factors are playing a role in 2022-activity in Algeria will be supported by the expected normalization of rainfall after the drought in 2021; and growth in Iran is expected to decelerate from 4 percent in 2021 to 3 percent in 2022 (an upgrade of 1 percentage point, reflecting higher oil production and exports to China, and assuming that US sanctions remain in place). Growth for CCA oil exporters is expected to slow considerably from 4.4 percent in 2021 to 2.3 percent in 2022. The downgraded outlook for Kazakhstan in 2022 reflects the impact of tighter monetary policy and higher inflation on domestic demand, whereas the downward revision to 2023 growth mainly captures delays in the expansion of the Tengiz oil field.

Inflation prospects vary across oil exporters. Despite an upgrade, inflation is expected to peak at 3.1 percent in GCC countries in 2022, after 2.2 percent inflation in 2021. By contrast, high inflation is a concern outside GCC countries. For instance, inflation has been revised significantly up for Iran and Iraq by 4.8 and 2.4 percentage points to 32.3 percent and 6.9 percent in 2022, respectively, capturing the pass-through from currency depreciation and loose monetary and fiscal policies (Iran), and higher imported inflation (Iraq). Inflation for CCA oil exporters is expected to reach 10.4 percent, on average, in 2022, largely driven by Azerbaijan, which is seeing a broadbased surge in prices.

The windfall from higher oil prices is expected to improve fiscal and external balances. Oil revenues in 2022 are projected to increase by an average of 5.3 percentage points of GDP compared to 2021, reaching a total of \$818 billion (an upward revision of \$320 billion compared to October). Current account balances are expected to improve to 12.2 percent of GDP (an upward revision of about 8.7 percentage points compared to October). Accordingly, official reserves are expected to increase to \$1.3 trillion in 2022 (an upgrade of about \$235 billion). Most oil exporters are expected to rebuild fiscal buffers. Non-oil primary balances are set to improve by an average of 2.8 percentage points of GDP for most oil exporters, except for Algeria, Iraq, Qatar, and UAE, reflecting a sharp slowdown in non-oil GDP (Iraq) and higher primary expenditure for Algeria, Qatar, and UAE. As a result, the expansionary fiscal stance after the pandemic is expected to be fully reversed in some countries-with non-oil primary fiscal balances projected to improve from their pre-pandemic levels (Azerbaijan, Bahrain, Oman, and Saudi Arabia; Figure 1.10). Debt levels in 2022 are projected to decline to 34.6 percent of GDP (a 2.8-percentage-point downgrade), and public gross financing needs are expected to contract markedly by \$463 billion compared to 2020-21, leading to a buildup of deposits of \$92 billion over 2022–23.

Subdued Outlook for Low-Income Countries

The outlook for LICs has deteriorated amid rising food prices, low vaccination rates, and underlying fragilities and conflict in some countries. Growth is expected to drop sharply from 4.2 percent in 2021 to 2.2 percent in 2022 (a downgrade from October of about 2.2 percentage points), before accelerating to 4.3 percent in 2023. In MENA, the disruption of trade services from Djibouti to Ethiopia, after the escalation of conflict in the latter and the fallout from the October coup in Sudan, will weigh on the outlook for these countries. The conflict in Yemen is expected to continue to significantly weigh on growth and amplify existing food shortages and fuel price hikes. In addition, the Russia-Ukraine war has exposed a large dependency among several MENA LICs on wheat imports from these countries, exacerbating existing price pressures and food insecurity concerns further. CCA LICs face a downgraded growth outlook as well, which reflects subdued prospects for remittances from Russia (Kyrgyz Republic, Tajikistan). With combined import shares of food and energy above 40 percent of total imports and a similar food weight in consumer price index baskets, all LICs are facing a particularly difficult environment with immediate repercussions on poverty and food security. As a result, inflation for 2022 is projected to remain at an average of 8.7 percent for most LICs, with exceptionally high rates for Sudan and Yemen. Higher food prices are also expected to markedly weaken LICs' external accounts, with current account deficits for the group rising by 3.7 percentage points of GDP to 9.5 percent of GDP this year.

Persistent Output and Revenue Losses

Over the medium term, persistent output losses will have long-lasting effects on revenue generation across the region, despite the observed cyclical recovery-particularly in EM&MI countries and LICs (Figure 1.11). Revenue-to-GDP ratios for these groups are expected to be 2 and 1.5 percentage points lower for EM&MI countries and LICs, respectively, on average, compared with pre-pandemic projections. As a result, debt-to-GDP ratios are expected to remain above their pre-pandemic levels over the medium term, with only Egypt and Jordan unwinding the pandemicrelated debt increase by 2025 or 2026. Revenue losses for LICs are not expected to be fully offset by lower expenditures, resulting in a worsened fiscal outlook.

1.4. Risks Skewed to the Downside

The outlook for ME&CA continues to be uncertain, with risks skewed to the downside.

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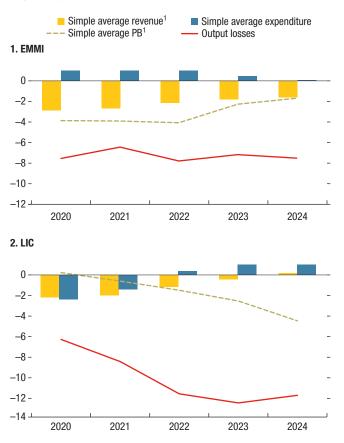


Figure 1.11. Fiscal Balances, Revenue, and Expenditure (*Percent of 2019 GDP, percentage point changes from pre-COVID-19 projections*)

Sources: IMF World Economic Outlook database; and IMF staff calculations. Note: Country abbreviations are International Organization for Standardization country codes. EMMI = emerging market and middle-income countries; LIC = low-income countries; and PB = primary balance. ¹Excludes grants.

> A prolonged war in Ukraine with broad-based sanctions could result in further disruption of trade, tourism, and remittances; supply shortages; capital outflows; weaker investment, and, ultimately, lower growth and higher inflation. Countries in the CCA are the most exposed, followed by MENA oil-importing emerging market economies. Intensified flight to safety could reverse investor sentiment and, hence, pose capital flight and financing risks. For oil exporters, further increases in oil prices would constitute an upside risk, with positive spillovers to others in the region through remittances.

Food insecurity. LICs and conflict-affected states that are reliant on wheat and fertilizer imports from Russia and Ukraine and lack alternative

supply sources will face the risk of food insecurity. This risk is amplified by the lack of agriculture inputs in time for the planting season as well as spiking input prices, making ramping up domestic agriculture production difficult. In addition, the impact of the war could aggravate the already difficult situation for people in many countries because of the pandemic crisis. For ME&CA, about 6.5 million people are estimated to have entered extreme poverty since 2020, and this can increase further, given lower growth prospects and higher food prices.

Social unrest risks. Commodity importers, LICs, and fragile states are particularly at risk of social unrest because of the surge in food and energy prices, potential war-induced shortages of wheat, downward revisions to growth, weak employment recovery, limited policy space to offset these new challenges, and underlying fragilities.

Tighter-than-expected global financial conditions. Higher interest rates in advanced economies, particularly if combined with increased global market volatility, could have adverse consequences for capital flows, bond yields, and economic activity and could elevate debt stress. If the Federal Reserve were to tighten more than expected under the baseline by 100 basis points, this would reduce portfolio inflows to the region further by about \$6 billion in 2022 and increase the interest expense burden of EM&MI countries by 4 percent of fiscal revenues by 2024. If the increase in global rates is associated with heightened volatility, the impact on portfolio inflows would multiply, particularly for oil importers and countries with weaker fundamentals (see Chapter 3). The intensified balance sheet links between the sovereign, banks, and the private sector could amplify this shock (April 2021 Regional Economic Outlook: Middle East and Central Asia).

Persistent inflation and deanchoring of inflation expectations. Further increases in inflation could arise from second-round effects or further increases in global commodity prices. For example, a repetition of the food and fuel price increases seen in March could create additional upward inflation pressures of about 1 percentage point in 2022. A longer period of high inflation could deanchor inflation expectations, prompting monetary policy to tighten sharply, causing a spike in borrowing costs and weighing further on the recovery.

Sharper growth slowdown in China. ME&CA's direct exposure to China varies across countries, with some oil exporters having more than 20 percent of their exports going to China. In addition to the direct links, however, China's slowdown could have a knock-on impact on activity in the rest of the world and could drag the region's trade down further.

New COVID-19 variants, to which countries with low vaccination rates remain susceptible, could potentially hamper the recovery.

Fiscal risks. The materialization of any or a combination of these risks could derail the planned fiscal adjustments and weigh on debt stabilization. In addition to the fiscal impact of tighter global financial conditions, persistent increases in food and energy prices could worsen fiscal outcomes in many countries. Despite important reform progress, energy subsidies are pervasive in the ME&CA region, amounting to an average of 4 percent of GDP in 2020. Given the historical elasticities of subsidies to oil prices, the \$43 increase in the oil price since October may increase subsidies by up to \$155 billion. This translates into a median increase for oil exporters, EM&MI countries, and LICs of about 2.4, 0.8, and 1.3 percent of GDP, respectively. Other fiscal risks include further revenue losses from a weaker recovery, higher food subsidies and fiscal packages to offset rising commodity prices, procyclical policies by oil exporters, and higher rollover costs. If any of these risks were to materialize, it would put fiscal sustainability at risk for countries with limited buffers and elevated debt burdens (Bahrain, EM&MI countries, and LICs).

1.5. Policies: Walking a Fine Line

Policy trade-offs have become increasingly complex, particularly for oil-importing countries. Given elevated inflation and debt in the context of a fragile recovery, as well as tightening global financial conditions, these countries were already grappling with diminished policy space, and this situation has worsened as a result of the war in Ukraine. High uncertainty and divergences across countries call for a tailored policy response to manage multiple trade-offs, while advancing a transformational recovery.

Managing Uncertainties and Worsening Trade-Offs...

Controlling inflation while avoiding derailing the recovery. In MENA EM&MI and CCA countries, where adverse effects from the war are larger, the trade-off between safeguarding growth and containing inflation will be particularly challenging. For countries with independent monetary policy, raising policy rates would be warranted if there are signs of broadening price pressures and/or risks of deanchoring inflation expectations. In countries where underlying inflation pressures remain contained, central banks can maintain an accommodative stance where the recovery is weak. In oil-exporting countries with fixed exchange rate regimes, monetary policy accommodation will decline in line with monetary policy normalization in advanced economies, and trade-offs are less stark, given an improved growth outlook, and, in GCC countries, low inflation. In countries with pegged exchange rates and fragile recoveries, alternative ways for liquidity management (for example, adjusting reserve requirements) could be considered.

Managing capital flow and exchange rate risks. In countries with flexible exchange rates, exchange rates should adjust to negative terms of trade and potential capital outflows, with interventions reserved to prevent market disruptions. Continued efforts to deepen domestic financial markets and proactive debt management strategies would help cushion future external spillovers.

Safeguarding debt sustainability while supporting the recovery and the vulnerable amid rising interest rates.

• *EM&MI countries* with high refinancing needs face challenging fiscal policy trade-offs amid rising interest rates, pressures to offset rising

commodity prices to protect the poor, and high debt. Fiscal adjustment is unavoidable for many, and any additional policy support should be temporary, transparent, and targeted to the most vulnerable, with offsetting measures to ensure sustainability. In particular, in response to rising global food and energy prices, given already existing subsidies and administered price schemes, passing the increases through to domestic prices, while simultaneously compensating vulnerable households and firms via targeted transfers, is more effective and less costly than expanding existing generalized subsidies and price controls or instituting new ones, which tend to be regressive and might exacerbate shortages. Where social safety nets are weak, a gradual adjustment of domestic prices could be considered. Continued efforts to enhance and expand the coverage of social safety nets, including by leveraging digitalization, will be important given already high levels of unemployment.

- *LICs and fragile and conflict-affected states* face significant food insecurity risks in addition to existing challenges, including from the pandemic. Given lost revenues and a lack of fiscal space, decisive support from the international community and global cooperation are paramount to prevent a humanitarian crisis in many countries.
- *Oil exporters* have the opportunity to use the oil windfall to build fiscal buffers and avoid procyclical spending, particularly in the context of oil market volatility. Where the recovery is weak, countries could use their extra fiscal space wisely by prioritizing targeted social spending and productive investment. Pressing ahead with much-needed fiscal reforms will support long-term sustainability and intergenerational equity.

Monitoring financial stability risks, particularly in the CCA region. CCA countries—with high levels of dollarization and facing depreciation pressures—should proactively monitor spillovers from Russia and related balance sheet effects and, if needed, put prudential and supervisory regulations in place. Pandemic-induced support measures will need to continue to be gradually phased out in a way that avoids bankruptcies while targeting support to viable firms. For oil exporters, the liquidity from higher oil prices would provide the space for the full removal of measures while containing any negative effects on credit growth. Overall, policymakers should take early action and tighten selected macroprudential tools to target pockets of elevated vulnerabilities while avoiding a broad tightening of financial conditions (April 2022 *Global Financial Stability Report*).

Coordinated policies anchored in credible and transparent frameworks. The complexity and limitations in policy space have made coordination between fiscal, monetary, and financial policies a crucial necessity. A tighter monetary policy that targets inflation, while unavoidable, will diminish fiscal space by increasing borrowing costs. Thus, in countries where fiscal space is already limited, higher interest rates would require stronger adjustments to safeguard debt sustainability. Relaxing fiscal policy to support the recovery where inflation is rampant can exacerbate inflation and be at cross-purposes with monetary policy. In addition to coordination, policy credibility and transparency are key to easing these tradeoffs. Fiscal adjustments should be anchored in a medium-term fiscal framework, clearly illustrating debt sustainability. Government interventions should be fully reflected in the budgetary process, thereby avoiding opacity originating from offbudget spending. As fears of entrenched inflation arise, improvements in monetary frameworks and clear communication strategies would bolster central bank credibility and help countries respond effectively to rising inflation.

Multifaceted global and regional cooperation remains crucial for effectively controlling the pandemic and responding to humanitarian crises. Efforts to provide countries with equitable access to a comprehensive COVID-19 toolkit with vaccines, tests, and treatment need to intensify, given that about half of ME&CA countries are not expected to reach the 70 percent vaccination coverage target in 2022.

...while Enhancing Long-Term Resilience

Accelerating structural reforms has become even more urgent to mitigate the impact of tighter macroeconomic policies on growth, address long-term scarring from the pandemic and the war, and improve resilience in the post-pandemic world. To bolster a sustainable, inclusive, and greener recovery, countries should prioritize measures that tackle some of their long-standing structural issues, such as enhancing the efficiency of government expenditure and revenue collection capacity, promoting private sector activity, reducing informality and youth unemployment, and addressing climate change. Leveraging the acceleration of digitalization during the pandemic through continued efforts to enhance access to technology would help bolster reforms, raise productivity, and help deliver government services and social safety nets more effectively.

As governments withdraw their pandemic support measures and fiscal consolidations ensue, it will be crucial to rethink the scope and nature of public spending. Exiting the pandemic will be an opportunity to redesign and reallocate public expenditure in line with a transition toward greater and more reliable safety nets and better-targeted subsidies, a less bloated public administration (lower wage bills and state-owned enterprise transfers (IMF 2021)), and more efficient investment spending to boost potential output.

Increasing revenue-generating capacity will enhance fiscal sustainability while allowing for social welfareimproving expenditure (IMF 2022c). Revenue mobilization policies can restore lost revenue collection capacity and help reshape progressive tax systems. This is critical for EM&MI countries and LICs, given their large pandemic-induced revenue losses, while for oil exporters, the challenge will be to increase non-hydrocarbon revenue capacity and economic diversification. Priorities include broadening the tax base (addressing exemptions and inefficient tax incentives and introducing value-added tax where absent) and improving compliance by focusing on revenue administration reforms and providing incentives for formalizing the economy.

Policies aimed at promoting private sector activity will help boost productivity, reduce informality, and foster inclusion (IMF 2022b). Structural reforms designed to stimulate private sector activity—such as measures to improve the quality of governance, reduce the burden from government regulations, level the playing field for all economic agents and improve competition, widen the availability of financial services, design efficient and nondistortionary tax systems, and remove unnecessary rigidities in labor market codes—would enhance productivity, facilitate formalization, and foster inclusiveness.

Adaptation to climate change is an urgent priority for the region (IMF 2022a) while carefully balancing energy security risks. The devastating effects of climate change on lives and livelihoods are already visible in ME&CA, particularly in economies dependent on agriculture. The war in Ukraine also highlighted the vulnerabilities regarding energy security. Therefore, adaptation-adjusting to climate change and its effects-is an urgent priority for the region and should be part of comprehensive climate strategies that also include mitigation and transition risk management, in the context of heightened volatility in energy markets. Oil exporters could also take the opportunity of channeling the oil revenue windfall to invest in cleaner energy sources and diversify their economies.

IMF support. The IMF has supported ME&CA members with \$20 billion in financing since the pandemic began, allocated \$49.3 billion special drawing rights to boost the region's reserve assets, and established the Resilience and Sustainability Trust to channel financial resources from countries with strong external positions into affordable longterm financing for vulnerable countries. It is now assisting the region in managing spillovers from the war and tighter global financial conditions through financing, capacity development, and policy advice.

References

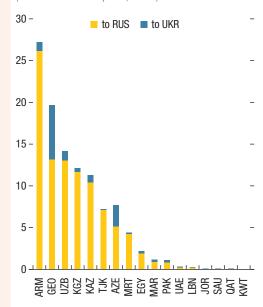
- International Monetary Fund (IMF). 2021. "State-Owned Enterprises in Middle East, North Africa, and Central Asia: Size, Role, Performance, and Challenges." IMF Departmental Paper 21/19, International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2022a. "Feeling the Heat: Adapting to Climate Change in the Middle East and Central Asia." IMF Departmental Paper 22/008, International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2022b (forthcoming). "Informality, Development, and Business Cycle in North Africa." IMF Departmental Paper, International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2022c (forthcoming). "Revenue Mobilization for a Resilient and Inclusive Recovery in the Middle East and Central Asia." IMF Departmental Paper, International Monetary Fund, Washington, DC.
- Simoes, Alexander J. G., and Cesár A. Hidalgo. 2011. "The economic complexity observatory: An analytical tool for understanding the dynamics of economic development." In Workshops at the Twenty-Fifth AAAI Conference on Artificial Intelligence, August.

Box 1.1. Direct Spillovers from the War in Ukraine and Sanctions on Russia to the Caucasus and Central Asia

Caucasus and Central Asia (CCA) countries will feel the brunt of the direct effects of the war and associated sanctions mainly through trade, remittances, and financial links with Russia and Ukraine.

Lower exports, tourism, and remittances. The deep recession in Russia and Ukraine and limitations on international transactions and trade finance could lower exports sharply from the CCA to these two countries, with Armenia and Georgia the most exposed.¹ In addition, sanctions against Russian companies and reliance on Russian and Ukrainian pipelines and ports for oil exports (Kazakhstan) could affect energy exports and investments in some oil-exporting CCA countries. Tourism is also likely to be affected because Russia, Ukraine, and Belarus make up more than 15 percent of total tourist arrivals for Armenia, Azerbaijan, Georgia, and Tajikistan. Lower growth in Russia, pressures on the ruble, and restrictions on payment systems are expected to drastically hamper remittances to the CCA, which account for between 7 and 25 percent of GDP for the Kyrgyz Republic, Tajikistan, and Uzbekistan. A drawn-out war carries the risk of large numbers of workers returning home, resulting in high unemployment and social pressures.



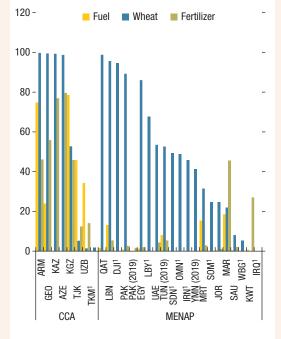


Sources: UN COMTRADE database, 2020; and IMF staff calculations.

Note: ME&CA = Middle East and Central Asia; Country abbreviations are International Organization for Standardization country codes.

Box Figure 1.1.2. Food and Energy Import Reliance on Russia and Ukraine (Imports from Russia and Ukraine, percent of total such

imports, 2020)



Sources: UN COMTRADE database, 2020; and IMF staff calculations.

Note: CCA = Caucasus and Central Asia; MENAP = Middle East, North Africa, Afghanistan, and Pakistan. Country abbreviations are International Organization for Standardization country codes. ¹Data are from Economic Complexity Observatory, 2019.

Prepared by Jeta Menkulasi and Olivier Bizimana, with input from CCA teams.

¹Land borders with Russia, however, could allow for some trade to continue versus a potential halt in cases where goods are transported via ports.

Box 1.1. (continued)

Supply shortages, food and energy insecurity, and affordability. CCA countries are markedly exposed to wheat and fertilizer imports from Russia and Ukraine (Armenia, Azerbaijan, Georgia) and energy imports from Russia (Armenia, Kyrgyz Republic).² Potential border closures, outright import bans, and trade-financing restrictions can all imply potential shortages unless offset by strategic reserves or alternative sources. High food and energy prices will exacerbate these risks, likely leading to an increase in subsidies to offset these pressures in the context of heightened social unrest risks.

Exchange rate pressures. Currencies in the CCA have depreciated against the dollar, also reflecting the tendency of regional currencies to move in tandem (Georgia, Kazakhstan, Kyrgyz Republic), but still appreciated against the ruble. This could aggravate inflation pressures further, complicate policy trade-offs, and pose financial stability risks in countries with foreign exchange balance sheet mismatches.

Banking exposures and cross-border payments. Sanctions against Russian banks will weigh on their subsidiaries, which have a footprint in some CCA countries (4, 5, and 14 percent of total banking sector assets in Georgia, Armenia, and Kazakhstan, respectively, before the crisis). After the sanctions announcement, Georgian regulators facilitated offloading the portfolio of a Russian bank subsidiary. In addition, the exclusion of Russian banks from the Society for Worldwide Interbank Financial Telecommunications System and sanctions on the Russian banking sector could limit cross-border payments as scaling up alternative payment systems and corresponding banking relationships will take time and be more costly. Some CCA countries could also experience secondary spillover effects from Kazakhstan, which intermediates trade and payments, including through its bank subsidiaries (Kyrgyz Republic).

²Long-term gas contracts between Russia and Armenia could be a mitigating factor.

2. Here Today, Where Tomorrow? A Deep Dive into Inflation Dynamics and Drivers in the Middle East and Central Asia

Like elsewhere, inflation in the Middle East and Central Asia (ME&CA) region surged since mid-2020 because of a variety of factors and country specificities. Overall, external factors have been the main driver of price dynamics in the region, both historically and in the current episode. Among these, the pass-through of international food prices is estimated to have the strongest impact on domestic inflation dynamics in most countries, while that of supply-chain disruptions appears to affect domestic inflation with the longest lag. International oil prices have had a more limited impact in the region, reflecting the prevalence of energy-related subsidies. Historically, along with external factors, inflation expectations have also been a major driver but domestic factors do not appear to have a statistically significant effect on inflation, possibly reflecting measurement errors. Currently, however, it appears that domestic factors have played a role in driving inflation dynamics in some countries, including expansionary fiscal and monetary policies and the strength of the ongoing recovery.

2.1. Recent Inflation Dynamics in ME&CA

Inflation in the region continued to increase in 2021. The yearly average change in the consumer price index (CPI) increased from 7.5 percent in 2019 to 14.8 percent in 2021 in the Middle East and North Africa (MENA) region, and from 6.6 percent to 9.2 percent in the Caucasus and Central Asia (CCA) region, according to purchasing-power-parity (PPP) GDP-weighted averages. The increase has been generalized across country income groups, though at different rates and starting from different levels. A breakdown of headline inflation into its food and energy components as well as headline inflation excluding food and energy (labeled "other;" see Online

Prepared by Rodrigo Garcia-Verdu, Filippo Gori, and Sahra Sakha with excellent research assistance from Roy Randen. Annex 1.1 for details) shows the following patterns¹:

Higher food prices were the main driver of headline inflation in 2021, except in Gulf Cooperation Council (GCC) countries (see Figure 2.1, panels 1–3, which show unweighted averages). For example, food contributed close to 60 percent of the increase in headline inflation between 2020 and 2021 for MENA, excluding the GCC (see Online Annex 1.1 for details). The muted contribution of food inflation in GCC countries reflects the lower weight of food in their CPI baskets and of food imports in total imports as well as the prevalence of administered food prices (Figure 1.1.1 in Online Annex 1.1).

Inflation excluding food and energy has been the second main driver of headline inflation in most subregions, but it has played the primary role in GCC countries—which have lower inflation than the rest of the region to start with—reflecting both base effects from deflation pressures during 2020 (particularly on services), the strength of the ongoing recovery, and domestic policies in some countries.

Only a subset of countries experienced a significant increase in domestic energy prices (for example, Georgia). Others were affected less because of energy subsidies (see Section 2.3) and/or reliance on long-term gas contracts, where gas prices are typically fixed in the short term (for example, some CCA countries and Jordan).

¹The sample of countries used to produce the unweighted average shown in Figure 2.1 is different from the sample used to produce the PPP-weighted average quoted above and used in the figures in Chapter 1. In particular, the sample in Figure 2.1 excludes Lebanon, which is an outliner, and includes only those countries for which the data needed to produce the breakdown are available. See Online Annex 1.1 for the list of countries in the sample.

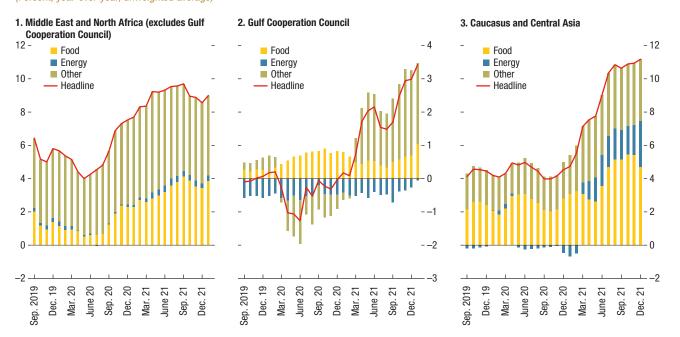


Figure 2.1. Recent CPI Inflation Dynamics (Percent, year-over-year, unweighted average)

Sources: Haver Analytics; national authorities; and IMF staff calculations. Note: CPI = consumer price index.

2.2. External versus Domestic Factors: An Empirical Assessment

To examine the historical impact of external and domestic factors on domestic inflation dynamics, an augmented Phillips curve is estimated for 10 countries over 2014–21, using standard control variables, such as five-years-ahead inflation expectations (proxied by IMF desk projections), lagged core inflation, measures of external price pressures, and domestic and foreign output gaps.^{2,3}

²Two measures of external price pressures are used in this section: i) the percent change in import-weighted trading partners' producer price indexes (converted to local currency using the nominal effective exchange rate) and relative to the percent change in the GDP deflator, following the October 2021 *World Economic Outlook*, Chapter 2; ii) the lagged quarter-over-quarter percentage change in the import price index.

³The domestic and foreign output gaps are the difference between the actual and potential output in percent of potential output, where potential is estimated as the Hodrick-Prescott-filtered underlying trend of output. Non-oil GDP is used for oil exporters. Domestic core inflation seems to be sensitive to both external factors and inflation expectations for the countries in the estimation sample.

A 1-percentage-point increase in external price pressures-based on trading partners' producer prices-is associated with an increase of 0.03 percentage point in core inflation; or a one standard deviation increase in external price pressures results in a 0.33 standard deviation increase in core inflation (Figure 2.2), in line with estimates for a broader sample of emerging markets in the October 2021 World Economic Outlook. Similar results are found for headline inflation. When using import prices as another measure of external price pressures, the results remain broadly unchanged (Figure 2.2).^{4,5} Using the estimated model and zooming in on the recent period shows that external factors account

⁴Recent empirical literature shows that the role of external factors has increased over the past decade because of greater trade openness and the increase in global value chains (Auer, Borio, and Filardo 2017; Forbes 2019).

⁵This also holds when trading partners' producer price indexes and the nominal effective exchange rates are included separately in the regression (see Online Annex 1.2 for robustness checks).

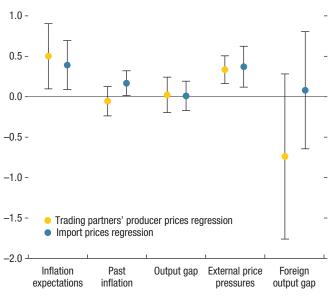


Figure 2.2. Coefficients of Phillips Curve Augmented by External Factors

(Percentage points)

Sources: IMF World Economic Outlook database; Haver Analytics; World Trade Organization; and IMF staff calculations.

Note: The dots denote the standardized coefficients from the augmented Phillips curve (see Online Annex 1.2) and the vertical lines denote the 95 percent confidence interval. All regressions include country and time fixed effects. Countries include: Egypt, Georgia, Iran, Jordan, Kazakhstan, Kuwait, Morocco, Qatar, Tunisia, Saudi Arabia. Please see footnote 2 for detailed explanation of trading partners' producer price index.

for 50 percent of the change in core inflation between 2020 and $2021.^{6}$

 Long-term inflation expectations seem to play a prominent role in explaining inflation dynamics. A 1-percentage-point increase in five-years-ahead inflation expectations is associated with an increase in core inflation of 0.21 percentage point—or a one standard deviation increase in inflation expectations results in a 0.5 standard deviation increase in core inflation (Figure 2.2). This result is robust for headline inflation as well as to the horizon of inflation expectations (see Online Annex 1.2).⁷ Evaluated over the recent period, the estimated model implies that inflation expectations explain 8 percent of the change in core inflation between 2020 and 2021.

Domestic factors do not seem to be playing a role in the longer-term Phillips curve setting. Indeed, the output gap does not carry a statistically significant effect, possibly due to measurement errors.⁸ And alternative domestic settings also appear to be imprecisely estimated—such as the fiscal impulse and broad money growth (in excess of real GDP) (see Online Annex 1.2 for details).

Focusing on recent periods, there is some suggestive evidence that the strength of the ongoing recovery is associated with the recent surge of inflation in the region (Figure 2.3). In addition, countries with more expansionary fiscal and monetary policies and those that experienced larger exchange rate depreciations (for example, Algeria, Iran, and Tajikistan) appear to have had higher inflation recently, on average (see Online Annex 1.2 for details). In some GCC countries, the introduction of or the rise in value-added taxes led to temporary increases in inflation (Oman in 2021, Saudi Arabia in 2020).

The prominent role of inflation expectations as drivers of inflation dynamics begs the question of whether expectations have been affected by the recent surge in prices in the region, which, in turn, may feed into higher current and future inflation. Indeed, short-term expectations have risen above the inflation target for countries where data are available (Georgia, Uzbekistan). For Kazakhstan, the short-term inflation expectation is above the mid-point of the inflation target but below the upper range. For a small subset of countries, where long-term inflation expectations are available, expectations have remained broadly anchored (with the exception of Uzbekistan) as of February

⁶Estimating the model through 2019 and again through 2021 does not reveal a change in coefficient estimates, demonstrating stability of the estimated Philips curve through the COVID-19 pandemic.

⁷Data on inflation expectations are limited for the region. As a proxy, IMF desk inflation projections are used. A comparison between the first and second moments of desk and Consensus Survey projections shows that they are broadly similar on a five-year

forecast horizon. Inflation expectations in the baseline specification correspond to five-years-ahead inflation forecasts, which tend to capture beliefs about long-term inflation rather than the effect of transitory shocks and the response of monetary policy in the near term.

⁸The estimation of the output gap is subject to large uncertainty, especially for emerging market economies and low-income countries (Orphanides and van Norden 2005; Coibion, Gorodnichenko, and Ulate 2018; Barkema, Gudmundsson, and Mrkaic 2020).

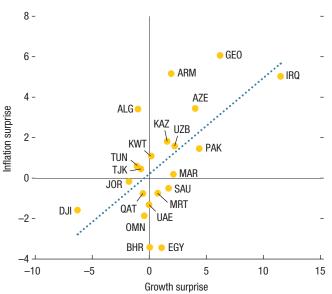


Figure 2.3. Growth Surprise versus Inflation Surprise, 2021

Sources: World Economic Outlook databases; and IMF staff calculations. Note: Inflation and growth surprise values computed as the difference between 2021 actual values and projections from the October 2020 World Economic Outlook report. Country abbreviations are International Organization country codes.

> 2022 (see Online Annex 1.2).⁹ If high inflation becomes embedded into long-term inflation expectations, such second-round effects could make inflation more persistent, as indicated by Phillips curve estimations.

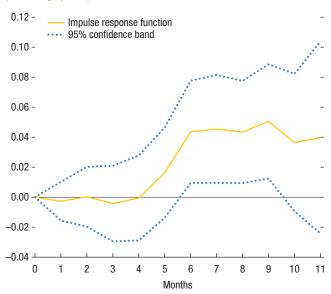
2.3. Assessing the Pass-Through of External Factors

This section estimates the pass-through of international food and oil prices and global supply-chain constraints to domestic price dynamics, based on local projection methods and using monthly data for a panel of countries in the region (see Online Annex 1.3).

In line with the evidence presented in Section 2.1, the pass-through of international food prices is a key driver of domestic inflation dynamics in the region. Among external inflation drivers, international food prices have the highest impact on domestic



(Percentage points)



Source: IMF staff calculations. Note: CPI = consumer price index.

prices, even if the pass-through is relatively shortlived. The estimated pass-through shows that a 1-percent rise in food prices translates, on average, into an increase in domestic inflation of about 0.05 percentage point within five months of the initial shock while disappearing after 10 months (Figure 2.4). Country-level pass-through estimates suggest that the extent of the transmission is associated with the food weight in CPI baskets and the food import share, in line with evidence presented in Section 2.1. Quantitatively, differences in the food weight explain close to 40 percent of the cross-country variation in the estimated pass-through of international food prices across the region.

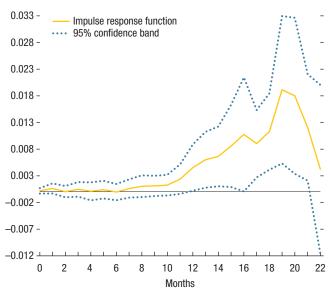
The pass-through of oil prices matters only for a subset of countries in the region. A 1-percent increase in oil prices translates into an increase in domestic inflation of about 0.015 percentage point, but only for those countries in which petroleum product-related subsidies, as a share of GDP, are below the median across ME&CA.¹⁰ The

¹⁰This result holds when splitting the sample along subsidies as a percent of GDP below the median and up to the third decile, sug-

⁹Inflation expectations are measured using Consensus Surveys and are available for nine countries (Armenia, Azerbaijan, Egypt, Georgia, Kazakhstan, Pakistan, Saudi Arabia, Turkmenistan, Uzbekistan) for 1-, 3-, 5-, and 10-year horizons.



(Percent)



Source: IMF staff calculations.

Note: CPI = consumer price index; GSCPI = Global Supply Chain Pressure Index. The chart shows the cumulative Impulse Response Function (IRF) for domestic inflation and 95% confidence bands following a 1 standard deviation in the GSCPI.

pass-through persists over time, with the effect vanishing 12 months after the shock.

Supply chain disruptions appear to affect domestic inflation with the longest lag. The Global Supply Chain Pressure Index (GSCPI),¹¹ which tracks the extent of disruptions on supply chains (Benigno, di Giovanni, Groen, and Noble 2022), rose dramatically during the pandemic, remaining below, but close to, its historically high levels in February 2022. An estimation of the dynamic impact of supply-chain constraints (proxied by the GSCPI) on domestic inflation for ME&CA shows a positive and significant pass-through about 12 months after the shock. Following a one standard

gesting that even relatively low levels of subsidies cushion the impact of higher international oil prices on domestic inflation. deviation increase in the GSCPI, domestic inflation is estimated to rise by up to 0.02 percentage point (Figure 2.5). Among external drivers of inflation, supply-chain constraints appear to affect domestic inflation with the longest lag and most persistence, driving domestic prices up until a year and half after the initial shock. As a consequence of persistent supply chain constraints in the last quarter of 2021, supply-related price pressures will likely extend until the end of 2022 and beyond.

References

- Auer, Raphael, Claudio Borio, and Andrew Filardo. 2017. "The Globalization of Inflation: The Growing Importance of Global Value Chains." BIS Working Paper 602, Bank for International Settlements, Basel, Switzerland.
- Barkema, Jelle, Tryggvi Gudmundsson, and Mico Mrkaic. 2020. "What Do We Talk about When We Talk about Output Gaps?" IMF Working Paper 259, International Monetary Fund, Washington, DC.
- Benigno, Gianluca, Julian di Giovanni, Jan J. J. Groen, and Adam I. Noble. 2022. "A New Barometer of Global Supply Chain Pressures." *Liberty Street Economics* (blog), Federal Reserve Bank of New York. January 4. https://libertystreeteconomics.newyorkfed. org/2022/01/a-new-barometer-of-global-supplychain-pressures/.
- Coibion, Olivier, Yuriy Gorodnichenko, and Mauricio Ulate. 2017. "The Cyclical Sensitivity in Estimates of Potential Output." NBER Working Paper 23580, National Bureau of Economic Research, Cambridge, MA.
- Forbes, Kristin J. 2019. "Has Globalization Changed the Inflation Process?" BIS Working Paper 791, Bank for International Settlements, Basel, Switzerland.
- Orphanides, Athanasios, and Simon van Norden. 2005. "The Reliability of Inflation Forecasts Based on Output Gap Estimates in Real Time." *Journal of Money, Credit, and Banking* 37 (3): 583–601.

¹¹The GSCPI synthesizes signals relating to supply-side constraints from country-level manufacturing indicators (including purchasing manager indexes and Institute for Supply Management data, which are corrected for demand factors) and transportation costs (such as the Baltic Dry and the Harper Petersen indexes). The GSCPI represents a more adequate measure of supply-side constraints for ME&CA than indexes solely based on shipping costs (such as the Baltic Dry Index), due to the relatively large number of landlocked countries in the region.

3. Changing Tides: Spillovers from US Monetary Policy Normalization to the Middle East and Central Asia

Countries in the Middle East and Central Asia (ME&CA) have been receiving increasing amounts of capital inflows over the past decade. This has eased funding constraints and helped improve financial markets' depth and liquidity, while increasing the region's exposure to spillovers from shocks to global financial conditions. A tightening of advanced economies' monetary policy, particularly if associated with heightened volatility, is expected to have adverse consequences for capital inflows, bond yields, equity prices, and economic activity in the region. Quantitatively, a 100-basis-points (bps) rise in the 10-year US Treasury yield would lead to an average increase in long-term sovereign bond yields of nearly 60 bps, a 6 percent decline in equity prices, and a 0.13 percentage point reduction in output growth, with a more severe impact in countries with relatively weaker fundamentals. Depending on how aggressively the US tightens its monetary policy and whether it is associated with elevated volatility, the region could lose between \$6 billion and \$31 billion of portfolio inflows. While elevated vulnerabilities and war-induced market volatility are likely to amplify spillovers in emerging markets, high oil prices are expected to reduce oil exporters' vulnerabilities.

3.1. Recent Developments and Stylized Facts

With persistent inflation pressures, central banks in some advanced economies have started to tighten policies while others are poised to do so, but how far and fast remain to be seen. Even before the war in Ukraine, advanced economies' central banks started to either tighten or indicate their intention to tighten in response to rising inflation, contributing to a rapid increase in sovereign borrowing rates. Tightening global financial conditions may particularly be a concern in emerging markets, including those in ME&CA. Past episodes of monetary policy normalization in the US have generally resulted in lower capital inflows, currency depreciations, rising interest rates, and declining stock markets, with adverse implications for investment and output in these economies (for example, IMF 2014; April 2016 *World Economic Outlook*; Ahmed, Coulibaly, and Zlate 2017; April 2022 *World Economic Outlook*).

Countries in ME&CA are prone to shifts in global financial conditions. Over the past 10 years, portfolio inflows to the region receded whenever global financial conditions tightened, including during the 2013 taper tantrum episode, the 2018 Federal Reserve tightening, and the COVID-19 crisis. More vulnerable economies, as measured by relatively low reserve coverage, suffered larger portfolio outflows. Recently, fund flows to the region have also started to reverse after intensified discussions of an imminent tightening of monetary policy by the Federal Reserve, with the region losing nearly \$1.7 billion from September 2021 to February 2022 (Figure 3.1, panels 1 and 2).¹ Similarly, sovereign bond spreads widened following the Federal Reserve's signals of monetary policy tightening. The region's oilimporting emerging markets in particular have seen an increase in spreads in line with other emerging markets (April 2022 Global Financial Stability Report), with the median spread rising by about 100 bps during the 2018 Federal Reserve tightening cycle and by more than 50 bps between September 1, 2021, and February 16, 2022 (Figure 3.1, panel 3).

Prepared by Nordine Abidi, Mohamed Belkhir, and Shujaat Khan with excellent research assistance from Bashar Hlayhel, and inputs from Troy Matheson.

¹Emerging Portfolio Fund Research (EPFR) fund flows represent only a small fraction of total portfolio inflows to ME&CA (an average scale of 1 to 7.5) but they are available at higher frequency, and therefore they are commonly used to track recent trends.

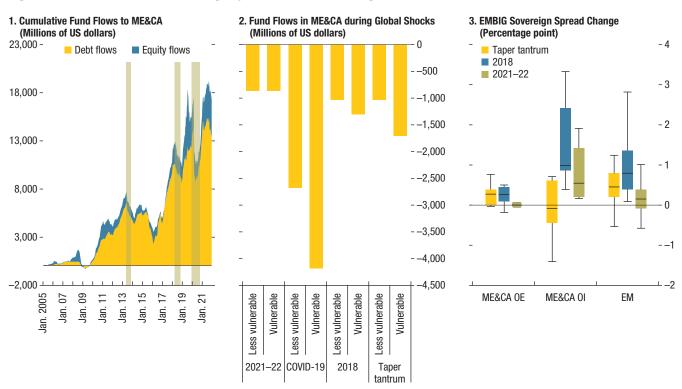


Figure 3.1. Portfolio Flows and Sovereign Spreads in the ME&CA Region

Sources: Emerging Portfolio Fund Research; Haver Analytics; JP Morgan Chase; Bloomberg Finance L.P.; and IMF staff calculations.

Note: Spread change is calculated as the difference between the spread on the last day and first day of the episode. taper tantrum: May 1–Sep. 30, 2013. 2018 Federal Reserve Tightening: Apr. 1–Dec. 31, 2018. Covid-19: Mar. 1–Dec. 31, 2020. 2021–22: Sep. 1, 2021–Feb. 16, 2022. Countries whose FX reserves to GDP ratio is below (above) the sample's median are (less) vulnerable. Bars in panel 2 represent cumulative fund flows during the episode. Countries included in the analysis of fund flows are: Azerbaijan, Bahrain, Egypt, Georgia, Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Tunisia, and United Arab Emirates. ME&CA: Middle East and Central Asia. EM = emerging markets; EMBIG = Emerging Market Bond Index-Global. ME&CA 0E: 8 countries, ME&CA 0I: 8 countries. 0E = oil exporter; OI = oil importer.

3.2. Spillovers from Higher US Treasury Yields to Domestic Financial and Economic Conditions

To better understand the nature and magnitude of spillovers from US monetary policy normalization to ME&CA countries, this section analyzes the impact of an increase in 10-year US Treasury yields on financial and economic variables using a panel vector autoregression with quarterly data.

ME&CA countries are prone to spillovers from US monetary policy tightening, with adverse effects on yields, equity prices, and economic activity. On average, a 100-bps increase in the 10-year US Treasury yield leads to a rise in the region's longterm sovereign bond yields of 56 bps, a decline in equity prices of 6 percent, and a decrease in real GDP growth of 0.13 percentage point. These effects are broadly comparable to those reported by prior studies on emerging markets (see Online Annex 2.1 for more details).²

²A 100-bps increase in the 10-year US Treasury yield is consistent with the experience in prior US monetary policy tightening episodes as well as baseline forecasts at the current juncture. Because of data availability, long-term yields in ME&CA are proxied by bonds ranging from 5- to 13-year maturity. A recent study by the Federal Reserve Bank of New York (2021) finds that a monetary policy innovation that raises the US federal funds rate by 100 bps leads to a fall of 0.2–0.3 percent in emerging markets' output within a four-quarter period. IMF (2014) reports that a money shock that drives up US Treasury yields by 100 bps leads, on average, to a 36-bps increase in emerging market yields, and a 10-percent decline in equity prices in the first 12 months after the shock.

3.3. Global Financial Conditions and Portfolio Inflows to the ME&CA

This section quantifies the potential impact of tightening global financial conditions on annual portfolio inflows to ME&CA countries under various scenarios, including a tighter-thanexpected stance in US monetary policy and higher global risk aversion. To this end, it adopts the empirical framework used in the October 2019 Regional Economic Outlook: Middle East and Central Asia while extending the sample period and augmenting the capital flow model with additional "pull" factors. The analysis uses annual balance of payments panel data covering the 1990-2021 period to estimate the effect of US interest rates and global risk aversion, as measured by the Chicago Board Options Exchange implied volatility index (VIX), on portfolio inflows (see Online Annex 2.2 for more details).

Portfolio inflows are more sensitive to global financial conditions in ME&CA countries than in other emerging markets. A 1-percentage-point increase in the 10-year US Treasury yield results, on average, in a 0.25 percentage point decrease in the ratio of portfolio inflows to GDP in ME&CA versus a 0.14 percentage point drop in other emerging markets. Likewise, a 10 percent increase in the VIX results in a higher loss of portfolio inflows to ME&CA than to other emerging markets (0.12 versus 0.09 percentage point of GDP).

ME&CA countries could suffer important losses in portfolio inflows, particularly in a scenario of aggressive tightening by the Federal Reserve and heightened global risk sentiment. Under a baseline scenario in which the 10-year US Treasury yield increases by 100 bps in 2022 with no change in investor risk sentiment, the region would see an average decline in portfolio inflows by 0.25 percentage point of GDP—the marginal impact reported earlier in this chapter. If US monetary policy tightens by an additional 100 bps due to broad-based and persistent inflationary pressures, this would reduce inflows by an additional 0.25 percentage point of GDP. If this 200-bps tightening is associated with higher global market volatility-by two standard deviations in the VIX (a 60-percent increase compared with its 2021 average value)—ME&CA countries would, on average, suffer a much larger decline in portfolio inflows-adding up to 1.25 percent of GDP. Overall, across the whole region, the decline in portfolio inflows would amount to \$6 billion under the baseline scenario, \$12 billion under a scenario of 200-bps tightening by the Federal Reserve, and \$31 billion in a scenario where the 200-bps tightening is accompanied by higher global market volatility.³ These spillovers may, however, be less pronounced in countries with relatively deep domestic financial markets (see Online Annex 2.2).

3.4. Fundamentals and Spillovers

Spillovers from tightening global financial conditions seem to be differentiated across country groups, with strong fundamentals and high oil prices acting as buffers. To better understand these interactions, a vector autoregression framework is used for both sovereign yields (as reported above) and a narrower measure of portfolio inflows, which is available at higher frequency (see footnote 1). Results suggest that countries with relatively higher reserve coverage or lower primary fiscal deficits face smaller increases in their sovereign yields after a rise in US Treasury yields (Figure 3.2, panel 1). For instance, a 100-bps rise in the 10-year US Treasury yield drives up sovereign yields by an average 24 bps in countries with high reserve coverage, versus 77 bps in countries with low reserve coverage. Likewise, countries with low reserve coverage face a larger drop in portfolio inflows. Countries with weak fiscal balances and high public debt ratios also suffer relatively larger drops of portfolio inflows after increases in the US Treasury yield (Figure 3.2, panel 2). In addition, high oil prices cushion oil-exporting countries from adverse spillovers of US monetary policy tightening, as increases in yields and losses

³This stress-testing exercise assesses the marginal effects of changes in the 10-year US Treasury yield and VIX on ME&CA portfolio inflows while holding everything else constant.

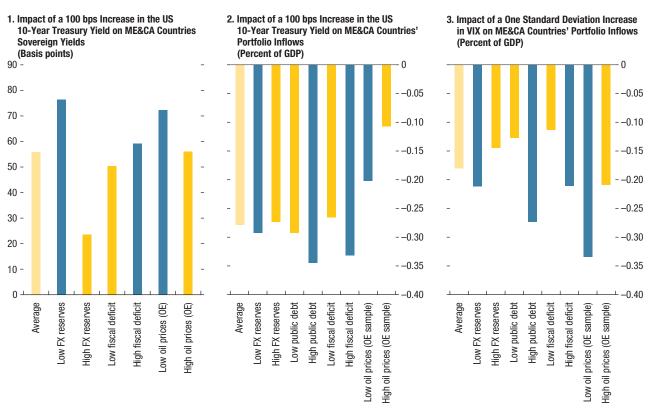


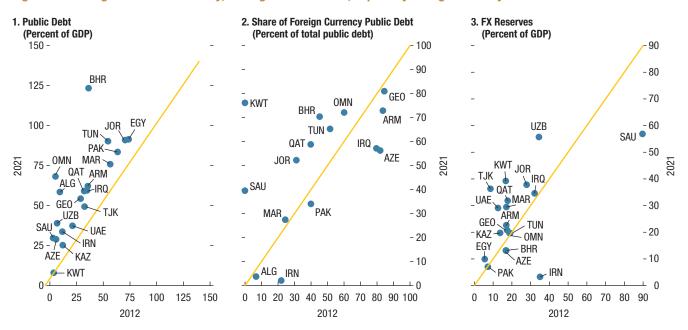
Figure 3.2. Fundamentals and Spillovers to ME&CA Countries

Source: IMF staff calculation.

Note: Low (high) reserves represents countries with FX reserves-to-GDP ratio below (above) 50 percent (three months of imports, on average). All Gulf Cooperation Council countries are included in the group of high reserves coverage, reflecting extensive accumulated buffers in their sovereign wealth funds. Low (High) public debt represents countries with debt to GDP ratio below (above) 70 percent (upper 25th percentile). Low (High) deficit represents countries with primary fiscal balance to GDP ratio above (below) –6 percent (bottom 25th percentile). Low (high) oil prices for oil exporting countries represents periods with oil prices below (above) \$45 per barrel (bottom 25th percentile). Bars represent the average response over six months. bps = basis points; FX = foreign exchange; ME&CA = Middle East and Central Asia; OE = oil exporter. OI = oil importer.

of portfolio inflows are less pronounced when tightening coincides with a cycle of high oil prices. Moreover, strong fundamentals mitigate adverse spillovers from a reversal in global risk sentiment. Countries with relatively larger reserve coverage and lower fiscal deficits and public debt suffer fewer declines of portfolio inflows after an increase in global market volatility. The adverse effect of an increase in the VIX is also less severe for oilexporting countries when oil prices are relatively high (Figure 3.2, panel 3) (see Online Annex 2.1).

For oil-importing ME&CA countries, the impact from US monetary policy normalization might be amplified this time around, because of elevated vulnerabilities. Considering the increase in public debt—and in some countries the increase in foreign currency-denominated debt—and fiscal deficits compared with conditions at the start of the taper tantrum episode (Figure 3.3 and Online Annex 2.1), spillovers from the looming US monetary policy normalization could be more severe, particularly for the region's emerging market and middle-income economies. At the same time, international reserves, compared to standard benchmarks (GDP or imports), are more ample now than at the onset of the taper tantrum episode, which could help in attenuating spillovers—although this improvement is less prominent when reserves are compared to external financing needs. In addition, the recent surge in oil prices may mitigate spillovers to oil exporters.





Sources: IMF World Economic Outlook Database; and IMF staff calculations.

Note: Public debt for Egypt refers to Fiscal Years. Country abbreviations are International Organization for Standardization country codes. FX = foreign exchange.

References

- Ahmed, Shaghil, Brahima Coulibaly, and
 Andrei Zlate. 2017. "International Financial
 Spillovers to Emerging Market Economies:
 How Important Are Economic Fundamentals?" *Journal of International Money and Finance* 76 (C): 133–52.
- International Monetary Fund (IMF). 2014. "2014 Spillover Report." IMF Policy Paper, International Monetary Fund, Washington, DC.
- Ozge Akinci, and Albert Queralto. 2021. "How Does US Monetary Policy Affect Emerging Market Economies?" *Liberty Street Economics* (blog), May 17, Federal Reserve Bank of New York.

ME&CA: Selected Economic Indicators, 2000–23

(Percent of GDP, unless otherwise indicated)

	Average				Projections	
	2000–18	2019	2020	2021	2022	2023
ME&CA ^{1,2}						
Real GDP (annual growth)	4.6	2.2	-2.9	5.7	4.6	3.7
of which non-oil growth	5.6	3.0	-2.7	4.5	3.7	3.6
Current account balance	6.4	0.5	-2.5	3.0	8.3	5.6
Overall fiscal balance	1.5	-3.0	-7.5	-3.2	1.0	-0.2
Inflation (year average; percent)	7.4	7.3	10.5	13.3	13.2	10.2
ME&CA oil exporters						
Real GDP (annual growth)	4.6	1.3	-4.2	6.5	5.0	3.3
of which non-oil growth	6.0	2.8	-3.7	4.7	3.5	3.2
Current account balance	9.4	2.7	-2.1	5.2	12.2	8.7
Overall fiscal balance	3.7	-1.8	-7.8	-2.3	2.9	1.2
Inflation (year average; percent)	6.8	6.3	8.9	11.2	10.5	8.6
ME&CA Emerging Market and Middle-	Income Countries ¹					
Real GDP (annual growth)	4.2	3.6	-0.8	4.5	4.2	4.4
Current account balance	-3.4	-5.5	-3.4	-3.7	-5.6	-4.9
Overall fiscal balance	-6.1	-7.0	-7.3	-6.7	-6.3	-5.3
Inflation (year average; percent)	7.4	6.6	8.1	8.4	11.1	9.1
ME&CA Low-Income Developing Count	tries ²					
Real GDP (annual growth)	4.4	2.9	-1.5	4.2	2.2	4.3
Current account balance	1.8	-5.6	-4.9	-5.8	-9.5	-8.1
Overall fiscal balance	-2.2	-2.8	-3.2	-3.0	-3.1	-2.5
Inflation (year average; percent)	12.9	19.5	39.3	71.3	57.6	34.4

Sources: National authorities; and IMF staff calculations and projections.

¹2011–23 data exclude Syrian Arab Republic.

²2021–23 data exclude Afghanistan.

Note: Data refer to the fiscal year for the following countries: Afghanistan (March 21/March 20) until 2011, and December 21/December 20 thereafter, Iran (March 21/March 20), and Egypt and Pakistan (July/June).

The 32 ME&CA countries and territories are divided into three (nonoverlapping) groups, based on export earnings and level of development: (1) Oil Exporters (ME&CA OE), (2) Emerging Market and Middle-Income Countries (ME&CA EM&MI); and (3) Low-Income Developing Countries (ME&CA LIC).

ME&CA OE include Algeria, Azerbaijan, Bahrain, Iran, Iraq, Kazakhstan, Kuwait, Libya, Oman, Qatar, Saudi Arabia, Turkmenistan, and United Arab Emirates.

ME&CA EM&MI include Armenia, Egypt, Georgia, Jordan, Lebanon, Morocco, Pakistan, Syrian Arab Republic, Tunisia, and West Bank and Gaza.

ME&CA LIC include Afghanistan, Djibouti, Kyrgyz Republic, Mauritania, Somalia, Sudan, Tajikistan, Uzbekistan, and Yemen.

MENA, Afghanistan, and Pakistan: Selected Economic Indicators, 2000-23

(Percent of GDP, unless otherwise indicated)

	Average				Projections	
	2000–18	2019	2020	2021	2022	2023
MENA ¹						
Real GDP (annual growth)	4.3	1.7	-3.3	5.8	5.0	3.6
of which non-oil growth	5.5	2.9	-3.0	4.2	3.7	3.5
Current account balance	7.3	1.2	-2.6	3.6	9.5	6.6
Overall fiscal balance	1.8	-3.0	-7.9	-3.0	1.4	0.1
Inflation (year average; percent)	7.2	7.5	11.1	14.8	13.9	10.4
MENA oil exporters						
Real GDP (annual growth)	4.4	1.1	-4.4	6.8	5.4	3.2
of which non-oil growth	5.8	2.6	-3.9	4.6	3.6	3.1
Current account balance	10.2	3.1	-2.0	5.3	12.3	8.8
Overall fiscal balance	3.8	-2.1	-8.1	-2.3	2.8	1.1
Inflation (year average; percent)	6.7	6.5	9.3	11.5	10.5	8.7
MENA emerging market and middle-income countries ¹						
Real GDP (annual growth)	4.2	3.8	-0.3	3.5	4.4	4.6
Current account balance	-3.9	-6.2	-4.1	-5.2	-5.6	-5.2
Overall fiscal balance	-6.8	-6.8	-7.4	-7.0	-6.7	-6.0
Inflation (year average; percent)	7.3	6.6	6.7	8.1	11.2	8.4
MENA low-income developing countries						
Real GDP (annual growth)	2.4	-0.5	-4.2	0.4	1.1	3.7
Current account balance	-2.9	-9.6	-11.3	-5.7	-10.0	-9.1
Overall fiscal balance	-4.1	-6.4	-4.0	-1.7	-3.0	-2.6
Inflation (year average; percent)	14.5	33.4	93.2	191.0	141.4	70.8
MENA excl. conflict-affected countries						
Real GDP (annual growth)	4.4	1.5	-3.0	3.4	5.0	3.6
of which non-oil growth	5.6	3.0	-2.9	4.3	3.8	3.6
Current account balance	7.3	1.1	-2.4	3.5	9.4	6.5
Overall fiscal balance	1.8	-3.3	-7.6	-3.2	1.2	-0.1
Inflation (year average; percent)	7.2	7.6	11.0	14.6	13.8	10.4
MENA excl. fragile states and conflict-affected countries	7.2	1.0	11.0	11.0	10.0	10.1
Real GDP (annual growth)	4.0	1.5	-2.0	3.4	5.0	3.4
of which non-oil growth	5.4	2.9	-1.6	3.7	3.9	3.6
Current account balance	8.2	1.9	-1.7	3.6	9.3	6.5
Overall fiscal balance	2.3	-3.4	-7.4	-3.5	0.6	-0.6
Inflation (year average; percent)	6.9	7.2	8.4	9.9	10.3	8.7
MENAP ^{1,2}	0.0	1.2	0.4	0.0	10.0	0.7
Real GDP (annual growth)	4.4	1.9	-3.0	5.7	4.8	3.7
of which non-oil growth	5.5	2.9	-2.7	4.4	3.8	3.6
Current account balance	6.9	0.8	-2.4	3.3	8.5	5.8
Overall fiscal balance	1.5	-3.4	-7.8	-3.3	0.9	-0.3
Inflation (year average; percent)	7.2	7.4	11.0	13.9	13.5	10.4
Gulf Cooperation Council	1.2	7.4	11.0	10.0	10.0	10.4
Real GDP (annual growth)	4.3	1.0	-4.8	2.7	6.4	3.4
of which non-oil growth	6.2	2.4		4.0	3.9	3.6
Current account balance	13.6	5.6	-4.0	8.9		15.1
			-0.8		19.5	
Overall fiscal balance	6.9	-1.8	-9.0	-1.1	7.3	7.1
Inflation (year average; percent)	2.6	-1.5	1.2	2.2	3.1	2.3
Arab World ¹	4.5	0.0		0.1	5 4	0.0
Real GDP (annual growth)	4.5	2.3	-4.4	6.1	5.4	3.9
of which non-oil growth	5.8	3.1	-3.9	4.5	4.0	3.9
Current account balance	8.1	1.4	-3.5	4.4	12.5	8.9
Overall fiscal balance	2.6	-2.6	-9.0	-2.3	4.1	3.6
Inflation (year average; percent)	4.8	2.7	6.2	9.9	10.3	7.2

¹2011–23 data exclude Syrian Arab Republic.

²2021–23 data exclude Afghanistan.

Note: Data refer to the fiscal year for the following countries: Afghanistan (March 21/March 20) until 2011, and December 21/December 20 thereafter, Iran (March 21/March 20), and Egypt and Pakistan (July/June).

MENA includes Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen.

MENA oil exporters: Algeria, Bahrain, Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

MENA emerging market and middle-income countries include Egypt, Jordan, Lebanon, Morocco, Syrian Arab Republic, Tunisia, and West Bank and Gaza.

MENA low-income developing countries include Djibouti, Mauritania, Somalia, Sudan, and Yemen.

MENA excl. fragile states and conflict-affected countries include Algeria, Bahrain, Egypt, Iran, Jordan, Kuwait, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, and United Arab Emirates. MENAP: MENA, Afghanistan, and Pakistan.

Gulf Cooperation Council includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates.

Arab World includes Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen.

CCA Region: Selected Economic Indicators, 2000–23

(Percent of GDP, unless otherwise indicated)

	Average				Projections	
	2000–18	2019	2020	2021	2022	2023
CCA						
Real GDP (annual growth)	6.9	4.1	-2.1	5.6	2.6	4.2
Current account balance	0.0	-2.1	-3.6	-0.8	5.6	3.2
Overall fiscal balance	1.4	0.7	-5.2	-2.5	2.2	0.9
Inflation (year average; percent)	9.1	6.6	7.5	9.2	10.7	8.6
CCA oil and gas exporters						
Real GDP (annual growth)	7.3	3.0	-3.0	4.4	2.3	3.8
of which non-oil growth ¹	7.4	3.9	-2.1	5.3	3.0	3.4
Current account balance	0.1	-0.5	-3.2	1.3	10.9	6.9
Overall fiscal balance	3.5	1.1	-5.6	-1.8	4.3	2.1
Inflation (year average; percent)	8.0	4.7	6.1	8.6	10.4	7.9
CCA emerging market and middle-income countries						
Real GDP (annual growth)	5.9	6.1	-7.0	8.4	2.5	5.1
Current account balance	-9.3	-6.3	-8.6	-6.7	-9.3	-6.8
Overall fiscal balance	-1.9	-1.5	-7.5	-5.4	-4.0	-2.7
Inflation (year average; percent)	4.5	3.4	3.5	8.6	8.9	5.4
CCA low-income and developing countries						
Real GDP (annual growth)	6.4	5.8	1.1	7.3	3.1	4.8
Current account balance	1.9	-6.0	-3.1	-5.8	-9.0	-7.2
Overall fiscal balance	-0.1	0.2	-2.8	-4.1	-3.2	-2.4
Inflation (year average; percent)	12.9	12.3	11.7	10.7	11.7	11.1

Sources: National authorities; and IMF staff estimates and projections.

Note: CCA oil and gas exporters include Azerbaijan, Kazakhstan, and Turkmenistan.

CCA emerging market and middle-income countries include Armenia and Georgia

CCA low-income and developing countries include Kyrgyz Republic, Tajikistan, and Uzbekistan.