

3. Trade Patterns amid Shocks and a Changing Geoeconomic Landscape¹

Amid rising trade restrictions globally, several shocks—Russia’s war in Ukraine, the conflict in Gaza and Israel, and disruptions in the Red Sea—are altering trade patterns across the Caucasus and Central Asia (CCA) and the Middle East and North Africa (MENA). Since 2022, the CCA region has witnessed a notable uptick in overall trade activity, reflecting heightened transit trade and trade diversion. Some MENA countries have also seen shifts in trade patterns, particularly in energy products. More recently, tensions in the Red Sea have disrupted trade in several MENA countries. As the geoeconomic landscape evolves and uncertainties take hold, countries in the region could continue benefiting from an increase in trade flows or face trade and economic output losses, depending on the fragmentation scenarios considered. Amid this uncertainty, reducing risks and harnessing the gains from trade will require that countries reduce trade barriers, upgrade infrastructure, and strengthen regulatory frameworks. Meanwhile, mitigating disruptions from Red Sea tensions while building resilience to trade shocks could be achieved by diversifying shipping routes and, over the medium term, by developing alternative trade corridors and diversifying trade.

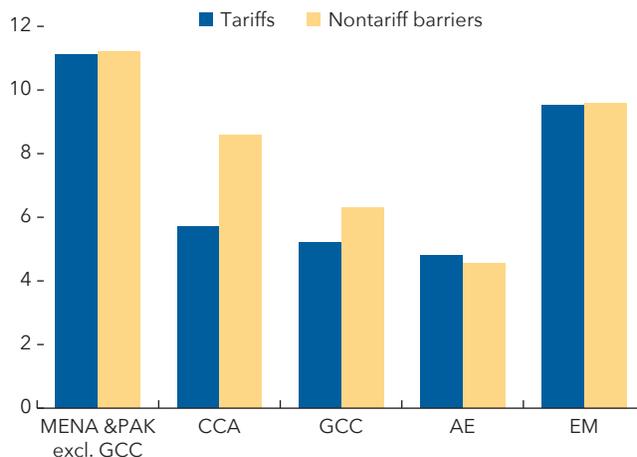
3.1. Shifting Trade Patterns

Countries across the CCA and MENA have experienced numerous shocks that have significantly reshaped their trade patterns in recent years. Following trade dislocation from the COVID-19 pandemic, Russia’s war in Ukraine contributed to changes in regional trade dynamics, especially for CCA countries. More recently, security tensions in the Red Sea have raised broader concerns about their impact on shipping costs and trade. This has increased the risk of trade and supply chain disruptions, not only in the MENA region but also globally. Moreover, these shocks have occurred amid long-standing trade barriers (including high nontariff barriers), deficient infrastructure, and weak regulatory environments, limiting the CCA and MENA trade potential (Figures 3.1 and 3.2).

Trade Diversion Reshaping Trade

One of the key implications of the war in Ukraine for CCA countries has been a shift in the direction of their trade flows. In 2022, the CCA’s share in EU, Russian, and US nonhydrocarbon exports increased by 25, 22, and 53 percent, respectively. In addition, the CCA’s share in their nonhydrocarbon imports rose by 47, 43, and 27 percent, respectively. Meanwhile, Russia’s shares in EU and US nonhydrocarbon exports and imports

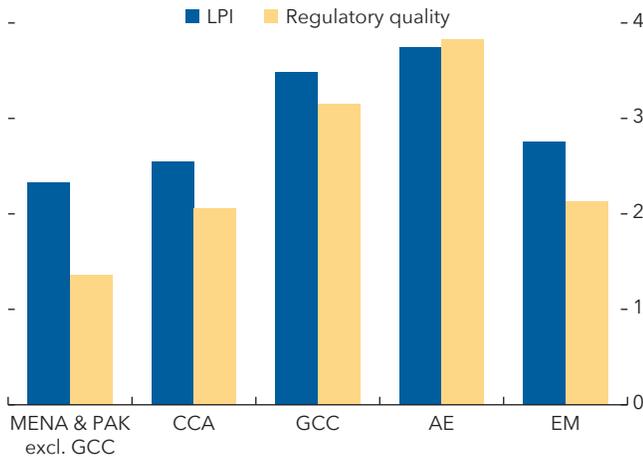
Figure 3.1. Tariff and Nontariff Barriers
(Tariffs in percent; nontariff barriers as index values)



Sources: Fraser Institute Economic Freedom Index; World Bank, World Development Indicators; and IMF staff calculations.
Note: Tariff data correspond to 2022; nontariff data correspond to 2021. Nontariff barriers have been rescaled to show index values between 0 and 20 (higher values are associated with higher barriers). AE = advanced economies; CCA = Caucasus and Central Asia; EM = emerging markets; GCC = Gulf Cooperation Council; MENA & PAK = Middle East and North Africa and Pakistan.

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Figure 3.2. Logistics Performance and Regulatory Quality (Index)

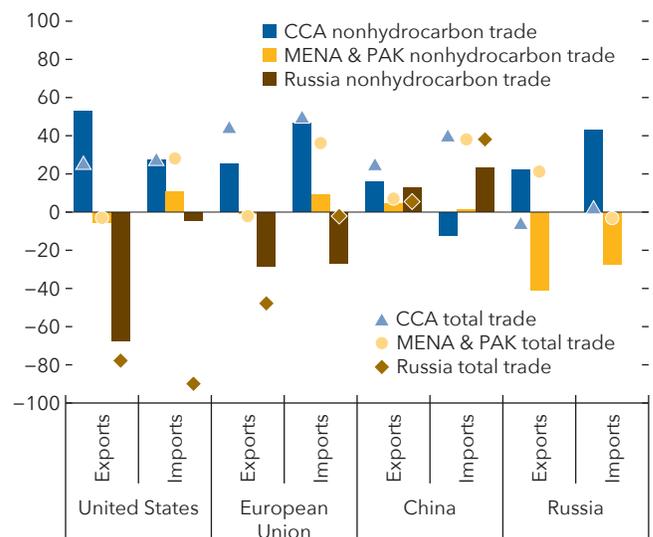


Sources: World Bank, Logistics Performance Index; and World Bank, Worldwide Governance Indicators database.
 Note: Regulatory quality is rescaled as an index ranging from 0 to 5 (higher values are associated with better regulatory quality). The Logistics Performance Index (LPI) is also reported as an index, rated from very low (1) to very high (5). The LPI includes measures of infrastructure quality, customs performance, logistics quality, and logistics efficiency. AE = advanced economies; CCA = Caucasus and Central Asia; EM = emerging markets; GCC = Gulf Cooperation Council; MENA & PAK = Middle East and North Africa and Pakistan.

declined markedly (Figure 3.3). The CCA region also increased its share in China’s nonhydrocarbon exports, reflecting some reorientation of trade with greater traffic through the Middle Corridor, where transported volumes have risen sharply (Box 3.1). Hence, trade diversion to the CCA region entailed a noticeable increase in imports from and exports to major trading partners and across a wide range of product categories (especially in extractive industries and manufacturing, such as iron and steel, electrical machinery, chemicals, and vehicles)—a trend that continued in 2023 and contributed to the expansion of both overall and intraregional trade linkages, particularly for Armenia, Georgia, and the Kyrgyz Republic (Figures 3.4 and 3.5).

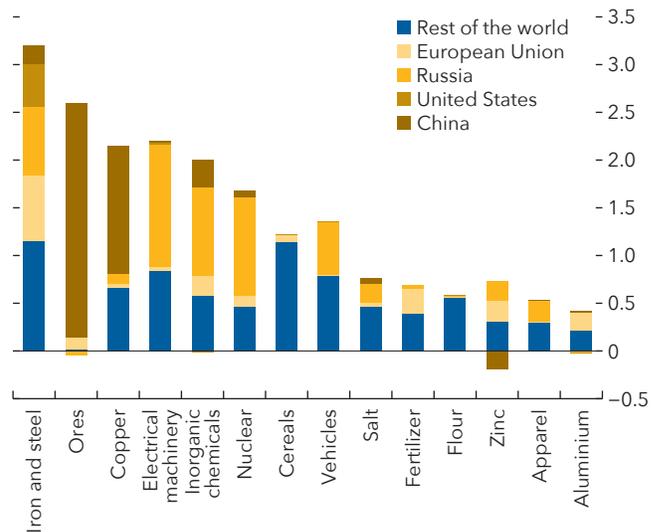
The CCA region’s footprint in global value chains has also expanded. Specifically, participation in global value chains—that is, the share of exports that is part of a multistage trade process—has increased in all CCA countries (except Tajikistan). At the same time, several CCA countries (Armenia, Azerbaijan, Georgia, Kazakhstan, Uzbekistan) have increased their use of foreign inputs in their production and exports, surpassing the volume of their exports used in the production of other countries’ exports (Figure 3.6).

Figure 3.3. Trade Shares with Partner Countries, 2021-22 (Percentage change)



Sources: CEPII BACI database; and IMF staff calculations.
 Note: Percent change in the share of CCA, MENA and Pakistan, and Russia in exports and imports from/to selected trading partners between 2021 and 2022. CCA = Caucasus and Central Asia; MENA & PAK = Middle East and North Africa and Pakistan.

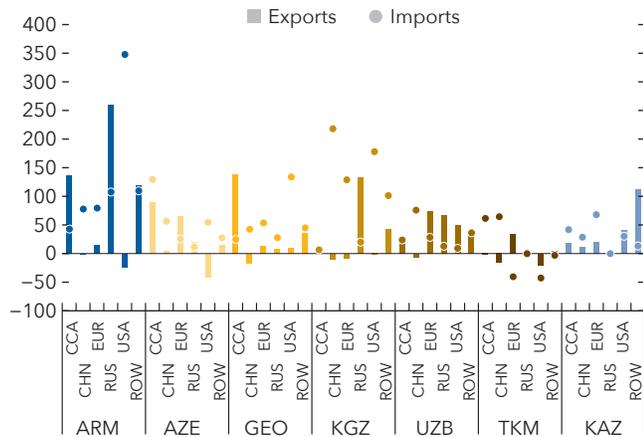
Figure 3.4. CCA: Exports by Product Group (Value change in billions of US dollars, 2022 versus 2019-21 average)



Sources: UN Comtrade; and IMF staff calculations.
 Note: Excludes Tajikistan given data limitations. CCA = Caucasus and Central Asia.

Figure 3.5. CCA: Exports and Imports by Trading Partner

(Percentage change, 2022–23 average versus 2021)

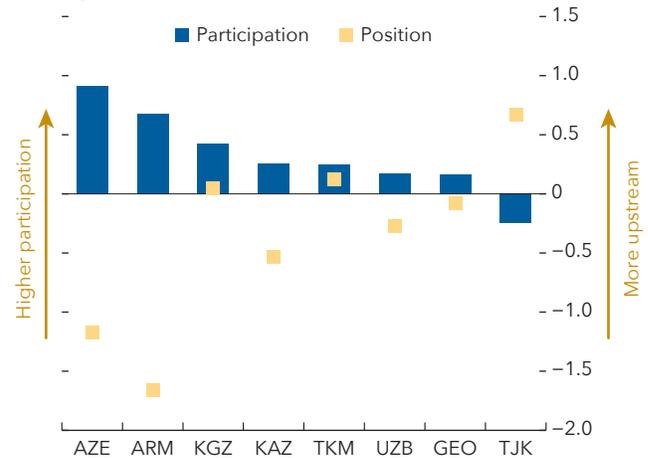


Sources: UN Comtrade; and IMF staff calculations.

Note: Excludes Tajikistan given data limitations. Kyrgyz Republic: Data do not include gold exports, which declined sharply for reasons not related to the war. Country abbreviations are International Organization for Standardization (ISO) country codes. CCA = Caucasus and Central Asia; ROW = rest of the world.

Figure 3.6. CCA: Deepened Involvement in Global Value Chains

(Change in index values, 2021–22)



Sources: EORA MRIO database; and IMF staff calculations.

Note: Both indices are calculated following Aslam, Novta, and Bastos (2017), based on manufacturing trade excluding extractive sector. Increasing participation implies greater integration with global value chains. Increasing position implies more upstream exports. Country abbreviations are International Organization for Standardization (ISO) country codes. CCA = Caucasus and Central Asia.

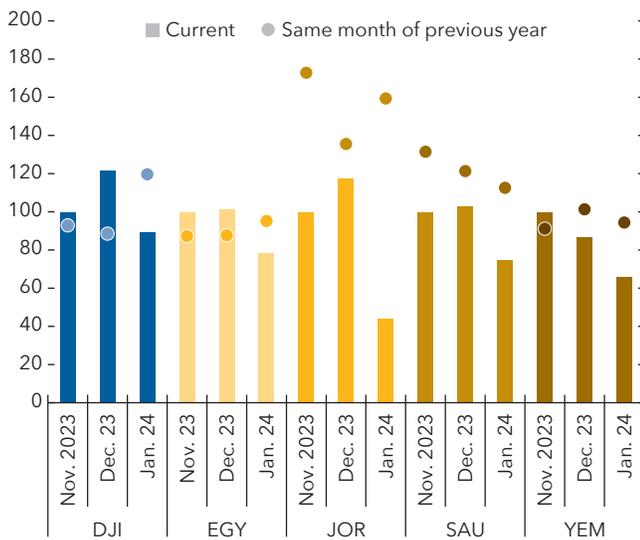
In MENA, shifting trade patterns were seen mainly among oil exporters and for hydrocarbon exports, as the European Union substituted some of its Russian-supplied oil and gas. MENA's share of EU hydrocarbon imports increased from 2.3 percent in the first quarter of 2022 to 5.8 percent in the fourth quarter of 2023 (with most gains for Algeria and Saudi Arabia).

Red Sea Security Tensions Disrupting Trade in MENA

Recent security tensions in the Red Sea have disrupted maritime trade through the region. With about 15 percent of global trade and 30 percent of global container trade transiting through the Suez Canal before the onset of the conflict, the Red Sea is a crucial pathway for global maritime trade. However, starting in November 2023, attacks on commercial vessels traversing the Bab el-Mandeb Strait have raised security concerns for shipping routes and caused a sharp rise in maritime insurance premiums. Consequently, from the onset of the conflict in Gaza and Israel until March 2024, the cost of shipping a standard 40-foot container from China to the Mediterranean Sea has soared from about \$1,000 to over \$4,000.

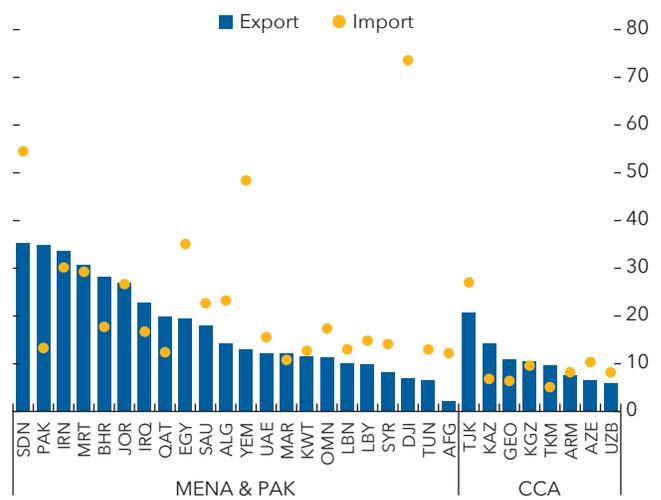
These security concerns have also affected regional trade. Trade through the Suez Canal dropped dramatically, declining by over 50 percent between November 2023 and the end of February 2024. Additionally, cargo trade volumes in some MENA countries, particularly those reliant on Red Sea ports, contracted during this timeframe, reflecting the varied exposure to maritime trade through the Bab el-Mandeb Strait (Figures 3.7 and 3.8). For example, the throughput of Jordan's Port of Aqaba fell by nearly half between November and the end of February, prompting the rerouting of some trade through land transport routes. In Saudi Arabia, Jeddah's port activity has decreased as the authorities have partly diverted trade flows to the port of Dammam in the Persian Gulf. Going forward, prolonged tensions in the Bab el-Mandeb Strait could have a deeper negative impact on trade and output, especially for countries bordering the Red Sea (Box 3.2).

Figure 3.7. Cargo Trade Volume
(November 2023 = 100)



Sources: PortWatch; and IMF staff calculations.
Note: Data capture trade in goods. Labels correspond to International Organization for Standardization (ISO) country codes.

Figure 3.8. Exports and Imports Transiting through the Bab el-Mandeb Strait
(Percent of total merchandise exports/imports, 2022)



Source: Verschuur and Hall (forthcoming).
Note: Labels correspond to International Organization for Standardization (ISO) country codes. CCA = Caucasus and Central Asia; MENA & PAK = Middle East and North Africa and Pakistan.

Rising Trade Restrictions

Globally, policymakers have become more receptive to implementing trade barriers, which are increasingly impeding the free flow of trade. A series of protectionist trade measures between China and the United States since 2018 preceded a broader trend of increased trade barriers between nations (Aiyar and others 2023). Moreover, trade dislocation from the COVID-19 pandemic, Russia's war in Ukraine, and tensions in the Red Sea has exacerbated challenges from rising geoeconomic fragmentation. In this context, trade interventions have increased globally by 70 percent since 2019. The average number of trade interventions affecting countries in the Middle East and Central Asia (ME&CA) has nearly doubled during the same period, with restrictions varying across countries (Figures 3.9 and 3.10).

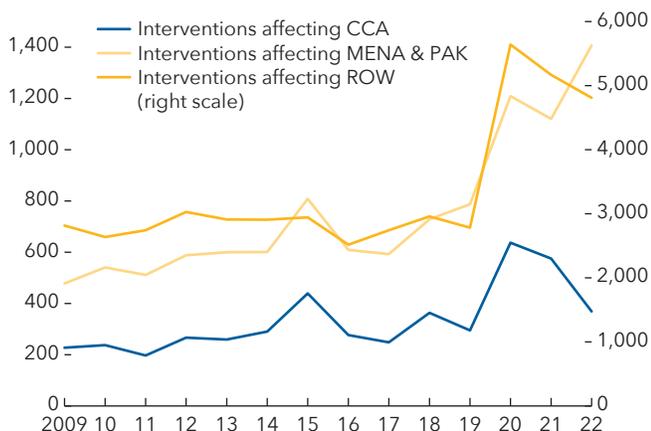
3.2. Assessing the Impact of Geoeconomic Fragmentation on ME&CA

Amid ongoing changes to trade patterns and trade restrictions, three illustrative scenarios point to potential trade and economic output gains and losses in ME&CA countries from rising geoeconomic fragmentation.² Scenario 1 would entail the European Union and the United States ceasing all trade with Russia while trade between other countries proceeds as normal.³ Scenarios 2 and 3 illustrate the separation of the world into three blocs—a Western bloc, an Eastern bloc, and a neutral bloc, with trade halted between the Western and Eastern blocs but the neutral bloc continuing to trade with any country. In scenario 2, ME&CA countries are assumed to remain in the neutral bloc. In scenario 3, ME&CA countries would align into the three blocs based on their votes in the 77th UN General Assembly Session during 2022-23 (see Online Annex 3.1 for details).

² These scenarios are assessed based on a structural bilateral gravity model using data for 185 countries from 2012-19. The focus is on the pre-COVID-19 years to remove any potential impact of COVID-19-related trade disruptions from the gravity equation estimation.

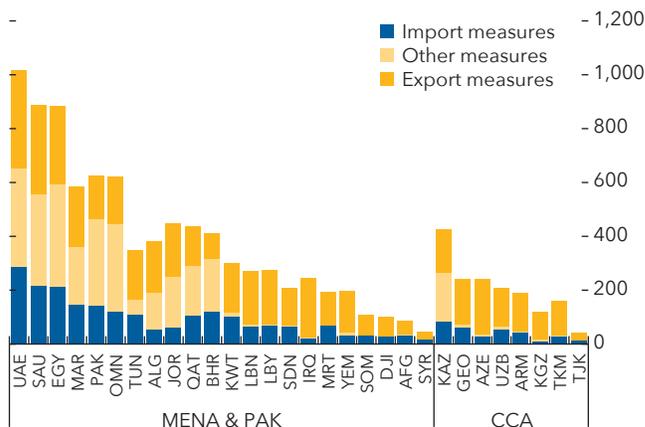
³ In line with the "strategic decoupling" scenario in Bolhuis, Chen, and Kett (2023).

Figure 3.9. Trends in Trade Interventions
(Number)



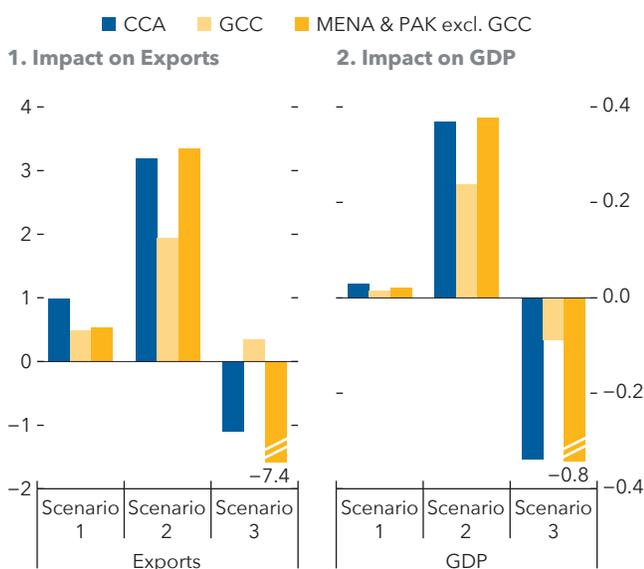
Sources: Global Trade Alert database; and IMF staff calculations.
Note: Trade interventions are defined as those that discriminate against foreign commercial interests. The main categories of interventions include export and import policy instruments, subsidies and state aid, and trade defense instruments. CCA = Caucasus and Central Asia; MENA & PAK = Middle East, North Africa, and Pakistan; ROW = rest of the world.

Figure 3.10. ME&CA: New Trade Interventions
(Number, 2020-22)



Sources: Global Trade Alert database; and IMF staff calculations.
Note: Other measures include anti-circumvention, anti-dumping, anti-subsidy, restrictions to public procurement, special safeguards, and measures not elsewhere specified. Data labels in the figure use International Organization for Standardization (ISO) country codes. CCA = Caucasus and Central Asia; ME&CA = Middle East and Central Asia; MENA & PAK = Middle East, North Africa, and Pakistan.

Figure 3.11. Baseline Impact on Exports and GDP
(Percent)



Sources: CEPII Gravity data set; and IMF staff calculations.
Note: CCA = Caucasus and Central Asia; GCC = Gulf Cooperation Council; MENA & PAK = Middle East and North Africa and Pakistan.

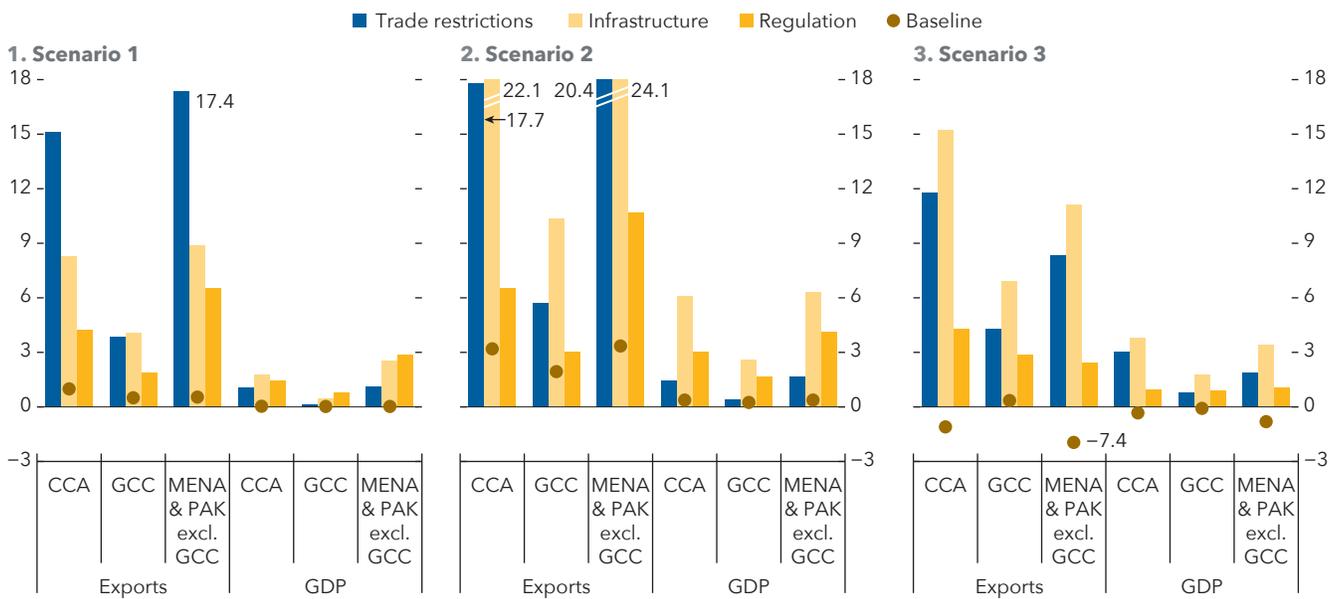
Economic Losses Possible

The net effect on trade and output across these scenarios depends on two opposing forces. On the one hand, the loss of trade partners would lead to reduced trade, adversely affecting economic output. On the other hand, trade diversion would occur due to fragmentation, redirecting trade flows toward countries that can trade.

Under scenario 1, ME&CA countries could continue to see expanded trade opportunities as trade diversion originating from a more targeted rise in trade restrictions could boost trade flows (Figure 3.11). Trade diversion and price effects in commodity markets generate positive, albeit modest, impacts on output, primarily in CCA countries.⁴

Under scenario 2, by remaining neutral, ME&CA countries could serve as intermediaries for trade between blocs with strained trade relations, contributing to trade and output gains above those illustrated under scenario 1. Across ME&CA, exports would increase by 2–3 percent while economic output would rise by up to 0.4 percent.

⁴ The structural gravity model only incorporates direct trade between an exporter and an importer but not trade that is intermediated through a third country in a fragmentation scenario. Hence, results may represent a lower bound for countries that may emerge as trade intermediaries in a fragmentation scenario.

Figure 3.12. Trade and Output Gains from Policy Actions

Sources: CEPII Gravity data set; and IMF staff calculations.

Note: CCA = Caucasus and Central Asia; GCC = Gulf Cooperation Council; MENA & PAK = Middle East and North Africa and Pakistan.

Under scenario 3, with the hypothetical configuration of blocs driven by UN voting, several ME&CA countries would experience losses, with a resultant drop in exports for the CCA (-1.1 percent) and for non-Gulf Cooperation Council (GCC) countries within the MENA and Pakistan group (-7.4 percent), and a mild decline in output. GCC countries would be less impacted under scenario 3, as they are better positioned to benefit from trade diversion due to their lower tariffs and nontariff barriers compared to other country groups.

Policy Actions Can Expand Trade Gains and Prevent Losses

Policy actions that curb long-standing barriers,⁵ such as reducing trade restrictions,⁶ easing regulatory constraints, and upgrading infrastructure investment,⁷ can facilitate trade and income gains under scenario 1 and 2 (Figure 3.12) or mitigate the adverse impact under scenario 3.⁸

Under scenario 1, lowering the trade restriction gap with advanced economies could boost exports by 14 percent for CCA countries and by more than 15 percent for the group containing non-GCC MENA countries and Pakistan relative to the baseline (that is, without such policy action). Upgrading infrastructure could enable ME&CA economies to increase exports by about 7 percent in the CCA and 8 percent in non-GCC MENA countries and Pakistan, driven by improved intra- and interregional trade flows. Moreover, improving the regulatory environment could lead to a more than 3 percent increase in exports for the CCA and around 6 percent increase for non-GCC MENA countries and Pakistan. These export gains under various policy actions could also translate into higher annual output in the CCA (between 1 and 2 percent) and among non-GCC MENA countries and Pakistan (between 1 and 3 percent).⁹

⁵ Calibrated to achieve a 20 percent reduction in the gap of such factors between ME&CA countries and advanced economies.

⁶ Based on a composite index of tariff and nontariff barriers.

⁷ Infrastructure is proxied by the World Bank's Logistics Performance Index, which is a composite measure of countries' physical infrastructure, customs performance, logistics quality, and logistics efficiency.

⁸ While the structural gravity model provides a tractable framework for policy analysis in a multicountry setting, the results rely on the implicit assumption that the structural parameters of each economy would be invariant to different degrees of geoeconomic fragmentation and could thus be captured by the gravity model estimated using historical data (see Online Annex 3.2 for details).

⁹ These gains have two components: higher trade through better infrastructure and higher domestic output through better infrastructure. In the results, GDP changes are reported excluding the direct impact of better infrastructure on domestic production.

Similarly, under scenario 2, reducing trade barriers would increase exports by more than 17 percent for CCA countries, more than 20 percent for non-GCC MENA countries and Pakistan, and 6 percent for GCC countries. Moreover, export gains related to an upgrade in infrastructure would reach 6, 22, and 24 percent in GCC, CCA, and non-GCC MENA countries and Pakistan, respectively, and 6, 3, and 11 percent following improvements in the regulatory environment, respectively. The additional gains in exports from policy actions also translate into extra output gains (0.4 to 6.3 percent), especially for CCA and non-GCC MENA countries and Pakistan.

Under scenario 3, policy actions can help prevent economic losses over the medium term and improve trade and output outcomes, though the improvements are generally less pronounced than those observed in scenarios 1 and 2 (Figure 3.12). By reducing trade restrictions, the CCA and the non-GCC MENA and Pakistan groups could see their exports rise by more than 11 percent and about 8 percent, respectively—effectively eliminating any output losses due to fragmentation under the baseline results. Furthermore, upgrading infrastructure would similarly boost both exports and output across the region. Improving regulatory quality also leads to export and output gains and reverses the adverse effects experienced by the CCA and the non-GCC MENA and Pakistan group without policy actions under scenario 3.

3.3. Policy Response

The empirical results emphasize the need for decisive and targeted policy actions to boost trade prospects and counteract the adverse potential impacts of trade shocks and increased fragmentation. It is essential that these measures are calibrated to address both immediate and longer-term challenges.

In the short term, policies prioritizing trade facilitation measures and improving “soft” infrastructure, such as digital technology and customs management, would help consolidate ongoing shifts in trade patterns into stronger trade and GDP gains. Reforms should aim to reduce nontariff barriers by improving customs efficiency, including by expanding the use of digital technology, simplifying import and export license processes, and tackling other technical barriers at the border.

Over the medium term, policies to reduce infrastructure gaps and enhance regulatory quality, such as reducing infrastructure bottlenecks and harmonizing and streamlining regulatory requirements, would also boost trade, help mitigate the impact of trade shocks, and curb the adverse impact of geoeconomic fragmentation, including by facilitating regional linkages and connectivity (for example, by developing alternative trade corridors). Further integration into global value chains could help countries bolster competitiveness and contribute to higher income per capita (Raei, Ignatenko, and Mircheva 2019).

In MENA countries, efforts to improve supply chain management, prepare for alternative sources of supply in most affected sectors, seek alternate shipping routes, and assess air freight capacity needs could help mitigate the disruptions related to ongoing tensions in the Red Sea. Over the medium term, increasing MENA countries’ resilience to trade disruptions requires moving forward with investments in transportation infrastructure to strengthen and expand regional linkages and connectivity, including by developing innovative sea-land routes. Cultivating a more diversified trade profile—spanning partners, products, and routes—would further enhance resilience.

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Box 3.1. The Middle Corridor

The Middle Corridor, also known as the Trans-Caspian International Transport Route, is a multimodal¹ network connecting China and Europe, offering significant potential for the Caucasus and Central Asia region's development. The corridor runs through Kazakhstan, the Caspian Sea, Azerbaijan, and Georgia, and on to Europe through Türkiye or the Black Sea. The Middle Corridor provides an alternative transit route to sea transportation and the Northern Corridor² (the overland east-west route across Russia³) for trade between China and Europe. The route was strengthened by the opening of the Trans-Kazakhstan railroad in 2014 and the Baku-Tbilisi-Kars railway in 2017. Since the onset of Russia's war in Ukraine, the volumes transported through the Middle Corridor have grown substantially, rising from 600,000 tons in 2021 to 2.7 million tons in 2023. While accounting for only a small share of overall trade between China and Europe, the Middle Corridor offers important potential for the Caucasus and Central Asia region's development and integration into global supply chains.

However, several actions are needed to overcome challenges related to developing the Middle Corridor as a viable route. Recent studies identified high transport costs and long and unpredictable transit times as key shortcomings (EBRD 2023; OECD 2023; World Bank 2023). As such, measures are needed to streamline procedures at border crossings to reduce delays, enhance automation through the digitalization of transport documents, and harmonize regulatory requirements, permits, and tariffs across Middle Corridor countries. Significant infrastructure improvements are also needed, including expediting transshipments along the route, expanding the fleet at the Caspian Sea, developing railway capacity, and improving the road network. Cooperation among the countries involved and beneficial conditions to attract private sector involvement are crucial for achieving these goals. To this end, several regional initiatives already exist. For example, in 2022, Azerbaijan, Georgia, Kazakhstan, and Türkiye signed the Roadmap for 2022–27 to accelerate the development of the Middle Corridor.

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¹ Involving road, railway, and sea links.

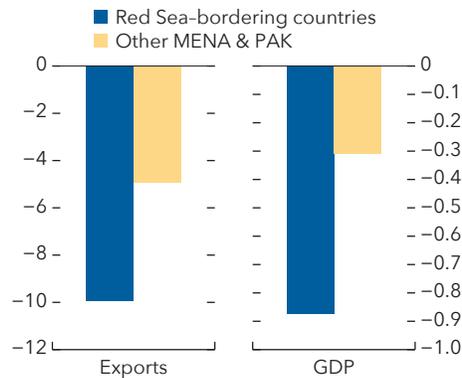
² See OECD/ITF (2022).

³ Volumes transported through the Northern Corridor dropped by over 60 percent in 2023 compared to 2021, according to the Eurasian Rail Alliance Index.

Box 3.2. MENA: Uneven Trade Losses from Prolonged Red Sea Tensions

Amid the ongoing changes to trade patterns related to the security concerns in the Red Sea, an illustrative scenario points to notable trade losses for highly exposed economies in the event of prolonged disruptions. The scenario assumes the current level of disruptions in maritime trade continues through the end of 2024. In turn, it simulates the impact of an increase in trade costs by 1 percent of freight value for trade traversing the Red Sea (equivalent to a full-year rise in maritime insurance premiums at the level observed as of mid-March 2024 for vessels traveling through the Red Sea). This shock is then scaled by each Middle East and North Africa (MENA) country's dependence on this shipping route, measured by the share of their trade via the Bab el-Mandeb Strait. Results from the analysis illustrate an uneven impact across MENA countries. For countries bordering the Red Sea (Egypt, Jordan, Saudi Arabia, Sudan, Yemen), exports are estimated to decline by 10 percent on average. For the rest of MENA, the decline in exports is about half of the decline seen for the previous group, reflecting a generally lower share of trade exposed to the ongoing disruptions in maritime traffic. The ensuing negative impact on economic activity is estimated at about 1 percent for economies bordering the Red Sea and 0.3 percent for other MENA countries and Pakistan (Box Figure 3.2.1).

Box Figure 3.2.1. Estimated Impact of Prolonged Red Sea Disruptions on MENA and Pakistan
(Percent change)



Sources: CEPII Gravity data set; and IMF staff calculations.

Note: The scenario assumes the current level of disruptions in maritime trade through the Red Sea continues through the end of 2024. The chart displays one-year impacts. Red Sea-bordering countries include Egypt, Jordan, Saudi Arabia, Sudan, and Yemen. MENA & PAK = Middle East and North Africa and Pakistan.