Builds on previous research

- A number of other studies use a similar framework to examine determinants of commonalities in commodity prices; see, for instance, Byrne, Fazio, and Fiess (2013); Lombardi, Osbat, and Schnatz (2010); Poncela, Senra, and Sierra (2014); and Vansteenkiste (2009)

Counterpoint to earlier claims

- Note that these global demand and supply shocks differ materially from the commodity demand and supply shocks modelled in Kilian and Murphy (2014) and others (Baumeister and Hamilton 2019; Jacks and Stuermer 2020). Here, an increase in both economic activity and commodity prices can reflect either a global demand or global supply shock—depending on movements in global inflation

Confirmation of earlier findings

- The persistence of the response of commodity prices to commodity market shocks can partly be attributed to a low elasticity of supply because of considerable lead times between resource discovery and production. The important role played by supply shocks in the late 1990s is consistent with other studies; see Charnavoki and Dolado (2014); Dieppe (2020); Kabundi and Zahid (forthcoming); Kotwal, Ramaswami, and Wadhwa (2011); Topalova and Khandelwal (2011); World Bank (2020c); and Zhu (2012)

Highlights:

- As the recovery from the pandemic-induced global recession continues, it is evident that there are commonalities and differences in conditions across emerging market and in developing economy (EMDE) regions

- Following cyclical rebounds in 2021, growth rates in most EMDE regions are projected to revert in 2022-23 to about the average during the decade prior to the pandemic, East Asia and Pacific (EAP) will fall short

- Historical umbrella frameworks for debt relief included the Paris Club founded in 1956; the Brady Plan launched in 1989; and the heavily indebted poor countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI) of 1996 and 2005, respectively

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- During 1970-96 supply shocks specific to particular commodity markets—such as the 1970s and 1980s oil price shocks—were the main source of variability in global commodity prices. These results suggest that the role played by developments specific to commodity markets in driving commodity price volatility may have diminished over time

- A 1 percent increase in global supply raised global commodity price by 1.6 percentage points over the following 7 months and the effect remained statistically significant for a year and a half

- The role of the common global factor in capturing price movements is largest, and has increased the most, for industrial commodities, consistent with the close link between demand for these commodities and global economic activity. Global demand shocks, such as recessions, have accounted for half of the variability of global commodity prices since the mid-1990s. Commodity price shocks, such as those arising from adjustment to long-term trends in supply and demand have accounted for just under a third of the variability in global commodity prices since the mid-1990s

Summary

Introduction_

- Output is projected to remain below the pre-pandemic trend through the forecast horizon, and all regions face downside risks from resurgences of COVID-19, tightening financial conditions, and extreme weather and other natural disasters.

- The degree of shortfalls from the pre - pandemic trend varies widely across and within regions Other risks—such as sluggish COVID-19 vaccination, lower-than-expected commodity prices, geopolitical tensions, social unrest, and food insecurity—stand to impact some regions more than others.

- What are the cross-regional differences in the outlook for growth? What are the key risks to the outlook for each region? (Remain important questions to ponder on)

- Following cyclical rebounds in 2021, growth rates in most EMDE regions are projected to revert in 2022-23 to about the average during the decade prior to the pandemic, East Asia and Pacific (EAP) will fall short.

- In EAP, downshifting growth in China, reflecting additional regulatory tightening and rapid deleveraging of the real estate sector, will account for most of the 2 percentage-point gap with the pre-pandemic average

M***ethodology_***

- Standard techniques used to study business cycles are applied to 67 global commodity prices.

- The procedure applied is a widely used algorithm for dating business cycles, and largely follows Harding and Pagan (2002) and Cashin, McDermott, and Scott (2002).

- The algorithm is applied to real commodity price series at the monthly frequency.

- The sample includes commodities spanning energy (10 prices), metals and minerals (7 prices), precious metals (3 prices), agriculture, fertilizers (5 prices), and raw materials (8 prices).

- To better capture the behavior of different agricultural commodities, separate indexes were constructed for the prices of annual and perennial agricultural commodities..

- A boom in commodity markets is defined as a trough-to-peak rise in commodity prices; a slump as a peak-to-trough decline.

- A cycle consists of both a boom and the subsequent slump.

- A number of months between troughs and peaks, and the magnitude of changes in commodity prices during this period, are the duration and amplitude, respectively.

- Slope is defined as the average monthly amplitude.

- Synchronization of phases between commodity prices is assessed by the concordance statistic, which measures the proportion of time that two series are concurrently in the same phase.

- A dynamic factor model in the spirit of Kose, Otrok, and Whiteman (2003) is adopted to analyze the co - movement of commodity prices.

- The common factor derived from 39 commodity price series represents global commodity price growth.

- The global factor plays an important role in driving fluctuations in industrial commodity prices.

- During 1970-2021, it accounted for as much as 22-37 percent of the variation in the prices of base metals, rubber, and platinum, and 18 percent of the variation in energy prices, on average.

- Only 2-14 percent of the variation in the prices of agricultural commodities, precious metals, and fertilizers, on average, is accounted for by the global factor.

- The relatively larger contribution of the global factor in explaining the variation in the prices of industrial commodities reflects the strong response of metal and energy consumption to industrial activity (Baffes, Kabundi, and Nagle 2021)

- This is in contrast to agricultural commodities where supply shocks, resulting mainly from weather conditions and policies, typically play a larger role than demand-side factors.

- To analyze the links between short term fluctuations in global economic activity and global commodity prices, a factor-augmented vector autoregression (FAVAR) model is estimated with three global variables—global consumer price inflation, global industrial production growth, and global commodity price growth—over 1970-2021.

- Global supply shocks, and commodity price shocks are identified using a set of sign restrictions on the interactions between these three variables on impact.

- Since 1970, global supply and commodity market shocks have had longer-lasting impacts on global commodity price growth than global demand shocks.

- The persistent response of commodity prices to commodity market shocks can partly be attributed to a low elasticity of supply resulting from the considerable lead times between resource discovery and production (World Bank 2016).

- It can take anywhere from a few years to several decades to develop resources, depending on the type of resource, the size and grade of the deposit, financing conditions, and country-specific factors (UNECA 2011)

- This Special Focus offers the following findings.

- Debt restructuring frameworks. Historical umbrella frameworks for debt relief included the Paris Club founded in 1956; the Brady Plan launched in 1989; and the HIPC Initiative and MDRI of 1996 and 2005, respectively.

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- In these initiatives, debt relief was granted by multiple creditors to multiple debtor countries on common principles, even if sometimes negotiated on a case-by-case basis.

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- These initiatives shared several commonalities: substantial—but protracted—debt stock reduction and being preceded by a series of less ambitious debt relief efforts.

- The Common Framework shares some of the features of the precursors of past umbrella debt restructuring frameworks in that it primarily envisions debt relief in the form of maturity extensions and interest rate reductions instead of face value reductions, it recognizes that in the most difficult cases debt write-offs may be needed.

- Future debt restructurings will face greater challenges than those in the past due to a more fragmented creditor base which poses larger difficulties in coordinating and negotiating debt relief efforts

Key takeaways :

- The preceding analysis finds evidence of substantial co - movement between commodity prices, and between commodity prices and global economic activity.

- These co - movements appear to have intensified over time.

- The role of the common global factor in capturing price movements is largest, and has increased the most, for industrial commodities, consistent with the close link between demand for these commodities and global economic activity.

- The global demand shocks such as recessions, have accounted for half of the variability of global commodity prices since the mid - 1990

- Global demand shocks, such as recessions, have accounted for half of the variability of global commodity prices since the mid-1990s.

- Commodity price shocks, such as those arising from adjustment to long-term trends in supply and demand have accounted for just under a third of the variability in global commodity prices since the mid-1990s

- As the world enters the third year of the COVID19 crisis, economic developments have been both encouraging and troubling, clouded by many risks and considerable uncertainty.

- The good news is that output in many countries rebounded in 2021 after a sharp decline in 2020. Advanced economies and many middle-income countries have reached substantial vaccination rates. International trade has picked up, and high commodity prices are benefiting many developing countries. Domestic financial crises and foreign debt restructurings have been less frequent than might have been expected in a time of severe global shocks.

- Yet, for many developing countries, progress toward recovery has been hampered by daunting challenges. This edition of Global Economic Prospects analyzes three of them.

- Macroeconomic imbalances have reached unprecedented proportions. Government spending, deficits, and debt in several advanced economies have reached record highs relative to GDP. Central bank balance sheets have absorbed unprecedented amounts of long-term assets financed by bank reserves, resulting in an inequitable allocation of capital. Spending in developing countries surged to support economic activity during the crisis, but many countries are now facing record levels of external and domestic debt. Adding to these debt-related risks is the potential for higher interest rates: it is difficult to predict how rapidly interest rates will rise as advanced economies slow down their expansion in monetary policies. With fiscal and monetary policy in uncharted territory, the implications for exchange rates, inflation, debt sustainability, and economic growth are unlikely to be favorable for developing countries.

- The world is facing growing income inequality across and within countries. The COVID-19 crisis wiped out years of progress in poverty reduction. As government's fiscal space has narrowed, many households in developing countries have suffered severe employment and earning losses—with women, the unskilled, and informal workers hit the hardest. School closures and sustained disruptions to healthcare services can do lasting damage to human capital, especially among children and the most vulnerable. At the other end of the income scale, booming asset prices are boosting the wealth of richer segments of the population, adding to inflation. This increasing divergence of fortunes is especially troubling given the possibility of social discontent in developing countries.

- Compounding this rising inequality, the world is undergoing a phase of exceptional uncertainty. The emergence of the Omicron variant is a stark reminder that the COVID-19 pandemic is not over. New variants of the virus can put even highly vaccinated countries under pressure and threaten to wreak havoc in those with low vaccination rates—which are the poorest and most vulnerable of all. Supply bottlenecks have hit developing countries hard—these countries are often the last in the global supply line, outbid by countries with greater financial resources and larger orders. Ports operating below capacity, pandemic-related delays in orders for new vessels, and containers stranded in the "wrong" ports have increased shipping costs and supply constraints to unprecedented levels. Volatile commodity prices and extreme weather events driven by climate change are aggravating food insecurity risks, further burdening health and nutrition.

- Progress in vaccination is key to restoring mobility and overcoming supply-chain disruptions. For most of 2021, the main obstacle was the limited access to vaccine doses, with low income countries suffering the most. At the start of 2022 the supply of vaccines is increasing appreciably, but new variants and vaccine deployment bottlenecks remain major obstacles, xvii causing the uncertainty over health to persist well into the future.

- In response, this edition of Global Economic Prospects charts a policy agenda for the world to address these three major challenges.

- To soften the increased global inequality, this report calls for a concerted effort to mobilize external resources and accelerate debt relief efforts. The recent $93 billion replenishment of the International Development Association (IDA) —the World Bank's fund for the poorest countries—is a key milestone in this respect. More progress, however, is needed on the implementation of the G20's Common Framework for debt restructuring for low-income countries under stress. In 2022 alone, around $35 billion in bilateral and private debt-service payments will become due on the public and publicly guaranteed debt of IDA countries. Given that burden, vulnerable countries will find it increasingly difficult to support recovery or direct resources to health, education, social protection, and climate.

- Some of the most important steps to contain inequality can come from domestic growth and innovation. The digital revolution offers an opportunity to strengthen social protection systems and health and education services. It can enable access to finance and help create new jobs and economic opportunities. E-government initiatives can facilitate access to public services for the poor and encourage entrepreneurs. Greater access to continuous electricity supply will be a vital first step. In addition, policy measures to facilitate cross-border trade and investment— especially if combined with reforms in developing countries to improve business climates, human and physical capital—can help these countries generate the productivity growth needed to catch up to advanced-economy per capita incomes.

- To enable social spending while investing more in infrastructure, climate adaptation and clean energy will require a careful review and prioritization of public spending, subsidies, and measures to expand the tax base. It will be equally important to strengthen financial systems, and to re profile debt to spread out repayments and reduce exchange-rate risks. Food-price inflation and supply shortages call for heightened attention to food security, particularly in fragile and conflict-affected countries. Access to clean water and better nutrition are vital to reduce stunting. Carbon taxes and the reduction of fossil fuel subsidies are important steps in reducing greenhouse gas emissions, but high energy prices are making the implementation of these policies more challenging.

- Against this mix of encouraging and troubling news, it is clear that challenging times lie ahead for the global economy—and particularly for developing countries—as economic stimulus slows and credit conditions tighten. Putting more countries on a favorable growth path will require concerted international action and a comprehensive set of national policy responses.

- The global recovery is set to decelerate markedly amid continued COVID-19 flare-ups, diminished policy support, and lingering supply bottlenecks. In contrast to that in advanced economies, output in emerging market and developing economies (EMDEs) will remain substantially below the pre-pandemic trend over the forecast horizon. The global outlook is clouded by various downside risks, including renewed COVID-19 outbreaks due to Omicron or new virus variants, the possibility of de-anchored inflation expectations, and financial stress in a context of record-high debt levels. If some countries eventually require debt restructuring, this will be more difficult to achieve than in the past. Climate change may increase commodity price volatility, creating challenges for the almost two-thirds of EMDEs that rely heavily on commodity exports and highlighting the need for asset diversification. Social tensions may heighten as a result of the increase in between-country and within-country inequality caused by the pandemic. Given limited policy space in EMDEs to support activity if needed, these downside risks increase the possibility of a hard landing. These challenges underscore the importance of strengthened global cooperation to foster rapid and equitable vaccine distribution, proactive measures to enhance debt sustainability in the poorest countries, redoubled efforts to tackle climate change and within-country inequality, and an emphasis on growth-enhancing policy interventions to promote green, resilient, and inclusive development and on reforms that broaden economic activity to decouple from global commodity markets.

- Global Outlook. After rebounding to an estimated 5.5 percent in 2021, global growth is expected to decelerate markedly to 4.1 percent in 2022, reflecting continued COVID-19 flare-ups, diminished fiscal support, and lingering supply bottlenecks. The near-term outlook for global growth is somewhat weaker, and for global inflation notably higher, than previously envisioned, owing to pandemic resurgence, higher food and energy prices, and more pernicious supply disruptions. Global growth is projected to soften further to 3.2 percent in 2023, as pent-up demand wanes and supportive macroeconomic policies continue to be unwound. Although output and investment in advanced economies are projected to return to pre-pandemic trends next year, in emerging market and developing economies (EMDEs)— particularly in small states and fragile and conflict -afflicted countries—they will remain markedly below, owing to lower vaccination rates, tighter fiscal and monetary policies, and more persistent scarring from the pandemic.

- Various downside risks cloud the outlook, including simultaneous Omicron-driven economic disruptions, further supply bottlenecks, anchoring of inflation expectations, financial stress, climate-related disasters, and a weakening of long-term growth drivers. As EMDEs have limited policy space to provide additional support if needed, these downside risks heighten the possibility of a hard landing. This underscores the importance of strengthening global cooperation to foster rapid and equitable vaccine distribution, calibrate health and economic policies, enhance debt sustainability in the poorest countries, and tackle the mounting costs of climate change. EMDE policy makers also face the challenges of heightened inflationary pressures, spillovers from prospective advanced-economy monetary tightening, and constrained fiscal space. Despite budgetary consolidation, debt levels—which are already at record highs in many EMDEs—are likely to rise further owing to sustained revenue weakness. Over the longer term, EMDEs will need to buttress growth by pursuing decisive policy actions, including reforms that mitigate vulnerabilities to commodity shocks, reduce income and gender inequality, and enhance preparedness for health- and climate-related crises.

- Regional Prospects. Growth in most EMDE regions in 2022-23 is projected to revert to the average rates during the decade prior to the pandemic, with the exception of East Asia.

- Pacific. This pace of growth will not be enough to recoup output setbacks during the pandemic, however. By 2023, annual output is expected to remain below the pre-pandemic trend in all EMDE regions, in contrast to advanced economies, where the gap is projected to close. The pace of recovery will be uneven across and within regions, with downside risks dominating the outlook. On a per capita basis, the recovery may leave behind those in economies that experienced the deepest contractions in 2020, such as tourism-reliant island economies. Half or more of economies in East Asia and Pacific, Latin America and the Caribbean, and the Middle East and North Africa, and two-fifths of economies in Sub-Saharan Africa, will still be below their 2019 per capita GDP levels by 2023.

- This edition of Global Economic Prospects also includes analytical pieces on the features and implications of global commodity price cycles, the impact of the COVID-19 pandemic on global income inequality, and the experience with past coordinated debt restructurings.

- Commodity Price Cycles: Drivers and Policies. Commodity prices soared in 2021 following the broad-based decline in early 2020, with prices of several commodities reaching all-time highs. In part, this reflected the strong rebound of demand from the 2020 global recession. Energy and metal prices generally move in line with global economic activity, and this tendency has strengthened in recent decades. Looking ahead, global macroeconomic developments and commodity supply factors will likely continue to cause recurring commodity price swings. For many commodities, these may be amplified by the transition away from fossil fuels. To dampen the associated macroeconomic fluctuations, the almost twothirds of EMDEs that are commodity exporters need to strengthen their policy frameworks and reduce their reliance on commodity-related revenues by diversifying exports and, more importantly, national asset portfolios.

- Impact of COVID-19 on Global Income Inequality. The COVID-19 pandemic has raised global income inequality, partly reversing the decline that was achieved over the previous two decades. Weak recoveries in EMDEs are expected to return between-country inequality to the levels of the early 2010s. Preliminary evidence suggests that the pandemic has also caused within-country income inequality to rise somewhat in EMDEs because of particularly severe job and income losses among lower-income population groups. Over the medium and long term, rising inflation, especially food price inflation, as well as pandemic-related disruptions to education may further raise within-country inequality. Within country inequality remains particularly high in EMDE regions that account for about two-thirds of the global extreme poor. To steer the global recovery onto a more equitable development path, a comprehensive package of policies is needed. A rapid global rollout of vaccination and redoubled productivity-enhancing reforms can help lower between-country inequality. Support targeted at vulnerable populations and measures to broaden access to education, health care, digital services and infrastructure, as well as an emphasis on supportive fiscal measures, can help lower within-country inequality. Assistance from the global community is essential to expedite a return to a green, resilient, and inclusive recovery.