GROUP OF TWENTY

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Prepared by Staff of the

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*Does not necessarily reflect the views of the IMF Executive Board

July 2022

EXECUTIVE SUMMARY

The global economic outlook has darkened considerably, while inflation remains high. Since the April 2022 World Economic Outlook, the war in *Ukraine* has continued and sanctions against *Russia* have been escalated. In addition to the humanitarian crisis, the economic impact has been felt worldwide, including through commodity prices, gas supply to Europe, supply chains, and financial markets. At the same time, the pandemic has continued to disrupt lives and activity, in particular in *China* where the virus prompted strict lockdown measures. Overall, recent indicators point to a very weak second quarter. Inflation has surprised on the upside, has broadened beyond food and energy prices, and has remained above targets in many economies. In response, major central banks have announced further monetary policy tightening, which will weigh on the outlook, and global yields have risen. Some economies have employed fiscal measures to help alleviate the impact on households. Amid a financial market risk-off mode, the appreciation of the US dollar has coincided with capital outflows from emerging market economies, putting pressure on vulnerable economies.

Downside risks threaten to worsen a difficult situation. In addition to risks from the pandemic, a prolonged war in *Ukraine* would increase global fragmentation pressures. Associated inflationary risks could inflame social tensions, and tighter financial conditions would add to challenges from high debt levels. Should inflation fail to respond rapidly to tighter monetary policy, expectations could de-anchor. A more protracted growth slowdown in *China* would further weigh on global activity. Weather-related climate events could worsen food insecurity.

Policy challenges are sharpening, as many economies must bring down inflation while securing a soft landing. While tightening cycles are underway in most economies, many central banks will need to continue to decisively tighten monetary policy. Delaying action would likely create more severe challenges later. Public sector debt will also need to be brought down. Yet, economies that have been hard hit by the war and sanctions may need to introduce targeted, temporary measures to lessen the impact of high energy and food prices on the most vulnerable people. That said, it will be important that fiscal policy does not work against monetary policy efforts to bring down inflation. With an eye to the future, measures are essential to minimize scarring from the pandemic and to urgently push forward on the green transition.

Joint multilateral efforts are key to overcoming the multiple challenges facing the world. Restoring peace is a priority. In addition, actions must help address global fragmentation pressures and support the most vulnerable people. Reducing trade costs, including by reversing newly implemented export restrictions, can help ease strains on food supply. Scaling-up vaccine absorption capacity, financing the ACT-A, and encouraging technological transfers to speed-up global vaccine production will help end the pandemic. Amid high debt levels and tightening financial conditions, full implementation of the G-20 Common Framework for Debt Treatments is a priority. An international carbon price floor, or equivalent regulations, differentiated by levels of development, should be a central part of a broader policy package to mitigate climate change. Implementing the global agreement on international corporate taxation would reduce tax competition and profit shifting.

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GROWTH SLOWDOWN AMID HIGH INFLATION

The trend toward slower growth and elevated inflation has continued. The war in Ukraine and associated sanctions on Russia are taking a toll on growth, putting upward pressure on commodity prices and adding to global fragmentation pressures. Recent strict lockdown measures in China to quell COVID-19 infections have weighed on economic activity and added to existing global supply chain challenges. At the same time, monetary policy tightening to bring down inflation has tightened global financial conditions. Emerging market economies have faced renewed capital outflows.

1. **New shocks have hit the global economy before it had fully recovered from previous blows**. On top of a global pandemic that has lasted more than two years and killed more than 6 million people worldwide, *Russia's* invasion of *Ukraine* in February 2022 along with associated sanctions, which were escalated in May, have led to renewed disruptions and economic costs—in particular in *Ukraine* and neighboring economies. About 5 million refugees from *Ukraine* have been recorded across Europe and 7 million people have been displaced internally. The impact is being felt across the globe through a surge in commodity prices, disruptions to trade linkages, and financial market volatility. Meanwhile, as part of its zero-COVID policy, strict lockdowns in major cities in *China* have hampered economic activity domestically and added to strains in global supply chains.

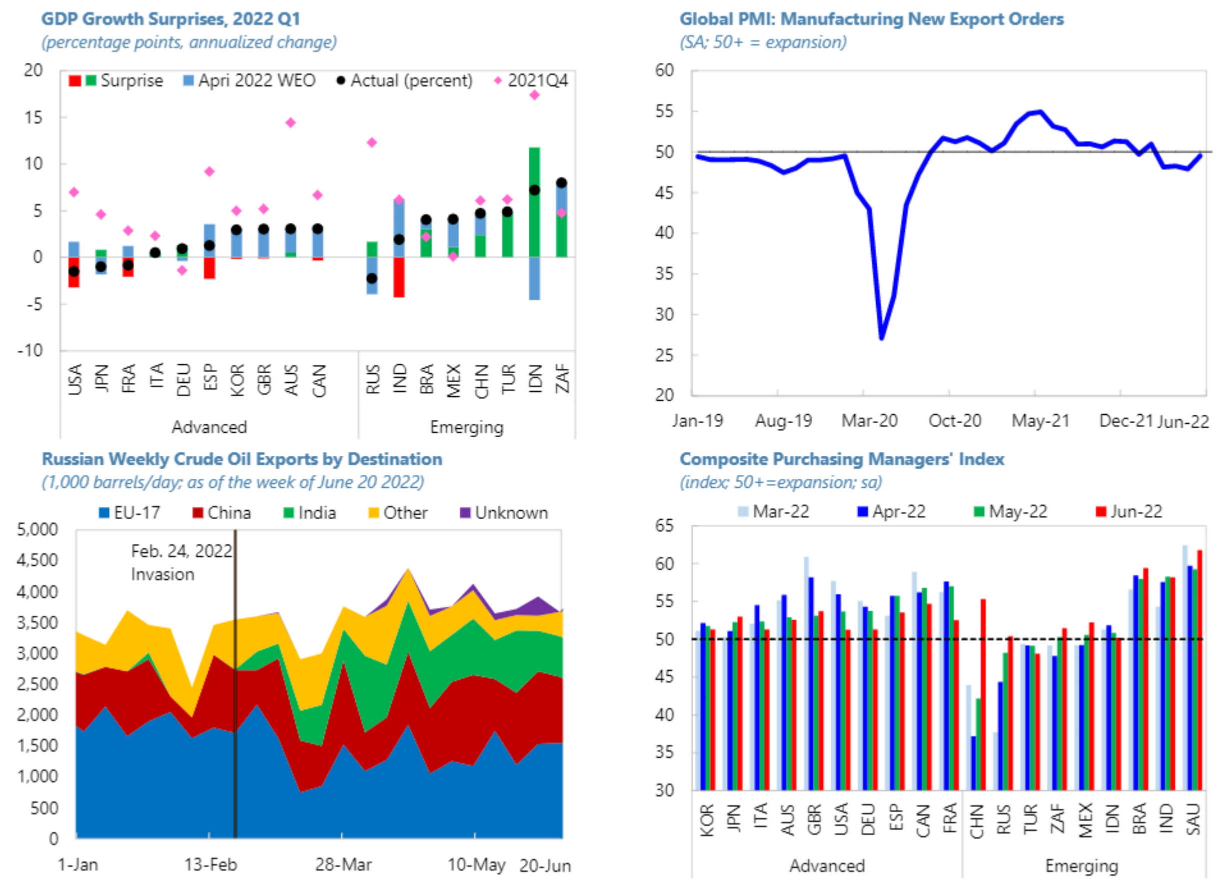
2. **Since the last growth projections were released in April, the outlook has darkened considerably, with recent indicators pointing to a very weak second quarter**. The April 2022 *World Economic Outlook* (*WEO*) revised down global growth projections to 3.6 percent this year and next, partly reflecting the economic effects of *Russia's* invasion of *Ukraine* and associated sanctions, the ongoing growth slowdown in *China*, and monetary policy tightening in the *United States* (Table 1). Since then, the global outlook has deteriorated significantly, despite slightly better-than-expected first-quarter GDP releases (Figure 1, upper left-hand panel). Positive inflation surprises have prompted major central banks to announce further frontloaded monetary policy tightening, which will weigh on the outlook, while the latest high-frequency indicators point to weakening economic activity. Recent mobility restrictions in *China* are leaving a significant mark on output in the second quarter, imparting a significant drag to global growth. In addition, and despite some resilience in consumption, economic data releases indicate that the war in *Ukraine*—whose quick resolution seems increasingly unlikely—has weighed on activity.

- *Indicators point to a moderation in global trade.* Notably, manufacturing export orders in April and May weakened on the back of lower import demand from economies highly impacted by the war and continued supply bottlenecks (Figure 1, upper right-hand panel). Meanwhile, the share of *Russian* oil exports to Europe has declined since *Russia*'s invasion of *Ukraine* amid lower prices to other markets (Figure 1, lower left-hand panel). Moreover, the supply of gas to Europe has fallen sharply, with flows to the *EU* declining to less than half their 2021 average.
- *Going into the second quarter, high-frequency indicators in G-20 advanced economies have been mixed but point to slower growth.* PMIs have generally remained in expansionary territory in G-20 advanced economies but showed signs of weakness in May and June (e.g., *Australia*, *United Kingdom*, *United States*; Figure 1, lower right-hand panel). While retail sales have remained resilient in some economies, consumer confidence surveys point to a retreat in most advanced economies.

Moreover, consumption in the *United States* contracted in May, and industrial production and PMI export orders in *Japan* and *Korea* have disappointed in recent months as activity in *China* slowed.

- *Most G-20 emerging market economies have seen a decline in economic activity in the beginning of the second quarter, led by China. China* saw a sharp contraction in economic activity in the first half of the second quarter—though with PMIs rebounding in June—with the slowdown spilling over to other economies in the region, and which is expected to weigh on global growth. Meanwhile, both manufacturing and services PMIs remained weak in some other economies. By contrast, PMI releases in June in a few economies have shown signs of resilience (e.g., *Brazil*, *India*, *Saudi Arabia*).

Figure 1. Recent Economic Developments

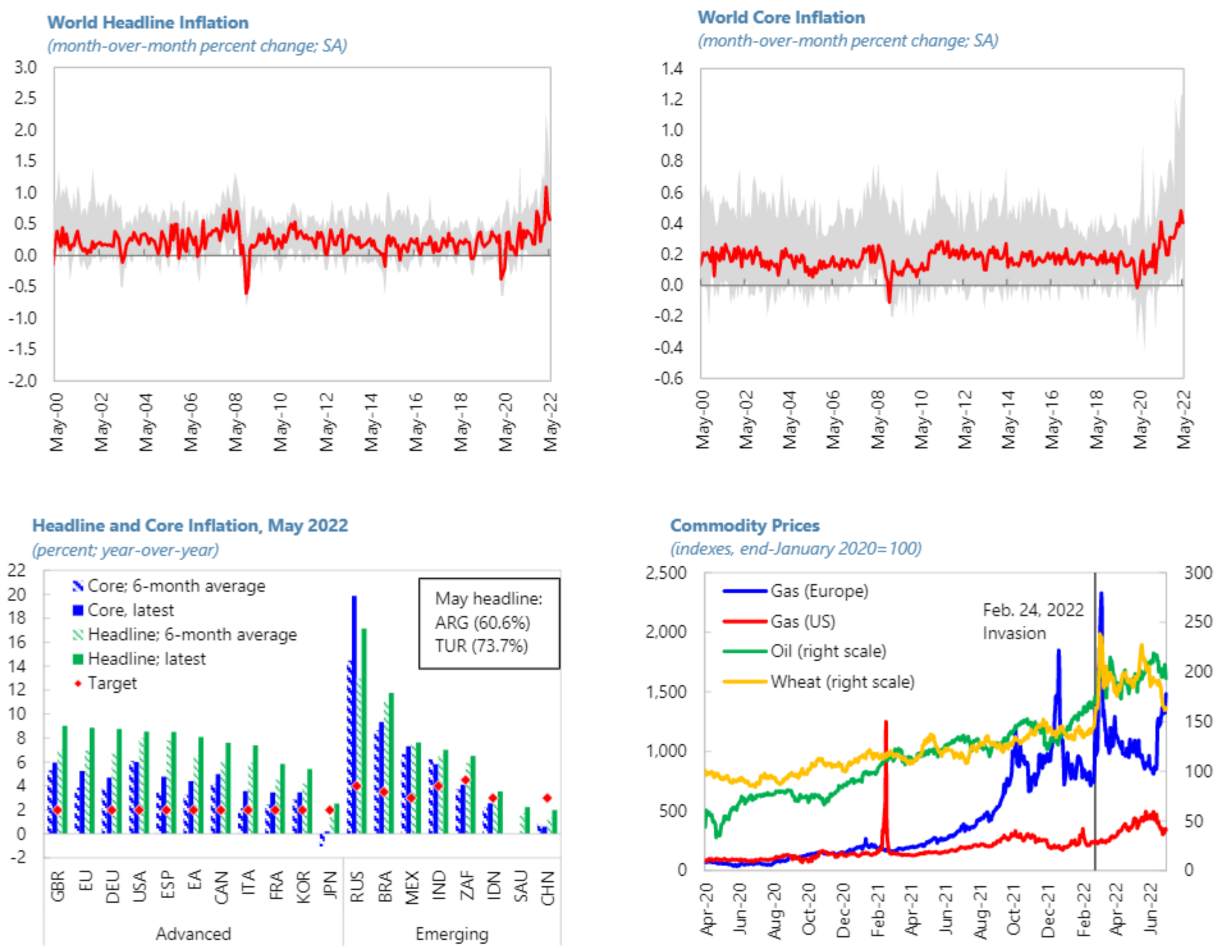


Sources: Haver Analytics; IMF, *World Economic Outlook*, April 2022; KPLER; and IMF staff estimates.
Note: Bottom left panel: EU-17: Belgium, Bulgaria, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Lithuania, Netherlands, Poland, Portugal, Romania, Spain, Sweden. Bottom right panel: Manufacturing PMIs for CAN, IDN, KOR, MEX, and TUR. Emerging excludes ARG due to data limitations.

3. **At the same time, inflation has continued to surprise on the upside and has become increasingly broad-based**. Global headline inflation has continued to rise (Figure 2). Key drivers remain the lingering supply-chain disruptions, continued strong aggregate demand, and a sustained increase in energy and food prices. For example, oil prices have continued to strengthen, including on the back of a further escalation of *EU* sanctions on Russia in early June. Moreover, price increases have broadened beyond food and energy prices, with core inflation rising in several economies, including in the *euro area* where import price inflation has reached double digits. In the *United States*, core

inflation has been above or around 6 percent since January 2022 amid a strong labor market recovery, an uptick in medium-term inflation expectations, an increase in demand for services, and a steady rise in producer prices. While the pickup in inflation in several G-20 emerging market economies (e.g., *China*, *Indonesia*) has been somewhat slower than in advanced economies, both headline and core inflation have continued to rise in most cases. As of May, only *China* among the G-20 economies with inflation targets observed headline inflation below (though close to) the target.

Figure 2. Inflation Developments



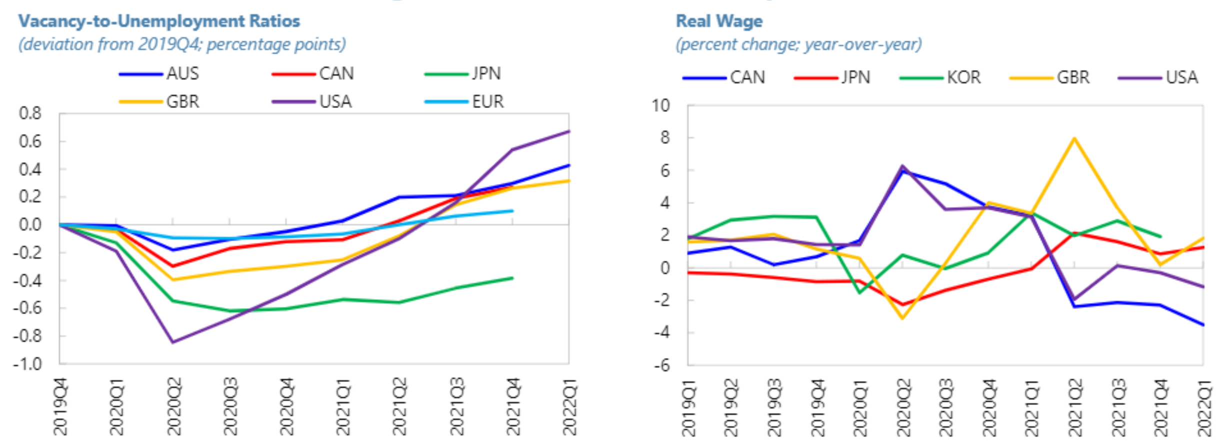
Sources: Haver Analytics; IMF, *Global Data Source*; and IMF staff calculations.
Note: Top two panels: exclude ARG, RUS, and TUR; gray areas denote 10th to 90th percentiles. Bottom left panel: AUS: not reported as only quarterly data are available; SAU: is not an inflation targeting economy; core inflation is not reported due to data limitations. ZAF: target reflects the mid-point of the target range (3–6 percent). IDN: target reflects the mid-point of the target range (2–4 percent). The ECB targets HICP as a medium-term objective for the euro area as a whole, including DEU, ESP, FRA, and ITA. EU: no inflation target available as monetary policy is set at the euro area or individual country level. ESP is a permanent invitee of the G-20.

4. **Food insecurity is rapidly intensifying, with particularly devastating effects for the poorest people**. As *Ukraine* and *Russia* account for close to 30 percent of global wheat exports, the reduction in exports of key food commodities from these economies is not only translating into higher food prices but also an acute risk of food insecurity for vulnerable populations. As such, the consequences of the war are rapidly adding to prior food supply shortages in key producer countries of other staples (e.g., *Brazil*) and are especially felt in low-income and emerging market economies

where food accounts for a large share of consumption. For example, food represents about 40 percent of the consumption basket in Sub-Saharan Africa.

5. **Labor markets have tightened in advanced economies**. In most G-20 advanced economies, unemployment rates have declined below pre-pandemic levels, employment is on the rise, and labor force participation is broadly constant. However, vacancy-to-unemployment ratios have steadily increased in several economies. In fact, by the end of the first quarter of this year, it had risen above pre-pandemic levels in *Australia*, *United Kingdom,* and the *United States* (Figure 3). Real wage growth has nonetheless decelerated in major advanced economies amid the rise in inflation, posing upside risks to nominal wage pressures. In contrast, in G-20 emerging market economies, employment rates generally remain below pre-pandemic levels, reflecting slower recoveries in output, in part on the back of more limited policy support during the crisis and slower COVID-19 vaccine rollouts.

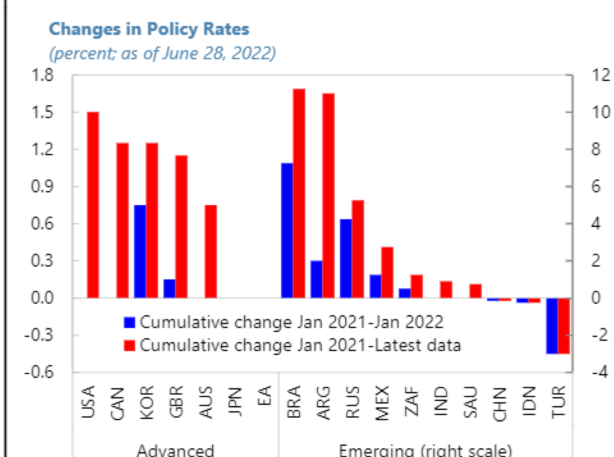
Figure 3. Labor Market Developments



Sources: Organisation for Economic Cooperation; Eurostat; Haver Analytics; Statistics of Japan; and IMF staff calculations.

6. **In response to surging inflation, monetary policy has continued to tighten across most G-20 economies**. As of mid-June, the U.S. Federal Reserve has hiked policy interest rates by 125 basis points since March, has started to reduce the size of its balance sheet, and has indicated that further tightening is expected this year. In Europe, the ECB ended its net asset purchases as of July 1st and has signaled a forthcoming rise in the policy interest rate. Moreover, monetary policy tightening has become increasingly synchronized across economies (Figure 4). As of early July, all central banks in the other G-20 advanced economies have started tightening, except for Japan. However, policy interest rates adjusted for one-year ahead inflation expectations remain

Figure 4. Monetary Policy Actions

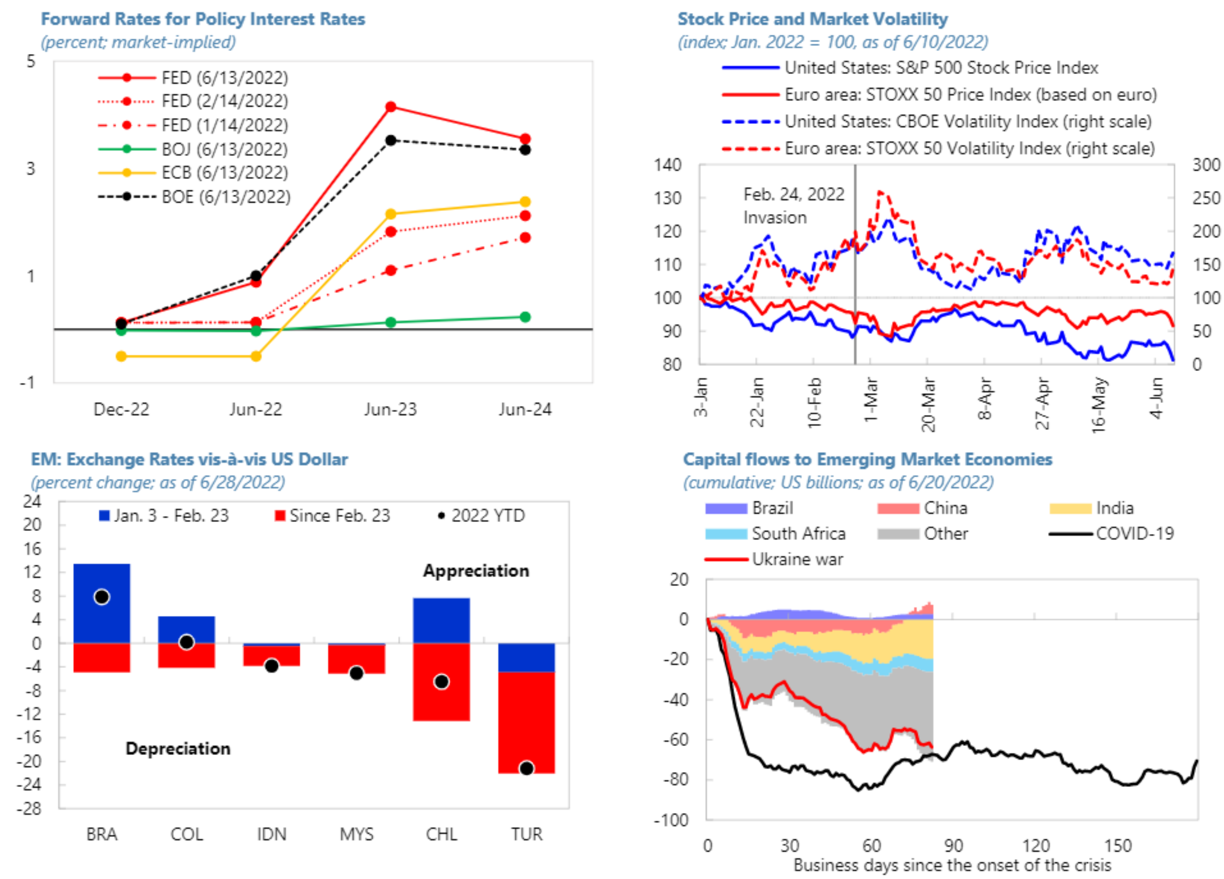


Sources: Bank for International Settlements; and IMF staff estimates.
Note: Latest data are those available in the BIS database as of June 28, 2022. The ECB conducts monetary policy for the euro area as a whole, incl. DEU, ESP, FRA, ITA.

negative in many economies, and futures markets are pricing in significant tightening of monetary policy over 2023 (Figure 5). Among G-20 emerging market economies, central bank tightening cycles have also commenced (e.g., *India*) or continued (e.g., *Brazil, Mexico*)—while, in contrast, *Türkiye* implemented notable interest rate cuts.

7. **Meanwhile, financial markets are tightening, and volatility has heightened**. While financial market volatility has been elevated since February, uncertainty related to the war in *Ukraine* has contributed to equity price swings, and the risk-off sentiment has strengthened. By the end of June 2022, the S&P 500 index has declined by 21 percent since the beginning of the year and US 10-year bond yields have risen by 143 basis points. Alongside, the US dollar has strengthened against most currencies, and cumulative capital outflows from emerging market economies as of late June were on par with those seen following the onset of the pandemic (Figure 5).

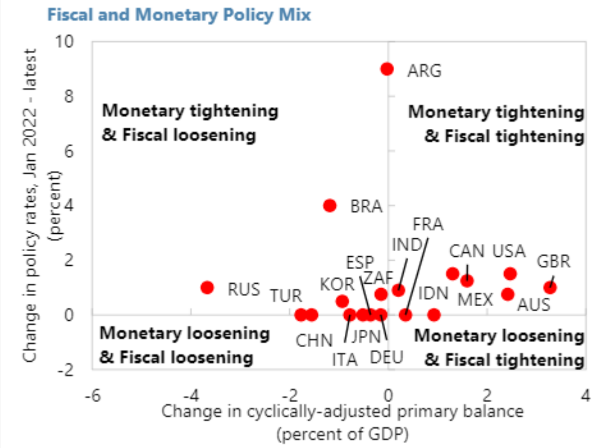
Figure 5. Monetary Policy and Financial Market Developments



Sources: Haver Analytics; Bloomberg Finance L.P.; IIF; and IMF staff calculations.
Note: First row: left panel, forward rates for the US Federal Fund mid target rate, the Bank of Japan Overnight call rate, the euro area ECB Deposit Facility Announcement rate, and the Bank of England Official Bank Rate. Last row, right panel: Data cover economies tracked by the IIF regarding daily non-resident portfolio flows to a subset of emerging market economies (including *Brazil, China, India, South Africa* among G-20 emerging market economies) as well as *Korea* (G-20 advanced economy).

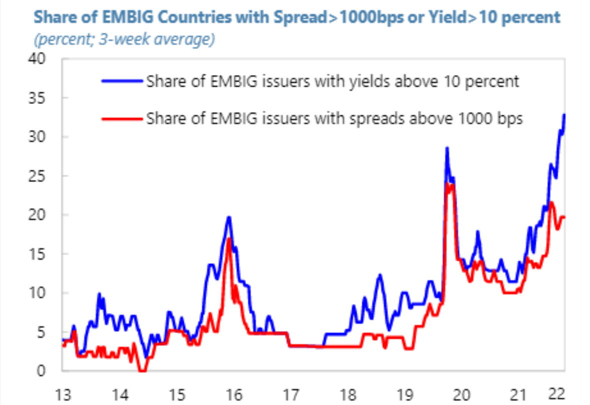
8. In some economies, fiscal policy has tightened alongside monetary policy. Debt levels in G-20 advanced and G-20 emerging market economies stood at 120 and 65 percent of GDP at the end of 2021. As such, policymakers in several economies have announced the withdrawal of fiscal support this year relative to 2021 (e.g., *Australia*, *Canada*, *Indonesia*, *United Kingdom*, *United States*) (Figure 6), in most cases complementing monetary policy efforts to reduce inflation. However, amid the impact of the war in *Ukraine* and associated sanctions, some European economies have implemented new fiscal measures (e.g., price subsidies and cash transfers) to help mitigate the impact on households and firms from rising food and energy prices, though potentially also slowing the speed at which inflation is brought down. In addition, relative to January projections, fiscal policy is projected to be mildly more expansionary in *China*, as growth prospects weakened amid the ongoing real estate slowdown and pandemic-related lockdown measures. Meanwhile, sovereign bond yields stand above 10 percent for about a third of countries in a sample of emerging market economies worldwide (Figure 7). The share of low-income countries in debt distress has risen to 60 percent (twice the 2015 share)—and a large fraction of those low-income countries are also at risk of food insecurity.

Figure 6. Fiscal and Monetary Policy Mix



Sources: Bank for International Settlements; IMF, *World Economic Outlook, April 2022*; and IMF staff estimates.
Note: Vertical axis: Latest policy rate is based on the most recent data available in the BIS database as of June 28, 2022. The ECB conducts monetary policy for the euro area as a whole, incl. DEU, ESP, FRA, ITA. The ECB ended its net asset purchases as of July and has announced that it will raise the policy intereste rate. Horizontal axis: Change in cyclically-adjusted primary balance between 2021 and 2022: a positive (negative) change in the cyclically-adjusted primary balance indicates a tighter (looser) fiscal policy.

Figure 7. Debt Vulnerabilities



Sources: Bloomberg Finance L.P.; and IMF staff calculations.
Note: EMBIG countries are those included in the J.P. Morgan Emerging Market Bond Index Global.

9. The near-term challenges from inflation and weakening growth momentum come on top of projections of scarring to medium-term economic prospects and elevated corporate debt. Medium-term economic prospects are projected to be reduced in many emerging market and developing economies relative to pre-pandemic projections. Moreover, the pandemic triggered a severe disruption to education, and the consequent setbacks to human capital accumulation are likely to result in significant economic scarring if left unaddressed.[1] In addition, non-financial corporate debt ratios have risen by about 12 percentage points of GDP on average across G-20 economies between end-2019 and 2021Q3, with

[1] IMF, 2022, G-20 Background Note on Minimizing Scarring from the Pandemic.

firms in sectors that were most impacted by the pandemic having seen the sharpest increase in leverage. This could hold back investment into the medium term and threaten financial stability.

10. In addition, risks are firmly on the downside, with many of the risks closely interconnected. For example, the war in Ukraine and the pandemic can reinforce inflationary pressures and heighten the need for a stronger tightening of monetary policy and financial conditions.

- *A worsening of the war in Ukraine would exacerbate the humanitarian crisis and deepen the recessionary impact in the economies involved.* In addition to the war itself, a marked escalation of sanctions and further disruptions to the gas supply to Europe could plunge many economies into recession and increase global energy prices. The energy crisis could also be compounded by a global food crisis amid a shortage of key commodities—and which could be worsened by further trade restrictions. Supply chain constraints could intensify, for example because of reduced availability of key inputs to production. A prolonged duration of the war could escalate geopolitical tensions and worsen global economic fragmentation pressures.
- *Rising medium-term inflation expectations could become more widespread.* Further shocks to food and energy prices, increasing demand for higher wages, and an insufficient policy response to inflation could intensify the upward drift in inflation expectations. Should they de-anchor, a wage-inflation spiral could ensue, threatening central bank credibility. The necessary central bank response would further weigh on the growth outlook.
- *Tighter global financial conditions, for example as a result of a poorly communicated tightening cycle in major advanced economies, would add to strains in vulnerable economies.* Higher global yields would increase the cost of public and private debt, causing challenges for vulnerable economies with sizable debt rollover needs and large shares of foreign-currency denominated debt. Capital outflows from emerging market and developing economies could amplify this risk.
- *Slower growth in China and other major G-20 economies could further derail the recovery.* China's slowdown could turn out more severe than currently projected, weighing on growth also in trading partners, including through supply chain bottlenecks. A recession in Europe, for example arising from disruptions to the energy supply, or a slowing U.S. economy amid persistently high inflation could jeopardize the chances that central banks can engineer a soft landing from high inflation, exacerbating risks of stagflation.
- *Weather-related climate events would put further strain on food security.* Adverse weather events in large food-producing economies (e.g., *Brazil, United States*) risk compounding food shortages from the war in *Ukraine*, put further pressure on international food prices, and result in severe food shortages across the globe. This could lead to social unrest and exacerbate global inequality.
- *A resurgence of the pandemic could lead to further human loss and economic damage.* A more lethal mutation that escapes immunity could result in a significant blow to lives and livelihoods. Moreover, other viruses could emerge or reappear.

REDUCE INFLATION WITHOUT HALTING GROWTH

Decisive monetary policy tightening is needed in many economies to bring down inflation and to avoid even more difficult challenges later. However, tighter financial conditions will complicate the already difficult task of addressing elevated debt, thereby putting a premium on macroprudential tools. Fiscal policy will need to bring down debt levels but, where needed, must ensure adequate support for the most vulnerable people, including amid slowing growth.

11. **In many economies, monetary policy will need to stay firmly on a tightening path to rein in inflation**. Notwithstanding the short-term costs to growth of decisive monetary policy tightening, continued high inflation and increasing inflation expectations could result in a more difficult situation later on, requiring a more forceful tightening cycle with an attendant larger drag on growth. As such, early action is essential.

- *In most G-20 advanced economies, decisive withdrawal of monetary accommodation—as announced by central banks—remains warranted.* In the *United Kingdom* and the *United States,* where inflation has broadened beyond commodity prices, inflation is running above target, and labor market conditions have tightened, further monetary policy tightening is warranted, subject to incoming data. Where inflation continues to broaden and, in some cases, is accelerating (e.g., *euro area*), monetary policy normalization should continue expeditiously.
- *In many G-20 emerging market economies, where inflation remains above the target, further policy interest rate hikes, already announced by some central banks, are warranted.* In some economies, despite previous hikes, additional tightening of monetary policy setting may be necessary (e.g., *Brazil, Mexico*). Interest rate hikes would also be warranted in *Türkiye* where inflation has surpassed 70 percent. In contrast, in *China*, weak economic activity and muted core inflation continue to allow for an accommodative monetary policy stance.

12. **In addition to domestic challenges, central banks in G-20 emerging market economies must tackle the impact of spillovers from tighter global financial conditions**. As monetary policy tightening in major advanced economies continues and global financial conditions further tighten, G-20 emerging market economies may face capital flow reversals. While the exchange rate represents an important shock absorber, policymakers should stand ready to use their full toolkits, particularly in countries with high vulnerabilities associated with foreign currency debt or poorly anchored inflation expectations. Policy interest rate hikes will be needed in some G-20 emerging market economies, even at the cost of raising the price of domestic credit. In countries with sufficient reserves, intervention in foreign exchange markets may be helpful in the event of disorderly market conditions. However, it will be important that any intervention does not substitute for necessary macroeconomic adjustment. Use of macroprudential policies may also be beneficial, depending on country circumstances. In the event that capital outflows trigger imminent crisis situations, capital flow management measures on outflows may also be part of the policy response.

13. **Financial sector regulators must continue to monitor and act to prevent the build-up of risks to financial stability**. In this respect, a tightening of broad-based or sectoral tools (e.g., limits on loan-to-value and debt-service-to-income ratios) could help lock in resilience or guard against

risks (e.g., from elevated property prices amid the monetary tightening cycle). Where macro-prudential tools are not available, policymakers should urgently develop them. As the withdrawal of monetary policy accommodation and the rollback of other support measures could weigh on loan performance, financial sector supervisory authorities should also ensure that bank asset classifications and loan-loss provisions accurately reflect credit risk and losses. In addition, increased commodity price volatility and the resulting strains on the functioning of commodity markets underscore the need for supervisory authorities to strengthen standards of transparency to counterparties.[2] In parallel, to ensure the smooth functioning of the international financial sector, policymakers need to incorporate cyber risk into financial stability analysis, enhance information-sharing across central banks, and adopt robust incident reporting frameworks. Alongside, efforts should also focus on addressing risks arising from nonbank financial institutions, which are playing an increasingly important role in the financial system, including on cross-border capital flows. Moreover, recent dislocations in the stablecoin market underscore the need for comprehensive crypto regulation. Such regulation should include licensing requirements for crypto-asset service providers and clear requirements for regulated financial institutions to report on their exposures to crypto assets (e.g., *euro area*, *United States*).

14. Amid elevated debt levels, fiscal policy will need to tighten to bring down public sector debt-to-GDP ratios and avoid weakening the effects of monetary policy tightening on inflation. Policymakers will need to act according to their country-specific circumstances, including amid slowing growth. However, in all economies, sound and credible medium-term fiscal frameworks can serve the multiple benefits of helping to manage market expectations and contain borrowing costs while bringing down debt over the medium term. It will also be important that fiscal policy does not work against monetary policy efforts to bring down inflation.

- *Where economic recoveries are further along, fiscal policy needs to shift away from the exceptional support introduced during the pandemic*. This includes, for example, economies such as *Indonesia* and the *United States*. Where inflation is high, such withdrawal of support will also have the benefit of reducing price pressures—in line with the monetary policy objective. Commodity exporters can leverage high commodity prices to help rebuild buffers (e.g., *Saudi Arabia*, *South Africa*).
- *Economies hard-hit by renewed shocks may need to maintain or reintroduce targeted support for the most affected households*. Where the impact of the war in *Ukraine* is having a major impact, the need for consolidation should not prevent governments from continuing with high-priority spending but should be delivered in a budget neutral way. Moreover, the appropriate fiscal response to high food and energy prices will vary depending on the strength of the social protection system.[3] For example, carefully calibrated policy support can help alleviate the impact of high food and energy prices on the most vulnerable low-income and middle-income households (e.g., *Germany*, *France*)—though such measures, where needed, would need to stay temporary to avoid undermining efforts towards the green transition, and an expansion of existing programs is to be preferred in countries with strong social protection systems.

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[2] IMF, 2022, Global Financial Stability Report, April.

[3] IMF, 2022 Fiscal Policy for Mitigating the Social Impact of High Energy and Food Prices, IMF Note/2022/001.

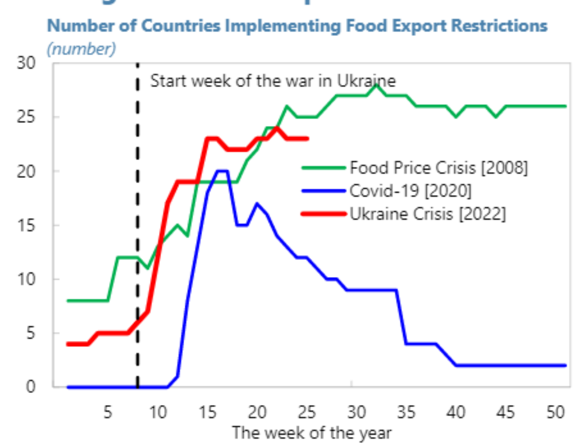
15. Short-term challenges should not distract from medium-term goals. Targeted fiscal measures and the implementation of structural reforms and training programs can help raise productivity-enhancing investments and create jobs. Moreover, at a time where monetary and fiscal policy is tightening, growth-enhancing structural reforms can be particularly beneficial. Crisis support measures should also be adjusted and solvency frameworks should be strengthened, where needed, to avoid hindering productivity-enhancing reallocation and prevent a debt-induced slump in investment. At the same time, urgent action is essential to quell the impact of the pandemic on education and recoup learning losses. Increasing the resilience of the education system would also help enhance preparedness for future pandemics, including by scaling up remote learning technologies.

ADDRESS FRAGMENTATION PRESSURES

Multilateral action is essential to address fragmentation pressures, to end the ongoing pandemic, to mitigate climate change, and to ensure shared prosperity.

16. Multilateralism is a key ingredient for countering deglobalization pressures. The reversal of recently imposed food export restrictions is vital to help mitigate food insecurity globally (Figure 8). In addition, looking ahead, the pandemic-related supply disruptions and the war in *Ukraine* have intensified the risk that imports are increasingly sourced from few economies with close linkages. However, as diversification of inputs to production across countries help boost resilience, governments should work together to reduce trade costs.[4] Helpful actions include the reduction of non-tariff barriers and support for firms through enhanced transparency and information about supply chains, which can facilitate better risk analyses of supply chain networks. In contrast, reshoring policies, which increase the share of inputs that firms source domestically, leave economies more exposed to domestic disruptions. In addition, trade policy uncertainty stifles investment and weakens growth.[5] In this respect, WTO reforms to strengthen trade rules and restore effective dispute settlement would make a major contribution to the global economy by promoting more open and more stable trade policies around the world.

Figure 8. Food Export Restrictions



Sources: Food Security Portal; and IMF staff calculations.
Note: Horizontal axis: 1= first week of the year. Data from the Export restriction tracker (June 27, 2022). Data cover restrictions by both non-G-20 and G-20 economies (*Argentina, India, Indonesia, Russia, Türkiye* have some in place since the *Ukraine* crisis).

[4] IMF, 2022, World Economic Outlook, April.

[5] IMF, 2018, World Economic Outlook, October.

17. Continued international cooperation is also needed to end the pandemic, reach net zero emissions by mid-century, support vulnerable economies, and reform international corporate taxation.

- *Well-designed health policies and investment are needed to end the pandemic and prepare for future ones.* COVID-19 vaccinations have progressed immensely during the past year. However, ending the pandemic requires scaling-up absorptive capacity as well as up-front financing for the ACT Accelerator. Investing in in-country health systems would help ensure preparedness against future threats.

- *Measures equivalent to a global carbon price of US$75 per ton of CO_2 by 2030 are needed to keep global warming below 2°C.* Introducing an international carbon price floor, differentiated by country-specific levels of development, would be a key element of a comprehensive package in the transition to a greener economy. It is also essential to provide a strong anchor for investments in energy systems. Moreover, establishing an international agency for metals—analogous to the International Energy Agency (IEA) for energy—could be instrumental in enhancing transparency through data dissemination and analysis and managing potential bottlenecks.

- *Support for vulnerable economies must be a priority.* Rapidly moving towards effective debt resolution mechanisms to improve the implementation of the G-20 Common Framework for Debt Treatments will be important to support vulnerable economies. In parallel, the newly established Resilience and Sustainability Trust (RST) will help economies build economic resilience and sustainability. Pledges by the G-20 are essential to operationalize the new Trust.

- *Continued joint action on international taxation is vital to support revenue generation and curtail tax avoidance and evasion.* Implementing the 2021 G-20/OECD Inclusive Framework agreement on reforming international corporate taxation in a manner that avoids overcomplexity would help reduce profit shifting by multinationals and tax competition between economies. Building on progress achieved through the Global Forum on Transparency and Exchange of Information for Tax Purposes, establishing beneficial ownership registries, as required by international AML/CFT standards, and building capacity in tax administration—especially for low-income economies—are key for supporting tax compliance and maximizing the benefits from coordination.

Table 1. Real GDP Growth

(percent)

	Year over Year		Projections (Apr. 2022)		Deviations (from Jan. 2022)	
	2020	2021	2022	2023	2022	2023
World	**-3.1**	**6.1**	**3.6**	**3.6**	**-0.8**	**-0.2**
Advanced Economies	-4.5	5.2	3.3	2.4	-0.6	-0.2
Euro area	-6.4	5.3	2.8	2.3	-1.1	-0.2
Emerging Market and Developing Economies	-2.0	6.8	3.8	4.4	-1.0	-0.3
G-20 1/	-2.9	6.3	3.6	3.4	-0.9	-0.4
Advanced G-20 2/	-4.6	5.0	3.2	2.2	-0.7	-0.2
Emerging G-20 3/	-1.4	7.3	3.9	4.5	-1.1	-0.3
Argentina	-9.9	10.2	4.0	3.0	1.0	0.5
Australia	-2.2	4.7	4.2	2.5	0.1	0.0
Brazil	-3.9	4.6	0.8	1.4	0.5	-0.2
Canada	-5.2	4.6	3.9	2.8	-0.2	0.0
China	2.2	8.1	4.4	5.1	-0.4	-0.1
France	-8.0	7.0	2.9	1.4	-0.6	-0.4
Germany	-4.6	2.8	2.1	2.7	-1.7	0.2
India 4/	-6.6	8.9	8.2	6.9	-0.8	-0.2
Indonesia	-2.1	3.7	5.4	6.0	-0.2	0.0
Italy	-9.0	6.6	2.3	1.7	-1.5	-0.5
Japan	-4.5	1.6	2.4	2.3	-0.9	0.5
Korea	-0.9	4.0	2.5	2.9	-0.5	0.0
Mexico	-8.2	4.8	2.0	2.5	-0.8	-0.2
Russia	-2.7	4.7	-8.5	-2.3	-11.3	-4.4
Saudi Arabia	-4.1	3.2	7.6	3.6	2.8	0.8
South Africa	-6.4	4.9	1.9	1.4	0.0	0.0
Spain 5/	-10.8	5.1	4.8	3.3	-1.0	-0.5
Türkiye	1.8	11.0	2.7	3.0	-0.6	-0.3
United Kingdom	-9.3	7.4	3.7	1.2	-1.0	-1.1
United States	-3.4	5.7	3.7	2.3	-0.3	-0.3
European Union	-5.9	5.4	2.9	2.5	-1.1	-0.3

Sources: IMF, *World Economic Outlook*, January 2022 and April 2022 updates.
1/ G-20 aggregates exclude the *European Union*.
2/ Includes *Australia, Canada, France, Germany, Italy, Japan, Korea, United Kingdom*, and *United States*.
3/ Includes *Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa*, and *Türkiye*.
4/ For *India*, data and forecasts are presented on a fiscal year basis, with FY 2021/22 starting in April 2021.
5/ *Spain* is a permanent invitee.