

# TRADE AND DEVELOPMENT REPORT 2023

Growth, Debt, and Climate:  
Realigning the Global  
Financial Architecture



United  
Nations

Part I

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# Chapter I

Current Trends  
and Challenges  
in the Global  
Economy: Stalling  
or Falling?





## Crisis averted?

### How to future-proof against systemic shocks

Today's global economic landscape is characterized by growing inequalities and divergence of growth paths between key regions. The world economy is flying at "stall speed", with projections of a modest growth of 2.4 per cent in 2023, meeting the definition of a global recession. Cautiously, the outlook for 2024 suggests a modest growth improvement (2.5 per cent), contingent upon the euro area's recovery and the avoidance of adverse shocks by other leading economies.

While many economies will grapple with divergent recovery paths, deepening inequalities and mounting pressures of indebtedness, global growth is unlikely to rebound sufficiently to pre-pandemic trends. This means that urgent needs like food security, social protection, and climate adaptation risk not being addressed.

Compounding these issues is the absence of adequate multilateral responses and coordination mechanisms. Without decisive action, the fragility of the global economy and an array of diverse shocks risk evolving into systemic crises. Policymakers must navigate these challenges on multiple fronts to chart a more robust and resilient trajectory for the future.

To avert tomorrow's potential crises, this report urges policymakers to adopt a policy mix prioritizing the reduction of inequalities and the delivery of sustainable, investment-led growth and development.

### Recommendations include

- Central banks must strengthen international coordination with a greater focus on long-term financial sustainability for the private and public sectors, and not just on price stability;
- Policymakers must enable advocate concerted increases of real wages and make concrete commitments towards comprehensive social protection;
- Investment in the energy transition process in developing countries must be actively pursued, by making technology and finance available and affordable, requiring stronger multilateral cooperation and appropriate agreements in the World Trade Organization (WTO), the International Monetary Fund (IMF) and the World Bank.

## A. INTRODUCTION

The global economy is flying at “stall speed”, with projected growth in 2023 of 2.4 per cent, meeting the conventional criteria for a global recession. The entire global economy, except East and Central Asia, has slowed since 2022. On a brighter note, inflation, while still above pre-pandemic years, is coming under control in many parts of the world. The banking crises that erupted in March 2023 did not lead to financial contagion, and commodity prices are down from their peaks in 2022. A small improvement in global growth is expected in 2024, contingent on the recovery in the euro area and other leading economies avoiding adverse shocks.

While there is a glimmer of hope on the horizon, celebrations of success would be inappropriate. Global growth, while showing some signs of improvement, has not sufficiently rebounded to pre-pandemic rates. This challenge compounds the difficulty of meeting critical needs such as food security, social protection, and climate adaptation, especially given the weakened foundation resulting from the global health pandemic.

Against this background, 2023 may turn out to be an inflection point in a fragile and uneven global recovery. Without adequate multilateral policy responses or coordination mechanisms, today's brittle economies and diverse shocks might evolve into tomorrow's systemic crises. This scenario is a threat to the multilateral system and global economic stability. Policymakers need to operate on multiple fronts to chart a stronger, more resilient trajectory for the future.

Analysis shows that three worrying trends are emerging in 2023:

- Divergent recovery paths in the context of slower growth across major regions;
- Deepening inequalities in income and wealth;
- Growing pressures of indebtedness and thinning policy autonomy in developing economies.

These three factors build onto an increasingly complex interplay between economic, climate and geopolitical risks. Growing inequalities within countries are a source of weak global demand and continue to hold back investment and growth. Divergence of low-growth trends between key regions, as well as within the Group of Seven (G7) and the initial BRICS countries (Brazil, the Russian Federation, India, China and South Africa), indicates that there is no clear driving force to propel the world economy onto a robust and sustainable recovery track.

*“There is no clear driving force to propel the world economy onto a robust and sustainable recovery track.”*

Historically, growth divergence has led to uncoordinated domestic policy actions with negative global repercussions, especially for developing countries. Today, policy discussions in advanced economies often overlook systemic links and multilateral forums for policy coordination, such as the Group of Twenty (G20), are not remedying the problem. This can hinder international cooperation and prevent the global economy from taking a sustainable recovery path.

The prospects for developing countries are especially concerning. Development requires a favourable external environment, characterized by strong global demand, stable exchange rates and affordable financing. Developing countries' ability to accelerate growth, strengthen productive capacities, decarbonize and meet their financial obligations is fundamentally dependent on steady and strong global demand. But international policy coordination centres on central banks that prioritize short-term monetary stability over long-term financial sustainability. This trend, together with inadequate regulation in commodity markets and continuous neglect for rising inequality are fracturing the world economy.

These threats are amplified by the uncertain impact of slower than expected growth in China and a deceleration of the economies in Europe, many of which have all but ground to a halt. They are particularly concerning given the present context, marked by a slowdown in the investment cycle, the impact of geopolitical conflicts on the structure of trade, food and energy security and the mounting costs of climate change and transition,

all compounded by uncertainty in the outcome of the of the 2024 United States elections. Even if growing financial risks in the larger economies do not trigger sharper shocks, a development crisis is already unfolding, with countries across the global South facing increasing debt service obligations.

For people and planet, further rounds of monetary tightening to obtain quick disinflation in the advanced economies would mean more economic and social disruption at a time when recovery has stalled. An ongoing slowdown diminishes prospects for trade and investment, prompting a further loss of momentum, higher inequality and debt burdens expanding relative to gross domestic product (GDP).

Against this context, 2024 is unlikely to show substantial improvement. A strategy of growth in the global North becomes less feasible if high levels of debt (chapters II and V) and inadequate financial regulation threaten financial stability and food security (chapter III), and while income is increasingly retained by capital owners rather than workers (figure I.1). In the face of a crisis, previous coordination efforts have tended to ignore sectors or countries that are not considered systemically relevant, thus compounding the very crisis they sought to resolve. This mistake should be avoided at all costs.

*“Monetary policy in advanced economies should take into account the damage that high interest rates can cause, in terms of structural change, climate adaptation and debt sustainability.”*

This Report presents an alternative response, in which the pace of disinflation takes into consideration the impact of high real interest rates not only on inflation indicators, but also on economic activity, employment, income inequality and fiscal stability. In an interconnected world in which developing countries are potential engines of economic growth, policymakers in advanced economies should take into account the damage that high interest rates can cause to long-term investment

– both in terms of structural change and climate adaptation – as well as debt sustainability. In the current international financial architecture, policy space is easily curtailed by movements in financial markets, with heavy impacts on social policies, investment and employment generation.

To address these problems, this Report suggests that:

1. Reducing inequality should be made a policy priority in developed and developing countries, keeping close watch on the labour share. This requires concerted increases of real wages and concrete commitments towards comprehensive social protection. Monetary policy is not to be used as a sole policy tool to alleviate inflationary pressures. With supply-side problems still unaddressed, a policy mix is needed to attain financial sustainability, help lower inequalities and deliver inclusive growth.
2. In light of growing interdependencies in the global economy, central bankers should assume a wider stabilizing function, which would help balance the priorities of monetary stability with long-term financial sustainability.
3. Internationally, a systemic approach to regulating commodity trading generally, and food trading in particular, needs to be developed within the framework of the global financial architecture.
4. To help address the crushing burden of debt servicing and the threat of spreading debt crises, reforms are needed to the rules and practices of the global financial architecture. This architecture should ensure reliable access to international liquidity and a stable financial environment that promotes investment-led growth. Given the failure of the current architecture to facilitate the resilience and recovery of developing countries from debt stress, it is crucial to establish a mechanism to resolve sovereign debt workouts. This should be based on the participation of all developing countries and have agreed procedures, incentives and deterrents.
5. Finally, the energy transition would require not only fiscal and monetary agreements among the G20, but also agreements within the WTO to implement technology transfer, and within the IMF and World Bank to provide reliable access to finance. Without eliminating the incentives and regulatory conduits that make cross-border speculative investment so profitable, private capital is unlikely to be channelled to measures to help adapt to climate change.

*“A policy mix is needed to attain financial sustainability, help lower inequalities and deliver inclusive growth.”*

The chapter is structured as follows. Section B examines the emerging risks to post-COVID-19 growth trend at the global level. It finds that divergence within key regional blocks and between major economies clouds the fragile growth of 2023, with downside risks lingering into 2024. Section C analyses the sectoral contribution to global demand growth in G20 economies. Section D identifies some of the key dimensions of the asymmetry between growing corporate concentration on the one hand and thinning fiscal policy space on the other. Section E discusses credit, investment and the impact of monetary policy on income and wealth inequality. Section F explores inflation, distribution and the easing or persistence of inflationary trajectories. Section G looks at labour costs and inequality. Section H concludes.

## B. GLOBAL GROWTH LANDSCAPE: DIVERGENCE UNDER THE CLOUDS OF UNCERTAINTY

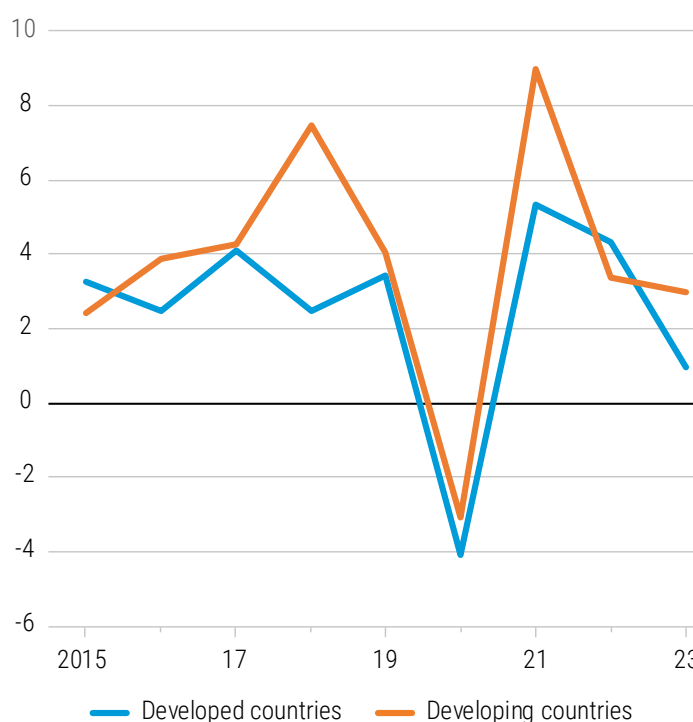
The growth of the world economic output is expected to decelerate to 2.4 per cent in 2023, before registering a small uptick to 2.5 per cent in 2024. (table I.1). These are among the lowest growth rates of the last four decades, outside of crisis years. Moreover, the figure for 2023 is below the conventional threshold of 2.5 per cent which marks recession in the global economy. These projections are subject to downside risks which have increased in recent months.

All regions, except for East and Central Asia, are expected to post slower growth this year than in 2022, with the largest drop (2.3 points) occurring in Europe. Likewise, among G20 countries, only Brazil, China, Japan, Mexico and the Russian Federation are expected to see a growth improvement, with considerable variation. Of particular concern, given the ambitious development and climate targets set by the international community with a 2030 delivery date, growth in 2023 and 2024 is also set to fall below the average for the five-year period before the pandemic, in all regions. Latin America is the exception, where growth in the earlier period was particularly weak (ECLAC, 2023).

In 2023, global growth showed uneven deceleration. Larger emerging economies are unlikely to provide a robust offset to slower growth in advanced economies. With tighter monetary policy, low investment (figure I.1), and limited government spending, the world economy is experiencing a lacklustre recovery reminiscent of the aftermath of the 2008–2009 financial crisis.

**Figure I.1 Private investment is slowing down sharply again**

Growth of private investment  
(Percentage change)



**Source:** UNCTAD calculations based on the United Nations Global Policy Model and database.

**Note:** GDP at constant 2015 prices, PPP.

**Table I.1 World output growth, 1991–2024**

(Annual percentage change)

Country groups	1991–1999 <sup>a</sup>	2000–2009 <sup>a</sup>	2010–2014 <sup>a</sup>	2015–2019 <sup>a</sup>	2019	2020	2021	2022	2023 <sup>b</sup>	2024 <sup>b</sup>	Revision for 2023 <sup>c</sup>
<b>World</b>	2.9	3.3	3.2	3.0	2.5	-3.2	6.1	3.0	2.4	2.5	+0.3
<b>Africa</b>	2.4	5.5	2.7	3.0	2.6	-2.4	4.5	3.1	2.7	3.0	+0.2
North Africa (incl. South Sudan)	2.7	5.3	-1.9	4.1	2.3	-3.3	4.8	1.9	2.9	3.0	+0.1
South Africa	2.7	4.0	2.5	1.0	0.3	-6.0	4.7	2.0	0.0	1.0	+0.3
Sub-Saharan Africa (excl. South Africa and South Sudan)	2.0	6.4	6.3	2.9	3.4	-0.9	4.2	4.0	3.2	3.4	+0.2
<b>America</b>	3.4	2.5	2.4	1.9	1.7	-3.8	6.0	2.5	2.0	1.8	+0.9
Latin America and the Caribbean	3.2	3.5	3.4	0.1	-0.3	-7.1	6.7	3.9	2.3	1.8	+1.0
Central America (excl. Mexico) and the Caribbean	2.8	4.4	3.6	3.0	2.2	-8.6	8.2	4.8	2.9	2.9	+0.4
Mexico	3.0	1.9	3.2	2.1	-0.2	-8.0	4.7	3.0	3.2	2.1	+1.4
South America	3.4	3.9	3.4	-0.9	-0.7	-6.6	7.2	4.0	1.9	1.6	+0.9
Argentina	4.6	3.8	2.7	-0.3	-2.0	-9.9	10.4	5.0	-2.4	-0.6	-1.9
Brazil	2.9	3.6	3.2	-0.4	1.2	-3.3	5.0	2.9	3.3	2.3	+2.4
North America	3.4	2.3	2.1	2.3	2.3	-3.0	5.9	2.2	1.9	1.8	+0.9
Canada	2.8	2.3	2.6	2.0	1.9	-5.1	5.0	3.4	1.3	1.0	-0.8
United States	3.5	2.3	2.1	2.3	2.3	-2.8	6.0	2.1	2.0	1.9	+1.1
<b>Asia (excl. Cyprus)</b>	4.3	5.6	5.7	4.8	3.7	-0.9	6.5	3.6	3.9	3.9	-0.0
Central Asia	-4.4	8.3	6.8	3.4	3.8	-1.2	5.3	4.5	4.5	3.8	+0.1
East Asia	4.4	5.6	5.8	4.8	4.0	0.4	6.7	2.4	3.8	3.8	-0.1
China	11.0	10.6	8.6	6.8	6.0	2.2	8.4	3.0	4.6	4.8	-0.2
Japan	1.2	0.9	1.4	0.9	-0.4	-4.3	2.2	1.0	2.3	0.9	+0.7
Republic of Korea	6.8	4.9	3.6	2.9	2.2	-0.7	4.2	2.6	0.9	2.1	-1.0
South Asia	4.7	6.3	5.4	6.0	3.7	-3.8	7.7	5.8	5.2	5.2	+0.1
India	5.9	7.2	6.6	7.0	4.6	-6.0	8.9	6.7	6.6	6.2	+0.6
South-East Asia	5.3	5.4	5.6	5.0	4.3	-3.9	4.0	5.4	3.9	4.2	-0.1
Indonesia	4.8	5.2	5.8	5.1	5.0	-2.1	3.7	5.2	4.2	4.1	-0.4
Western Asia (excl. Cyprus)	4.1	5.0	5.5	2.9	1.4	-3.2	6.3	6.6	3.3	2.7	+0.2
Saudi Arabia	1.7	4.0	5.8	1.9	0.8	-4.3	3.9	8.7	2.5	2.9	-1.0
Türkiye	3.9	5.0	7.6	4.3	0.8	1.9	11.4	5.6	3.7	1.9	+1.1
<b>Europe (incl. Cyprus)</b>	1.3	2.2	1.2	2.1	1.8	-6.0	5.8	2.9	0.6	1.2	+0.1
European Union (27 Members)	1.9	1.8	0.8	2.2	1.8	-5.7	5.6	3.4	0.4	1.2	-0.3
Euro area	1.9	1.6	0.6	2.0	1.6	-6.1	5.4	3.4	0.4	1.2	-0.3
France	1.8	1.6	1.1	1.7	1.8	-7.8	6.8	2.5	0.9	1.2	-0.1
Germany	1.6	1.0	2.0	1.8	1.1	-3.7	2.6	1.8	-0.6	1.1	-0.6
Italy	1.5	0.7	-0.8	1.1	0.5	-9.0	7.0	3.7	0.6	0.8	-0.1
Russian Federation	-5.9	6.2	3.1	1.2	2.2	-2.7	5.6	-2.1	2.2	1.9	+3.6
United Kingdom	2.3	2.0	1.8	2.1	1.6	-11.0	7.6	4.1	0.4	0.4	+0.4
<b>Oceania</b>	3.7	3.2	2.8	2.7	2.1	-1.8	5.1	3.5	1.8	1.5	-0.1
Australia	3.7	3.3	2.8	2.5	1.9	-1.8	5.2	3.7	1.9	1.5	+0.0
<b>Memorandum items:</b>											
<b>Developed countries</b>	2.3	2.2	1.7	2.1	1.8	-4.2	5.4	2.4	1.4	1.5	+0.4
<b>Developing countries</b>	4.9	6.4	5.8	4.4	3.6	-1.6	7.1	3.9	3.9	4.0	+0.1

**Source:** UNCTAD calculations, based on United Nations Global Policy Model; United Nations, Department of Economic and Social Affairs, National Accounts Main Aggregates database, and *World Economic Situation and Prospects* (WESP): Update as of Jun-2023; ECLAC, 2023; Organisation for Economic Co-operation and Development (OECD), 2023; International Monetary Fund (IMF), *World Economic Outlook*, spring 2023; Economist Intelligence Unit, EIU CountryData database; JP Morgan, Global Data Watch; and national sources.

**Note:** The composition of the five geographical regions follows the M49 standard of the United Nations Statistics Division. The distinction between developed and developing countries is based on the updated M49 classification of May 2022. Calculations for country aggregates are based on GDP at constant 2015 dollars.

<sup>a</sup> Average.

<sup>b</sup> Forecasts.

<sup>c</sup> Revisions relate to comparisons with forecasts presented in April 2023 in an UNCTAD *Trade and Development Report* update.

So far in 2023, four main factors have shaped the global outlook. Each introduces considerable uncertainty into near-term projections:

1. International prices of oil, gas and food have returned to late 2021 levels eliminating a powerful driver of inflation. However, retail prices in many countries remain higher than pre-pandemic averages, putting pressure on household budgets. While relief from major supply-side drivers of inflation would allow governments to address profiteering domestically, most major central banks continue to signal the likelihood of ongoing elevated interest rates.
2. The United States, comprising a quarter of the world economy, has displayed resilience throughout two years of rising consumer price inflation (April 2020–June 2022), despite a year of blanket disinflation policies (11 interest rate hikes in 18 months) and sporadic financial market disruptions. Key parts of the economy, buoyed by employment and nominal wage growth, have sustained consumption and spending. While unemployment has reached historic lows, the employment rate remains at recession levels, standing at 58 per cent of the population. Additionally, weakness in the manufacturing sector and recent aggregate figures<sup>1</sup> have heightened the risk of a sharper slowdown in the latter half of 2023.
3. In China, lifting of the remaining COVID-19-related restrictions has helped sustain the recovery which began in 2022 and which enabled a revamp of industrial production. The country's economic growth relies less on exports than in the past (table I.2) and the government continues to enjoy considerable fiscal space. However, persistent weaknesses in the real estate sector pose challenges, including potential financial stress, reduced job creation, constrained consumer spending and delayed investments. Additionally, escalating geopolitical tensions are disrupting how China dominates key global value chains, clouding prospects in some of its frontier technology sectors, at least in the short-term. Authorities in China have responded to slower-than-expected growth with a mix of monetary expansion, supply-side incentives and regulatory tightening. The overall impact of these measures as well as their spillover effects, particularly on neighbouring economies, remains uncertain.
4. Concern over growth prospects in China risks overshadowing the deteriorating economic health of the European economy. While growth in China has now decreased approximately 30 per cent compared to the pre-COVID-19 average of 2015–2019, growth in Europe has decreased approximately 70 per cent. With a share of the global economy similar to that of China (approximately 18 per cent in purchasing power parity, higher at current exchange rates), the global consequences of the slowdown in Europe are at least twice as heavy as those of the slowdown in China. Continuing monetary tightening in the euro area risks tipping the region into recession in 2024.

Post-pandemic growth performance in the leading developed and emerging economies over the past three years points to divergent recovery pathways. On the one hand, differences reflect country positions in the international monetary and financial hierarchy, which defines the scope of autonomy policymakers enjoy when formulating macroeconomic responses to shocks. The favourable position of developed countries in this hierarchy helped them to manage a swift turnaround from the initial shock of the pandemic.

*“Post-pandemic growth performance in the leading developed and emerging economies over the past three years points to divergent recovery pathways.”*

However, these routes depend on governments' willingness to deploy policies for longer-term growth plans. Advanced economies, aside from the United States and Japan, struggled to maintain a steady recovery after the 2020 pandemic shock. The United States stabilized through an aggressive use of industrial policy, widening the gap with other developed countries. Austerity-constrained Europe lagged behind (figure I.2.A). Among developing countries, China and India saw strong recoveries, while other BRICS members benefitted from favourable export conditions. South Africa stands out as an exception (figure I.2.B).

<sup>1</sup> Data released during the summer of 2023.

**Table I.2 Developing countries have been generating critical global demand**

Growth of demand stance of institutional sectors, G20 countries, 2022  
(Annual percentage change)

	GNI	Private	Government	External
<b>Developed countries</b>				
Australia	3.6	2.8	0.7	0.0
Canada	3.2	0.0	0.8	2.4
France	2.2	0.8	-0.3	1.7
Germany	2.1	0.0	0.0	2.1
Italy	3.3	0.7	-0.4	3.0
Japan	2.1	-0.4	-1.8	4.3
Republic of Korea	2.7	-0.4	0.6	2.5
Russian Federation	-1.8	-0.2	2.4	-4.0
United Kingdom	3.8	2.2	-1.6	3.2
United States	2.0	0.8	0.1	1.1
<b>Developing countries</b>				
Argentina	5.3	1.9	2.5	1.0
Brazil	2.9	0.1	0.6	2.2
China	3.3	1.3	2.0	0.0
India	6.7	3.5	1.7	1.5
Indonesia	4.7	-1.3	0.4	5.6
Mexico	2.7	0.3	-0.1	2.5
Saudi Arabia	8.2	-1.8	1.8	8.2
South Africa	2.2	2.6	1.9	-2.3
Türkiye	6.1	5.3	0.8	0.0

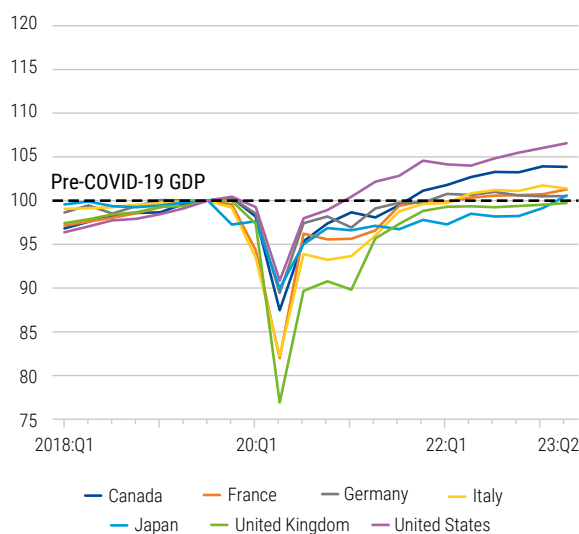
Source: UNCTAD calculations based on the United Nations Global Policy Model and database.

Note: GNI: gross national income.

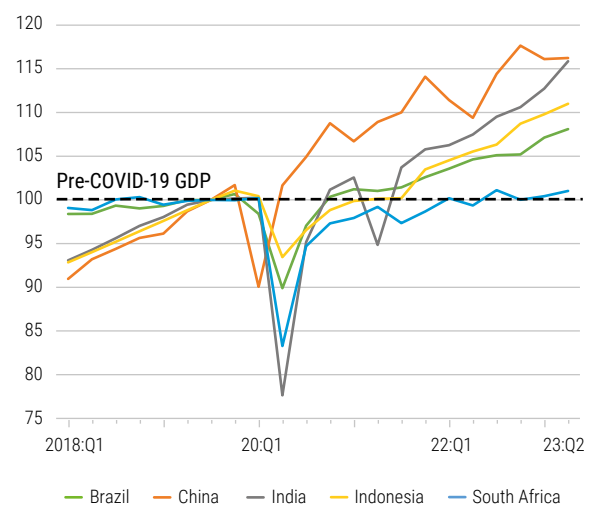
**Figure I.2 Real GDP levels recovering separately**

(Index numbers, third quarter of 2019=100)

**A. G7 countries**



**B. Selected developing countries**



Source: UNCTAD calculations based on Refinitiv data.

Note: Data is seasonally adjusted.



## C. LEADING ECONOMIES IN AN INTERDEPENDENT WORLD

To further assess the outlook for global growth, table I.2 illustrates the sectoral contribution to global demand growth in G20 economies. It shows that export sectors in developed countries are growth drivers in those countries. They tap global demand rather than generate demand for developing countries. At the same time, many developing economies positively contribute to global demand by importing more than they export. South Africa is an extreme case, with substantial growth in private sector demand. However, the external sector has absorbed a substantial part of that demand, partly due to a 20-year depreciation of the rand, which has made import costs higher.

As a guide to understanding how different sectors affect domestic growth prospects, table I.2 distinguishes the private sector (households and businesses) from the government and the external sector (the rest of the world). Numbers indicate the portion of economic growth generated by each sector, considering the positive effect of its spending and the negative effect (on growth) of its saving. The advantage of this approach lies in its straightforward rearrangement of national accounts data. It adheres to the accounting convention that fully distributes value added in production as income to workers, businesses, and the government.

Looking ahead, a “soft landing” for the **United States** economy still seems possible. This would imply that GDP growth is already close to hitting its low point (sparing the country a recession, conventionally defined as two consecutive quarters of negative growth), along with a small uptick of unemployment and moderate disinflation. In fact, disinflation has largely happened with the rate of annual price increases coming down two thirds from 8.9 per cent in June 2022 to 3.0 per cent in June 2023. This is bound to drive up the real cost of capital, which remained negative until early 2023. GDP growth in the United States is expected to slow from 2.1 per cent last year, to 2.0 per cent in 2023 and 2024.

The slowdown has been mainly policy-induced, owing to the combination of monetary tightening and a neutral fiscal policy. Recent signals from the Federal Reserve suggest interest rates will remain high for the remainder of the year, with further rises not ruled out. The fiscal stance is expected to turn recessionary next year in line with the latest congressional agreement on the Federal debt ceiling, pushing growth lower in 2024.

Uncertain developments in several specific domestic factors in the United States economy will have a bearing on prospects for the global economy. A drop in key asset prices is a worrying sign that financial markets may not be able to withstand higher interest rates much longer. Bank shares have been sliding since earlier this year, a movement that preceded both the global financial crisis and the sovereign debt crisis in Europe, as have the values of 10-, 15-, and 20-year treasuries compared to early 2020. Over this period, holders of 20-year treasuries have borne a 17 per cent loss. Given their ubiquity in structured financial asset portfolios, large write-downs of treasuries would likely be destabilizing.

*“Uncertain developments in several specific domestic factors in the United States economy will have a bearing on prospects for the global economy.”*

On the other hand, the policy interest rate (Federal Funds Rate) may fall in 2024. Nevertheless, small rate cuts are not effective at reversing growth deceleration and a large cut would run counter to the stated objective of monetary policy normalization (Federal Reserve Board, 2022). If unemployment begins to increase and real wages stagnate, the growth rate of consumption would likely slow, blocking any quick response of residential investment to reductions in interest rates.

The rest of North America is expected to follow the business cycle of the United States, with differences in outcome largely due to national policies. In **Canada**, more aggressive monetary policy and ongoing withdrawal of COVID-19 stimulus spending have led to a downward correction of 2023 growth projections. In **Mexico**, prospects have improved as the economy has benefited from less aggressive monetary tightening and an inflow of new investment to establish new manufacturing capacity, triggered by the bottlenecks that emerged in East Asia in 2021 and 2022.

In South America, Argentina and Brazil (which together account for almost 70 per cent of the region's output) are experiencing different developments. In **Brazil**, booming commodity exports and bumper harvests are driving an uptick in growth, from 2.9 per cent in 2022 to 3.3 per cent in 2023. However, negative demand forces are weighing on growth. These include the delayed impacts of monetary tightening, which started at the end of 2021, and which pushed the Brazilian real short-term interest rate to 9 per cent by the beginning of this year. This is in addition to growing private debt, especially by households, during the COVID-19 crisis. Significant fiscal expansion in 2023 should offset these recessive forces, but the fiscal impulse for 2024, although still subject to political negotiations, is expected to turn negative, reducing GDP growth below 3 per cent.

**Argentina** is experiencing both a recession and accelerating inflation. On the real side, a severe drought has raised the price of food and power, driving up an already high inflation rate, with significant negative effects on the purchasing power of households, especially among the poorest segments of the population. On the monetary side, the rise in inflation has triggered a run on foreign currency and currency depreciation. Fiscal policy turned contractionary because high inflation erodes real spending faster than it erodes tax revenues, but the induced fiscal tightening has not been sufficient to control inflation.

In this outlook, the darkest clouds hover over **Europe**, where the sharp rise in energy costs through most of 2022 and early 2023, as well as stubborn food price inflation and reduced household purchasing power are exerting downward pressure on consumption. Some governments partially absorbed the energy price increases but are now reducing fiscal spending to offset deficit pressures. While the euro area is still expected to experience marginal positive growth in 2023, it is on a knife edge.

The second quarter of 2023 saw the euro area narrowly avoid recession, in no small part due to an unexpected investment surge, which was more statistical artefact than renewed productive capacity: a reflection of the acquisition of intellectual property rights by a number of multinationals in Ireland (Bank of Italy, 2023; Arnold, 2023). The decision of the European Central Bank (ECB) to raise interest rates by the end of September is already casting a shadow over prospects for the fourth quarter, increasing the risk of tipping the euro area into a recession.

Overall, the largest economies in Europe, with the exception of Germany, are still projected to continue growing, primarily driven by exports. This highlights their market power vis-à-vis their trading partners in the face of price increases. Growth will, to a lesser extent, also be driven by private consumption and investment. Germany, France, Italy and the United Kingdom, are on a path of slowing demand growth. **Germany** experienced three quarters of negative growth in the last year and, in 2022, a record fall of real wages. But both the private sector and the government recorded a small surplus, spending less than their incomes and overall subtracting approximately 4 per cent from the country's economic growth. The export sector more than made up for this, bringing total growth barely into positive territory. This has not continued in 2023. **France** also "exported" its way out of a recession in 2022, but its private sector was a net contributor to aggregate demand. The government engineered a contraction of its net demand, continuing to reduce its net borrowing after the peak of 2020, while the external sector contributed almost 80 per cent of the country's growth.

**Italy** followed a similar pattern but with a less pronounced impact of reduced government net borrowing and an external sector that contributed approximately 90 per cent of growth. The labour share recovered somewhat in 2022 but not as result of improving workers' compensation. Rather, real wages fell, but productivity fell more, leaving the labour income share at a record low level and the profit share at a record high level. In the **United Kingdom**, the labour share fell drastically in 2021 and this continued in 2022, losing approximately 3 per cent of GDP to profits. Government net borrowing was also cut substantially, which led the government sector to subtract from aggregate demand rather than contribute to it. However, private sector spending, financed increasingly with debt accumulation and sustained by a resurgence in household consumption of services, along with support from the external sector, kept the economy out of a recession, albeit barely. Tentative data suggests that this might not be the case in the second half of 2023.

In the **Russian Federation**, economic growth has been slowed by a large reduction of net external demand, likely related to the economic response to the war in Ukraine. The overall volume of oil and gas exports, the country's main source of foreign currency, has not changed dramatically: exports of natural gas reportedly fell by 32 per cent in 2022, mainly as a result of shifting demand from Europe, which imported less piped gas and more liquified gas via tankers. However, oil exports, amounting to the majority of energy exports (75 per cent), remained mostly stable at 3 million barrels per day. Small volume changes notwithstanding, the revenue from oil and gas exports dropped by nearly half (47 per cent) in the first half of 2023 following the decrease of international prices, a trend that the Russian Federation responded to by cutting production. Whether this will yield the desired result remains to be seen. Meanwhile, the currency has posed another challenge. The rouble remained mostly stable through 2022, thanks to effective capital controls, but it has since depreciated sharply, compounding the problem posed by falling oil prices and further hindering the country's ability to purchase foreign commodities and manufactures. So far, the government has been able to pick up the slack in demand by increasing its net borrowing, in no small part thanks to a comfortably low sovereign debt ratio (23 per cent of GDP), but financial pressures are likely to intensify towards the end of the year. Based on all these factors, GDP growth is projected to be 2.2 and 2 per cent in 2023 and 2024, respectively.

Energy price and currency woes have affected **Türkiye**, too. The country was hit hard by high energy prices in 2022 but retained strong domestic demand throughout the first half of 2023 thanks to strong fiscal support, an effective programme of transfers to households, and a 10-point cut of the policy interest rate. However, while the latter provided stimulus to domestic demand, it placed pressure on the currency. The lira has been depreciating since before the pandemic, with a severe loss of value occurring earlier in the second quarter of 2023. Overall, projections for the country's economy are growth at 3.7 per cent in 2023, decelerating to 1.9 per cent in 2024.

In **Japan**, economic growth was driven last year by a surge in external demand, caused in large part by the pent-up global demand for automobiles and by a weaker yen. At the same time, government spending on goods, services and transfers fell, turning the public sector into a net saver. This year the currency has appreciated vis-à-vis the dollar and depreciated vis-à-vis the renminbi, leading to weaker net exports. External demand has continued to be strong while moderate inflation and a national agreement on wage growth have reinvigorated consumer demand. On the other hand, the contractionary stance of fiscal policy has continued, leading to a projected growth of 2.3 per cent this year and of 1.2 per cent in 2024. With sustained external demand and strong domestic demand, the main risks to the outlook come from the policy mix, notably a faster reduction of the fiscal deficit and a possible tightening of monetary policy.

In **China**, government net demand has remained the main driver of economic growth, while the external sector has exercised a drag on demand, contrary to frequent portrayals of the world's largest developing economy as purely export-driven. But it must also be noted that recently, the private sector in China has played a less relevant role as a driver of growth than it did it even in the aftermath of the global financial crisis. The relative weakness of the private sector to generate growth points to the ongoing challenge of establishing a deeper domestic market, which has left China more dependent today on fiscal expansion than it was a decade ago. The weakness in private sector demand in China is a source of uncertainty for global economic prospects. A deflating real estate bubble and a chain of financial crises among large developers, which started even before the pandemic struck, have caused significant losses in the construction sector and for owners of real estate and other affected assets. The government has responded with a series of measures aimed at reducing leverage in real estate finance (a major incubator of financial risk) and, more recently, cutting interest rates to stimulate aggregate demand. Meanwhile, domestic demand remains stable and key financial indicators have not yet exhibited concerning swings: bank share prices have decreased moderately (less than in the United States or Europe), demand for sovereign bonds has remained buoyant, and the renminbi has appreciated compared to other leading currencies in the region (although it has depreciated against the United States dollar). These factors together suggest GDP growth of 4.6 per cent in 2023 and 4.8 per cent in 2024. This is somewhat below the government target of 5 per cent, but still well above the average figure in advanced economies.

In **India**, the external sector – alongside the private and government sector – has contributed to domestic growth, partly helped by many countries redirecting trade flows away from the Russian Federation, with which India maintains a direct relationship. Growth in 2022 moved back in line with pre-pandemic rates and is expected to continue into next year. However, other indicators still suggest caution: with rates of unemployment still standing at 8.5 per cent in June 2023, employment remains disappointingly low by historical standards. Inequality has also significantly increased – as suggested by data on real wages and the labour share – which could hinder growth.

**Indonesia** has recently exhibited a shift from growth driven by private sector demand to a more export-oriented pattern, facilitated by the recent commodity boom, including for nickel. Robust growth this year is expected to continue into 2024. The government has been reducing its net borrowing since 2020 and its net claims on income are now absorbing aggregate demand rather than contributing to it. Investment and employment creation have also slowed, in a concerning sign for an economy whose growth has begun to be driven by commodities.

## D. CORPORATE CAPTURE AND THE DEMISE OF FISCAL POLICY

*“A functioning international financial architecture would isolate governments from these pressures and nudge them to adopt policies that favour growth, development and the necessary structural investments.”*

In 2010, this Report warned that fiscal retrenchment – the rapid rolling back of emergency support during the global financial crisis – would backfire. A few years later, economists from several international financial institutions expressed a mea culpa for advocating (premature) fiscal austerity (Blanchard and Leigh, 2013). After the devastating pandemic in 2020 and 2021, growth in most G20 countries is still much lower than it was in the 2010s, but primary fiscal balances (i.e., the balances that exclude interest payments, therefore the more easily controllable parts of governments’ budgets) have quickly turned positive (figure I.3). This

largely results from the high pressure faced by governments to reduce deficits to continue to have access to international credit markets. A functioning international financial architecture would isolate governments from these pressures and nudge them to adopt policies that favour growth, development and the necessary structural investments.

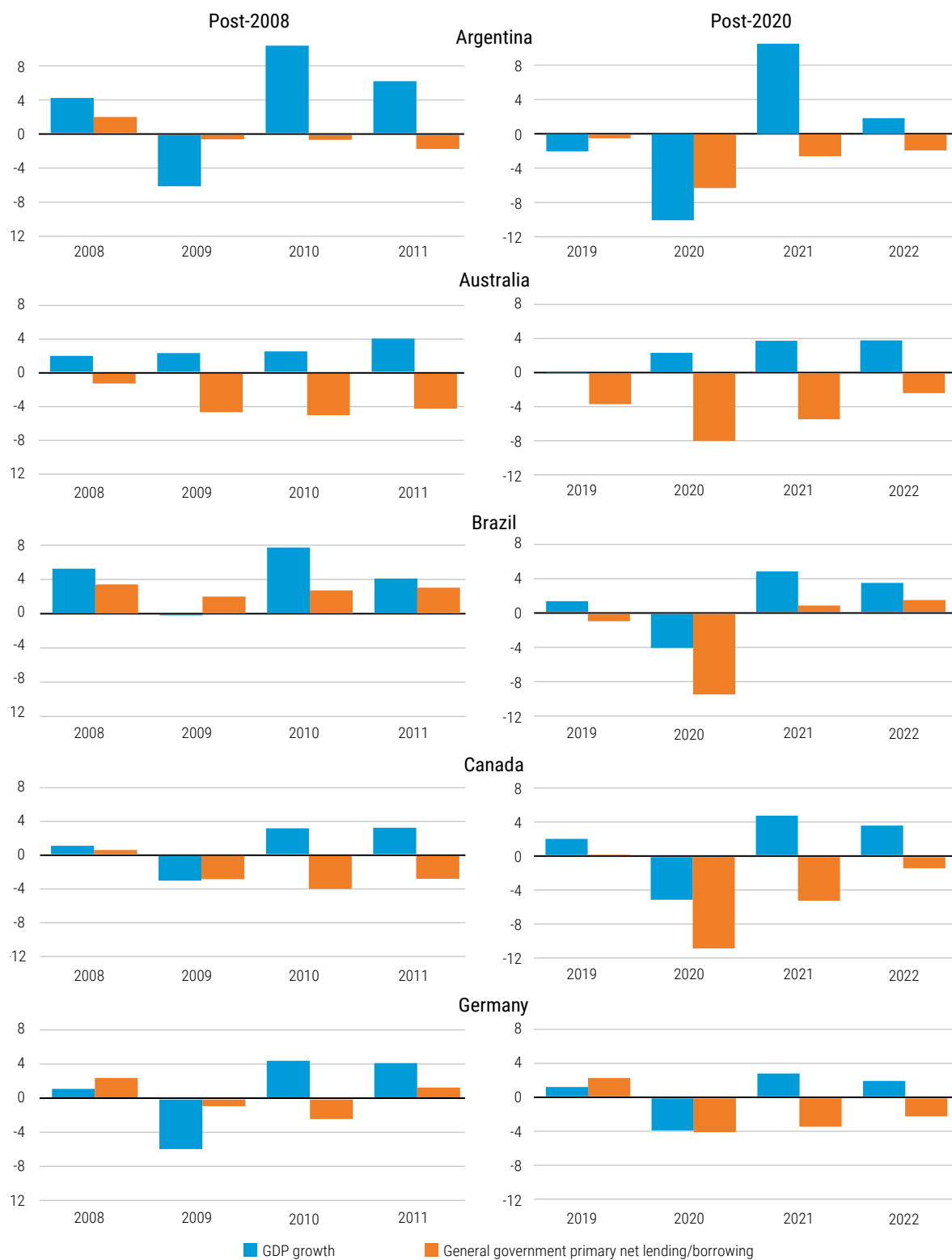
Figure I.3 illustrates how fiscal policy is considered at best, a shock absorber, subject to limited and temporary action (Bernanke, 2008) before a return to austerity. This approach has been proven to exacerbate boom–bust cycles and diminish the desired impact from emergency measures, including corporate capture as a contributing factor (Crouch, 2009; Costantini, 2020; TDR, 2021, 2022). In turn, this represents a reduction in States’ ambition to strategically shape the economic trajectory and comprehensively address heightened inequalities.

This problem has played out differently in developed and developing countries. Driven by inflationary fears, developed countries with sufficient fiscal space have tended to limit themselves to smoothing out the cycle, on both its downswings and upswings, around a mediocre normal. For most countries, this fiscal framework tends to drive up debt-to-income ratios, due to subdued growth and costly emergency spending. Meanwhile, the growing concentration of market power by large corporations and the influence of high net worth individuals reduce the ability to raise tax revenues (figure I.4). In an era of compounding crises that increasingly require public resources to address systemic disruptions, the asymmetry between growing corporate consolidation and the thinning fiscal space need to be addressed by revisiting dominant economic paradigms and, critically, the policy decisions based on them.

*“The asymmetry between growing corporate consolidation and the thinning fiscal space needs to be addressed by revisiting dominant economic paradigms and, critically, the policy decisions based on them.”*

**Figure I.3 Rushed withdrawal of fiscal support: Post-2008 and post-2020**

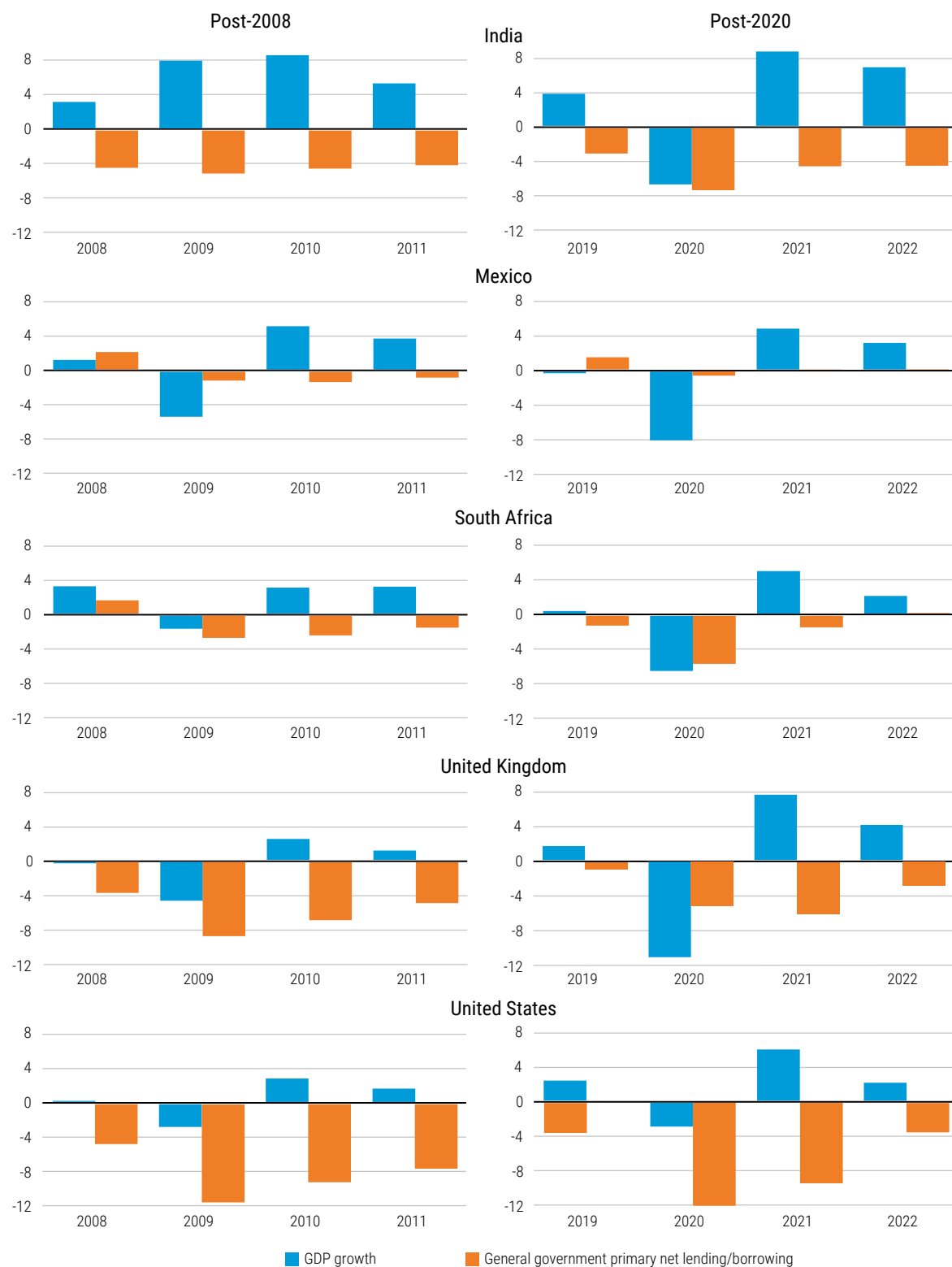
Real GDP growth and government primary net lending as a share of GDP, selected countries  
(Percentage)



Source: UNCTAD calculations based on IMF World Economic Database.

**Figure I.3 Rushed withdrawal of fiscal support: Post-2008 and post-2020 (cont.)**

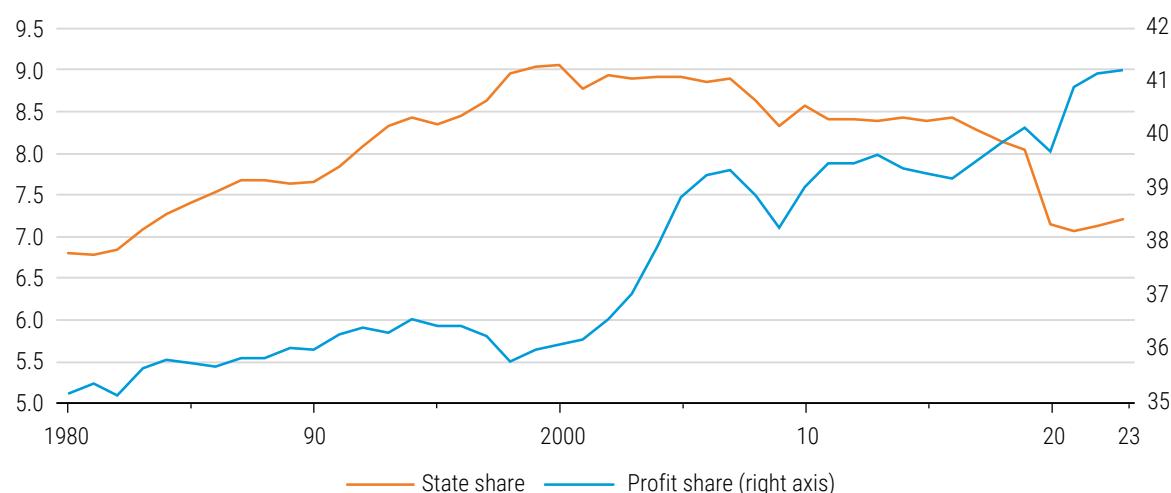
Real GDP growth and government primary net lending as a share of GDP, selected countries  
(Percentage)



Source: UNCTAD calculations based on IMF World Economic Database.

**Figure I.4 Globally: Rising profit share, shrinking fiscal space**

Shares of operating profits and indirect taxes (net of subsidies)  
(Percentage of GDP)



**Source:** UNCTAD calculations based on the United Nations Global Policy Model and database.

**Note:** GDP at constant 2015 prices, PPP.

## E. CREDIT, INVESTMENT AND THE ROLE OF MONETARY POLICY

From 2010–2021, with inflation subdued and often below target (see box I.2) and investment remaining stagnant, quantitative easing and record low interest rates were the policies of choice for many central banks, including in developing countries (TDR 2022: chapter III). While this central bank activism, which included regular purchases of bonds and assets of private corporations, contributed to a period of relative financial stability even during the shock of the pandemic, it did so by inflating asset prices and financial profits, which drove up inequality further. Meanwhile, fiscal austerity and low wages discouraged private investments and hampered productivity growth.

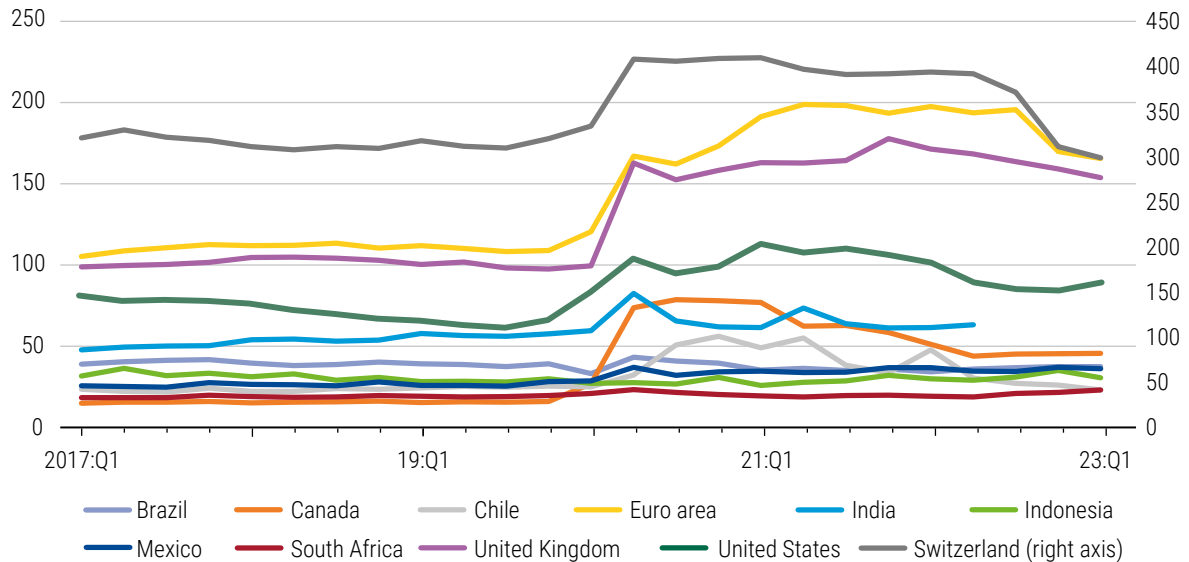
When inflation finally picked up in late 2021, central banks began “normalizing” their policies, scaling back their balance sheets (i.e., selling assets on the open market) and raising interest rates. But these moves were immediately met with sell-offs in several markets, prompting many central banks to adopt a slow pace of balance sheet reduction and, in some cases, to quickly resume asset purchases (figure I.5). Also, interest rate increases have been met with less opposition overall, partly because after their initial declines, stocks have rebounded markedly. In this context, it is also worth noting the actions of the United States Federal Reserve, which has recently experimented a hybrid policy of quantitative easing alongside interest rate hikes, suggesting that if a conflict arises between the priorities of price stability and financial market buoyancy, the latter is likely to prevail.

But more importantly, private credit creation – which is driven by financial sector profits and perceived risks, not policy priorities – has not followed the descending pattern of central bank credit. Where private credit has contracted, it has mostly done so much less than central bank credit. As a result, real interest rates are still close to zero in the United States and at or near record lows in many other developed countries (figure I.6). On the other hand, developing countries do not appear to benefit from this aspect of financialization, as they are experiencing markedly higher real interest rates.



**Figure I.5 Central banks have only partly retrenched from the pandemic expansion**

Monetary base to GDP  
(Percentage)

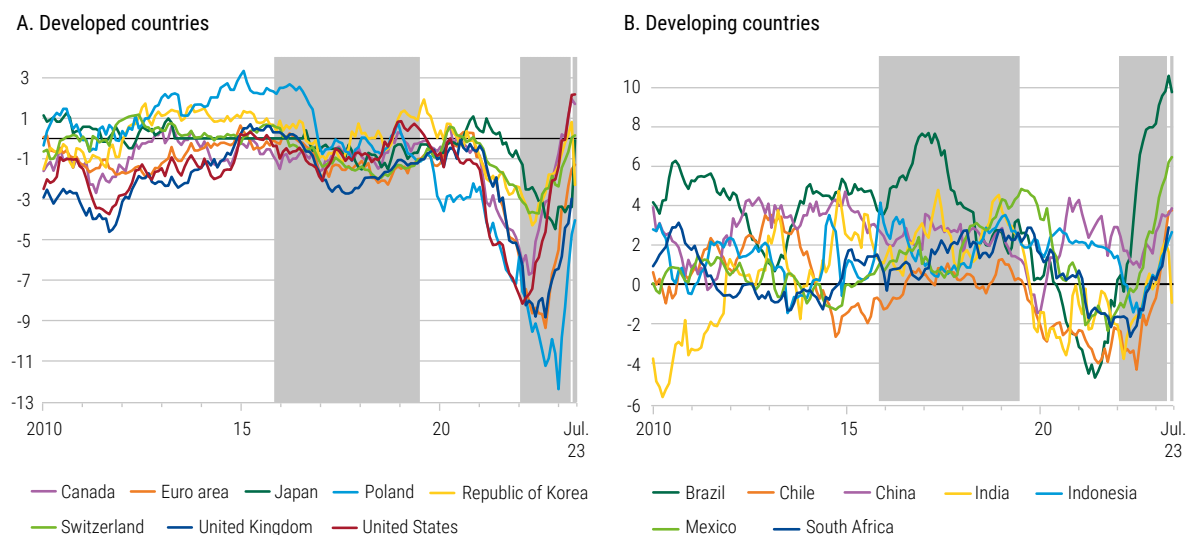


Source: IMF International Financial Statistics and Federal Reserve Economic Data.

Note: Q1: first quarter.

**Figure I.6 Though real rates have rebounded they remain low in some developed countries... but credit conditions are considerably less favourable in developing countries**

Consumer price index deflated policy rates, selected developed and developing countries  
(Percentage)



Source: UNCTAD calculations based on data from Bank of International Settlements.

Note: Grey areas refer to periods during which the policy rates were rising in the United States.

In fact, the interest rate hikes by central banks in developed countries may have limited effects domestically, but they wreak havoc in developing countries. Especially for countries with weaker currencies, higher interest rates in advanced economies can easily cause significant capital outflows, which puts more pressure on the currency, drives up inflation and can easily cripple the productive system.

*“Interest rate hikes by central banks in developed countries have limited effects domestically, but wreak havoc in developing countries.”*

This in turn, exacerbates inequality and compromises livelihoods. Developing countries are then under strong pressure to raise their own interest rates, sacrificing their financial stability to defend their monetary stability – an impossible choice in the best of times. With a muted fiscal policy, increased cost of credit affects the most fragile sectors and regions of the world economy, leading to reduced investment, stagnant wages, limited employment growth and liquidity stress. The hardest hit are the unemployed and low-to-medium earners, as well as firms and governments with high external debt in developing countries (chapter II).

The unbound response of private credit explains the divergence of total credit from investment (figure I.7), as pointed out in previous editions of the *Trade and Development Report*. In leading developed and developing economies, bumper credit creation in the early 2000s did not trigger fast investment demand, nor did it do so during the pandemic years. Some localized increase in capital formation may well be due more to inflation itself, which encourages the accumulation of inventories (not picked up in the charts below). Clearly, credit has continued to be channelled more towards financial assets rather than real investment.

The decoupling of investment and credit and the persistence of low real interest rates in key economies indicate that the immediate effect of monetary tightening is a worsening of income and wealth distribution, with only an indirect impact on economic growth.

*“... the immediate effect of monetary tightening is a worsening of income and wealth distribution, with only an indirect impact on economic growth.”*

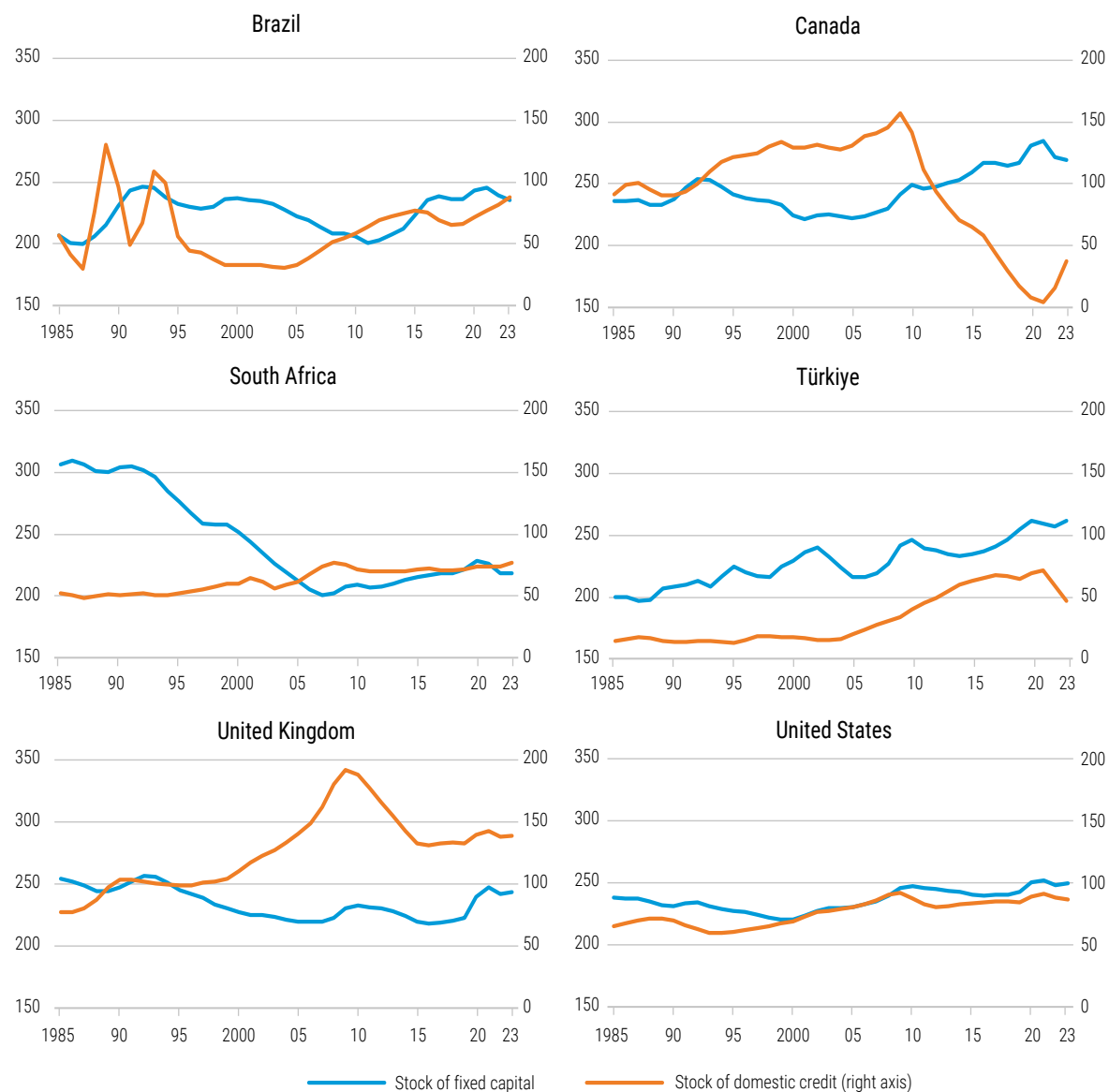
Of course, a hierarchy of safety applies to the different public and private means of money creation. As financial stability is the main concern of monetary institutions, their approach is a pragmatic one, with activity focused on markets that appear to be systemically relevant. As a result, liquidity is not guaranteed everywhere, and pockets of gluts and scarcity persist. The distribution of liquidity creation typically exhibits a North–South divide, although at times speculative inflows of capital are invested in developing regions (chapters II and V). In 2023, as the market for high yield corporate bonds in developed countries has become less attractive due to the rising costs of credit, high yield seekers have focused on developing countries with market access. Meanwhile, in the United States, corporate bankruptcies have picked up, a concerning trend that has likely contributed to the decision by the Federal Reserve to increase purchases again (figure I.5).

Recent developments in monetary policy clearly confirm that financial markets can, for long periods of time, remain largely detached from the performance of the rest of the economy and be sustained by prevailing conventional expectations. They can thrive when the rest of the economy is struggling and investment is down – as in 2020 – but if they do freeze up, the rest of the economy is hit hard, as in 2008. Therefore, the massive expansion and appreciation of financial assets, as has been observed in recent years, creates huge risk, with negligible benefits for many non-financial businesses (particularly smaller companies), and the vast majority of workers. In terms of policy design, monetary policy does have a large, if underappreciated, impact on income and wealth inequality. However, if the desired outcome is to create a sound macroeconomic environment that promotes capital formation and employment creation in leading sectors, then monetary policy cannot play the lead role. Fiscal and industrial policies remain the protagonists.

*“... if the desired outcome is to create a sound macroeconomic environment that promotes capital formation and employment creation in leading sectors, then monetary policy cannot play the lead role.”*

**Figure I.7 Investment and credit remain decoupled**

Stocks of fixed capital and domestic credit  
(Percentage of GDP)



**Source:** UNCTAD calculations based on the United Nations Global Policy Model and database.

**Note:** GDP at constant 2015 prices, PPP.

## F. INFLATION AND DISTRIBUTION

After 2020, inflation accelerated along similar trajectories in most countries, but in 2023, as inflation began to decrease, the paths diverged.

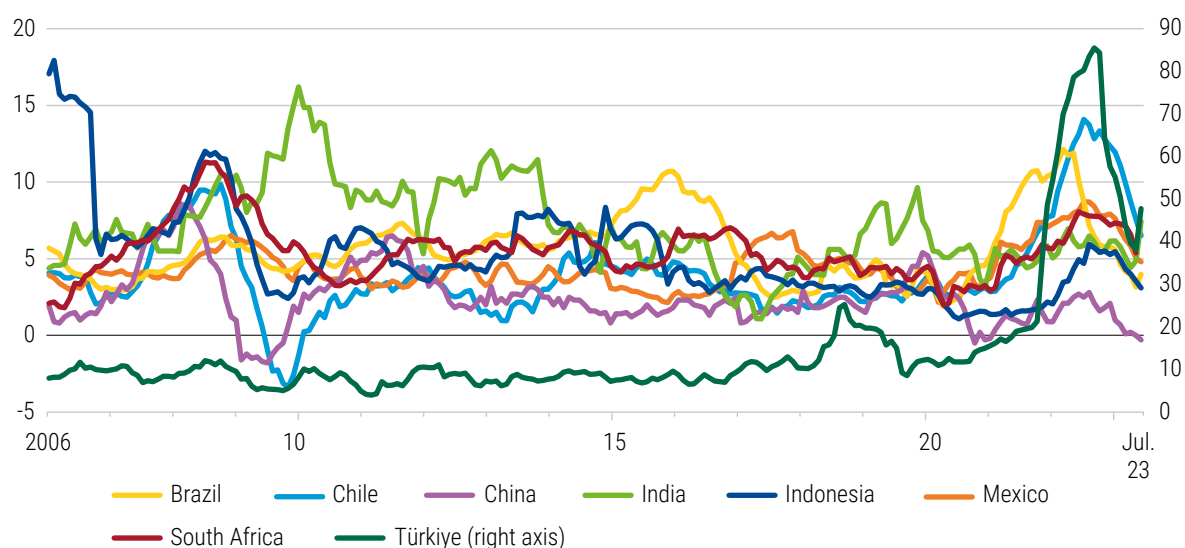
Signs of an inflation pick-up began to appear in the United States in the early months of 2021. Various temporary and lasting triggers contributed to this. These include four main factors: (a) changes to global trade patterns that impacted import costs; (b) a surge in consumption expenditure by the wealthy, who benefited from the stock market gains fuelled by extra-loose monetary policy; (c) small increases in the real wages of the lowest paid occupations; and (d) the ability of producers and retailers to raise prices in order to recoup cost increases and increase profit margins (Bivens, 2022; Konczal and Lusiani, 2022; Hayes and Jung, 2022; Schnabel, 2022; Storm, 2022; Weber and Wasner, 2023).

Concerns that inflation was extending beyond the expected transitory period that would normally accompany recovery from a deep economic shock only began towards the end of 2021, as an initial easing of rising prices was reversed. Failure to distribute effective vaccines worldwide prolonged the pandemic, causing temporary factors to linger on, eventually interacting with a largely anticipated initial increase in commodity prices. Then, as the war in Ukraine began, some commodity prices spiked, raising inflation rates further, especially in the European Union (see TDR, 2022 for a discussion). Despite the supply-side origins of this new round of inflationary pressure, leading central banks, beginning with the United States Federal Reserve, embarked on monetary tightening sooner than had been previously signalled.

**Figure I.8 Inflation rates have remained in line with historical standards in most developing countries**

Monthly consumer price index growth, selected developing countries

(Year-on-year percentage change)



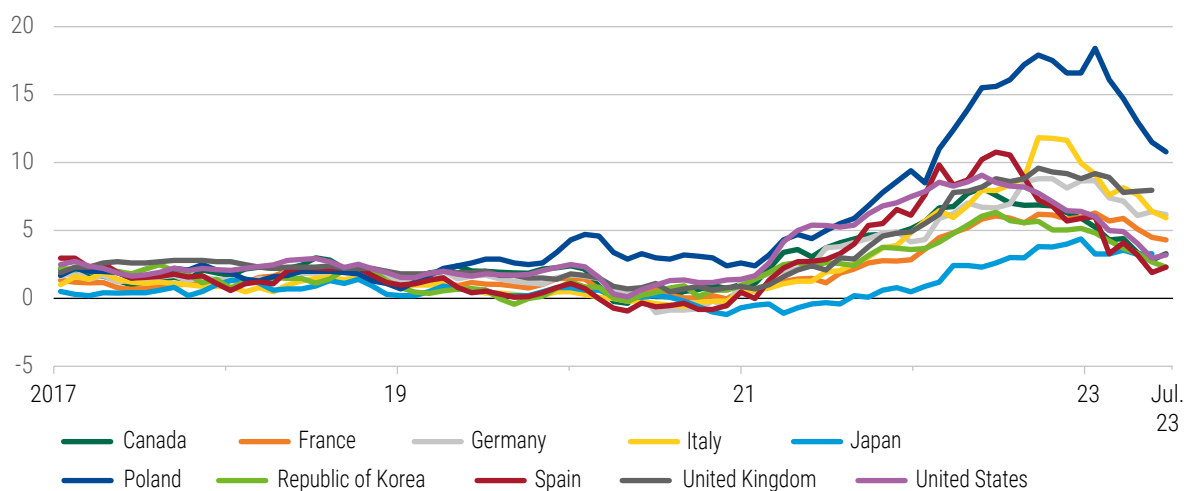
Source: OECD Statistics and national sources.

While inflation has been driven by the movements in the international prices of key energy and food commodities, beginning in late 2021 and early 2022, national outcomes differed depending on market structure and the capacity (and willingness) of their governments to offset the transmission to consumer prices. Furthermore, as the Federal Reserve began to raise interest rates, the dollar appreciated against other currencies, further intensifying import price inflation, especially for net importers of energy and food. This was particularly the case in countries which have liberalized the wholesale and retail energy sectors, such as the European Union, resulting in a swift transmission of international price changes to domestic consumers (TDR, 2022). It was also the case in many developing countries, where previous financial vulnerabilities and weak currencies left them doubly exposed.

As of mid-2023, as prices of key commodities eased, inflation around the globe has followed, albeit at an uneven pace (table I.3). In some cases, core inflation remains persistent and above the recent historical average, showing an ongoing persistence of rising corporate markups and localized exposure to supply chain disruptions. Among developed economies, the euro area has followed a markedly different path compared to Japan and the United States (figure 1.9).

**Figure I.9 Inflation rates are down in developed countries and some prices are falling**

Monthly consumer price index growth, selected developed countries  
(Year-on-year percentage change)



Source: OECD Statistics and national sources.

**Table I.3 Inflation eases at different rates across countries, due to their economic structures**  
 Consumer Price Index (CPI) inflation and contributions of food and energy, selected countries, January 2022–June 2023  
 (Near-on-year percentage change and shares)

	Yearly	Quarterly	Monthly			Weight	Yearly	Quarterly	Monthly			Weight
			First quarter 2023	April 2023	May 2023				June 2023	First quarter 2023	April 2023	
			Chile						France			
Annual CPI inflation	11.6	11.8	9.9	8.7	7.6		5.2	6.0	5.9	5.1	4.5	
Contribution to total inflation	Food	29.4	34.1	28.8	28.1	30.1	20.1	37.7	38.6	42.2		14.4
	Energy	13.5	8.6	6.2	5.0	2.1	40.4	17.3	10.9	3.8		8.9
	Non-food	56.2	56.0	64.0	65.9	67.1	40.8	44.8	50.7	54.6		76.6
			Germany						Mexico			
Annual CPI inflation	6.9	8.2	7.2	6.1	6.4		7.9	7.5	6.3	5.8	5.1	
Contribution to total inflation	Food	21.8	29.5	27.9	28.2	25.0	43.3	34.1	28.8	28.1	30.1	25.8
	Energy	32.6	14.2	8.3	4.5	4.4	6.7	8.6	6.2	5.0	2.1	10.0
	Non-food	46.1	56.4	64.3	68.2	71.4	48.8	56.0	64.0	65.9	67.1	64.2
			South Africa						Türkiye			
Annual CPI inflation	7.0	7.3	7.1	6.6	5.4		72.3	54.3	43.7	39.6	38.2	
Contribution to total inflation	Food	22.6	32.4	33.6	30.8	17.1	30.1	32.5	31.4	33.7		25.4
	Energy	28.6	11.2	7.6	7.0	8.5	21.2	8.5	3.6	-5.6		12.1
	Non-food	48.1	56.3	58.7	61.9	74.3	50.6	59.1	65.7	72.9		62.5
			United Kingdom						United States			
Annual CPI inflation	10.9	18.1	7.8	7.9	8.0		8.0	5.8	4.9	4.0	3.0	
Contribution to total inflation	Food	13.1	19.1	23.3	22.1	9.5	11.8	14.2	11.8	11.6	12.8	8.3
	Energy	38.9	33.3	8.8	6.7	6.5	25.8	3.0	-8.4	-23.7	-46.3	8.2
	Non-food	56.4	52.3	66.8	69.1	84	64.2	80.1	93.5	110.0	135.8	83.5

*Source:* UNCTAD calculations based on OECD Statistics data and national sources.

*Note:* "Weights" are percentages of the national total CPI; 2022 weights are used for 2023 contributions.

Three factors need to be considered to fully understand recent price dynamics.

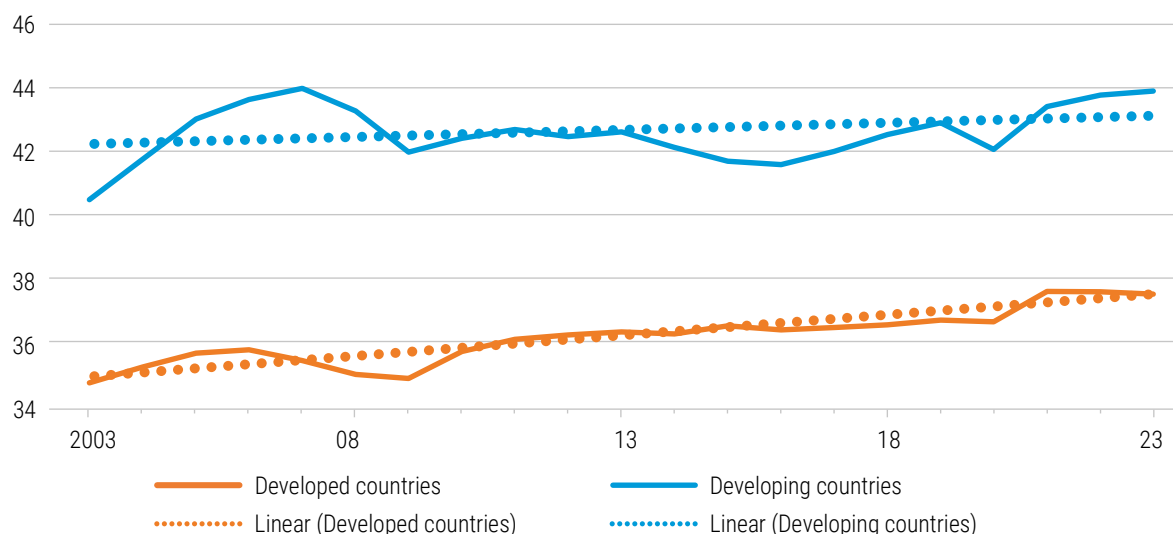
1. As the cost of key inputs accelerates, several circumstances allow firms to gain higher profits by setting their prices following the general increasing trend, even if the goods were produced when inputs were cheaper. Oligopolies and vertically integrated firms in particular were in a privileged position and have taken advantage of the general inflation to increase their profit margins. For them, the increased cost of credit has had a very limited impact, as the growth of their revenues has more than kept up with it (figure I.10).
2. Second, falling energy and food prices in international markets may well reduce inflation, but this does not signal a decrease in the price of most retail goods and services: at best these will remain stable at their elevated levels. Furthermore, depending on market power and regulation, domestic prices of food and energy will keep increasing even if the international prices of the commodities they use as key inputs decrease. This means that wages will have to increase to regain the real purchasing power lost with inflation. Whether current policies are consistent with this scenario is doubtful (see section E above). Policymakers should consider how to tackle income inequality while also addressing the unchecked capacity of businesses in critical sectors of the economy to pass higher labour costs through to increased prices.
3. Third, key factors of uncertainty and instability in international markets have not been addressed. The emergence of new players in commodities trade, such as the United States, now a net exporter of oil and gas, and of new restrictions to manufacturing trade, such as those relating to chips and semiconductors, evidently matter. But the structural problem relates to the organization of markets and trade, which are heavily exposed to asymmetric regulations and profiteering (chapters II and III, also TDR, 2022). Food prices, for instance, remain well above pre-pandemic averages: a largely unsustainable level for many households, especially in developing countries that are net importers of food.

*“Food prices remain well above pre-pandemic averages: an unsustainable level for many households, especially in developing countries that are net importers of food.”*

*“Policymakers should consider how to tackle income inequality while addressing the unchecked capacity of businesses to translate higher labour costs into increased prices.”*

**Figure I.10 Profit shares have increased above their long-term rising trends**

Income from profits and rents  
(Percentage of GDP)



**Source:** UNCTAD calculations based on the United Nations Global Policy Model and database.

**Note:** GDP at constant 2015 prices, PPP.



## G. LABOUR COSTS AND INEQUALITY

During the past six years, wage growth has lagged behind price inflation in most economies, causing substantial decreases of real wages (figure 1.11). By contrast, markups and profits have more than kept up, with significant sectoral differences, reflecting a number of factors, most significantly, market power.<sup>2</sup>

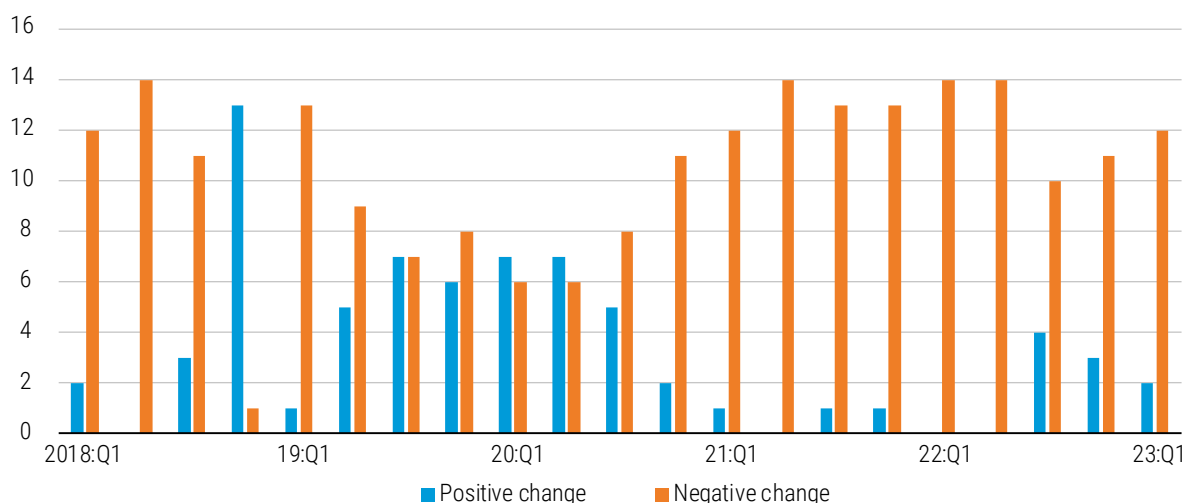
In the European Union, high coverage of collective bargaining has delayed wage claims longer than elsewhere after the rise of inflation. Most contracts were signed in 2021 and did not anticipate the subsequent price changes. But contracts signed in 2022 were not “revised up” to include the full increase in inflation. In addition, governments have sometimes opted for one-off tax breaks on compensation rather than let real wages grow (Bank of Italy, 2022). This clearly derails any prospects that this period of inflation can lead to a rebalancing of income distribution. Only in France and in the Kingdom of the Netherlands has the trend been somewhat more favourable to workers, due to more frequent bargaining. Moreover, in France, the minimum wage is indexed to inflation.<sup>3</sup> Overall, in Europe, hourly wages have mostly been on a declining trend, at least since 2018. This fact is hidden in annual wage statistics, which only report negative growth in 2022. This shift is largely due to the substantial increase in worked hours after 2020, which impacted annual wage statistics.

In the United States, the Employment Cost Index shows that the pandemic interrupted a positive trend in real total compensation. This trend had been particularly favourable for workers in the retail, trade, food and accommodation industries. Inflation induced a plunge across industries. Only as inflation started slowing in the third quarter of 2022 did real wages and salaries begin to recover, although remaining far below previous levels. Typically, low wage sectors and lower wage occupations have seen their real compensation fall less quickly and have recovered faster than others, pointing to a closer link with subsistence levels. These lower wage sectors remain far below the previous rising trend (figure 1.12).

**Figure 1.11 Wages have not kept up with inflation**

Change in real hourly wages by quarter

(Number of surveyed countries)



**Source:** UNCTAD calculations based on ILO and BIS data.

**Note:** The sample is limited to 14 countries: Brazil, Chile, France, Germany, India, Ireland, Italy, Japan, Mexico, Poland, South Africa, Spain, Switzerland, United States.

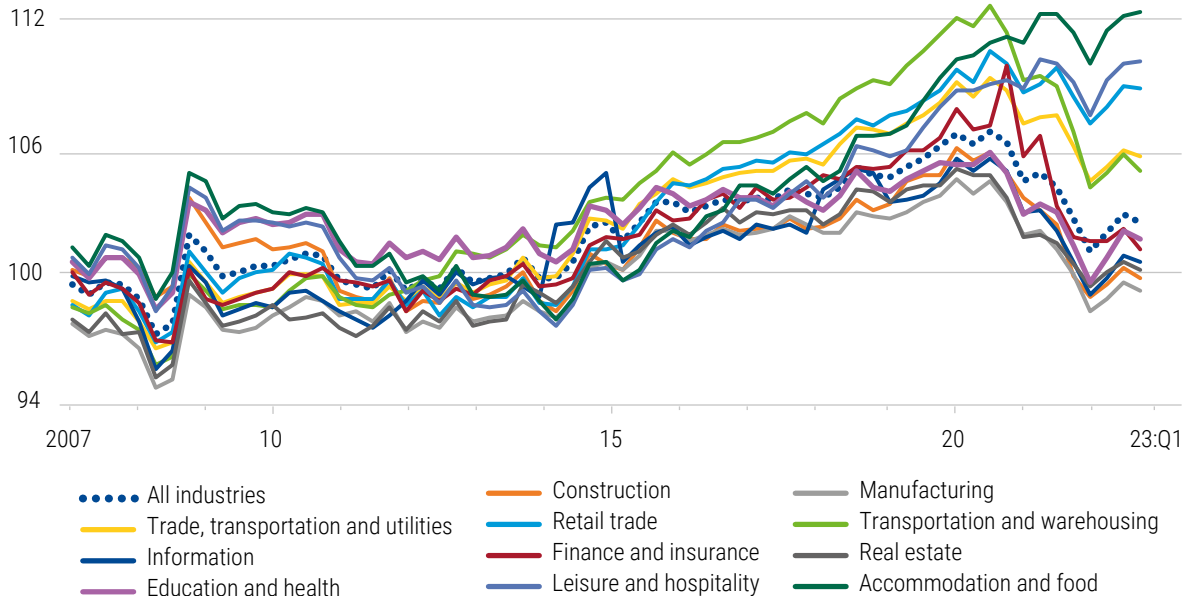
<sup>2</sup> The interpretation of inflationary pressures as a manifestation of cost-push inflation, driven by energy commodities and imports in general, which then was amplified by firms' price setting behaviour was advanced by a number of scholars (Bivens, 2022; Konczal and Lusiani, 2022; Storm, 2022; Schnabel, 2022; Hayes and Jung, 2022; Weber and Wasner, 2023) as well as TDR 2021 and 2022, but was originally opposed by many commentators. Today, it is widely acknowledged, including by the Federal Reserve and the ECB, that rising average markups, which account for the largest part of profit share increases, contribute to the price dynamics.

<sup>3</sup> See the 2022 Annual Report (Relazione Annuale) of the Bank of Italy for a detailed account of different collective bargaining practices in the euro area.

**Figure I.12 Post-pandemic, real compensation in the United States still has to recover**

Quarterly total compensation of workers in the United States, by industry

(Index numbers, average 2006=100)



**Source:** United States Bureau of Labor Statistics.

Recent debates on inflation should serve as a reminder that inflation in developing countries is generally higher than in developed ones (figure I.8). This often results from the process of structural transformation rather than a destabilizing excess of income, demand or money creation. For example, when new manufacturing sectors emerge, they often offer higher wages to attract workers from established sectors. This spurs the development of new market segments that cater to higher earning consumers. Historically, inflation rates of up to 20–30 per cent have often accompanied steady growth and development (Bruno and Easterly, 1996; Epstein, 2003; Chowdhury and Sundaram, 2023).

For most developing countries, inflationary pressures are not simply the outcome of internal growth dynamics but of their asymmetric and unstable integration in the global economy (Toye and Toye, 2004; Fontaine, 2021). A concern is how to deal with the current domestic economic structure, namely with an inefficient agricultural sector, small markets, a low tax base and inadequate infrastructure. These factors impede the reallocation of resources to the industrial sector and obstruct prospects for more sustained growth. In this regard, the literature has long established the need to look at a series of rigidities and bottlenecks which, combined with distributional conflicts, could trigger inflationary pressures. These rigidities cannot be addressed by a programme of public expenditure cuts, wage repression and market deregulation, as such measures typically bring down inflation at a very high cost in terms of lost output investment and jobs.

The international financial landscape, marked by strong instability and compounded by the problems arising from flexible exchange rates, presents a formidable challenge to low- and middle-income countries. Exposure to boom–bust cycles and to precarious integration into a highly fragmented global value chain with no significant technology transfers and a race to the bottom in wage setting, has been a crucial factor in the ensuing de-industrialization (TDR, 2019; Storm, 2017). The latter has been reinforced by technology-driven transformations of the economy and services, as well as the rise of intangible assets in value chains.

In these circumstances, a spike in inflation can signal a weakness bearing serious consequences, both economic and in terms of the legitimacy of the institutions involved. It may be the result of a drastic deterioration

of the value of a currency, which pushes import prices up, or it reflects volatility in some key input prices, such as energy. These pressures cannot be absorbed by a quick adjustment in production or wage growth.

In such cases, the increase in costs corresponds to a transfer of financial resources from one institutional sector, typically workers, to producers and importers, without a corresponding increase in the quantity supplied. While some of these financial resources may well leak straight abroad, high domestic markups also frequently occur, being both the cause and consequence of rising inflation. In fact, since production takes time, the price of the final product can be higher than it would have been when inputs were purchased. This gap is exacerbated by concentrated corporate control over markets and the lack of appropriate regulations. Chapter II examines this problem in the case of export concentration in developing countries. Workers, on the other hand, end up seeing any contractual adjustment to the cost of living eroded and sometimes surpassed by further rounds of inflation. In contrast with the first example of virtuous inflation, however, this process is not conducive to more production and job opportunities.

This kind of inflation has a clear asymmetric impact on different social groups, as the current inflationary event has shown. When public institutions try to respond without acknowledging this asymmetry, their actions often act to deepen it, provoking a stronger sense of injustice in the majority of the population. Interest rate increases, which are in themselves an aggravation of costs, also apply to those families who do not benefit from inflation. In fact, they apply especially to families, as well as to smaller and younger businesses that lack well-established relations with banks.

Throughout history, significant increases in the cost of living have often triggered protests. In some cases, these led to progress in the organization of labour, production, and society in general. In such instances, a growing government bureaucracy stepped up to guarantee economic stability, monitoring, and then regulating the decisions of companies and even individual managers to enhance stability (Costantini, 2018).

*“There is a need to reorganize global value chains to make the economic structure more resilient and governable and reduce its unfair consequences on wage rates and the global South.”*

These examples point to the need to reorganize global value chains to make the economic structure more resilient and governable and reduce its unfair consequences on wage rates and the global South. But this also requires sharing technologies to globally coordinate this transition, without wasting resources and with the avoidance of local crises. Price volatility in key commodities needs to be addressed, tackling the opaque financialized system that fuels and feeds off it (chapter III). As seen in recent years, re-shoring attempts (chapter II) and a revival of industrial and protectionist policies in some countries can lead to price frictions and temporary inflationary tensions.

## H. CONCLUSION

Since the last Report was published in October 2022, global growth has slowed against a backdrop of price deceleration. Recovery patterns across regions have varied considerably, and the lack of policy action accompanies talk of a “soft landing” for the global economy. A misplaced emphasis on demand-side inflationary pressure has been met with textbook interest rate hikes by central banks. Fiscal and supply-side measures have been more the exception than the rule (e.g., using Strategic Petroleum Reserve in the United States and ensuring food and fertilizer shipments through the Black Sea Initiative). The result has been a slowdown in global growth, persistently lower employment rates in many countries compared to pre-COVID-19 levels, and an exacerbation of income inequality, further shifting from wages to rents and profits, which had already been skewed prior to the pandemic.

Developing countries, and some developed ones are more exposed than ever to financial stress arising from high indebtedness and environmental shocks that are met with an uncoordinated response across the global

economy. With monetary policy geared towards preserving financial market stability, even the possibility of using inflation as an instrument to reduce real debt burdens and redress income and wealth inequalities appears to be off limits.

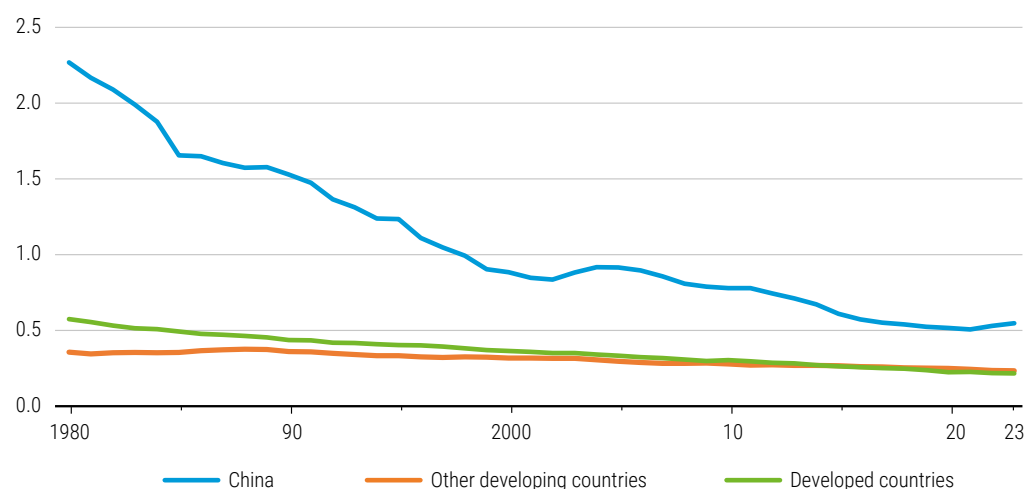
More generally, lack of policy coordination and weakened multilateral cooperation have betrayed the promise of “building back better”, constraining recent policy shifts that hold out the possibility of a more balanced recovery beyond this year (box I.2).

### Box I.1 Is a just transition possible in a low growth environment?

With appropriate international policy coordination, a period of low growth in developed countries can be an opportunity. It eases resource pressure, giving developing countries room for the industrial transition needed for a fast decarbonization. This would require fiscal and monetary agreements among the G20, WTO deals for technology transfer and collaboration with IMF and World Bank to provide access to finance. Energy efficiency has lagged in both developed and developing economies, with the latter needing more time due to lower incomes and limited policies. The former need to progress beyond the reliance on market-based mechanisms, as these are insufficient for the scale of the challenge.

**Figure B.I.1 Energy efficiency has increased since 1980 in most economies**

Carbon intensity of GDP  
(Grams of CO<sub>2</sub> per dollar of GDP)



**Source:** UNCTAD calculations based on the United Nations Global Policy Model and database.

**Note:** GDP at constant 2015 prices, PPP.

Market-based emission reduction strategies, such as carbon taxation, aim to promote renewables and fund the transition. However, these plans face practical hurdles. Energy spending, including fuels and power, typically accounts for less than 10 per cent of GDP in most economies (table B.1). This poses challenges for shifting from fossil fuels to renewables. Carbon tax proposals depend on revenue redistribution to households and businesses or investments in the renewable transition. Realistic tax rates, coupled with energy spending below 10 per cent of GDP, result in relatively small transfers compared to other income flows driving demand. This underscores the need for industrial policy and direct interventions to effectively guide energy production.

**Table B.I.1 Spending on energy is a small fraction of total spending in most countries**Spending on primary energy as percentage of GDP, current prices, 2022  
(Percentage)

	<b>Primary energy expenditure (Percentage of GDP)</b>
Russian Federation	21.4
Saudi Arabia	13.8
Indonesia	11.8
India	11.4
Australia	7.3
Canada	6.0
Brazil	5.7
Republic of Korea	5.6
Mexico	5.4
Argentina	5.0
Türkiye	4.7
South Africa	3.5
United States	3.4
China	3.3
Japan	3.2
Italy	2.7
France	2.5
Germany	2.4
United Kingdom	1.8

*Source:* UNCTAD calculations based on the United Nations Global Policy Model and database.

1. The effects of anti-inflation policies in advanced economies have been skewed, with the benefits accruing mostly to owners of financial assets and the costs mostly borne by wage earners and recipients of transfers everywhere, especially in developing countries. Aggressive monetary tightening threatens to hold back productive investment and restrain productivity growth for years to come. Moreover, focusing on containing wage growth, a minor player in the recent flare-up of inflation, has effectively put the burden of defending the real value of wealth on working people in both developed and developing countries. The focus on inflation reduction could have been on controlling prices that played a major role, such as energy prices, food and retail prices and exchange rates. The unchecked capacity of large firms to pass higher costs through to higher prices, while discussions on international taxation of profit move slowly, continues to compromise livelihoods worldwide.
2. Prioritizing private returns over social needs was demonstrated during the distribution of vaccines during the pandemic and the related protection of intellectual property rights, even when mass casualties have been the price to pay. This, together with the trade tensions described in chapter II, leads to deferral of critical decisions and commitments by technologically advanced countries, and sets a worrying precedent for the rest of the world as global temperatures and climate shocks intensify.
3. The return of industrial policy, most visibly in a series of legislative initiatives in the United States, while signalling a welcome break with the old Washington Consensus, is being shaped by geopolitical tensions and a retreat from multilateralism.

*“Achieving a post-pandemic recovery that reduces inequalities and averts a climate catastrophe, requires substantial changes to rules and practices of the global economy.”*

There is an urgent need to change course. Real wages need to start growing again in most leading economies and sustain their growth over a long period of time in order to effectively reduce inequality. Doing so will provide an incentive for capital formation and productivity growth. Instead, most leading central banks have continued to raise interest rates throughout 2023, sometimes with the explicit intention of impeding wage growth. An alternative growth trajectory requires

employment to expand, which, with the limited time left to respond to the climate challenge, must be efficiently directed to the right sectors and technologies. For developing countries, sufficient policy and fiscal space will be essential to better manage international resources which have been left to market forces.

However, as discussed in Part II of this Report, achieving a post-pandemic recovery that reduces inequalities and averts a climate catastrophe, requires substantial changes to rules and practices of the global economy.

#### Box I.2 Inflation targeting: the history of the 2-per cent target

Inflation targeting involves announcing inflation targets and a “credible and accountable” strategy to achieve them (Bernanke et al., 1999; Setterfield, 2006). The strategy reaffirms the prominent role of central banks setting interest rates, and on the fiscal authorities’ commitment to frugality (avoiding fiscal dominance).

Theoretically, central banks could pick any target inflation rate and adjust the nominal rate accordingly. But in the 1990s, the 2-per cent inflation target – a figure arbitrarily set by the central bank of New Zealand in 1990 – became widely adopted and justified by a series of assumptions about wage rigidity and product differentiation (Akerlof et al., 1996).

The main academic tenets of this approach continue to be put forward to this day, but after the Global Financial Crisis of 2008, the case for a higher inflation target gained force. It was based on the argument that, in a recession, when inflation falls, the nominal interest rate that equals the natural rate that can stimulate the recovery may well fall close to or below the zero lower bound. A higher inflation target in normal times would imply higher average nominal interest rates and provide more room for monetary policy to decrease interest rates when needed (Blanchard, 2022).

*“The 2-per cent inflation target – a figure arbitrarily set by the central bank of New Zealand in 1990 – became widely adopted and justified by a series of assumptions about wage rigidity and product differentiation.”*

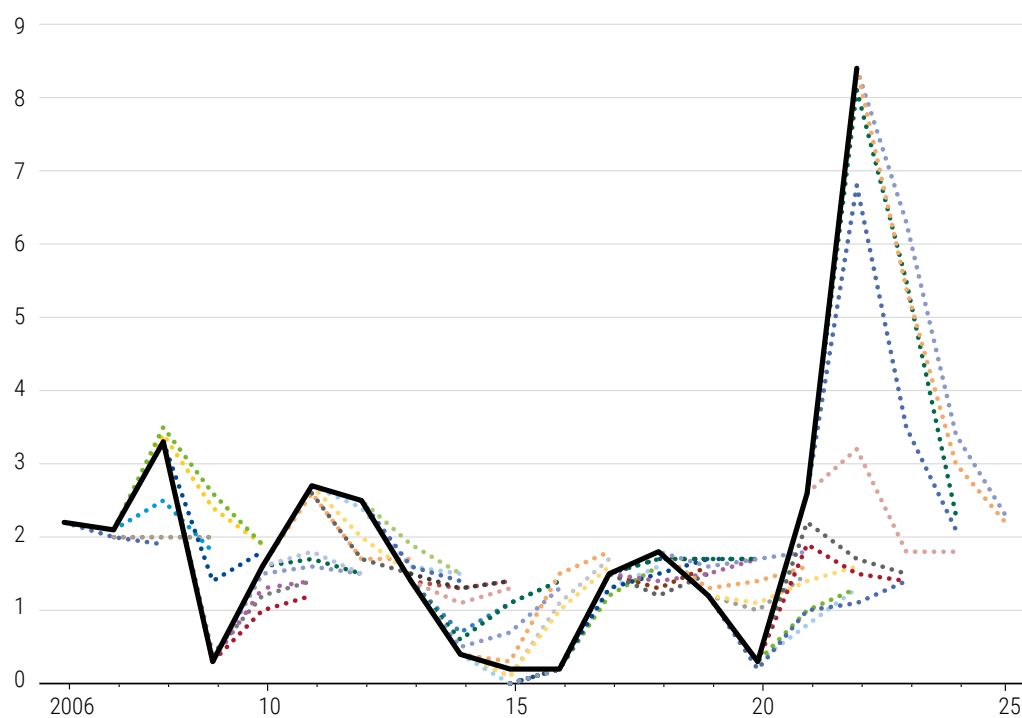
To update the theoretical framework, two ideas emerged: first, a Phillips curve with a broad flat section (Yellen, 2019; Seccareccia and Khan, 2019; Ratner and Sim, 2022) suggesting that disinflationary policies have become more costly in terms of employment. Indeed, “among the greatest disappointments for proponents of inflation targeting has been its apparent inability to reduce the so-called sacrifice ratio, the unemployment costs of fighting inflation” (Epstein, 2003: 2). Bernanke and co-authors concluded that the sacrifice ratio is often higher after adoption of an inflation-targeting regime (Bernanke et al., 1999). Second, the concept of a secular fall in the natural interest rate due to aging and automation (Eggertsson et al., 2019) is contradicted by the data (Taylor, 2017).

At the end of 2022, there were calls for a new monetary normal around a higher inflation target. Some observers suggested a 3 per cent figure (Blanchard, 2022) while others proposed a more flexible target varying between 2 and 4 per cent (Stiglitz, 2023). But should there be a target at all for monetary policy?

Researchers have found that the policy record experience of the inflation-focused approach has been rather disappointing, even disastrous for many countries (Epstein, 2003; Ball and Sheridan, 2004; Roger and Stone, 2005). “On average, there is no evidence that inflation targeting improves performance as measured by the behaviour of inflation, output or interest rates” (Ball and Sheridan, 2004: 250). Often, the rate of inflation has been decreasing independently of whether these countries adopted an inflation target or not, while employment gains have generally not materialized.

**Figure B.I.2 Inflation targeting is complicated by the difficulty of making correct projections**

Projections of the European Central Bank and actual Harmonized Index of Consumer Prices inflation rate (Percentage)



**Source:** European Central Bank Macroeconomic Projection Database.

**Note:** Each coloured dotted line reflects a given projection at a certain moment in time.



## REFERENCES

- Akerlof GA, Dickens WT, Perry GL, Gordon RJ and Mankiw NG (1996). The macroeconomics of low inflation. *Brookings Papers on Economic Activity*. (1):1–76.
- Arnold M (2023). Ireland's wild data is leaving economists stumped. *The Irish Times*. 23 August.
- Ball L (1994). What determines the sacrifice ratio? In: Mankiw NG, ed. *Monetary Policy*. The University of Chicago Press. Cambridge MA:155–193.
- Ball LM and Sheridan N (2004). Does inflation targeting matter? In: Bernanke B and Woodford M, eds. *The Inflation-Targeting Debate*. University of Chicago Press. Chicago, IL: 249–282.
- Bank of Italy (2023). *Relazione Annuale Anno 2022*. Rome.
- Bernanke BS, Laubach T, Mishkin FS and Posen AS (1999). *Inflation Targeting: Lessons from the International Experience*. Princeton University Press. Princeton, NJ.
- Bivens J (2022). Corporate profits have contributed disproportionately to inflation. How should policymakers respond? Working Economics Blog of the Economic Policy Institute.
- Blanchard O (2022). It is time to revisit the 2% inflation target. *Financial Times*. 28 November.
- Blanchard O and Leigh D (2013). Growth forecast errors and fiscal multipliers. IMF Working Papers. 13/143. International Monetary Fund. Washington, DC.
- Bruno M and Easterly W (1996). Inflation and growth: In search of a stable relationship. *Review*. 78(3).
- Chowdhury A and Sundaram JK (2023). Inflation phobia myths and dogma exacerbate policy responses. *Review of Keynesian Economics*. 11(2):147–171.
- Costantini O (2018). Invented in America: Birth and evolution of the cyclically adjusted budget rule, 1933–61. *History of Political Economy*. 50(1):83–117.
- Costantini O (2020). Eurozone as a trap and a hostage: Obstacles and prospects of the debate on European fiscal rules. *Intereconomics*. 55(5):284–291.
- Crouch C (2009). Privatized Keynesianism: An unacknowledged policy regime. *British Journal of Politics and International Relations*. 11(3):382–399.
- Eggertsson GB, Lancastre M and Summers LH (2019). Aging output per capita and secular stagnation. *American Economic Review: Insights*. 1(3):325–342.
- Epstein GA (2003). Alternatives to inflation targeting monetary policy for stable and egalitarian growth: A brief research summary. PERI Working Paper. 62.
- Epstein GA and Yeldan AE (2009). *Beyond Inflation Targeting: Assessing the Impacts and Policy Alternatives*. Edward Elgar Publishing Limited. Glos.
- Federal Reserve Board (2022). History of the FOMC's Policy Normalization Discussions and Communications. Available at: <https://www.federalreserve.gov/monetarpolicy/policy-normalization-discussions-communications-history.htm> (accessed 29 August 2023).
- Hayes C and Jung C (2022). *Prices and Profits after the Pandemic*. Institute for Public Policy Research. London.
- Schnabel I (2022). The globalisation of inflation. Speech at a conference organized by the *Österreichische Vereinigung für Finanzanalyse und Asset Management*. 11 May. Available at: [https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220511\\_1~e9ba02e127.en.html](https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220511_1~e9ba02e127.en.html) (accessed 31 July 2023).
- Konczal M and Lusiani N (2022). Prices profits and power: An analysis of 2021 firm-level markups. Roosevelt Institute Working papers. New York, NY.

- Levrero ES (2021). Estimates of the natural rate of interest and the stance of monetary policies: A critical assessment. *International Journal of Political Economy*. 50(1):5–27.
- Ratner D and Sim J (2022). Who killed the Phillips curve? A murder mystery. FEDS Working Paper. 2022–28.
- Roger S and Stone MR (2005). On target? The international experience with achieving inflation targets. IMF Working Papers 163. International Monetary Fund. Washington, DC.
- Seccareccia M (2017). Which vested interests do central banks really serve? Understanding central bank policy since the global financial crisis. *Journal of Economic Issues*. 51(2):341–350.
- Seccareccia M and Khan N (2019). The illusion of inflation targeting: Have central banks figured out what they are actually doing since the global financial crisis? An alternative to the mainstream perspective. *International Journal of Political Economy*. 48(4):364–380.
- Setterfield M (2006). Is inflation targeting compatible with post Keynesian economics? *Journal of Post Keynesian Economics*. 28(4):653–671.
- Stiglitz JE (2023). How not to fight inflation. *Project Syndicate*. 26 January
- Storm S (2017). The political economy of industrialization. *Development and Change*. (Virtual Issue):1–19.
- Storm S (2022). Inflation in the time of corona and war: The plight of the developing economies. Working Paper Series 192. Institute for New Economic Thinking. New York, NY.
- Taylor L (1988). *Varieties of Stabilization Experience: Towards Sensible Macroeconomics in the Third World*. Clarendon Press. Oxford.
- Taylor L (2017). The “natural” interest rate and secular stagnation: Loanable funds macro models don’t fit today’s institutions or data. *Challenge*. 60(1):27–39.
- UNCTAD (TDR, 2009). *Trade and Development Report 2009: Responding to the Global Crisis*. (United Nations Publication. Sales No. E.09.II.D.16. New York and Geneva).
- UNCTAD (TDR, 2019). *Trade and Development Report 2019: Financing a Global Green New Deal* (United Nations publication, Sales No. E.19.II.D.15. Geneva).
- UNCTAD (TDR, 2021). *Trade and Development Report 2021: From Recovery to Resilience – The Development Dimension*. (United Nations Publication. Sales No. E.22.II.D.1. Geneva).
- UNCTAD (TDR, 2022). *Trade and Development Report 2022: Development Prospects in a Fractured World: Global Disorder and Regional Responses*. (United Nations Publication. Sales No. E.22.II.D.44. Geneva).
- Weber IM and Wasner E (2023). Sellers’ inflation profits and conflict: Why can large firms hike prices in an emergency? *Review of Keynesian Economics*. 11(2):183–213.
- Wessel D (2018). Alternatives to the Fed’s 2 per cent inflation target. Rethinking the Fed’s 2 per cent inflation target. *Brookings Institutions Working Papers*. Washington DC.
- Yellen J (2019). Former Fed Chair Janet Yellen on why the answer to the inflation puzzle matters. Remark delivered at a public event “What’s (not) up with inflation?” hosted by the Hutchins Center on Fiscal & Monetary Policy at Brookings. 3 October. Available at: <https://www.brookings.edu/articles/former-fed-chair-janet-yellen-on-why-the-answer-to-the-inflation-puzzle-matters/> (accessed 31 July 2023).



# Chapter II

International  
Markets: Trade,  
Capital Flows,  
Commodities



## From a fractured international architecture to a sustainable new global order

The current wrong-footed international financial architecture and global trading system undermines the pursuit of the harmonious and stable order required to meet the goals of the 2030 Agenda for Sustainable Development or the Paris Agreement targets. More concretely, UNCTAD analysis finds that after the COVID-19 shock:

- International trade and its related power asymmetries have contributed to further worsening global labour income share. In addition, unilateral shifts in industrial policies in developed economies are generating tensions among trading partners, hampering prospects for structural transformation in developing countries.
- Elevated commodity prices persist globally, harming the most vulnerable and creating food insecurity for 350 million people worldwide.
- Global financial conditions are markedly deteriorating, placing almost one third of frontier market economies on the precipice of debt distress. This follows the deepening of their financial integration into international capital markets over the last decade.

In envisioning a hopeful future, a new paradigm is needed, one that goes beyond the traditional boundaries of globalization and trade liberalization. This new global order would require a comprehensive approach and a concerted effort to transform aspirations into a resilient, multifaceted system capable of meeting the intricate demands of an interconnected world. The imperative is clear: escalate the search for effective governance measures to rectify the imbalances and vulnerabilities inherent in the current global economic and financial architecture.

### In light of these dynamics, UNCTAD proposes

- Building a new consensus for international trade that can better accommodate policy priorities such as building resilient supply chains, achieving a just energy transition, delivering decent jobs, tackling corruption and corporate tax avoidance, and developing a secure digital infrastructure.
- Revisiting existing international trade agreements to create policy space for countries to redesign their production, consumption and trading profiles to face contemporary global challenges.
- Strengthening South–South trade cooperation, for instance by revitalizing the Global System of Trade Preferences (GSTP).
- Establishing effective mechanisms for debt restructuring and relief based on the participation of all developing countries with agreed procedures, incentives and deterrents.

## A. INTRODUCTION

Two key sets of factors have shaped the recent evolution in international markets. On the one hand, the year 2022 marked the culmination of the pandemic recovery. In this sense – and considering the risks to global growth discussed in chapter I – the world economy now begins a post-COVID-19 pandemic period conditioned by a few decisive elements whose overall impact is difficult to predict. These include a tighter monetary stance by central banks in advanced countries; a more geostrategic policy approach to international economic relations; the growing influence of industrial policy on trade strategies of major economies; and multiple geoeconomic uncertainties.

On the other hand, the post-pandemic cycle reveals trends that build upon pre-existing structural weaknesses in the global economy, which pre-date the COVID-19 shock. These are particularly onerous for developing countries and relate to:

- The growing concentration of export markets and related asymmetry of income distribution;
- A slowdown in investment and an unsustainable burden of debt;
- A widening technological divide;
- The mounting costs of the climate crisis and related challenges around the energy transition.

The intertwining of conjunctural and structural concerns poses governance challenges for today's highly interdependent global economy. In addition to the gaps in the international financial architecture analysed in Part II of this Report, there are serious concerns about the rule-based multilateral trading system given the diminishing prospects of achieving the kind of harmonious and stable order required to meet the goals of the 2030 Agenda and the targets set by the Paris Agreement.

If, and how, policymakers will meet these governance challenges over the coming months will determine whether the world avoids a global recession in 2024; whether developing countries avoid a “lost decade”, and whether the currently fractured multilateral system ends the decade in more robust health.

Finding the right response will require policymakers to adopt a long-term perspective and a holistic approach. Many longstanding concerns of developing countries regarding the international trading system, including distorted agricultural markets, food insecurity, premature de-industrialization and restrictive business practices, have never been adequately addressed, often leading to winner-takes-most outcomes rather than the win-win results envisaged in canonical trade models.

This chapter addresses these dilemmas, surveying recent developments in international trade (section B), commodity markets (section C) and international capital markets (section D), with the aim of identifying priority areas that require multilateral attention.

## B. TRADE

After experiencing a rollercoaster ride in 2020–2022, global trade in goods and services is forecast to grow about 1 per cent in 2023, significantly below world economic output growth (chapter I). It is also lower than the average growth registered during the last decade, itself the slowest average growth period for global trade since the end of the Second World War. In the medium term, trade is heading back to its subdued pre-crisis trend; in the near term, it will stand even below this figure. This is because the growth of merchandise trade has hovered around negative territory in 2023, despite global trade in services showing resilience.

*“Global trade is forecast to grow about 1 per cent in 2023, significantly below world economic output growth, with merchandise trade hovering in negative territory.”*

Behind these observations lie deeper shifts in the structure of global trade and a transformation of the political readings of the role of international trade today. Many of these changes concern the governance system that emerged with the conclusion of the Uruguay Round in 1994 and the creation of the World Trade Organization (WTO).

If the 1980s and the 1990s are commonly described as the period of trade liberalization, the past three decades were marked not so much by reducing trade tariffs and barriers to investment but by changes to domestic regulatory standards and norms within national jurisdictions. The global regulatory architecture that emerged as a result of these reforms has benefited the interests of big business, such as international banks and other multinational enterprises (MNEs), above all else (Rodrik, 2023). As many developing countries were on the receiving end of these reforms, their policy space has been progressively diminished by the recent crises.

The asymmetry of gains from the international trading system, apparent in both the advanced and developing countries, has been building into a backlash against the rules of global governance and, increasingly, the very idea of free trade. This backlash is prompting policymakers to reassess their strategic prioritization of the role of trade. In the unfolding policy debate on the regulatory architecture of global trade, the potential costs of deeper trade relations are no longer seen as marginal. Similarly, the notion that the benefits from

*“The asymmetry of gains from the international trading system, apparent in both advanced and developing countries, has been building into a backlash against the rules of global governance and the very idea of free trade.”*

deregulation reforms – to developed and developing countries alike – would flow automatically has never been challenged so strongly and so widely. Instead, managing trade increasingly turns on harnessing strategic interests with the support of State actors, much more willing to intervene in the workings of markets, both domestic and international (Sullivan, 2023; Hudson, 2022).

A new lexicography of trade reflects these ongoing shifts, with a series of buzzwords, such as “fragmentation”, “deglobalization”, “slowbalization”, “reshoring”, “nearshoring”, “friendshoring”, “de-risking”, “decoupling”, “open strategic autonomy” and “new industrial policy” peppering current discussions around trade policy. The turning tide is also visible in an emergent new paradigm of trade that approaches the challenge of global economic interdependence from a more strategic standpoint that can better accommodate new policy priorities, such as reducing inequality, building resilience, and accelerating the energy transition (Rodrik, 2023).

The question to what extent the emergent consensus on the need to reform international trade can be translated into a new regime of international trade remains open. What is already apparent is that a significant reshaping of world trade, including the restructuring of global supply chains, is under way. Navigating this

*“A significant reshaping of world trade is under way. Navigating this transformation poses major challenges to most developing economies.”*

transformation poses major challenges to most developing economies at a time when their prospects for economic growth are deteriorating, the investment climate is worsening, and financial stresses are mounting (see chapter I and section D below).

If history is any guide, as national security and geopolitical considerations move to the centre of the policy stage, not only will multilateral options struggle for attention, but many developing countries risk being caught in the crossfire of trade disputes or face growing pressure to take sides in economic conflicts they neither want nor need. Furthermore, the rise of protectionist unilateral trade measures and the more widespread use of industrial policies in large economies can adversely impact developing economies’ exports and hinder their prospects for structural transformation.

Some developing countries may see gains from a restructuring of global supply chains in the near-term. Similarly, a green investment boom in advanced economies might bring opportunities for some fortunately endowed countries, such as exporters of strategic minerals. Yet, sustainable developmental success will require parallel support to promote access to reliable (and cheaper) sources of finance, a rebalancing of trade rules and levelling the playing field.



This, in turn, includes policies that facilitate technology transfer and reduce the market power of large MNEs, as well as enabling developing countries to add more value domestically to their exports, including through greater processing of raw materials. What is more, an analysis of several key indicators relating to income distribution and power asymmetry confirms that development cannot be reduced to increased trade flows, and that achieving the Sustainable Development Goals (SDGs) requires a set of proactive policy strategies and institutions that reflect economic, social and environmental priorities of the developing countries.

## 1. Review of recent cyclical developments in international trade

Recent trends in international trade provide a mix of good and bad news, with the balance tipping to the negative side, especially when looking beyond conjunctural indicators and considering some recent developments relating to trade policy (subsection 2) and the distributional impact of trade (subsection 3).

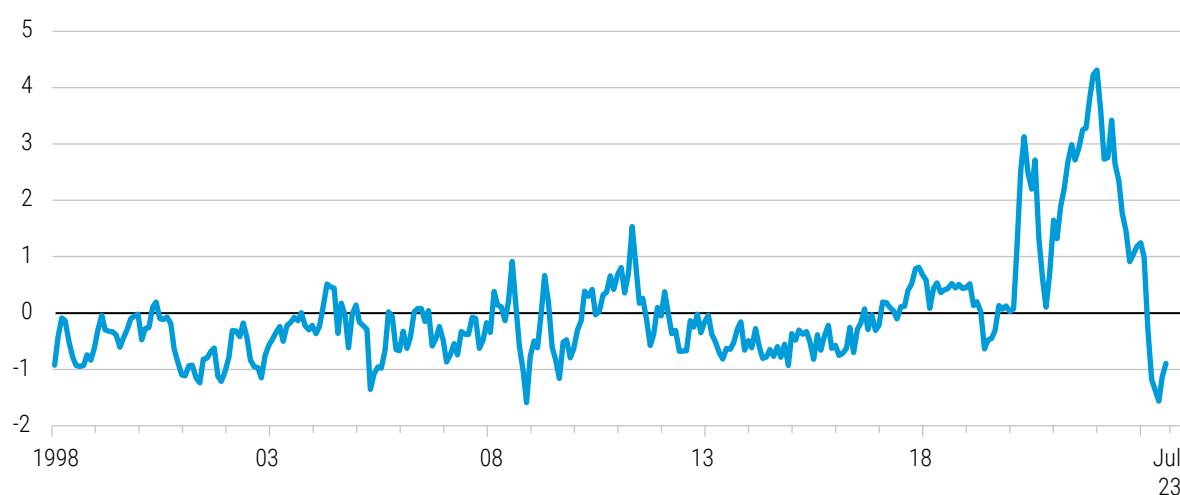
*“The normalization of cyclical trade indicators should not mask the ongoing tectonic shifts that are taking place in international trade policy settings.”*

On the positive front, several indicators suggest a return to some form of normalcy after the collapse and recovery that followed the COVID-19 outbreak, with the major supply-chain disruptions that took place between 2020 and 2022 coming to an end (figure II.1). Altogether, this is expected to ease pressures on prices owing to the end of the lockdowns in China, the normalization of trade composition after the COVID-19 boom in demand for manufactured goods, the stabilization of transport logistics for goods in several developed countries, and adjustments to the effects of the war in Ukraine and the economic sanctions that followed.

The trend towards normalization is also reflected in the sharp drop of international maritime freight rates for container and dry bulk during the second half of 2022, after a surge to historical highs in the aftermath of the COVID-19 outbreak (figure II.2).

**Figure II.1 The sharp swing of supply chain pressures after their COVID-19 highs**

Global supply chain pressure index  
(Standard deviations from average value)



Source: Benigno et al. (2023).

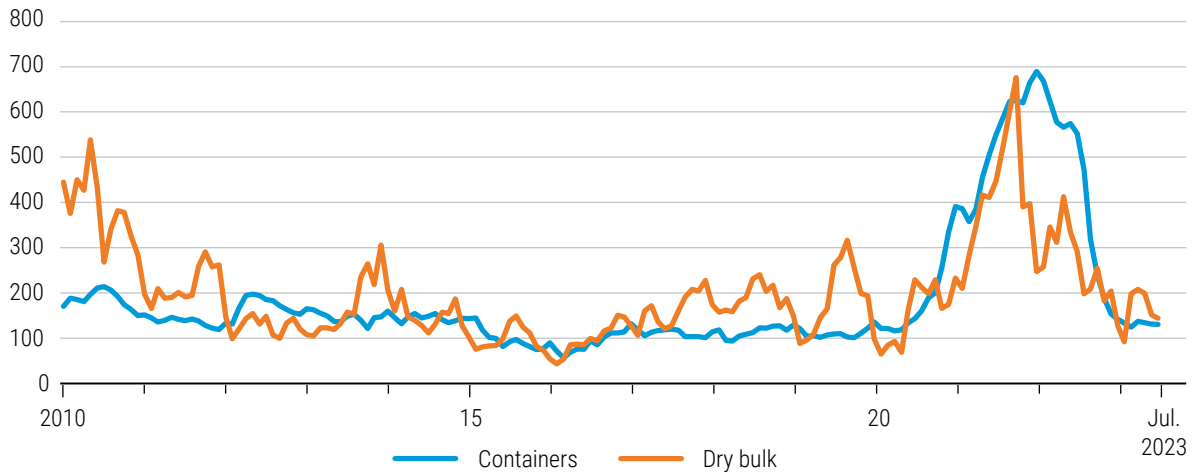
**Note:** The Global Supply Chain Pressure Index (GSCPI) integrates transportation cost data and manufacturing indicators to provide a gauge of global supply chain conditions, by considering a number of metrics with the aim of providing a comprehensive summary of potential supply chain disruptions. For global transportation costs, it includes data from the Baltic Dry Index and the Harpex index, as well as airfreight cost indices from the United States Bureau of Labor Statistics. GSCPI also uses several supply chain-related components from Purchasing Managers' Index (PMI) surveys, focusing on manufacturing firms. The index is normalized such that a zero indicates the index is at its average value, with positive values representing how many standard deviations the index is above this average value (and negative values representing the opposite).



**Figure II.2 Maritime freight rates have returned close to their 2010s average**

Monthly rates, dry bulk and containers

(Index numbers, average 2015=100)



**Source:** UNCTAD calculations based on Clarksons Research Shipping Intelligence Network database.

**Note:** “Dry bulk” relates to the Baltic Exchange Dry Index and “containers” to the Shanghai Containerized Freight Index (SCFI) Comprehensive index.

Furthermore – and relevant for trade in services as it relates to both international transport and tourism, two of its main components – the recovery in international air traffic has continued after the sector was hit hard by the pandemic. Global air revenue-passenger kilometres (RPKs) – which indicates the number of kilometres travelled by paying passengers – was only 9 per cent below pre-pandemic levels in May 2023. This followed an expansion of almost 50 per cent year on year, owing partly to China reopening its international markets, which resulted in an almost threefold annual increase for Asia-Pacific carriers (figure II.3).

All the above positive trends pushed international trade, when measured in current dollars, to an all-time high of around \$32 trillion in 2022, an increase of 13 per cent compared to 2021 and a rise of 25 per cent from the pre-COVID-19 levels of 2019. However, a pertinent factor behind this result relates to the *sharp price increases in some heavily traded commodities*, especially energy and to a lesser extent agri-food, metals and minerals. When measured in constant prices, international trade, both goods and services, recorded an increase of about 3.5 per cent in 2022.

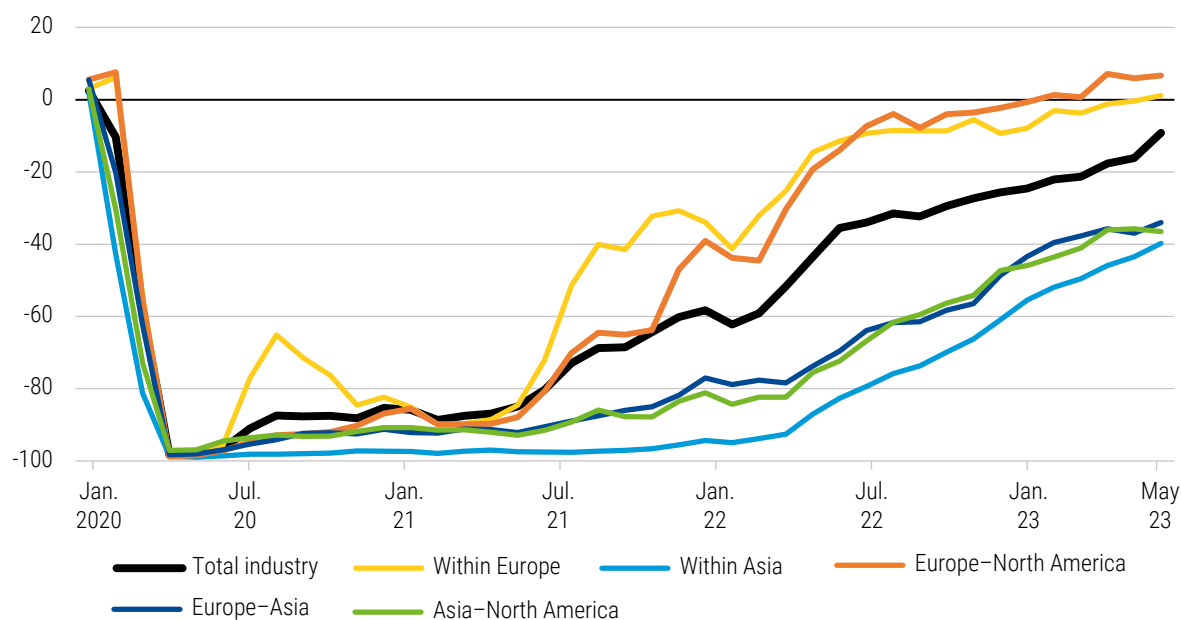
Under a more granular examination, quarterly data shows that merchandise trade peaked during the second or third quarters of 2022 – depending on whether figures are looked at in constant (volumes) or current prices (values) (figure II.4). Over the subsequent quarters, declines set in, albeit more slowly when controlling for the negative price effects (dashed line). This was unexpected to most observers, who had anticipated a significant rebound owing to a normalization of the inventory cycle and a relaxing of the pandemic restrictions in China. Preliminary estimates for the second and third quarters of 2023 confirm the downward trend as the post-lockdown rebound has waned and expectations about international merchandise trade prospects have deteriorated (*Financial Times*, 2023a).

Regarding trade in services, this subaggregate component also receded during the second half of 2022, while estimates for 2023 show resumed growth during the first half of 2023. This highlights the overall resilience of some of the services sectors, even if the overall growth over the last five quarters has been weak.

As a result, the annual growth of international trade in goods and services is expected to decelerate to about 1 per cent in real terms in 2023, less than half the already subdued growth of global economic activity (chapter I). Moreover, multiple downside risks remain, which could further impact the trade outlook. These include, inter alia, ongoing trade tensions between major economies, the weakening of global demand and growing geopolitical uncertainties.

**Figure II.3 International air passengers flying high: But Asia still not at cruising altitude**

International revenue passenger kilometres, year-on-year change compared to 2019  
(Percentage)

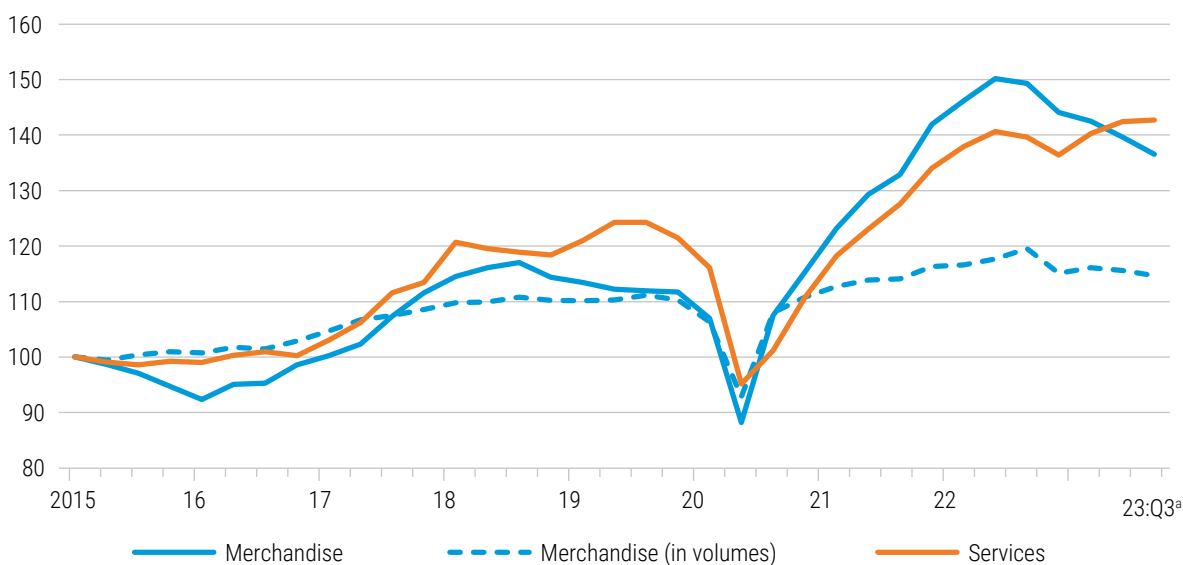


**Source:** UNCTAD calculations based on IATA (2023) *Monthly Statistics by Route Area* (May).

**Note:** The figure depicts the top five route areas in 2019, ranked by performed traffic level. RPKs corresponds to the sum of the products obtained by multiplying the number of revenue passengers by the flight stage distance (one RPK means that one passenger is carried on one kilometre).

**Figure II.4 Global trade: Merchandise is declining while services appear more resilient**

Quarterly world trade, merchandise (in values and volumes) and services (in values)  
(Index numbers, first quarter of 2015=100)



**Source:** UNCTAD calculations based on UNCTADstat database.

**Note:** All series are seasonally adjusted.

<sup>a</sup> Estimates from UNCTAD nowcasts for the second and third quarters of 2023.

## 2. A new paradigm of international trade?

The subdued trade outlook coincides with a renewed focus on policy matters. For much of the post-World War II era, policy decisions on trade were built on a relatively straightforward set of assumptions. A general commitment to openness tempered by abiding sectoral priorities and security concerns, combined with a recognition that the places where goods were made largely coincided with where jobs were created and profits registered (and reinvested).

While the connections were never perfect, particularly in developing countries, international trade was seen, both academically and politically, as an important lubricant that could help support a virtuous circle connecting jobs, investment, productivity, and incomes. Even where the required international linkages were weak, broken, or missing altogether, the “permissive international trade regime” embedded in the post-war global economic architecture gave governments the policy space and tools to repair or replace them. It also allowed governments to “create social and economic institutions that suited their individual preferences and needs” (Rodrik, 2023). That stopped being the case a while ago.

The evolution of global value chains, the financialization of corporate structures, the adoption of one-size-fits-all policy programmes and the squeezing of national fiscal autonomy have narrowed the room for policymakers aiming to align their efforts at integrating into the global economy with national and local priorities. For many developing countries, this challenge has coincided with uneven growth spurts coexisting with weak job creation (at least in the formal economy), structural regression towards less diversified economies, including through “premature de-industrialization”, increased commodity dependence and widening social divisions.

The limits of the labour-intensive trade-led growth model and the unequal benefits from trade integration became a growing concern before the pandemic (e.g., World Bank, 2020). During the past two years, this concern further transformed into a set of moves that point to a new political economy of trade governance. In the emergent “new consensus”, globalization in general, and trade liberalization specifically, are secondary to the goals of building resilient supply chains, supporting a just energy transition, delivering decent jobs, tackling corruption and corporate tax avoidance, and developing a secure digital infrastructure (Luce, 2023).

In a candid statement, the National Security Adviser to the President of the United States, argued that, not only did meeting these goals move trade policy beyond a simple call to reduce tariffs, it also abandoned the assumption that “trade-enabled growth would be inclusive growth, that the gains of trade would end up getting broadly shared within nations” and rather took the view that a more integrated policy approach was required, built around a dedicated industrial strategy and new international partnerships (Sullivan, 2023).

These are laudable aims, long advocated by UNCTAD and previous editions of this report (e.g., TDR 1997, 2018). But without adequate policy coordination at all levels of policymaking, the move towards a new set of priorities for international trade governance can generate tensions among trading partners. It also can raise serious concerns, particularly for developing countries with no fiscal space, if the approach is adopted unilaterally and without careful consideration of the implications for established multilateral practices and procedures. Some aspects of these tensions, current and potential, are examined below.

### a. The trade dispute between China and the United States

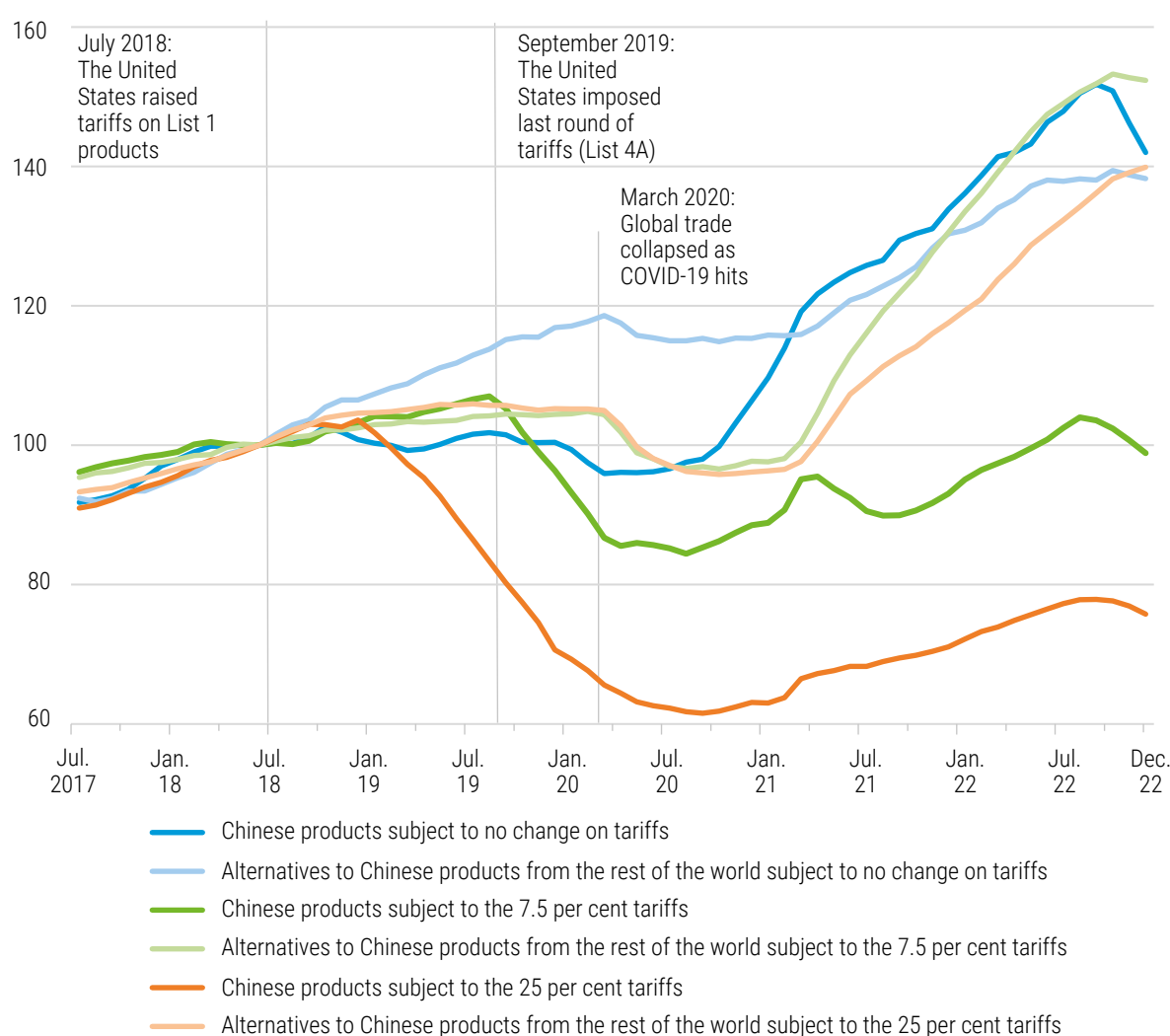
This century has seen the United States displaced by China as the world's leading exporter of manufactured goods (chapter I). While a growing trade deficit with China provoked intermittent responses from legislatures in the United States (Siripurapu and Berman, 2022), a more assertive stance began only in 2017, with progressive increases in tariff on exports from China. This has resulted in significant trade diversion, mostly to the benefit of main economic rivals to China, including Mexico and the European Union (Moody's Analytics, 2020), though some policy details have also created worries, and at times outright disapproval, among these beneficiaries.

A paradox of the current trade dispute between the world's two largest economies is that total imports of goods to the United States from China have returned to their pre-COVID-19 peak. This is due to the sharp increase in products not subject to tariffs (figure II.5). Bilateral imports of both goods and services from China to the United States reached the highest level ever recorded, at \$564 billion in 2022, as services continue to expand. The United States remains by far the main destination for exports of merchandise from China; followed by Japan, Republic of Korea, Viet Nam and India.

### Figure II.5 The paradox of United States-China trade decoupling

**The merchandise imports by the United States from China that were subject to increased tariffs have followed a divergent trend. The rest of the bilateral imports continued to rise until mid-2022, resulting in the total bilateral import bill of 2022 nearly matching its record high of 2018**

Goods imports of the United States from China and the rest of world by tariff list  
(Index numbers, June 2018=100)



**Source:** Bown (2023) based on United States imports data from the United States Census Bureau and the Bureau of Economic Analysis.

**Notes:** Lighter lines refer to imports from the rest of the world, which have therefore not been subject to increased tariffs by the United States. All series refer to 12-month trailing sums of not seasonally adjusted import data. A "list" refers to the group of products subject to the United States tariffs imposed on imports from China under Section 301 of the Trade Act of 1974. "Chinese products subject to the 25 per cent tariffs" relates to goods appearing in lists 1, 2 or 3. "Chinese products subject to the 7.5 per cent tariffs" relates to goods appearing in list 4A.

At the same time, notwithstanding this recovery, the trade dispute has imposed costs on the trading partners. A large body of research shows that real incomes have been adversely affected in both countries due to the tariffs, with consumers of imported goods shouldering the burden through increased prices (e.g., Amiti et al., 2019; Cavallo et al., 2021; Fajgelbaum and Khandelwal, 2022). Fajgelbaum et al. (2023) find that it also opened new trade opportunities for “bystander” countries rather than just causing shifts among existing trade partners.

While the precise trigger of the process is yet to be ascertained, this may be explained by the fact that countries that became the beneficiaries of the trade war (e.g. Czechia, Malaysia and Mexico, according to Fajgelbaum et al., 2023) might have viewed it as an opportunity to invest in new facilities, trade infrastructure, or trade and investment facilitation, or alternatively, because these countries might have enjoyed better credit reallocation conditions (Hassan et al. 2020). Alternatively, they might have already been well integrated into global trade, allowing them to seize new exporting opportunities across various sectors. Importantly, the significant diversity of the benefiting economies (not the sectors) suggests that country-specific reforms and institutions can be key determinants in driving how countries’ exports respond in this new era of post-pandemic globalization.

## b. The rise of export controls

New export controls have been another manifestation of the shifting sentiment around trade policy across the globe. These have mostly covered three types of non-mutually exclusive objectives: (i) securing domestic supply, (ii) restricting geopolitical rivals, and (iii) encouraging investment in locally based processing facilities.

### *(i) Securing domestic supply*

With regards to domestic supply concerns, the current WTO rules allow for temporary export restrictions or prohibitions to prevent or relieve critical shortages of essential products, provided all measures are communicated, have phase-out timelines and are proportionate to the scale of the problem at hand.

A key issue here is to define what can be considered as proportionate. During COVID-19, for instance, over 80 countries resorted to banning exports of medical and personal protective goods in the early phases of the pandemic (UNCTAD, 2021a). Similarly, following the outbreak of the war in Ukraine in early 2022, almost 100 export restrictions on essential agricultural commodities were identified to have been applied by 35 WTO members or observers (WTO, 2023).

Overall, such unilateral measures often do more harm than good, which begs the question of whether the international community should not come up with stricter rules, especially on essential goods such as medicinal products or food, to ensure that similar future practices are better controlled and do not result in a negative spiral that ultimately hampers the resilience of all. Discussions have been continuing for some time, yet no significant agreement has been reached and it is unlikely to emerge before the WTO Thirteenth Ministerial Conference of February 2024, at best.

### *(ii) Constraining geopolitical rivals*

A plethora of additional geopolitical-related export restrictions – such as non-automatic licensing, incomplete rebate of value added tax (VAT) on exports or even outright bans – have also emerged in recent years. Under Article XXI of the General Agreement on Tariffs and Trade (GATT), “national security” has long provided an umbrella for derogation of international trade rules. The war in Ukraine, along with concerns about potential future military conflicts, has only strengthened that position. As a result, the supply of different raw materials critical for the green transition or for food or industrial production has been affected after several exporters implemented such measures (OECD, 2022).

In other cases, these curbs have related to high-technology components, for example the overseas sales of chip-making technology, as well as sales of advanced chips to some countries including, China, by the United

States in October 2022. This was later followed by Japan and the Kingdom of the Netherlands. Other similar interventions relate to the efforts of the United States to exclude Chinese companies from participating in the development of global digital infrastructure for security concerns such as the development of the global submarine cable market (Financial Times, 2023b). Elsewhere, Poland, Slovakia, Hungary and Romania have imposed a ban on the import of Ukrainian grain, even as the European Union discontinued its own ban in September 2023 (AP News, 2023).

### *(iii) Encouraging investment in locally based processing facilities*

Export restrictions aimed at boosting value addition domestically and building forward linkages within the country are, from a developmental perspective, becoming an objective for some commodity exporting countries. In this vein, Indonesia has encouraged investment in locally based processing facilities relating to the global energy transition by limiting its nickel exports through successive policies since 2009. This culminated in a complete ban on nickel ore exports in 2014 (UNCTAD, 2017).

The European Union disputed this policy at the WTO, and in November 2022, a Panel recommended that Indonesia brings its measures into conformity with its obligations under the GATT 1994. Indonesia subsequently appealed that decision, and as of now, the case is pending due to the current non-operational status of the Appellate Body.<sup>1</sup> More recently, Zimbabwe, in December 2022, and Namibia, in June 2023, also announced the ban of exports of unprocessed critical minerals including rare earths and lithium to try to build more of the supply chain for processing raw materials domestically (Africanews, 2022; Reuters, 2023).

In this instance, and notwithstanding the specific aspects of each commodity and situation, UNCTAD has long maintained that effectiveness of such types of trade policy depends on the non-substitutability of the commodity in question. If ready substitutes for the product are available in international markets, other exporters are likely to benefit from these export bans.

*“One metric to gauge the adequacy of export restrictions of raw materials to promote domestic processing facilities by developing countries should be how well a policy can promote economic diversification and advancement.”*

The trade-off between national policy autonomy and global and regional economic integration is difficult to manoeuvre for most developing countries. Insufficient policy space can prevent governments from addressing local needs, ultimately undermining the effectiveness and trust in global regulations. One metric for assessing the appropriate balance of policies for a country's needs can be the effectiveness of a policy in promoting economic diversification and advancement. This is provided there is no superior alternative option for achieving the same objective for all parties involved.

### **c. The growing use of subsidies and other trade instruments by developed countries to foster the green transition**

The growing use of subsidies – sometimes discriminatory – has emerged, notably in developed countries that have rediscovered a more active role for industrial policies to promote investment and jobs at home and facilitate the transition to green practices. In the United States, there have been a series of interrelated legislative initiatives – the Inflation Reduction Act (IRA), the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and the Infrastructure Investment and Jobs Act (IIJA) – which promote new spending and tax credits aimed, inter alia, at supporting key sectors of the economy – electric vehicles, green manufacturing, the semiconductor industry, and renewable energy production – as well as addressing regional divergence, labour market inequalities, and national security issues.

In the European Union, under the banner “open strategic autonomy”, the main relevant frameworks are the Green Deal Industrial Plan (GDIP) and its Net-Zero Industry Act (NZIA). GDIP will include multiple funding approaches and places an emphasis on workforce training, aiming to equip European workers with the

<sup>1</sup> For more details, see [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds592\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds592_e.htm).

necessary skills to maximize their employability during the energy transition. NZIA will ease the regulations on state aid regarding allowable domestic subsidies, to cover more types of clean energy projects. Also, the European Union intends to extend its support to domestic manufacturing through the implementation of the European Sovereignty Fund, offering subsidies for select industries. However, unlike the initiatives in the United States, there are no clear budget lines attached to these proposals, with some countries arguing that it is simply a way to allocate unused funds from the Recovery and Resilience Facility of the European Union as well as other existing funding programmes (such as InvestEU, REPowerEU, and Innovation funds).

Though they stand outside the subsidy provision, when it comes to trade, two parts of the overarching GDIP are particularly pertinent: the carbon border adjustment mechanism (CBAM) and the Deforestation Regulation (EUDR). CBAM is scheduled to start in October 2023, while the EUDR entered into force in June 2023.<sup>2</sup>

These initiatives have raised concerns around the world, especially among developing countries (e.g., UNCTAD, 2021b). Several countries, including China, are expected to challenge it at WTO, partly because the introduction of distinct carbon pricing certificates based on a product's country of origin might infringe upon the WTO "most favoured nation" (MFN) principle (Garg, 2022). Moreover, they risk unfairly penalizing the exports of developing countries because these economies have often less capacity to adapt to new specific standards. Furthermore, by imposing equal carbon taxes on developed and developing nations, the proposed CBAM would also violate the Paris Agreement principle of "common but differentiated responsibilities" (CBDR). With respect to EUDR, exporting countries are concerned that the traceability requirement will be impractical and could constitute a *de facto* import ban.

*"The fact that recent initiatives were not discussed multilaterally, even though developing countries will bear a significant part of the consequences, is problematic."*

In other words, it is important for every nation to acknowledge its role in addressing a common global challenge like climate change or deforestation. However, it is unfair to place equal demands on less affluent countries, compared to wealthier ones. Historically, wealthier countries have generated a greater amount of carbon emissions over time – and continue to do so. Many of them have also carried out significant levels of deforestation. This calls for better alignment between the non-discrimination and the CBDR principles,

for which the coherence between special and differential treatment provisions (SDT) and CBDR could offer a starting point for understanding a development-sensitive approach to the trade-climate nexus.

Also, the fact that these recent initiatives were not discussed multilaterally, even though developing countries will bear part, and most likely a significant part (TDR, 2022), of the consequences, is problematic (Rajan, 2023). Weighing the advantages of domestic climate-oriented industrial policies against their adverse impacts on trade relations will likely require an independent assessment, including a revamping of some WTO agreements, notably to ensure that (green) technology is adequately shared with the developing world. This is a pressing concern because as green industrial policy strengthens, trade policies and environmental goals are now interacting much more closely.

### 3. Revisiting the distributional impacts of trade

That increased trade flows have not always been accompanied by considerable progress in terms of development outcomes is a longstanding concern of UNCTAD since its creation in 1964. While the trading system has undergone significant changes in the intervening years – particularly since the implementation of

<sup>2</sup> Under CBAM, importers in the European Union buy carbon certificates corresponding to the carbon price that would have been paid, had the goods been produced under the carbon pricing rules of the European Union. It is a policy tool to reduce the risk of carbon leakage, i.e., preventing the importers of the European Union from diverting purchases to foreign goods that may be cheaper than the equivalent of the European Union but more carbon-emitting. Yet, the measure may be perceived as an additional tariff on a specific import, the rate of which corresponds to the carbon price of the European Union (European Commission, 2021). EUDR requires foreign exporters to the European Union of commodities like soybeans, beef, palm oil, wood, cocoa, coffee, rubber and some of their derived products to prove that products do not originate from recently deforested land or have contributed to forest degradation.



the Uruguay Round agreement – insufficient attention to their distributive impact explains, in part, why many developing countries, and more recently some constituencies in developed economies, have expressed their discontent towards the current rules and practices of the international trading system (Davies et al., 2021; Levell and Dorn, 2022; Rodrik, 2022).

The expansion of trade in the era of hyperglobalization has been closely tied to the spread of global value chains (GVCs) controlled by lead firms, primarily headquartered in advanced economies (TDR, 2018: chap. II). In parallel, more developing countries have participated in the international division of labour by providing specific links in these chains, drawing on their abundance of unskilled labour. The promise was that such fledgling manufacturing activities, through a mixture of upgrading and spillover effects, would quickly establish robust and inclusive growth paths aligned with their comparative advantage.

The success of this model has been neither uniform nor certain (cf. World Bank, 2020). This raises questions about the strong bets made in many developing economies on the spillovers expected from processing trade, because unless developing countries manage to capture part of the surplus created by these GVCs and reinvest it in productive capacities and infrastructure, immediate gains in output and employment are unlikely to translate into a dynamic move up the development ladder. In short, replicating the successes that have been registered in several developing countries, mostly in East and South-East Asia, has proven difficult elsewhere.

*“The rise in big profits for MNEs, together with their growing concentration, is pushing down the global labour income share, exacerbating income inequality.”*

Moreover, along with the rise of export market concentration, large firms have increased their ability to extract rents. Empirical evidence suggests that part of the surge in the profitability of top MNEs – a proxy for the very large firms dominating international trade and finance – together with their growing concentration, has acted as a major force pushing down the global labour income share, thus exacerbating personal income inequality. It has also led to unequal trading relations even as developing countries have deepened their participation in global trade. Chapter III examines the problems of market concentration in the global food trading sector in detail.

Assessing distributional concerns, both within and across countries, usually comes with delays due to difficulties in data availability and measurement. To help address these difficulties, the empirical analysis proposed below builds on TDR (2018: chap. II). More concretely, this subsection provides an update of previous findings in two areas: (a) the concentration of exports among firms within developing countries, and (b) the evolution of labour and capital income shares, especially for the top 2,000 largest firms in the world.

While a fully-fledged analysis is beyond the scope of this chapter, this update gives an indication of the role trade has played vis-à-vis these metrics during the COVID-19 pandemic years, with new data supporting two main findings:

- Export concentrations appear to have strengthened in the majority of the observed developing countries between the pre-pandemic period and the COVID-19 years.
- Factor income distribution has continued to shift further in favour of capital-owners during the COVID-19 pandemic years, with the profits of the largest 2,000 firms worldwide accounting for the bulk of this gain. This mirrored the continued decline of the labour income share globally.

The details of these findings are further discussed in the remaining part of this subsection.

#### a. Concentration in export markets has strengthened in recent years

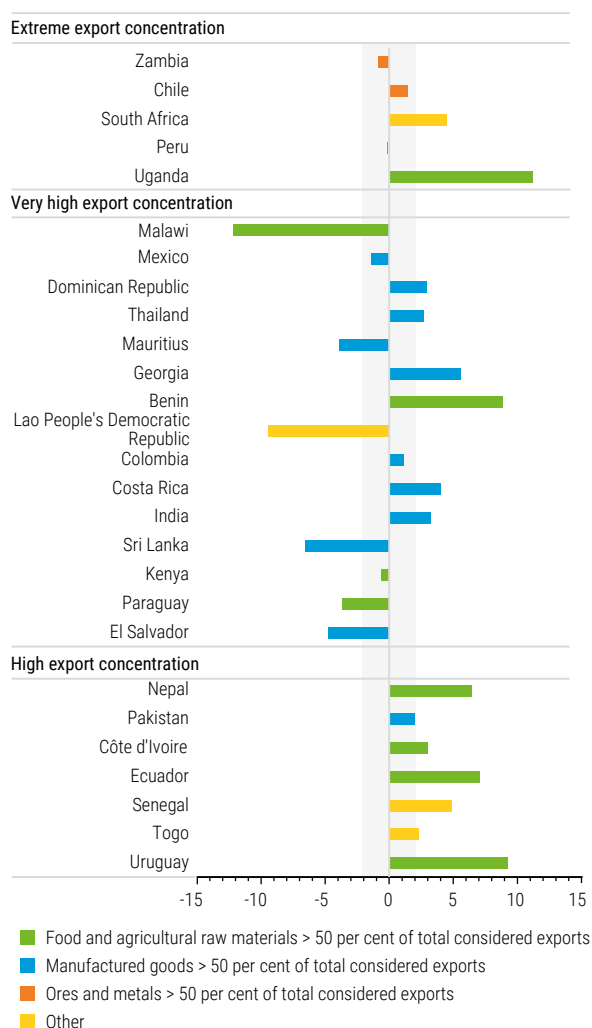
International trade has long been dominated by large MNEs that trade and invest abroad. This greater market access has often led to unequal gains, and these gains disproportionately benefit a minority of economic entities. This finding is also valid in developing countries.



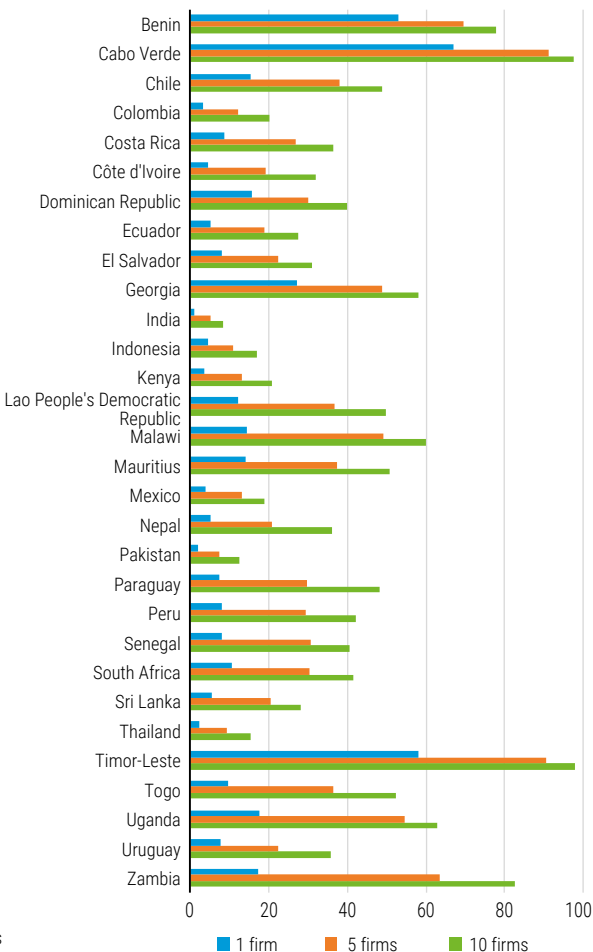
The recent update of the *Exporter Dynamics Database* by Fernandes et al. (forthcoming) – which provides aggregated firm-level data on goods exports (excluding the oil sector, as well as services) for 30 developing countries for the period of 2020–2022 – confirms this stylized fact. Data show that within each country the top 1-per cent largest exporting firms altogether received between 40–90 per cent of the total export revenues of the entire country (figure II.6).

**Figure II.6 During the pandemic, export concentration strengthened further in more than half of surveyed developing countries**

**A. Changes in countries' exports shares of the top 1-per cent exporting firms by types of export specialization: 2015–2019 vs. 2020–2022**  
(Percentage points)



**B. Shares in a country's exports by its largest exporting firms, 2020–2022**  
(Percentage)



**Source:** UNCTAD based on the 2023 release of the *Exporter Dynamics Database* described in Fernandes et al., 2016.

**Notes:** The current version of the database includes 30 developing countries with data for 2020–2022, of which only 27 economies also have data for 2015–2019. The database reports aggregated firm-level data on goods exports (excluding the oil sector and services) within the very restricted circle of exporting firms. In panel A, countries are sorted in a descending order of their export concentration. Moreover, “extreme” export concentration designates countries where the top 1-per cent firms accounted for more than 70 per cent of total exports in 2015–2019. Similarly, “very high” and “high” export concentration designate countries where the top 1-per cent firms accounted for between 50 and 70 per cent, and between 36 and 49 per cent, respectively.

What is more telling still, is that this indicator of export concentration has increased in recent years in more than half of the developing countries included in the database. The statement is based on a comparison between the average export shares that accrue to the top 1-per cent exporting firms in each country during the 2015–2019 period versus the one that was registered during the 2020–2022 pandemic years.

These results presented in figure II.6.A show a trend towards further export concentration after COVID-19. More precisely, out of 27 countries for which sufficient data exist, the aggregated share in total exports of the top 1-per cent largest exporters had increased by at least 2 percentage points in 14 cases. The average increase for this group of 14 countries was almost 6 percentage points.

Notably, as figure II.6.A shows, it is mostly countries specialized in food and agricultural raw materials or manufactured goods (5 jurisdictions each) that accounted for the bulk of these increases. Figure II.6.A also points to the fact that in the 7 countries with the lowest export concentration in the 2015–2019 period (ranging between 36–50 per cent), the share of exports accruing to their top 1-per cent firms increased in all these jurisdictions by an average of 5 percentage points within this relatively short time span.

By contrast, export concentration had significantly diminished (i.e., a decline of at least 2 percentage points) in only 6 countries out of 27. For those economies, the average decline was less than 3 percentage points. Meanwhile, export concentration had remained rather constant (i.e., an absolute change of less than 2 percentage points) in the 7 remaining countries. Out of these 7 cases, 3 jurisdictions are considered as ores and metals exporters. Their exports were already extremely concentrated on the eve of the COVID-19 shock, in the sense that each country's top 1-per cent exporting firms accounted in aggregate for more than 70 per cent of the total country exports in 2015–2019.

Focusing further on the top firms, this time in absolute numbers, not in relative terms, figure II.6.B shows that foreign trade is often dominated by just a handful of firms. For instance, when the sample is restricted to the largest exporting firm(s) – unlike above, the number of entities, not the top percentage(s) of firms – within each country, data show that for the period 2020–2022, the share of total exports can sometimes exceed 50 per cent for one single firm. Moreover, except for a few outliers in the database, there is only a handful of countries where the share of the 10 largest firms represents less than 20 per cent of the total exports. In general, the value is much higher. For instance, the median is about 40 per cent, and it is common to see figures above 50 per cent. One outlier is India, which records the smallest figure in the database. Its 10 largest firms account for 8 per cent of its total exports, although the total number of exporting firms exceeded 123,000 in 2021.

To sum up, recently released data confirm that the levels of export concentrations among large MNEs are elevated across the board and that this tendency has strengthened during the pandemic years. These findings raise concerns about market control and the distribution of the gains from trade. This topic is addressed below by looking at the evolution of the factor income and the role played by MNEs worldwide in contributing to income inequality.

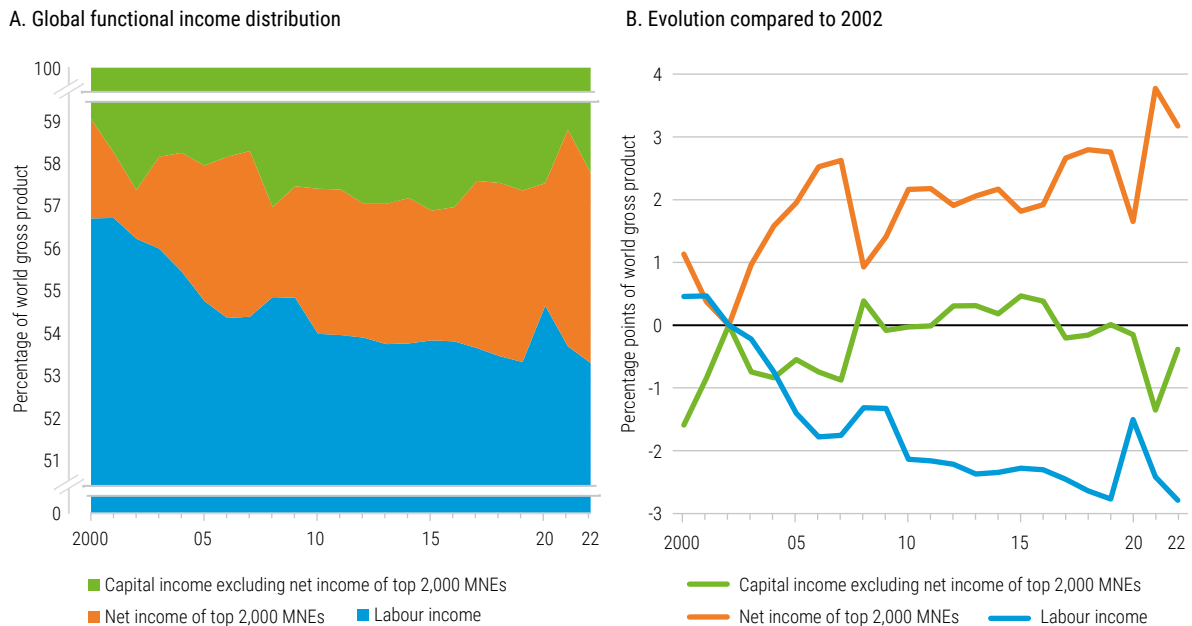
## b. Asymmetry of world income distribution deepens

Another metric to examine when analysing how the activities of large firms affect income distribution globally is the evolution of labour and capital incomes shares, and especially the role played by the largest 2,000 MNEs worldwide.

Figure II.7 updates previous analyses on functional incomes at the level of the world economy until 2022, splitting the capital incomes share into two components. One relating to the net income (i.e., profits) of the 2,000 largest firms globally, and a residual that can be interpreted as the remaining capital income outside the profits of these large enterprises worldwide.<sup>3</sup>

<sup>3</sup> For more details about the methodology and a further discussion on the relevance of the use of this metrics for international trade, both in goods and services, see TDR, 2018:56–57.

**Figure II.7 Increasing asymmetries of trade benefits: After the COVID-19 shock, profits of top 2,000 multinational enterprises further increased while the global labour income share continued to shrink**



**Source:** UNCTAD calculations based on the Refinitiv Eikon database and the United Nations Global Policy Model.

**Notes:** The selection of the top 2,000 firms is based on their market capitalization. Thus, it excludes non-listed firms. In panel A, the net income of the top 2,000 MNEs (derived from the financial statement of listed firms) and the capital income excluding net income of top 2,000 MNEs add up to the world capital income (derived from national accounts data) even though methodologies differ in several regards across both sets of accounts.

While the share of capital income other than profits accruing to the top 2,000 MNEs has remained relatively flat over the last two decades, the profits of top MNEs have registered a gradual increase over this period, only interrupted temporarily at times of major turmoil such as the global financial crisis (GFC) in 2008 and the COVID-19 shock in 2020. Mirroring this evolution, global labour income share has registered a decline of 3 percentage points from almost 57 per cent in 2000 to slightly more than 53 per cent in 2022. The declining labour share and the rising profits of MNEs point to the key role of large corporations dominating international activities – partly though by no means exclusively through their organization of production and trade – in driving up global functional income inequality.<sup>4</sup>

*“While the costs and risks of asymmetric structure of global trade are more readily acknowledged, the search for governance solutions to address these issues has barely begun.”*

More broadly, the trends of growing income inequality and continuing concentration of market power press the need to find more equitable policy solutions. Here, while the costs and risks of asymmetric structure of global

trade are now more readily acknowledged, the search for governance solutions to address these issues has barely begun. In the meantime, increasingly complex crises and compounding risks further magnify the structural asymmetries of the global economy.

<sup>4</sup> The critical role of control of intellectual property in the inequality story has been examined elsewhere, see TDR 2017 and Baker 2018.

## 4. Conclusion

A healthy trading system is crucial for meeting the 2030 Agenda. Unfortunately, it remains unclear whether there is the political will among key trade partners to guide it through its current difficulties. For the future outcome to be positive, policymakers will need a bold pro-developmental and cooperative approach to address the fault lines in the international trading system, both old and new. The ideal response is neither to double down on free trade nor to return to the situations in place prior to the COVID-19 shock.

Building such an adequate answer requires revisiting existing agreements at the bilateral, regional and multilateral levels to create policy space for all countries to redesign their production, consumption and trading profiles to face contemporary global challenges.

Ten specific multilateral trade agreements have, for example, been identified by the Group of 90 (G90) developing countries at the WTO (G90, 2023), which include the Agreement on Subsidies and Countervailing Measures (ASCM), Agreement on Trade-Related Investment Measures (TRIMS), and Trade-Related Aspects of Intellectual Property Rights (TRIPS). The G90 proposal seeks to strengthen existing flexibilities for developing members to make them more precise, effective and operational so that they may more effectively address development aims of members. Failure to address these concerns may result in growing asymmetries, which will make it even more difficult for the world to deliver on its 2030 Agenda.

Ideally, such reforms should build upon some of the core General and Special Principles (GSP) that Member States agreed upon at the creation of UNCTAD in 1964. These remain relevant to the governance of international trade relations and trade policies in support of development, namely “policy space”, “special and differential treatment” and “voice and solidarity” (Davies et al., 2021).

Given the new industrial policy initiatives being adopted in advanced countries (as discussed in subsection B.2.C above), which may shorten their existing supply chains, developing countries will need to look for new outlets to diversify their export markets. In this context, regional trade as well as South–South trade can provide a significant opportunity. Since 1995, South–South merchandise trade has grown faster than global trade and faster than North–South trade. In 2022, South–South trade accounted for around 54 per cent of South’s total trade. South–South trade has also grown steadily in food, fuel, ores and metals, and fertilizers, with many developing countries, including Brazil, China, India, Indonesia and Thailand playing major roles.

While South–South trade should not be seen as an alternative to North–South trade, it can provide an opportunity for developing countries to diversify their production and export basket. In the same vein, regional integration programmes – such as the African Continental Free Trade Area (AfCFTA) – to the extent they support diversification and the benefits are broadly shared, can also mitigate the negative effects of the current situation, including with respect to climate change and food insecurity.

To further boost South–South trade, the Global System of Trade Preferences (GSTP) initiative of UNCTAD can play a critical role by providing an opportunity to negotiate inter alia tariff reductions among developing countries in products based on mutual preferences (box II.1). GSTP can also support a just green transition in the developing countries by focussing on green products and facilitating green technology transfers. Doing so will, however, need a more integrated policy nexus of financial-investment-industrial-technology-trade cooperation among developing countries (TDR, 2022; UNCTAD, 2023a).

*“There is a need to revisit existing agreements at the bilateral, regional and multilateral levels to create policy space for all countries to redesign their production, consumption and trading profiles to face contemporary global challenges.”*

*“Since 1995, South–South merchandise trade has grown faster than global trade and faster than North–South trade. In 2022, South–South trade accounted for around 54 per cent of the South’s total trade.”*

### **Box II.1 South–South trade cooperation: recent developments around the BRICS and the Global System of Trade Preferences initiative**

Emerging economies' rapidly increasing economic prominence in international trade has become more pronounced in recent years. The expansion of the five-member group of the BRICS (Brazil, the Russian Federation, India, China, and South Africa) with six more members (Argentina, Egypt, Ethiopia, the Islamic Republic of Iran, Saudi Arabia and the United Arab Emirates), as announced in August 2023, suggests a potential new economic block that accounts for 30 per cent of current global GDP, with a growing population that already stands as 46 per cent the world population.

The XV BRICS Ministerial Declaration confirms the members' commitment to “the open, fair, predictable, inclusive, equitable non-discriminatory and rules-based multilateral trading system with WTO”. While there appears to be advancements in finance and investment cooperation, trade among BRICS has yet to fully exploit the South–South trade potential: current trade flows mainly take place between China and the other members, with relatively little bilateral trade among Brazil, India and South Africa for instance.

GSTP is another older initiative aiming at strengthening South–South trade cooperation. GSTP is an agile partnership framework that allows its members to take a variety of cooperative actions in the area of tariffs, para-tariffs, non-tariff measures, direct trade measures and sectoral arrangements.

The conceptual basis of GSTP was provided in 1976 by the Group of Seventy-Seven (G77). GSTP was accepted in the multilateral trading system, under paragraph 2(c) of the Decision of 28 November 1979: “Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries”, generally referred to as the “Enabling Clause” of the GATT. During the subsequent three decades, GSTP has had its ups and downs.

A new impetus occurred in December 2010 in Brazil with the conclusion of the third round of negotiations. This culminated in the adoption of the São Paulo Round Protocol by eight participants (counting Mercosur as one): Cuba, Egypt, India, Indonesia, Malaysia, Morocco, the Republic of Korea and Mercosur (i.e., Argentina, Brazil, Paraguay and Uruguay).

Though the São Paulo Round Protocol has still to enter into force, the ratification by Brazil at the end of 2022 created a significant step forward in this direction, which could help the 11 current signatories reap up to \$14 billion of shared welfare gains (UNCTAD, 2019). Furthermore, such a framework can be an effective tool for accelerating the Goals by fostering knowledge sharing on best practices in trade, investment, capacity-building and technology transfer, including in new areas for cooperation such as energy transition and food security.

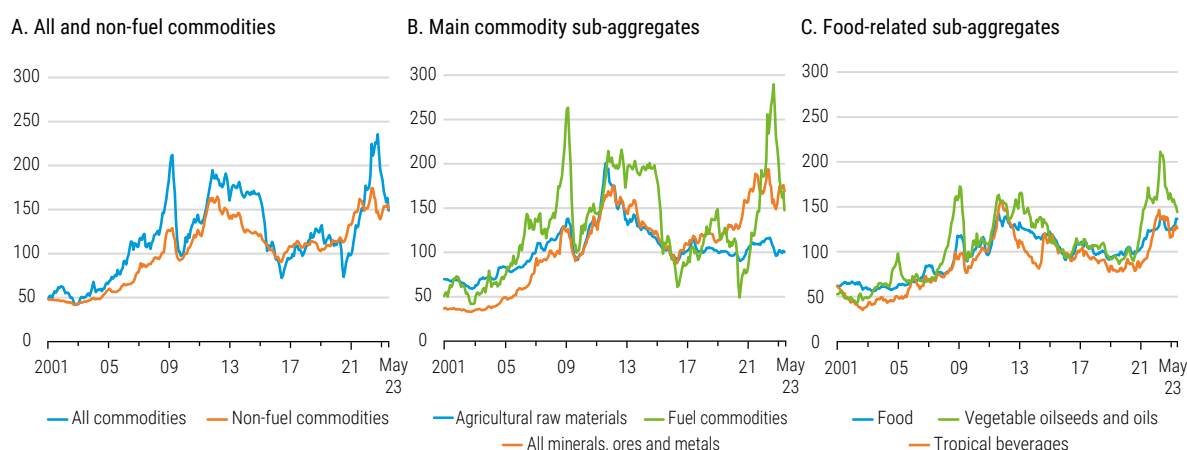
## C. COMMODITY MARKETS

The notable recent upward trajectory in commodity prices – brought on by the pandemic and, in some cases, exacerbated by the outbreak of the war in Ukraine – has given way to a moderation in these prices starting in mid-2022 and continuing into 2023. Yet, many commodity prices have not returned to their pre-pandemic levels. Still, the aggregate commodity price index registered a drop of more than 30 per cent in May 2023 compared to a year earlier (figure II.8). The reduction in aggregate prices has been primarily driven by fuel commodities, which experienced a significant drop of over 40 per cent during this period. However, some product groupings in the UNCTAD price index registered more muted reductions during this period to remain at historically high levels. Notably the prices of minerals, ores and metals declined only 4 per cent, while food dropped by just 2 per cent.

**Figure II.8 Commodity prices have moderated since 2022, but many products remain at historical levels**

Commodity price indices, selected commodity groups and products

(Index numbers, average 2015=100)



**Source:** UNCTAD calculations based on UNCTADstat database.

**Note:** Index numbers are based on prices in current dollars.

A key factor in the moderation observed in commodity prices since the middle of last year has been the deteriorating outlook for global demand, compounded by the sharper than anticipated tightening of monetary policy by central banks across the globe. This current round of global monetary tightening has been both more rapid and synchronized than the previous bout of tightening just prior to the GFC. The application of this more restrictive monetary stance has dampened expectations for global economic growth. Meanwhile, the heightening of financial market stress – with the failure of several banks in the United States and the exposed fragility of large banking institutions elsewhere during the first half of 2023 – has added further gloom to the global economic outlook, resulting in a softening in the global demand for raw materials. Similarly, the more restrictive monetary conditions and accompanying uptick in international interest rates has also prompted investors to move financial investments away from commodities towards higher interest-bearing assets (chapter III). Lastly, the slower than expected rebound in China following the reopening of its economy and the persistent weaknesses in its real estate sector have also contributed to the slackening in broad commodity price indices after they peaked in the course of 2022.

*“Although commodity prices have moderated since mid-2022, they remain above their pre-pandemic levels.”*

For its part, the surge in the prices of commodities – most notably crude oil, natural gas and grains – following the outbreak of the war in Ukraine eased from the middle of 2022 thanks in large part to a reorientation of trade flows of key commodity exports from the Russian Federation and Ukraine, as well as the brokering of the Black Sea Initiative agreement in July 2022 to enable the shipment of grains and other materials from strategically important Ukrainian ports (UNCTAD, 2022a).

## 1. Oil and natural gas

Fuel commodities is the group that initially showed the sharpest decline after mid-2022, with prices of crude oil and natural gas falling by 33 per cent and 67 per cent, respectively, over the 12 months to May 2023. Though the oil price has since rebounded somewhat to over \$90 per barrel, the initial drastic drop corresponded to the outsized impact of the global factors outlined above in the energy sector, together with a range of factors specific to the energy industry. Moreover, despite the announced rounds of production cuts by OPEC+ countries in April 2023 – representing a reduction of over 1 million barrels per day – a significant increase in oil production from non-OPEC+ countries as well as a substantial release of strategic petroleum reserves by OECD member countries have more than offset the agreed OPEC+ cuts. For its part, Western economic sanctions on Russian crude oil exports have mostly resulted in redirecting these flows to countries such as China and India at a discounted price, meaning that their impact on global oil supplies has been minimal while also having a downward influence on global crude prices.

The precipitous fall in natural gas prices from the unprecedented highs registered last year – in the wake of the restrictions imposed by European importers of Russian natural gas and the intermittent shutting down of gas pipelines to Europe by the Russian authorities – is principally due to the reshuffling of export and import markets in this sector. European countries have successfully re-oriented their natural gas imports towards liquefied natural gas (LNG) purchases, particularly from the United States, alleviating, to a significant degree, the upward price pressures in the region's natural gas markets. The longer-term reorientation of European natural gas imports towards LNG is reflected in the much milder downturn in global LNG prices during the last year (15 per cent). This re-orientation by European gas importers is not without its negative consequences: various developing countries, such as Bangladesh and Pakistan, have seen a tightening and redirecting of the global supply of LNG shipments on which their economies depend. Similarly, while the prices of both crude oil and natural gas have fallen significantly from the highs observed in the middle of 2022, they still lie significantly above the average levels registered during the five years prior to the pandemic, posing a significant challenge for developing countries dependent on the import of these products to meet their energy needs.

## 2. Minerals and metals

The expected bump in demand for various commodities due to the relaxing of COVID-19 restrictions and reopening of the economy in China in December 2022 has proven to be far less pronounced than anticipated. This outcome has been particularly relevant for the minerals and metals commodity group for which Chinese demand represents about half of total global demand. Specifically, the reduction in metals prices observed over the 12 months to May 2023 is to a large degree due to the continuing financial challenges faced by the Chinese real estate sector, which accounts for a significant share of global demand for industrial metals. Partially offsetting this comparative shortfall in demand has been strong State spending on infrastructure projects by the Chinese authorities. This has helped to sustain the demand for products such as copper and iron ore whose downward price movement of 12 and 20 per cent, respectively, would have been far more pronounced without the bump to global demand provided by this spending.



### 3. Food

The commodity group where the impact of recent trends in international prices has been most detrimental for developing nations is that of food commodities. As the Global Crisis Response Group of the United Nations noted, international food prices were already approaching historic highs even before the conflict broke out, causing food import bills to rise dramatically, with about two thirds of the increase of costs concentrated in developing countries (United Nations, 2022). The further climb in international food prices in the wake of the outbreak of the war in Ukraine left many developing countries faced with prohibitively high prices for many of their most basic staple food products. Moreover, the impact of the disruption in the supply and transport of grains, notably wheat, maize, and sunflower products, from Ukraine and the Russian Federation, proved particularly acute for African and Middle Eastern countries that rely on the flow of grains from these countries to meet their basic food needs (UNCTAD, 2022b).

The international prices of many of these food products have moderated over the 12 months to May 2023 – with prices of wheat, maize and sunflower oil dropping by 25, 21 and 51 per cent respectively – partly thanks to the Black Sea Initiative and to increased supplies from South America and other major producing countries. Still, international food prices remain at historically high levels, and the pass-through of lower international prices to domestic prices has proven to be weak. In fact, in several developing countries, the domestic prices of basic foods in June 2023 remained above their levels of the previous year and continue to weigh on food security. Relevant factors which have kept domestic prices at elevated levels include high fertilizer costs, adverse weather, high distribution costs, strong indebtedness as well as domestic currency weaknesses (UNCTAD, 2023b; FAO, 2023). As discussed further in chapter III, the financialization of food markets and the pricing behaviour of large commodity traders have been other contributing factors. As a result, almost 350 million people worldwide – including more than 100 million people in sub-Saharan Africa – are projected to be food insecure in 2023, which is over double the number in 2020 (WFP, 2023).

For its part, higher food prices also impact income distribution within countries. Where the production is more capital-intensive, as happens in larger farms and where land is more concentrated, higher food prices generate rents that favour the richest individuals and large landowners (Mohtadi and Castells-Quintana, 2021). Moreover, where food supply chains are highly concentrated and small farmers have no bargaining power, at the global level food price increases may be fully captured by big corporations controlling food trade, storage, processing and retail (Hansen, 2013; Deconinck, 2021).

Using data covering 126 countries (82 developing and 44 developed) for the period 1990–2020, an empirical analysis shows that rising food prices are associated with increased inequality in developing countries, while the impact in the developed countries was found to be statistically insignificant (UNCTAD, 2023c). This highlights the importance of the role played by government policies to provide safety nets to both producers and the consumers of food. For example, the United States implements the Supplemental Nutrition Assistance Program (SNAP) earlier known as the Food Stamp Program to protect consumers, and the Federal Crop Insurance Program buffers farmers' incomes from losses due to disasters or low prices.

While COVID-19 and the war in Ukraine have accelerated food price volatility, and thus raised global food insecurity, data show that after decades of improvements, the number of people in hunger started to rise around 2014, some years before the emergence of these two events (Saccone, 2021). Along with local conflicts and national economic crises, a main driver for this increase has unequivocally been identified as climate change (FAO et al., 2020; Ray et al., 2019; Mirzabaev et al., 2023). More generally, the rapidly changing climate, political turmoil, and macroeconomic shocks, combined with the speculative behaviour of commodity traders, have introduced further instability and uncertainty in food markets (Rabbi et al., 2023), which call for specific policies that address food insecurity (box II.2).



### Box II.2 Tackling food insecurity

As international tensions persist and the effects of climate change become increasingly evident, urgent measures are needed to counter the expected increases in food insecurity, which is already contributing to rising poverty and inequality, especially in developing countries. There is a pressing need to strengthen redistributive social programmes to defend vulnerable households from increased food prices and to insulate farmers from international food price volatility.

However, the policy space in this area is severely restricted by some of the provisions of the WTO Agreement on Agriculture. The domestic support that developing countries can give to their farmers under this Agreement differs widely from that which the developed countries can provide, as advanced countries were able to procure a much higher binding for domestic support to their farmers, i.e., Aggregate Measure of Support. While the United States can provide a maximum of \$19 billion, the European Union \$81 billion, and Japan \$36 billion, 104 developing countries can provide “zero” support. As proposed by the Africa Group at the WTO (African Group, 2021), there is an urgent need to revisit and correct this inequity.

Apart from the Aggregate Measure of Support, advanced countries are also able to provide billions of dollars of subsidies to their farmers under the “green box” subsidy, which should be non-trade-distorting. However, a stream of independent studies has shown that green box subsidies shift the global production of food towards uncompetitive producers in advanced countries, which have the financial resources to provide these subsidies, thereby adversely impacting the incomes of farmers in developing countries. These subsidies distort production and international trade through various effects, such as:

- Risks (Chavas and Holt, 1996; Hennessy, 1998; Young and Westcott, 2000; Anton and Le Mouel, 2004; Sckokai and Moro, 2006; Serra et al., 2006; Just, 2011; Serra et al., 2011).
- Land prices (Dewbre et al., 2001; Goodwin et al., 2003; Roberts et al., 2003; Roe et al., 2003; Gohin, 2006; Kirwan, 2009).
- Credits (Whited, 1992; Gilchrist and Himmelberg, 1995; Hubbard et al., 1995; Bierlen et al., 1998; Bierlen and Featherstone, 1998; Rude, 2000; Benjamin and Phimister, 2002; Vercammen, 2003).
- Labour participations (El-Osta et al., 2004; Ahearn et al., 2006; Key et al., 2006).
- Expectations (Sumner, 2003; Lagerkvist, 2005; McIntosh et al., 2007).

Hence, there is a need to discipline green box subsidies to ensure more equitable distribution of gains from production and trade in food. The African Group and Pakistan (2023) propose disciplining the green box subsidies at the WTO.

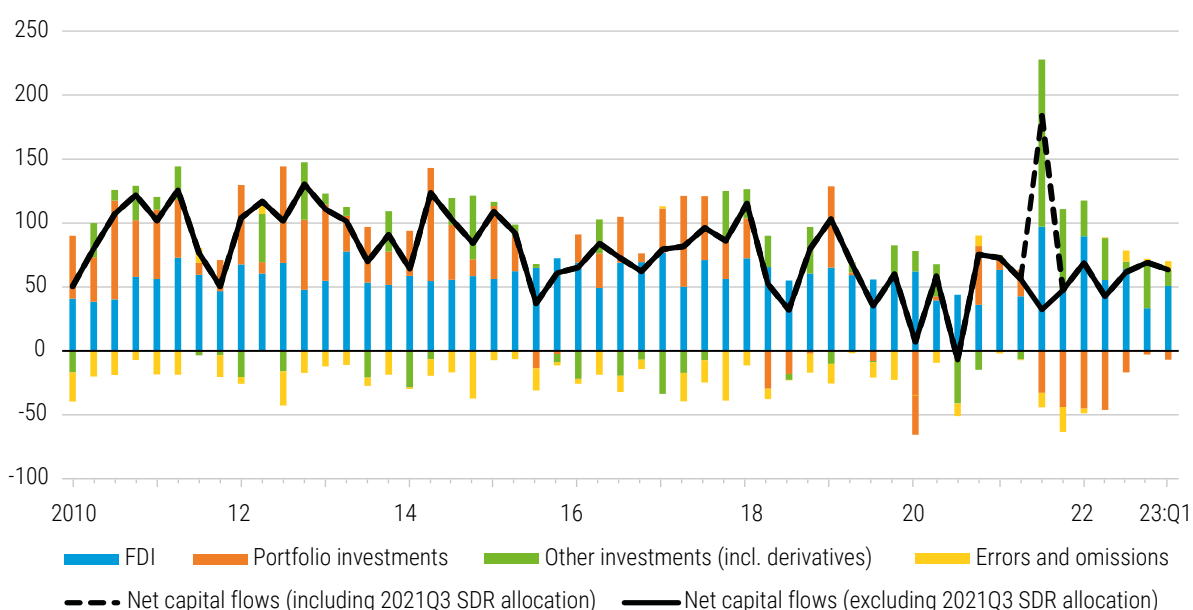
Another challenge facing developing countries is the lack of policy space to design food procurement programmes. One such programme is “public stockholding” which governments in many developing countries provide to their farmers for achieving food security. It is a policy tool used by governments to procure, stock, and distribute food to the public. In most cases, the governments procure food at a minimum support price which is higher than the market price. The difference between these two prices is considered as a subsidy for the farmers under the WTO rules. Under the “de minimis” provision in the Agreement on Agriculture, a ceiling is set for procurement in developing countries. They can provide this support with respect to only 10 per cent of the value of production of both product-specific and non-product specific support. However, the subsidy in terms of minimum support price is calculated using the reference price index of 1986–1988 and is not based on the current prices, therefore it does not consider the intervening rise in prices. Consequently, many developing countries have breached their binding obligations.

## 1. Capital flows to developing countries: Recent developments

Cross-border financial transactions involving developing countries have experienced significant shocks in recent years. With the onset of the COVID-19 pandemic, net capital inflows to low- and middle-income developing countries (excluding China) came to a sudden halt during the first quarter of 2020. This scenario repeated itself during the third quarter of 2020 when additional pandemic-related measures were put in place as the second wave of COVID-19 hit. These two quarterly figures contrast markedly with the lower bound of about \$50 billion of net quarterly capital inflows that these countries, in aggregate, typically received between 2010 and 2019 (figure II.9).

**Figure II.9 Capital flows to developing countries have been very volatile in recent years, with portfolio investments turning highly negative in late-2021 and early-2022**

Net capital inflows to low- and middle-income developing countries, excluding China  
(Billions of dollars)



**Source:** UNCTAD calculations based on IMF Balance of Payments Statistics.

**Notes:** The two “net capital flows” series exclude the transactions of the monetary authorities registered under Reserves in the balance of payments statistics. Because SDR allocations (unlike SDR holdings, which are included in Reserves) are registered under “Other investments” in the financial account, the “Net capital flows (excluding 2021 Q3 SDR allocation)” series aims at neutralizing the SDR allocation of the third quarter of 2021 worth about \$650 billion, of which it is estimated that about 20 per cent was shared among the countries considered in this figure. All series refer to net non-resident inflows minus net resident outflows. Thus, positive values correspond to net inflows to this group of countries. Each component reflects the aggregation of the net figures of all available low-income and middle-income developing countries in the database. The balance of net derivatives, which is relatively small, was merged with other investments.

The second half of 2021 and the first half of 2022 also marked abnormal times for capital flows, albeit in the upper end of the distribution this time around. Net foreign direct investments (FDI) and other investment inflows reached record levels in three quarters, partly due to the cyclical rebound of the global economy and, in the case of other investments, to the new allocation of special drawing rights (SDRs) during the third quarter of 2021. Meanwhile, net portfolio inflows turned strongly negative for four quarters in a row, as the policy stance by the central banks of developed countries was to raise policy rates to contain and attenuate inflationary pressures (TDR, 2022).

Since mid-2022, sharp portfolio outflows have ceased, while net foreign direct investments and other investments, in aggregate, have receded from their previous highs, leaving the sum of the three main components of the financial account slightly above the \$50 billion mark per quarter.

Given the increasing volatility in food prices, at the Ninth Ministerial Conference in Bali in 2013, it was agreed that there is a need to update the rules under the Agreement on Agriculture with respect to public stockholding of food. Until a permanent solution is found, a “peace clause” will prevail which implies that members would temporarily refrain from lodging complaints against any developing country which exceeds its de-minimis limits. While many proposals have been tabled with respect to public stockholding, even after a decade, a permanent solution has not been agreed. Given the rising volatility in international prices of food and growing food insecurity, it becomes urgent to provide flexibility in the existing rules and a permanent solution to this issue.

Furthermore, there is a need to improve the integration of small farmers into the domestic and international markets, raising their bargaining power, and making the gains from trade reach the poorest farmer. This requires addressing the high concentration of food markets and discouraging speculative behaviour with adequate regulations. Breaking the food monopolies is critical for progressing towards global food security. These issues are dealt with in more detail in chapter III.

## D. GLOBAL FINANCIAL CONDITIONS AND DEVELOPING COUNTRY VULNERABILITIES

On the eve of the COVID-19 shock, many developing countries already faced unsustainable debt burdens (TDR, 2019). Since then, compounding crises – the pandemic, the war in Ukraine, the deepening climate crisis and the cost-of-living crisis – along with the most aggressive monetary tightening in developed countries since the 1970s, have exacerbated this situation (chapter I). While a systemic debt crisis – in which a growing number of developing countries move simultaneously from distress to default – has so far been kept at bay, a development crisis is already unfolding, with external debt service draining resources away from delivering the 2030 Agenda and the goals of the Paris Agreement (UNCTAD, 2023c).

One difference between the current and previous debt crises in the developing world is that emerging market economies (EMEs) – i.e., countries that were brought into international financial markets in earlier periods – are not at the forefront. This time around, it is mostly low- or lower-middle-income developing countries that started to tap international capital markets. This mostly occurred during the capital flow boom after the global financial crisis and before COVID-19. These countries, hereafter referred to as “frontier market economies” (FMEs), have been the hardest hit (see annex to this chapter for the list of countries considered as FMEs in this Report).

The staggered integration of EMEs and FMEs into international capital markets has meant that while both groups are vulnerable to changes in global financial conditions and changes in the risk perceptions of global investors, they have experienced different degrees of external financial vulnerability since COVID-19. However, without a concerted effort from the international community, the slowdown of the global economy in 2023, and the danger that things could worsen in 2024, raises serious concerns across the developing world. As a result, an increasing number of developing countries, financially exhausted from years of treading water, may begin to sink under the growing weight of unpayable debts.

This section provides an overview of the recent evolution of capital flows and debt vulnerabilities in developing countries, with a particular focus on FMEs.

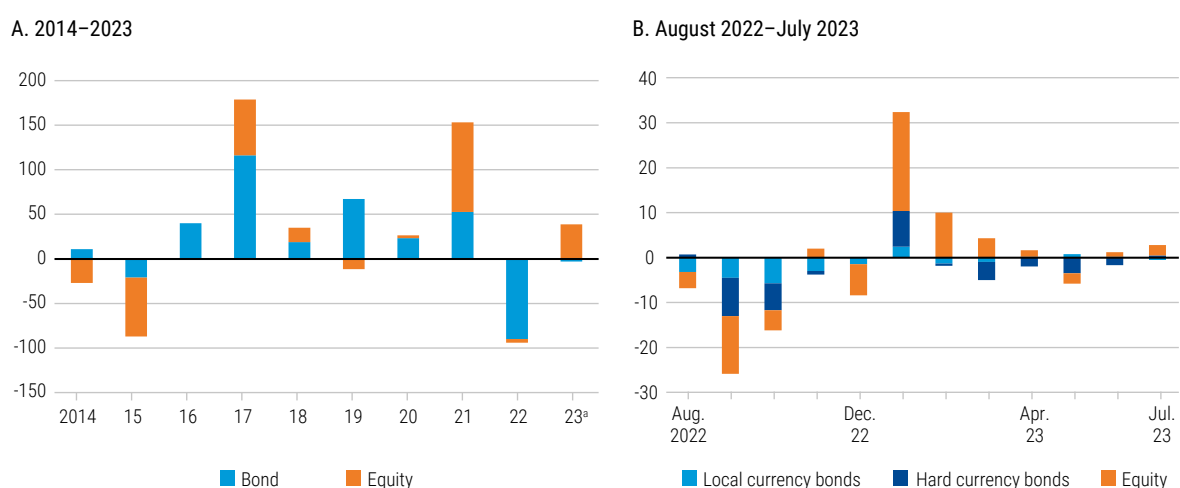
However, the aggregates mask significant differences between countries and regions. For example, FDI flows to Latin America and the Caribbean – typically the most stable source of foreign capital for developing countries – experienced a significant increase in 2022 (UNCTAD, 2023c). By contrast, FDI flows to least developed countries (LDCs) fell by 16 per cent to \$22 billion in 2022, with the top five recipients of this group – Ethiopia, Cambodia, Bangladesh, Senegal, and Mozambique, in that order – accounting for about 70 per cent of this figure. Turning to portfolio flows, significant differences exist between its equity and debt subcomponents, including external versus domestic sovereign bonds. During the third quarter of 2021, non-resident outflows totalling \$28.5 billion mostly affected equity flows. Leaving aside the special case of the first quarter of 2020, when COVID-19 hit, the withdrawal of debt investments by non-residents reached a record of almost \$25 billion during the first quarter of 2022. And while equity investment by non-residents started to bounce back earlier, the debt investment counterparts have remained in negative territory up to the fourth quarter of 2022 at least.<sup>5</sup>

For more recent trends relating to EMEs, due to the lag in the publication of balance of payments data for many of these countries, it is necessary to rely on proxy indicators which are only available for a limited number of countries. One source is the weekly release of *JP Morgan EM Flows*, which focuses on a subset of portfolio investments. According to these data, figure II.10.A shows that during the first seven months of 2023, total investor fund flows were positive, in aggregate, due to a rebound of its equity subcomponent, though this total figure conceals different developments across the types of capital flows and country groups in recent months.

Equity fund flows experienced a robust rebound in the first quarter of 2023, primarily attracted by low valuations in EMEs following the selloffs of 2022 (figure II.10.B). These flows have since declined sharply. Meanwhile, hard currency bond flows increased significantly in January 2023 followed thereafter by five consecutive months of outflows, which were particularly large between March and April 2023. Local currency net bond flows have so far hovered around zero throughout this year, owing to large outflows from the Chinese domestic bond market, which offset inflows into other EME local bonds.

**Figure II.10 Equity fund flows to emerging market economies rebounded in early 2023**

Emerging markets fund flows, bond and equity  
(Billions of dollars)



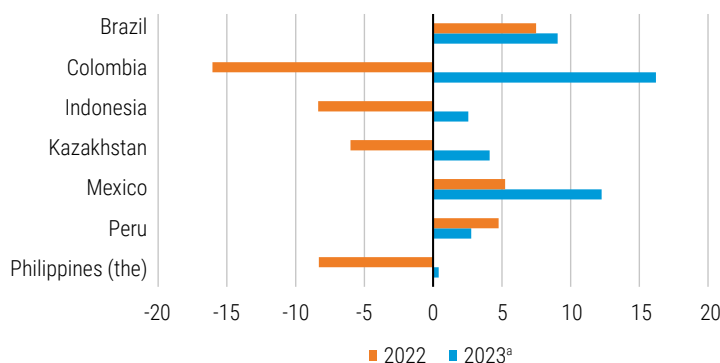
**Source:** UNCTAD calculations based on JP Morgan EM Flows Weekly (4 August 2023).

<sup>a</sup> The figure for 2023 includes data until July.

<sup>5</sup> At the time of going to press, data for the first quarter of 2023 remained incomplete to have a final assessment of the aggregate for this group of countries.

**Figure II.11 Significant appreciations of several emerging market currencies in the first half of 2023**

Change in the value of the domestic currency vis-à-vis the dollar, selected economies (Percentage)



Source: UNCTAD calculations based on Refinitiv data.

Note: Positive value indicates currency appreciation.

<sup>a</sup> The figure for 2023 includes data until 31 July 2023.

Altogether, these net inflows have triggered appreciations of at least 14 EME currencies, most of them in Asia and Latin America, making local bonds even more profitable for global investors (figure II.11).

Overall, these patterns suggest that spillovers from bank distress in March 2023 have been milder on larger EMEs (IMF, 2023). As many EME central banks sharply hiked their interest rate before the Federal Reserve started tightening its interest rates, many of these economies have become increasingly attractive to hot capital flows seeking higher yields (UNCTAD, 2023c). By contrast, debt problems appear more acute in several FMEs.

## 2. Debt and development distress in developing countries: Insights from the frontier market economies

The recent rise in debt distress and related development setbacks in developing countries can be directly attributed to inherent structural weaknesses in the international financial system. It has proven inadequate in facilitating access to reliable sources of external development finance in the required quantity, cost and maturity, for these countries to meet their development needs.

Other related factors have also played a role as further explained below. These include: (i) the insufficient official development assistance (ODA) (box II.3); (ii) a relative decline of official concessional financing (and the denial of access to some categories of developing countries for such schemes); (iii) decisions of credit rating agencies (CRAs); and (iv) an inadequate global financial safety net (GFSN). Added to this is the significant presence of illicit financial flows (IFFs), which diminish government revenues and drain resources away from development (UNCTAD, 2023e).

On the back of these developments, developing countries have become increasingly reliant on global financial markets to meet their funding requirements. Moreover, for most of the last decade, these private actors have provided access to capital for countries that were previously excluded from financial markets, albeit at an

elevated cost even during relatively stable times. However, the strongly cyclical nature of these flows and the compounding crises of recent years have exposed the limitations of the system in dealing, in an equitable and timely manner, with debt distress and its subsequent impact on development.

A renewed sense of urgency to advance multilateral solutions is required, given the magnitude of the debt challenges faced. In the aftermath of the COVID-19 pandemic, the total world debt of both public and non-financial

private sectors peaked at 257 per cent of world gross product in 2020, before receding 10 percentage points by the end of 2021. Within this broader context, developing countries are highly vulnerable, as their debts, private and public, registered significant increases over the last decade. More specifically, private debt in a broad group of emerging markets and developing economies increased from 84 to 130 per cent of GDP

*“Frontier market economies are currently experiencing severe financial vulnerabilities after deepening their integration into international capital markets over the last decade.”*

between 2010 and 2021.<sup>6</sup> Meanwhile, total public debt in these countries nearly doubled, reaching 64 per cent of GDP by 2022.

The rapid accumulation of non-concessional debt has caused a significant increase in interest payments. Since the ending of easy monetary policy in both developed and developing economies, these payments have reached new highs, with a double burden in countries that have also seen their currencies depreciating against the dollar and euro. The number of countries where interest spending accounted for 10 per cent or more of public revenues increased from 29 countries in 2010 to 50 countries in 2022. Consequently, interest payments in many developing countries outpaced expenditures in critical sectors such as education, health, and public investment over the past decade. Currently, at least 3.3 billion people live in countries that spend more on interest than on either health or education (United Nations, 2023). Most of these countries experienced declines in their Human Development Index in recent years (UNCTAD, 2023d). Carrying these greater debt burdens obstructs the mobilization of resources needed to achieve the goals of the 2030 Agenda.

*“In the past decade, interest payments in many developing countries outpaced expenditures in critical sectors such as education, health, and public investment. Carrying these greater debt burdens obstructs the mobilization of resources needed to achieve the goals of the 2030 Agenda.”*

### Box II.3 Recent trends in official development assistance

For several low-income and lower-middle-income countries, diminished access to concessional official development finance has contributed to the increasing reliance on private external finance. This trend is particularly pronounced among recently promoted lower-middle-income countries that transitioned from low-income status shortly after GFC (e.g., Angola, Mongolia, Nigeria, Pakistan, and Viet Nam). These nations lost access to affordable concessional external finance from the Poverty Reduction and Growth Trust (PRGT) and the International Development Association (IDA). Thus, they represent the “missing middle of development finance” (United Nations, 2020).

Recent patterns in official development assistance (ODA) have also played a role. ODA takes the form of grants, loans to sovereign entities, debt relief and contributions to multilateral institutions (calculated on a grant-equivalent basis). In 2022, total net ODA from the Development Assistance Committee (DAC) member countries reached \$211 billion, a rise from \$186 billion in 2021, largely due to spending on refugees, much of it in the donor countries themselves. However, as a percentage of the gross national income (GNI) of DAC members, this equated to only 0.36 per cent, falling short of the target 0.7 per cent of GNI, which is only achieved by five donor countries. Furthermore, in 2021, DAC members disbursed \$129 billion in ODA to developing countries, of which \$84 billion (65 per cent) was directly allocated to these nations and \$45 billion (35 per cent) was allocated to multiple regions (called “unspecified” flows). The difference of \$57 billion in 2021 between the total net ODA aforementioned (\$186 billion) and the amount disbursed to developing countries (\$129 billion) is categorized as “unallocated” flows and relates to expenditures within donor countries, such as administrative costs and in-house refugee expenses.

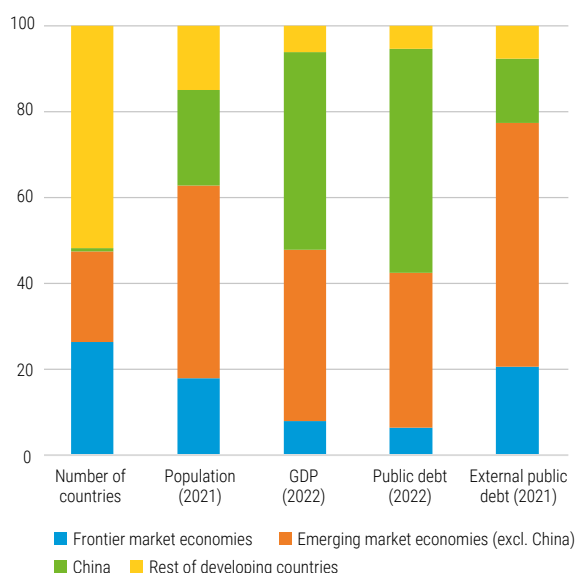
Amid the context of ODA realigning away from central budget support towards in-donor expenditures and broader multilateral priorities, these “unspecified” and “unallocated” flows constituted, respectively, an average of 24 per cent and 30 per cent of net ODA from DAC members to developing countries between 2014 and 2021. It is anticipated that this proportion increased in 2022 due to the war in Ukraine.

<sup>6</sup> UNCTAD calculations based on IMF Global Debt database. Note that IMF classifies 97 economies as emerging markets and developing economies. These include those that are neither advanced economies nor low-income countries.



**Figure II.12 Frontier markets contribute less than 10 per cent of developing countries' total output but carry 20 per cent of the external public debt**

Shares with respect to all developing countries' aggregates, selected indicators  
(Percentage)



Source: UNCTAD calculations based on Refinitiv data.

Note: For each indicator, the year of reference is provided between parentheses.

Within developing countries, FMEs require particular attention. Collectively, this subgroup of economies within developing countries registered the fastest growth of external public debt over the last decade. It is therefore not a coincidence that even if FMEs altogether only represented, vis-à-vis the total of developing countries, 8 per cent of their GDP and 6 per cent of their total public debt in recent years, they accounted for 20 per cent of developing countries' total external public debt (figure II.12). In other words, FMEs, and especially their public sector, are now particularly exposed to the asymmetries and shortcomings of the international financial architecture, particularly with respect to the consequences of debt distress.

Part of this rapid increase of debt has relied on the global investors' idea that FMEs are the next generation of EMEs, with expectations of rapid and sustained economic growth linked to, and fuelled by, their increased integration into global financial markets. The growing significance of FMEs as an asset class over the past two decades has been influenced by three interconnected trends: the pursuit of higher returns by global investors, a divergence in the returns on bonds of different developing groups, and a compression of credit ratings of EMEs.

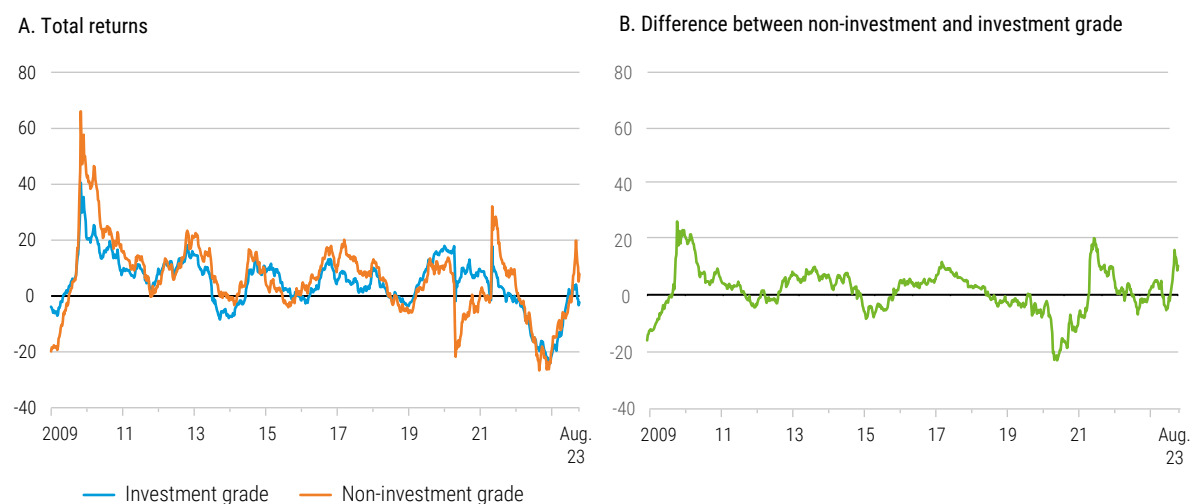
To begin with, non-resident portfolio inflows to developing countries were spurred by global push factors after the GFC. This pattern mirrored the historical capital flow cycles that followed the breakdown of the Bretton Woods system (Akyüz, 2017; TDR, 1998). Easy monetary and financial conditions in developed countries led investors to accept higher risks in their search for bigger returns (da Silva et al., 2021). Demand prompted the growth of alternative asset classes with the desired characteristics, including FME bonds.

While it is common to group flows to developing countries together, such practice masks a divergence in the return on bonds in different developing groups. Following the GFC, long-term returns on non-investment grade bonds from developing countries outpaced those of investment grade bonds consistently – except for a period during the onset of the pandemic shock of 2020 (figure II.13).

Moreover, investors' demand for non-investment grade instruments was affected by credit compression among EMEs, as most of these countries became investment grade. CRAs played a pivotal role in this dynamic due to their pro-cyclical behaviour. Market reactions are amplified by their ratings during both the boom and contraction phases of capital flow cycles (Griffith-Jones and Kraemer, 2021; Pretorius and Botha, 2017). As EMEs weathered the GFC in terms that beat market expectations, CRAs enhanced their assessments of these countries between 2006 and 2015. By 2015, 21 out of 31 EMEs had achieved investment-grade status, leading to a reduction in the potential supply of non-investment grade bonds among this group (figure II.14.A).

**Figure II.13 In the years after the global financial crisis, returns of non-investment grade bonds usually outstripped those of investment-grade bonds**

Year-on-year total returns and their difference on public bond indices, selected grades  
(Percentage)

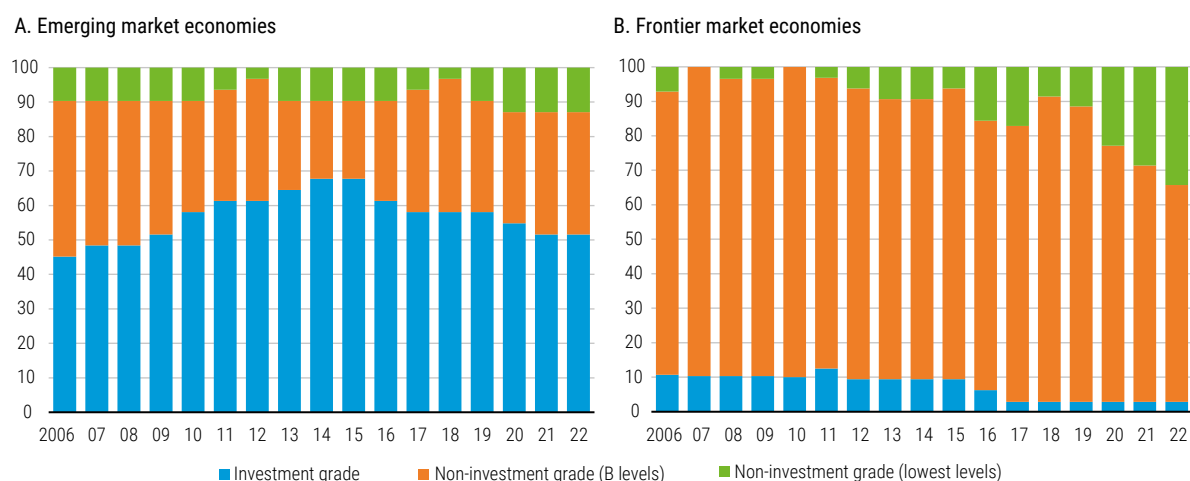


**Source:** UNCTAD calculations based on JP Morgan Emerging Market Bond Index (EMBI) Global Diversified Total Return Index.

**Note:** These indicators refer to year-on-year changes of dollar-denominated sovereign and quasi-sovereign indices and are provided on a weekly basis ending on 24 August 2023.

**Figure II.14 Frontiers filling the vacuum in the non-investment grade segment**

Distribution of credit ratings within selected country groups  
(Percentage and absolute number of countries within bars)



**Source:** UNCTAD calculations based on Refinitiv and Oxford Economics.

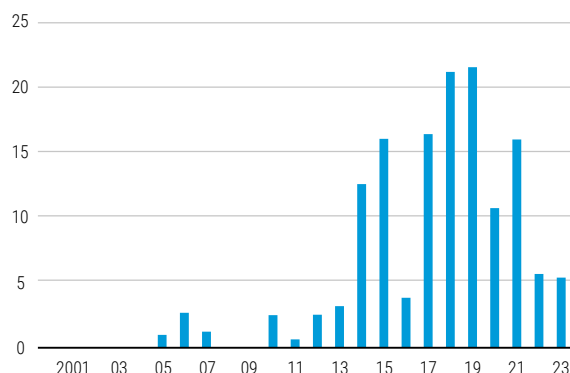
**Notes:** Average ratings between the three main credit rating agencies (CRAs): Fitch, Moody's and Standard & Poor's. "Non-investment (B levels)" refers to all the grades considered by CRAs as "speculative" and "highly speculative". "Non-investment (lower levels)" corresponds to the remaining grades within the non-investment heading, and thus carry even greater risks.



**Figure II.15 Frontiers' bond issuance was on the rise during the last decade until the COVID-19 shock**

Gross issuances of hard-currency frontier markets' sovereign bonds

(Billions of dollars)



**Source:** UNCTAD calculations based on Refinitiv.

**Notes:** This figure only considers bonds issued by governments denominated in dollars, euro and yen with a minimum face value equivalent to \$500 million. It includes rollover of previous bonds.

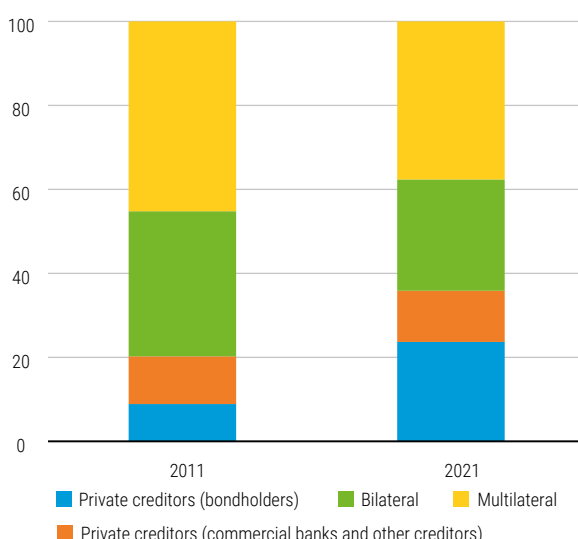
The decline in the number of EME sovereigns categorized as non-investment grade encouraged investors to seek higher yielding alternatives in the early 2010s. FMEs emerged to fill this void, with most of these countries being rated as non-investment grade (figure II.14.B). FMEs attracted investors in pursuit of higher returns, opening the doors to global financial markets for these countries. While only three FMEs had issued sovereign bonds denominated in hard currency between 2000 and 2009, this count surged to 27 countries in the ensuing decade. Annual bond issuance of FMEs reached a record value of \$22 billion in 2018 and 2019, just before the onset of the COVID-19 pandemic (figure II.15).

The surge in bond issuance by FMEs has been at the core of the massive accumulation of external public and publicly guaranteed (PPG) debt by these countries over the past decade. The stock of PPG bonds issued by FMEs rose sevenfold during the last decade, reaching \$154 billion in 2021. As a result, since 2011, the portion of FMEs' PPG debt held by private creditors almost doubled from 19.6 to 35.9 per cent, with bondholders accounting for 8.8 per cent and 23.7 per cent, respectively (figure II.16). In total, FMEs' external PPG debt reached \$651 billion in 2021, marking a threefold increase since 2010. For comparison, during the same period, external PPG debt of EMEs and remaining developing countries doubled (figure II.17).

**Figure II.16 The reliance on private creditors for external financing of frontier market economies has strengthened**

Creditor composition of frontier market economies' external public and publicly guaranteed debt

(Percentage)

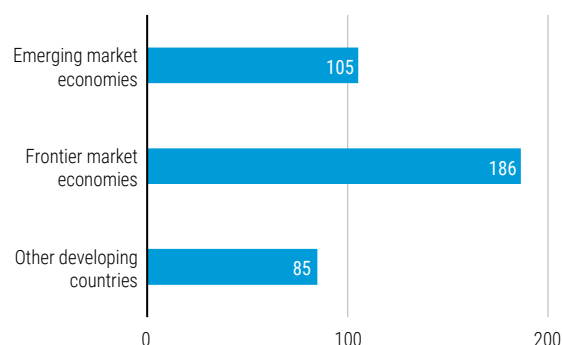


**Source:** UNCTAD calculations based on World Bank International Debt Statistics.

The accumulation of external PPG debt is exerting significant pressures on the public finances of FMEs, as growing debt service obligations reduce available resources for crucial public expenditures. Debt service on PPG debt relative to government revenues surged from almost 6 to 16 per cent between 2010 and 2021. In contrast, for EMEs, this figure stood at 3 per cent, while it reached 7 per cent for other developing countries in 2021 (figure II.18.A). As of 2021, a minimum of 26 FMEs allocated 10 per cent or more of their revenues to debt service. Moreover, among the top 25 developing countries with the highest debt service to revenue ratio in 2021, 15 were FMEs (60 per cent of the total). The leading 4 countries on this list were all FMEs (figure II.18.B). As a result, the pressure of debt service on development expenditures has become substantial in FMEs. 26 out of 37 FMEs were spending more on external PPG debt service relative to either education or health by 2021 (UNCTAD, 2023c).

**Figure II.17 External public debt of frontier markets has grown faster post-financial crisis**

Growth of public and publicly guaranteed external debt, selected groups of developing countries, 2010–2021 (Percentage)



**Source:** UNCTAD calculations based on IMF World Economic Outlook.

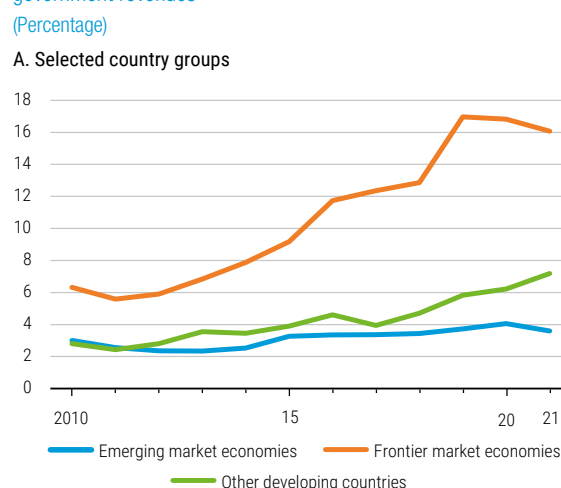
External public debt in FMEs is also contributing to heightened external vulnerabilities. The ratio of external debt service to exports in FMEs rose from about 6 to 16 per cent between 2011 and 2021. In comparison, this metric stood at 15 per cent for EMEs and 10 per cent for other developing countries in 2021 (figure II.19.A).<sup>7</sup> To provide context, these aggregate figures are double or even triple the threshold established by the 1953 London Agreement on restructuring war debts for Germany. This agreement limited the portion of export revenues that could be allocated to external debt servicing to 5 per cent of the total, with the aim of ensuring the post-war recovery of the then Federal Republic of Germany would be sustainable (TDR, 2015). Furthermore, among the 25 countries with the highest proportion of export revenues allocated to total external debt servicing in 2021, over half (13 countries) were FMEs (figure II.19.B).

Cracks in the market façade of FMEs appeared in the aftermath of COVID-19. The buildup of debt vulnerabilities over the previous decade led to an increase in bond spreads of FMEs relative to that of EMEs (figure II.20). This shift indicates that markets are factoring in a heightened risk of default for this specific group of economies. In fact, most of the countries that have lost market access since 2019 fall into the category of FMEs (figure II.21). The number of FMEs trading with spreads surpassing the 1,000-basis

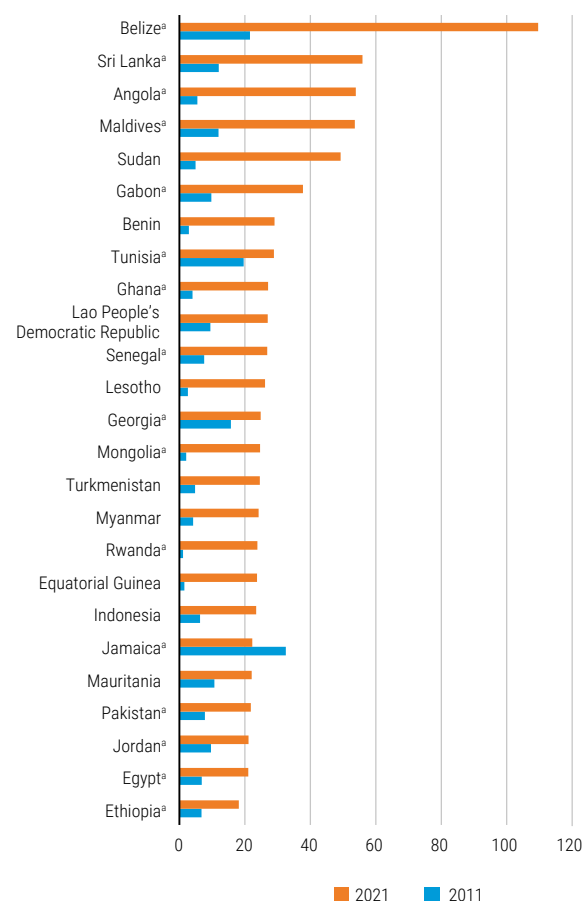
<sup>7</sup> The high ratio in EMEs is a result of the higher share of the private non-guaranteed (PNG) debt in the long-term debt compared to FMEs (45.4 per cent and 32 per cent in 2021, respectively).

**Figure II.18 Frontier markets' public finances are under heavy pressure after a decade of debt accumulation**

Public and publicly guaranteed external debt service relative to government revenues (Percentage)



**B. Top 25 within all developing countries in 2021**



**Source:** UNCTAD calculations based on World Bank International Debt Statistics and IMF World Economic Outlook.

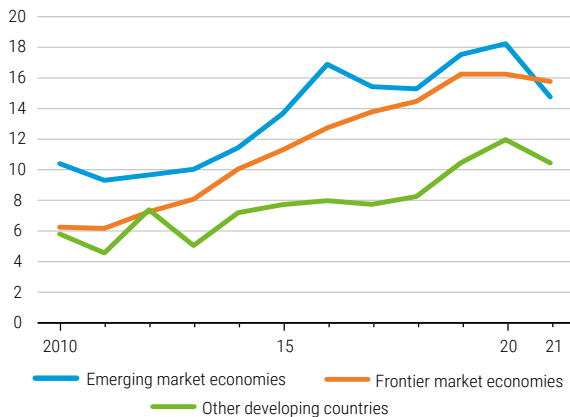
**Note:** Indonesia is the only emerging market economy in this group.

<sup>a</sup> Frontier market economies.

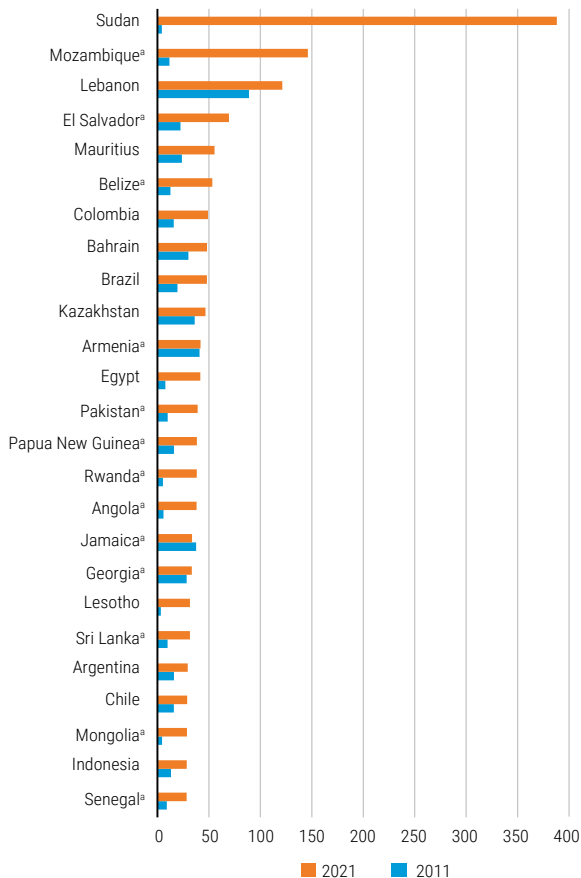
**Figure II.19 Frontier markets' external debt service drains export revenues**

Public and publicly guaranteed external debt service relative to export revenues  
(Percentage)

**A. Selected country groups**



**B. Top 25 within all developing countries in 2021**



Source: See figure II.18.

Note: Argentina, Brazil, Chile, Colombia, Egypt, Indonesia, Kazakhstan and Lebanon belong to the group of emerging market economies (EMEs), while Bahrain, Lesotho, Mauritius and the Sudan do not belong to EMEs or the frontier market economies.

<sup>a</sup> Frontier market economies.

points threshold – used to gauge market access – has notably increased from 1 to 13 between January 2019 and August 2023. In addition, it is mostly FMEs that have been downgraded in recent years by CRAs to a rating of CCC or lower, indicating substantial credit risks and likelihood of default (figure II.22).

With each subsequent shock since 2020, more FMEs have found themselves in a situation of debt distress, placing them at ground zero in the looming debt crisis (figure II.22). The developing countries that have been classified as in default by S&P Global Ratings as of July 2023 since the pandemic, are all FMEs (Ghana, Sri Lanka, Suriname and Zambia). In addition, Ethiopia applied for debt restructuring under the G20 Common Framework.<sup>8</sup>

The debt challenges faced by developing countries in general, and those of FMEs in particular, are set to increase as a large wave of bond repayments comes due in the coming years (figure II.23). FME bond repayments, including principal and coupon payments, will reach \$13 billion in 2024 and continue to be high at least until the end of the decade. This raises concerns that more FMEs may default if their market access is not restored. Moreover, for EMEs and FMEs that have retained market access, new sovereign bond issuances will be costly given the higher interest rates in developed countries. Higher borrowing costs in a context of lower economic growth – and as discussed in chapter I, both are conditions that look set to last well into next year – will undermine debt sustainability. Without measures to effectively address this dynamic, most countries are expected to prioritize fiscal consolidation to stabilize debt levels (UNCTAD, 2023c). Regrettably, this dynamic will place the attainment of the 2030 Agenda further out of reach.

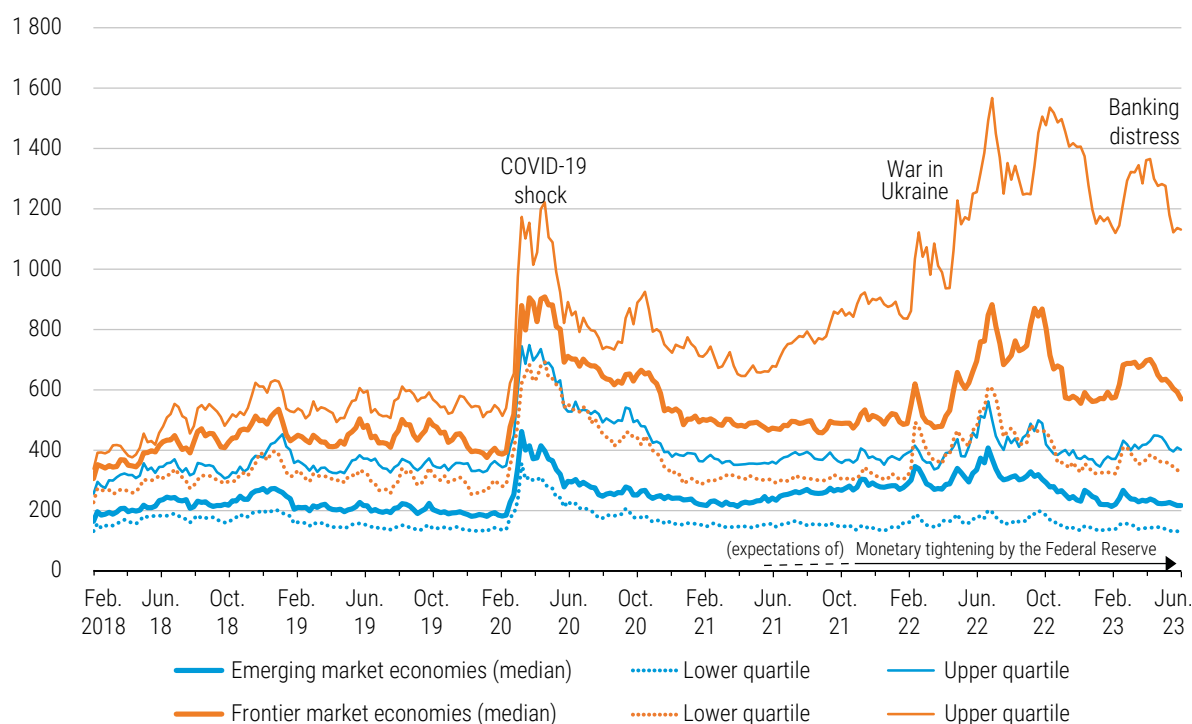
The trajectory of debt vulnerabilities in FMEs reveals the imbalance between the advantages and disadvantages of dismantling capital controls in developing countries and rapidly integrating into unregulated international private capital markets – a theme discussed in previous reports (TDR, 2015; 2019). While the benefits encompass access to external financing in countries constrained by balance of payments restrictions and limited domestic financial markets, as has been discussed above, the associated costs are exceedingly high.

<sup>8</sup> Debt restructurings of Chad and Malawi (not considered as FME) have not been classified as in default by a rating agency.

**Figure II.20 Frontier markets are at the forefront of compounding crises**

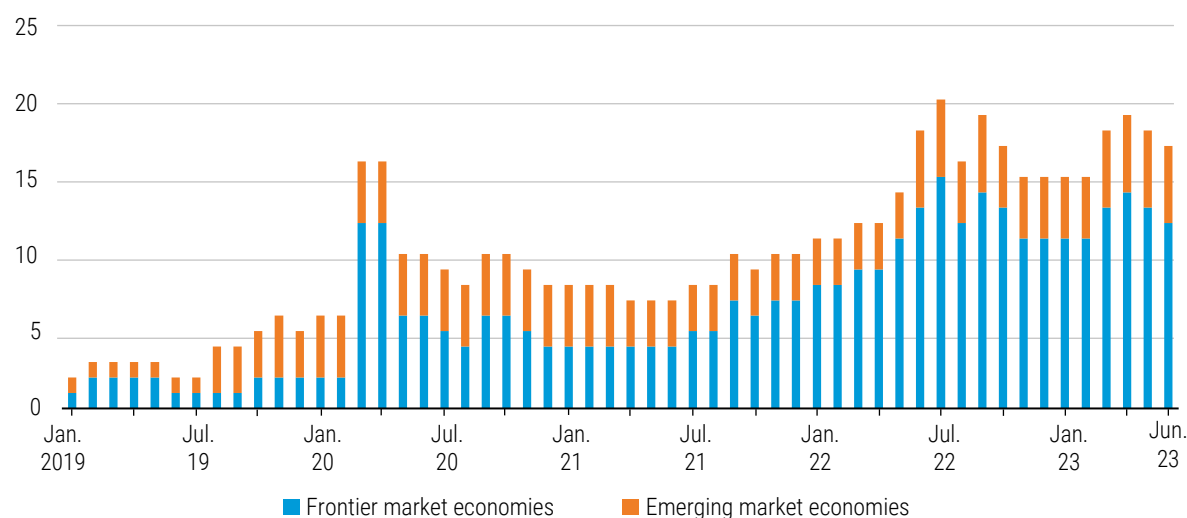
Spreads with respect to the Treasuries of the United States, selected country groups

(Basis points)

**Source:** UNCTAD calculations based on JP Morgan Emerging Market Bond Index (EMBI) data.**Note:** Medians and quartiles are based on the availability of country-level data in JP Morgan EMBI–Global Diversified, a widely-followed dollar-denominated sovereign and quasi-sovereign index.**Figure II.21 Growing number of frontier markets moving into debt distress**

Emerging and frontier markets with bond spreads above 1,000 basis points over treasuries of the United States

(Number of countries)

**Source:** See figure II.20.

**Figure II.22 COVID-19 and other financial shocks increased debt vulnerability of frontier markets**

Public debt situation of selected frontier market economies after COVID-19 and other subsequent major financial shocks

Pre-COVID-19	COVID-19 shock (March 2020)	Monetary tightening	
		War in Ukraine (February 2022)	Banking distress (March 2023)
Suriname	Angola	Belize	Belize
Zambia	Belize	El Salvador	Bolivia (Plurinational State of)
Angola	Cameroon	Ethiopia	El Salvador
Belize	Gabon	Ghana	Ethiopia
Bolivia (Plurinational State of)	Ghana	Pakistan	Ghana
Cameroon	Iraq	Sri Lanka	Maldives
Costa Rica	Mongolia	Suriname	Mozambique
El Salvador	Mozambique	Tajikistan	Pakistan
Ethiopia	Nigeria	Tunisia	Sri Lanka
Gabon	Sri Lanka	Zambia	Suriname
Ghana	Suriname	Maldives	Tajikistan
Iraq	Tajikistan	Mozambique	Tunisia
Kenya	Tunisia	Papua New Guinea	Zambia
Maldives	Zambia	Angola	Gabon
Mongolia	Costa Rica	Bolivia (Plurinational State of)	Kenya
Mozambique	El Salvador	Cameroon	Angola
Nigeria	Ethiopia	Costa Rica	Cameroon
Pakistan	Kenya	Gabon	Costa Rica
Papua New Guinea	Pakistan	Iraq	Iraq
Sri Lanka	Bolivia (Plurinational State of)	Kenya	Mongolia
Tajikistan	Maldives	Mongolia	Nigeria
Tunisia	Papua New Guinea	Nigeria	Papua New Guinea

■ Market access ■ Almost at distress level ■ Distress level

**Source:** UNCTAD calculations and typology based on JP Morgan Emerging Market Bond Index–Global Diversified indices.

**Note:** This figure only considers frontier market economies whose spreads reached 800 basis points or more since 2020. JP Morgan EMBI-Global Diversified tracks dollar-denominated sovereign and quasi-sovereign bonds. “Distress level” refers to spreads vis-à-vis the treasuries of the United States above 1,000 basis points (bp). “Almost at distress level” relates to spreads between 800-1 000 bp and “Market access” corresponds to spreads below 800 bp.

The analysis above has shown that the search for yield by global investors created global push conditions in which FMEs were flooded with capital inflows. However, the worsening of external financial conditions associated with compounding crises and downgrades by CRAs, has produced a rapid exit of those flows. This has triggered a further deterioration of financial conditions, cutting some FMEs off from accessing those markets altogether. Collectively, these factors have combined to place almost a third of FMEs on the precipice of debt distress, with five already falling over the edge. The international response to this problem has been insufficient. Urgent measures are imperative to prevent more FMEs from reaching the brink of financial distress, and worse still, tipping into default. Equally crucial is the reform of the international financial architecture, including the increase of reliable and affordable financial resources to fulfil the 2030 Agenda and the Paris

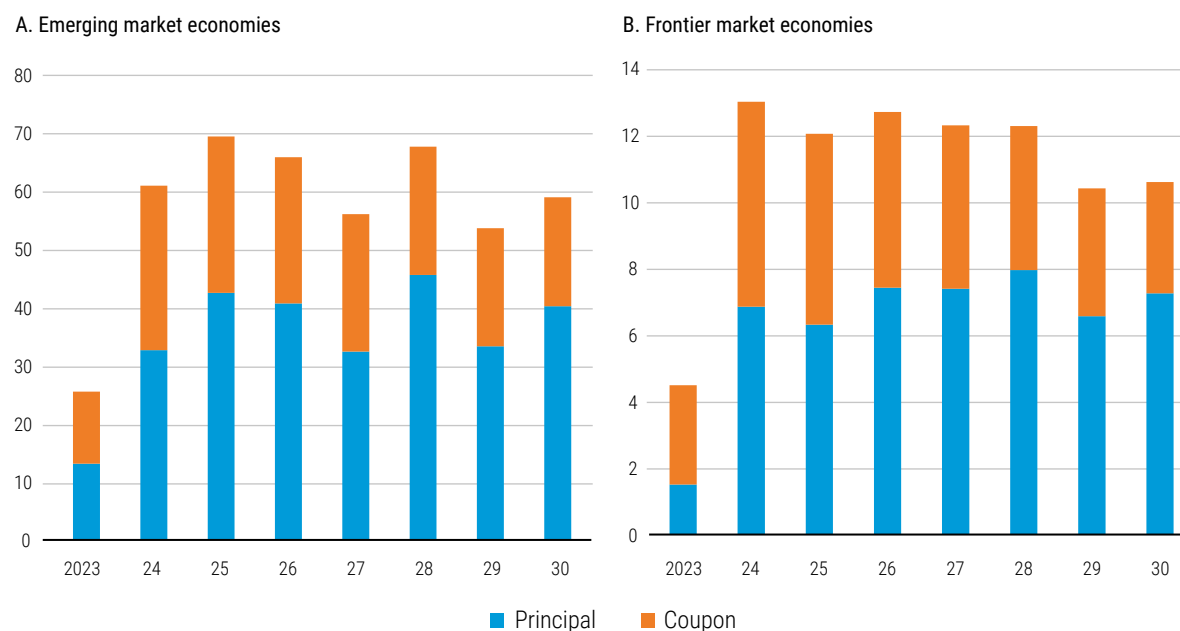
Agreement, with effective and timely mechanisms of debt restructuring and relief. Otherwise, the siren calls of international financial markets will entice more low- and lower-middle-income developing countries on to the rocks of debt distress and default. Detailed discussions on these reforms can be found in chapters IV to VI of this Report.

*“One third of frontier market economies are on the precipice of debt distress, with five already falling over the edge. The international response to this has been insufficient.”*

**Figure II.23 Emerging and frontier markets face a wall of debt repayments from 2024 onwards**

Bond repayment schedule from principals and coupons

(Billions of dollars)

*Source:* UNCTAD calculations based on Refinitiv.*Note:* This figure only considers bonds issued by governments denominated in dollars, euro and yen with a minimum face value equivalent to \$500 million.

## REFERENCES

- African Group (2021). Domestic support: Disciplines on final bound AMS entitlement. Communication from the African Group. JOB/AG/203. World Trade Organization. 12 July.
- African Group and Pakistan (2023). Committee on Agriculture – Special Session – Domestic support – Communication from the African Group and Pakistan – Revision. JOB/AG/242/Rev.1. World Trade Organization. 27 July.
- Africanews (2022). Zimbabwe bans all lithium exports. 29 December.
- Ahearn MC, El-Osta H and Dewbre J (2006). The impact of coupled and decoupled government subsidies on off-farm labor participation of U.S. farm operators. *American Journal of Agricultural Economics*. 88:393–408.
- Akyüz Y (2017). *Playing with Fire: Deepened Financial Integration and Changing Vulnerabilities of the Global South*. Oxford University Press. Oxford.
- Amiti M, Redding SJ and Weinstein DE (2019). The impact of the 2018 tariffs on prices and welfare. *Journal of Economic Perspectives*. 33(4):187–210.
- Anton J and Le Mouel C (2004). Do counter-cyclical payments in the 2002 USA Farm Act create incentives to produce? *Agricultural Economics*. 31(2–3):277–284.
- AP News (2023). EU lets Ukrainian grain ban expire even as some member countries impose their own. 15 September.
- Baker D (2018). Is intellectual property the root of all evil? Patents, copyrights, and inequality. Working paper presented at “The Great Polarization: Economics, Institutions and Policies in the Age of Inequality” conference. University of Utah. Department of Economics. 27–29 September.
- Benigno G, di Giovanni J, Groen JJJ and Noble AI (2023). A new barometer of global supply chain pressures. Federal Reserve Bank of New York. July release.
- Benjamin C and Phimister E (2002). Does capital market structure affect farm investment? A comparison using French and British farm-level panel data. *American Journal of Agricultural Economics*. 84(4):1115–1129.
- Bierlen R, Barry PJ, Dixon BL and Ahrendsen BL (1998). Credit constraints, farm characteristics, and the farm economy: Differential impacts on feeder cattle and beef cow inventories. *American Journal of Agricultural Economics*. 80(4):708–723.
- Bierlen R and Featherstone A (1998). Fundamental q, cash, and investment: Evidence from farm panel data. *The Review of Economics and Statistics*. 80(3):427–435.
- Bown CP (2023). US imports from China are both decoupling and reaching new highs. Here's how. PIIE blog. 31 March 2023. Available at: <https://www.piie.com/research/piie-charts/us-imports-china-are-both-decoupling-and-reaching-new-highs-heres-how> (accessed 27 July 2023).
- Cavallo A, Gopinath G, Neiman B and Tang J (2021). Tariff pass-through at the border and at the store: Evidence from US trade policy. *American Economic Review: Insights*. 3(1):19–34.
- Chavas JP and Holt MT (1996). Economic behavior under uncertainty: A joint analysis of risk preferences and technology. *Review of Economics and Statistics*. 78:329–335.
- da Silva VHCA, de Almeida LA and Singh D (2021). Determinants of and prospects for market access in frontier economies. Working Paper WP21/137. International Monetary Fund. Washington, DC.
- Davies R, Banga R, Kozul-Wright R, Gallogly-Swan K and Capaldo J (2021). Reforming the international trading system for recovery, resilience, and inclusive development. Research Paper No. 65. UNCTAD.
- Deconinck K (2021). Concentration and market power in the food chain. OECD Food, Agriculture and Fisheries Papers. No. 151. Organisation for Economic Co-operation and Development.



- Dewbre J, Anton J and Thompson W (2001). The transfer efficiency and trade effects of direct payments. *American Journal of Agricultural Economics*. 83(1):204–214.
- El-Osta HS, Mishra AK and Ahearn MC (2004). Labor Supply by farm operators under “decoupled” farm program payments. *Review of Economics of the Household*. 2:367–385.
- European Commission (2021). Carbon Border Adjustment Mechanism: Questions and Answers. Press release. 14 July.
- Fajgelbaum PD, Goldberg P, Kennedy PJ, Khandelwal AK and Taglioni D (2023). Trade war and global reallocations. Working Paper No. 29562. National Bureau of Economic Research.
- Fajgelbaum PD and Khandelwal AK (2022). The Economic Impacts of the US-China Trade War. *Annual Review of Economics*. 14:205–228.
- FAO (2023). Food price monitoring and analysis (FPMA) Bulletin #6. Food and Agriculture Organization. Rome. 12 July.
- FAO, IFAD, UNICEF, WFP and WHO (2020). *The State of Food Security and Nutrition in the World 2020. Transforming Food Systems for Affordable Healthy Diets*. Food and Agriculture Organization. Rome.
- Fernandes AM, Freund C and Pierola MD (2016). Exporter behavior, country size and stage of development: Evidence from the exporter dynamics database. *Journal of Development Economics*. 119:121–137.
- Fernandes AM, Freund C and Pierola MD (forthcoming). Preliminary release of the Exporter Dynamics Database. Advanced release kindly provided by the authors.
- Financial Times* (2023a). Maersk predicts long and deep contraction in global trade. 4 August.
- Financial Times* (2023b). How the US is pushing China out of the internet's plumbing. 13 June.
- G90 (2023). G90 document for the special session of the Committee on Trade and Development (CTD-SS) on 10 agreement-specific special and differential treatment proposals. Submission by South Africa on behalf of the Organisation of African, Caribbean and Pacific States (OACPS), the African Group and the LDC Group. Committee on Trade and Development – Special Session – Trade Negotiations Committee. Job/TN/CTD/2, Job/TNC/106. World Trade Organization. 28 February.
- Garg K (2022). The Common but Differentiated Responsibilities – WTO Conundrum. *Opinio Juris* blog. 9 September. Available at: <https://opiniojuris.org/2022/09/09/the-common-but-differentiated-responsibilities-wto-conundrum/> (accessed 27 July 2023).
- Gilchrist S and Himmelberg CP (1995). Evidence on the role of cash cow for investment. *Journal of Monetary Economics*. 36(3):541–572.
- Gohin A (2006). Assessing CAP reform: Sensitivity of modeling decoupled policies. *Journal of Agricultural Economics*. 57(3):415–440.
- Goodwin BK, Mishra AK and Ortalo-Magne FN (2003). What's wrong with our models of agricultural land values? *American Journal of Agricultural Economics*. 85(3):744–752.
- Griffith-Jones S and Kraemer M (2021). Credit Rating Agencies and developing economies. DESA Working Paper No. 175. United Nations Department of Economics and Social Affairs.
- Hansen H (2013). *Food Economics: Industry and Markets*. Routledge. London.
- Hassan F, Rappoport V and Federico S (2020). Trade shocks and credit reallocation: Lessons from Italy. *VoxEU*. 25 June.
- Hennessy DA (1998). The production effects of income support under price uncertainty. *American Journal of Agricultural Economics*. 80:46–57.
- Hubbard RG, Skinner J and Zeldes S (1995). Precautionary saving and social insurance. *Journal of Political Economy*. 103(2):360–399.

- Hudson WM (2022). Revisiting Albert O. Hirschman on Trade and Development. *American Affairs*. 20 August.
- IMF (2023). *Global Financial Stability Report*. International Monetary Fund. Washington, DC. April.
- Just DR (2011). Calibrating the wealth effects of decoupled payments: Does decreasing absolute risk aversion matter? *Journal of Econometrics*. 162(1): 25–34.
- Key N, Roberts MJ and O'Donoghue E (2006). Risk and farm operator labor supply. *Applied Economics*. 38:573–586.
- Kirwan B (2009). The incidence of U.S. agricultural subsidies on farmland rental rates. *Journal of Political Economy*. 117(1):138–164.
- Lagerkvist C (2005). Agricultural policy uncertainty and farm level adjustments – the case of direct payments and incentives for farmland investment. *European Review of Agricultural Economics*. 32(1):1–23.
- Levell P and Dorn D (2022). Changing views on trade's impact on inequality in wealthy countries. *VoxEU*. 14 February.
- Luce E (2023) The new Washington consensus. *Financial Times*. 19 April.
- McIntosh C, Shogren J and Dohlman E (2007). Supply response to countercyclical payments and base acre updating under uncertainty: An experimental study. *American Journal of Agricultural Economics*. 89(4):99–122.
- Mirzabaev A, Olsson L, Kerr RB, Pradhan P, Ferre MGR and Lotze-Campen H (2023). Climate Change and Food Systems. In: von Braun J, Afsana K, Fresco LO and Hassan MHA, eds. *Science and Innovations for Food Systems Transformation*. Springer. Cham: 511–529.
- Mohtadi S and Castells-Quintana D (2021). The distributional dimension of the resource curse: Commodity price shocks and income inequality. *Structural Change and Economic Dynamics*. 59(C):63–78.
- Moody's Analytics (2020). Trade Diversion Since the U.S.-China Trade War. Available at: <https://www.moodyanalytics.com/-/media/article/2020/Trade-Diversion.pdf> (accessed 27 July 2023).
- OECD (2022). The supply of critical raw materials endangered by Russia's war on Ukraine. Organisation for Economic Co-operation and Development. Paris. 4 August.
- Pretorius M and Botha I (2017). The procyclicality of African sovereign credit ratings. In Tsounis N and Vlachvei A, eds. *Advances in Applied Economic Research*. Springer. Cham: 537–546.
- Rabbi MF, Ben Hassen T, El Bilali H, Raheem D and Raposo A (2023). Food security challenges in Europe in the context of the prolonged Russian–Ukrainian conflict. *Sustainability*. 15(6):4745.
- Rajan RG (2023). Unilateral action on climate change can have unintended consequences. *Financial Times*. 14 August.
- Ray DK, West PC, Clark M, Gerber JS, Prishchepov AV and Chatterjee S (2019). Climate change has likely already affected global food production. *PLoS ONE*. 14(5):e0217148.
- Reuters (2023). Namibia bans export of unprocessed critical minerals. 8 June.
- Roberts MJ, Kirwan B and Hopkins J (2003). The incidence of government program payments on agricultural land rents: The challenges of identification. *American Journal of Agricultural Economics*. 85:762–769.
- Rodrik D (2022). A primer on trade and inequality. The IFS Deaton Review VI. Institute for Fiscal Studies. London.
- Rodrik D (2023). What next for globalization? *Project Syndicate*. 9 March.
- Roe T, Somwaru A and Diao X (2003). Do direct payments have intertemporal effects on US agriculture? In Moss CB and Schmitz A, eds. *Government Policy and Farmland Markets*. Iowa State Press. Ames, IA:115–139.

- Rude J (2000). An examination of nearly green programs: Case study for Canada. *American Journal of Agricultural Economics*. 82(3):755–761.
- Saccone D (2021). Can the Covid19 pandemic affect the achievement of the “Zero Hunger” goal? Some preliminary reflections. *The European Journal of Health Economics*. 22(7):1025–1038.
- Schipke A (2015). *Frontier and Developing Asia: The Next Generation of Emerging Markets*. International Monetary Fund. Washington, DC.
- Sckokai P and Moro D (2006). Modeling the reforms of the common agricultural policy for arable crops under uncertainty. *American Journal of Agricultural Economics*. 88(1):43–56.
- Serra T, Goodwin BK and Featherstone A (2011). Risk behavior in the presence of government programs. *Journal of Econometrics*. 162(1):18–24.
- Serra T, Zilberman D, Goodwin BK and Featherstone A (2006). Effects of decoupling on the mean and variability of output. *European Review of Agricultural Economics*. 33(3):269–288.
- Siripurapu A and Berman N (2022). The Contentious U.S.-China Trade Relationship. Council on Foreign Relations. 2 December.
- Sullivan J (2023). Remarks by national security advisor Jake Sullivan on renewing American economic leadership at the Brookings institution. The White House. Washington, DC. 27 April.
- Sumner DA (2003). Implications of the US Farm Bill of 2002 for agricultural trade and trade negotiations. *The Australian Journal of Agricultural and Resource Economics*. 46(3):99–122.
- UNCTAD (2017). Using trade policy to drive value addition: Lessons from Indonesia’s ban on nickel exports. Background document to the Commodities and Development Report 2017. UNCTAD/SUC/2017/8. Geneva.
- UNCTAD (2019). Energizing South-South trade: The global system of trade preferences among developing countries. Policy Brief 74. Geneva.
- UNCTAD (2021a). Export restrictions do not help fight COVID-19. 11 June.
- UNCTAD (2021b). *A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries*. 14 July. UNCTAD/OSG/INF/2021/2. Geneva.
- UNCTAD (2022a). *A Trade Hope: The Role of the Black Sea Grain Initiative in Bringing Ukrainian Grain to the World*. UNCTAD/OSG/INF/2022/6. Geneva. 20 October.
- UNCTAD (2022b). The impact on trade and development of the war in Ukraine. 16 March.
- UNCTAD (2023a). *South-South Cooperation and Economic Integration: The Vision and Roadmap*. Geneva.
- UNCTAD (2023b). Recent developments, challenges and opportunities in commodity markets. TD/B/C.I./MEM.2/58. Geneva. 31 July.
- UNCTAD (2023c). *South-South Cooperation for Resilient Food Security*. Geneva (forthcoming).
- UNCTAD (2023d) *Trade and Development Report Update (April): Global Trends and Prospects*. UNCTAD/GDS/INF/2023/1. Geneva.
- UNCTAD (2023e). SDG Pulse. First official estimates on illicit financial flows – UNCTAD SDG Pulse 2023.
- UNCTAD (TDR, 1997). *Trade and Development Report 1997* (United Nations publication, Sales No. E.97.II.D.8. New York and Geneva).
- UNCTAD (TDR, 1998). *Trade and Development Report 1998*. (United Nations publication, Sales No. E.98.II.D.10. New York and Geneva).
- UNCTAD (TDR, 2015). *Trade and Development Report 2015: making the international financial architecture work for development* (United Nations publication, Sales No. E.15.II.D.4. New York and Geneva).

- UNCTAD (TDR, 2018). *Trade and Development Report 2018: Power, Platforms and the Free Trade Delusion*. (United Nations Publication. Sales No. E.18.II.D.7. New York and Geneva).
- UNCTAD (TDR, 2019). *Trade and Development Report 2019: Financing a Global Green New Deal* (United Nations publication, Sales No. E.19.II.D.15).
- UNCTAD (TDR, 2022). *Trade and Development Report 2022: Development Prospects in a Fractured World: Global Disorder and Regional Responses*. (United Nations Publication. Sales No. E.22.II.D.44. Geneva).
- United Nations (2020). External debt sustainability and development, Note by the Secretary-General to the General Assembly. A/75/281. Geneva. 30 July.
- United Nations (2022). Global impact of the war in Ukraine: Billions of people face the greatest cost-of-living crisis in a generation. Brief No 2. UN Global Crisis Response Group on Food, Energy and Finance. 8 June.
- United Nations (2023). A world of debt: A growing burden to global prosperity. UN Global Crisis Response Group on Food, Energy and Finance. 12 July.
- Vercammen J (2003). A stochastic dynamic programming model of direct subsidy payments and agricultural investment. Paper presented at the joint annual meeting of the American Agricultural Economics Association and Canadian Agricultural Economics Society. 27–30 July. Montreal.
- WFP (2023). A global food crisis. World Food Programme. Rome. Available at: <https://www.wfp.org/global-hunger-crisis> (accessed 27 July 2023).
- Whited T (1992). Debt, liquidity constraints, and corporate investment: Evidence from panel data. *Journal of Finance*. 47:1425–1460.
- World Bank (2020). *World Development Report 2020: Trading for Development in the Age of Global Value Chains*. The World Bank Group. Washington, DC.
- WTO (2023). *Trade Monitoring Updates: A Year of Turbulence on Food and Fertilizers Markets*. World Trade Organization. 28 February.
- Young CE and Westcott PC (2000). How decoupled is U.S. agricultural support for major crops? *American Journal of Agricultural Economics*. 82(3):762–767.

## ANNEX TO CHAPTER II

### Definition of the frontier market economies considered in this chapter

There is no formal definition of FMEs, although the term often refers to developing countries with small yet investable markets of recent origin, which are part of the next generation of EMEs (Schipke, 2015). For the sake of the analysis of this chapter, FMEs are identified with the 37 countries in the JP Morgan Next Generation Markets (NEXGEN) index, itself a subset of the larger JP Morgan Emerging Markets Bond index (EMBI). NEXGEN focuses on dollar-denominated government bonds from FMEs. This diverse group includes countries across all World Bank income classification levels, some of which are LDCs and small island developing States (SIDS) (table II.A.1). Of these, 14 FMEs were eligible for the International Monetary Fund (IMF) Poverty Reduction and Growth Trust (PRGT) and the World Bank International Development Association (IDA), with 10 participating in the heavily indebted poor countries (HIPC) initiative.

**Table II.A.1 List of frontier market economies**

Country	Region	Income group	SIDS	LDC	HIPC	PRGT and IDA eligible
Angola	Sub-Saharan Africa	LMIC				
Armenia	Western Asia	UMIC				
Azerbaijan	Western Asia	UMIC				
Barbados	Latin America and the Caribbean	HIC				
Belize	Latin America and the Caribbean	LMIC				
Bolivia (Plurinational State of)	Latin America and the Caribbean	LMIC				
Cameroon	Sub-Saharan Africa	LMIC				
Costa Rica	Latin America and the Caribbean	UMIC				
Côte d'Ivoire	Sub-Saharan Africa	LMIC				
El Salvador	Latin America and the Caribbean	LMIC				
Ethiopia	Sub-Saharan Africa	LIC				
Gabon	Sub-Saharan Africa	UMIC				
Georgia	Western Asia	UMIC				
Ghana	Sub-Saharan Africa	LMIC				
Guatemala	Latin America and the Caribbean	UMIC				
Honduras	Latin America and the Caribbean	LMIC				
Iraq	Western Asia	UMIC				
Jamaica	Latin America and the Caribbean	UMIC				
Jordan	Western Asia	UMIC				
Kenya	Sub-Saharan Africa	LMIC				
Maldives	Southern Asia	UMIC				
Mongolia	Eastern Asia	LMIC				
Mozambique	Sub-Saharan Africa	LIC				
Namibia	Sub-Saharan Africa	LMIC				
Nigeria	Sub-Saharan Africa	LMIC				
Pakistan	Southern Asia	LMIC				
Papua New Guinea	Oceania	LMIC				
Paraguay	Latin America and the Caribbean	UMIC				
Rwanda	Sub-Saharan Africa	LIC				
Senegal	Sub-Saharan Africa	LMIC				
Sri Lanka	Southern Asia	LMIC				
Suriname	Latin America and the Caribbean	UMIC				
Tajikistan	Central and Southern Asia	LMIC				
Tunisia	Northern Africa	LMIC				
Uzbekistan	Central Asia	LMIC				
Viet Nam	South-Eastern Asia	LMIC				
Zambia	Sub-Saharan Africa	LMIC				

**Source:** UNCTAD typology based on World Bank (July 2022) and UNCTADstat (2023) classifications.

**Note:** IDA: International Development Association; HIPC: heavily indebted poor country; LDC: least developed country; LIC: low-income country; LMIC: lower middle-income country; PRGT: poverty reduction and growth trust; SIDS: small island developing State; UMIC: upper middle-income country.



# Chapter III

Food Commodities,  
Corporate Profiteering  
and Crises: Revisiting  
the International  
Regulatory Agenda





## From excess to equity

The stark contrast between the surging profits of commodity trading giants and the widespread food insecurity of millions underscores a troubling reality: unregulated activity within the commodities sector contributes to speculative price increases and market instability, exacerbating the global food crisis.

This presents significant obstacles to effective policy measures. At the same time, an intricate web of cross-sector connections and high volume of intragroup corporate activity in the industry complicates efforts to establish transparency and accountability.

Profiteering from financial activities now drives profits in the global food trading sector. Yet commodity traders circumvent existing regulations: they are not regulated as financial institutions but are treated as manufacturing companies.

This report calls for a fundamental revision of this regulatory approach. It is imperative to develop tools to enhance transparency and accountability in this opaque yet systemically vital global industry. Policymakers and regulators need to foster a future where equity replaces excess, and the global paradigm shifts from profiteering to purposeful sharing for the betterment of all.

### Specifically

- Profiteering prompts the need to reevaluate corporate group membership and the behaviour of major players in food trading.
- Regulators should recognize the financial aspects of food traders' activities as systemically important and extend relevant regulations. Measures proposed here at the corporate-finance nexus can enhance wider efforts to combat financial speculation and profiteering.
- A set of market-level, system-level and global governance reforms are needed to align the international financial architecture with recent developments in the opaque, underregulated yet strategically vital commodity trading industry.

## A. INTRODUCTION

The cost-of-living crisis has become the hallmark of the post-COVID-19 recovery and continues to cascade through the global political economy. In advanced economies, the crisis is manifesting as high inflation and growing financial fragilities (chapter I). In the developing world, import dependencies, extractive financial flows, boom–bust commodity cycles, trade disruptions, the war in Ukraine and climate-vulnerable food systems are combining to destabilize finances, bringing countries closer to a debt crisis (chapter II; IPES, 2023).

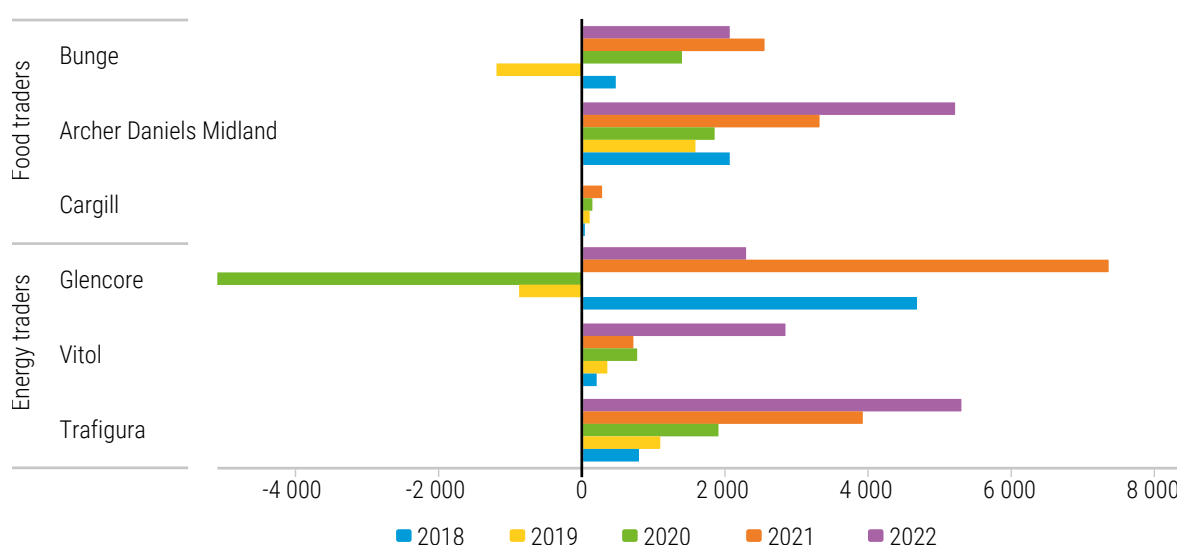
In the interplay of crisis transmission mechanisms, a vicious cycle has emerged between higher energy and food production costs, reduced farm yields and higher food prices, more inflation pressures and subsequent financial tightening. Stricter financial conditions are eroding the buying power of currencies in developing countries and increasing the import costs of food and energy, reducing financial capacity and increasing the costs of servicing debt (GCRG, 2022). In a fragile global economy on the verge of a recession, volatility in commodity markets endangers access to most basic needs and rights, such as food and energy security for millions, potentially threatening social and political stability in many parts of the world.

But crises always present opportunities, at least for some. The last few years of commodity price volatility have coincided with a period of record profit growth by global energy and food traders. In the area of food trading, the four companies that conservatively account for about 70 per cent of the global food market share registered a dramatic rise in profits during 2021–2022. As figure III.1 shows, growth in profits of some of the largest food traders in 2021–2022 is at par with the profitability profiles of leading firms in the energy sector. Meanwhile, total profits of the nine big fertilizer companies over the past five years grew from an average of around \$14 billion before the pandemic to \$28 billion in 2021 and then to an astounding \$49 billion in 2022 (IATP and GRAIN, 2023).

This chapter analyses some key dynamics of corporate profiteering through crisis, with a focus on the global food trading sector. The analysis presented below aims to identify and help address some of the destabilizing impacts of concentrated corporate control in the strategically vital, highly interconnected yet opaque and poorly regulated food commodity trading industry.

**Figure III.1 Profits of main energy and food traders increased dramatically in 2021–2022**

Profit (or loss) before tax, selected companies  
(Millions of dollars)



**Source:** UNCTAD calculations based on Orbis database.

**Note:** Based on corporate entities in the group with highest reported operating revenues.

Corporate profiteering in times of crisis is not a new challenge. At the very first United Nations conference, which took place 80 years ago in Hot Springs, Virginia, United States, 43 countries gathered to discuss the food and agricultural challenges faced by the post-war international order.<sup>1</sup> With many agricultural economies still suffering from the price collapses of the inter-war years and against a backdrop of famine conditions in parts of Europe and Asia, a central issue at the time was the problem of volatile prices, for both producers and consumers. But while there was broad agreement that the food question could not be left solely to market forces, there was less agreement about the best way to establish a more secure and stable global food system.

Today, in the context of systemic crises, the contrast between growing risks to food security of millions around the world and profiteering by the few corporations that control global food systems during times of volatility and shocks, is particularly stark. In the highly concentrated commodity trading industry, the super profits enjoyed by “agripolies” trickle down very slowly, if at all, to local farming communities.

*“In the context of cascading crises, there is a stark contrast between growing risks to the food security of millions and profiteering by corporations that control global food systems.”*

In July 2023, Oxfam estimated that 18 food and beverage corporations made on average about \$14 billion a year in windfall profits in 2021 and 2022, enough to cover the \$6.4 billion funding gap needed to deliver life-saving food assistance in East Africa more than twice over (Oxfam, 2023). A recent study found that in Europe, up to 20 per cent of food inflation can be attributed to profiteering (Allianz, 2023). Some reports suggest that the ten leading “momentum-driven” hedge funds made an estimated \$1.9 billion by trading on the food price spike at the start of the war in Ukraine (Ross and Gibbs, 2023).

However, according to two leading scholars, the issue is more enduring and rooted in structural factors. Growing cross-sectoral control over the food system by major agri-corporations raises the risk that extreme food-price swings will become the norm. Through decades of mergers and acquisitions, such firms have been able to expand their influence up and down the supply chain, while amassing huge amounts of market data. If a handful of companies continue to hold inordinate power over the world’s food systems, any policy effort to mitigate the short-term effects of food price spikes will be futile in the long term (Clapp and Howard, 2023). Similar warnings are increasingly echoed by market analysts, civil society, regulators and international organizations concerned with the lack of regulatory oversight of commodity trading (FSB, 2023; Schmidt, 2022; Tarbert, 2023; Tett, 2023).

The analytical and policy challenges of regulating commodity trading cannot be overestimated. Opacity, lack of regulatory oversight – especially at the systemic level – cross-sector interconnections and intragroup corporate activity all pose major hurdles in efforts to scope the problem and identify risks and workable solutions. This can explain why, despite growing public attention on the issue of market concentration and profiteering, current policy debate on possible multilateral solutions to the food systems crisis has not addressed this question in depth.

This chapter is a step forward in this endeavour and its aim is two-fold. First, to examine the factors that enable corporate profiteering in food trading in times of crises and thus play a role in the current dysfunction of global food systems. Second, to put forward a set of regulatory measures that can help address the destabilizing impacts of concentrated corporate control in a strategically vital, highly interconnected yet opaque and poorly regulated industry.

<sup>1</sup> It is also worth noting that development issues were much more prominent in Hot Springs than they were a year later in Bretton Woods at the United Nations Monetary and Financial Conference (Daunton, 2023).

The analysis reveals that unregulated financial activity significantly contributes to the profits of global food traders. It also shows that corporate profits from financial operations appear to be strongly linked to periods of excessive speculation in commodities markets and to the growth of shadow banking – an unregulated financial sector that operates outside traditional banking institutions.

Specifically, during periods of heightened price volatility, certain major food trading companies gain amplified profits in the financial markets. Like a non-bank financial institution, food trading companies take positions and function as key participants in financial markets. This shadow banking function is not regulated in the current financial system. As a result, these companies are motivated to increase their already significant role in profiting from price differences in food markets. To help combat the problem of profiteering, arbitrage and unearned profits, a set of regulatory measures have been identified that can help address market dysfunction and risks of shadow financial trading.

The analysis does not necessarily establish that financial speculation is driving food prices up. Rather, it suggests a strong link between corporate profiteering through the use of financial instruments and the current period of market volatility. As figure III.2 shows, the past two years have been marked by high volatility in crop prices and in the financial markets for food, but correlation does not mean causation. Much more research needs to be carried out to establish the relationship between excessive speculation and price dynamics. Food prices are determined by an interplay of supply and demand conditions, including in retail sectors, food processing industries and conditions in labour markets (Scott et al., 2023). Therefore, while financial speculation, and excessive speculation specifically, may accentuate price swings, agriculture prices are highly affected by market conditions, geopolitical tensions, climate risks and trade measures.

In February 2022, threats to global food systems were amplified with the start of the war in Ukraine. Since 24 February 2022, 62 per cent of 667 export-related non-tariff measures recorded affected agricultural products or fertilizers. Of these, 267 are restrictive measures such as bans on the export of fertilizers and certain food products.<sup>2</sup>

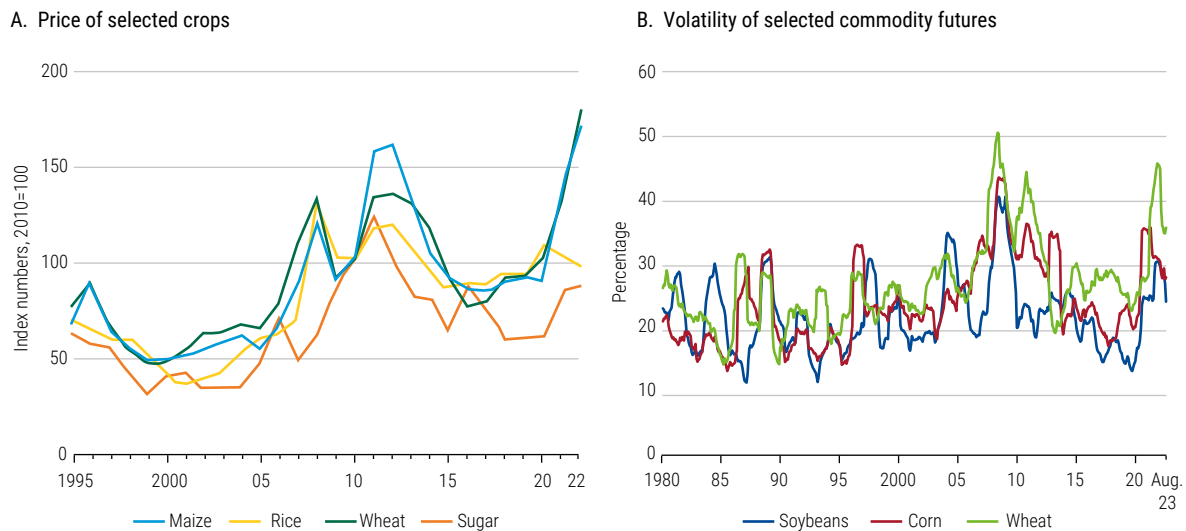
Early in 2023, food prices came down from their 2021 peaks, yet the suspension of the Black Sea Initiative and the subsequent withdrawal of the Russian Federation from the deal has again sparked market volatility (figure III.2.B). In early August 2023, wheat remains more than twice as expensive as it was before the pandemic. In most developing economies, food price inflation is above 5 per cent, and as high as 30 per cent in Egypt and Rwanda (Clapp and Howard, 2023). And while it may seem straightforward that high agriculture prices benefit food producers, such assumptions ignore the major role played by the international agrobusiness firms that control many of the links in the global agrifood chains and the dynamics of price formation in global food systems (Akyüz and Gursoy, 2020; Baines, 2017; Clapp and Howard, 2023; Staritz et al., 2018; UNCTAD, 2023).

With these qualifications, the findings presented in this chapter are indicative, and not definitive. More research is needed, and the challenge of incomplete data and non-transparency of the commodity trading industry is a major hurdle in this endeavour.

However, what is clear is that the fragmented and compromised set of regulatory norms governing the financial dimension of the global food trading industry has played a key role in enabling financial speculation, corporate arbitrage and profiteering in the global food industry since 2010. This problem was accentuated in the global context of compounding crises post-2020. Financial speculation in commodity markets, as well as the increasing role of financial assets under the control of large corporations that dominate the sector, point to the issue of unearned profits and the need to strategically regulate important modes of corporate control.

<sup>2</sup> UNCTAD calculations based on the Global Trade Alert database, available at [https://www.globaltradealert.org/data\\_extraction](https://www.globaltradealert.org/data_extraction), accessed on 20 August 2023.

**Figure III.2 Food as an asset: Price and volatility high again**



*Source:* Chicago Board of Trade (CBOT) commodity futures retrieved through Refinitiv database and World Bank data.

The chapter is structured as follows:

- Section B analyses the role of financial trades and speculation in food trading, finding a strong parallel between the period of high profits of major food traders and the wave of financial speculation in over-the-counter (OTC) markets.
- Section C investigates the conditions for corporate arbitrage in commodity trading created, in part, by the regulatory distinction between commercial and financial institutions. Findings show that this distinction is being eroded by the process of regulatory loopholing, corporate arbitrage and financialization of food trading.
- Analysing some of the concerns related to this process flagged by the Financial Stability Board in 2023, an indicator was developed (the asset dominance ratio, or ADR) to help locate and estimate the risks to financial stability in commodity trading.
- Section D concludes by charting policy solutions that aim to limit the systemic and distributional effects of unregulated financial activities in commodity food trading, at different regulatory levels.

## B. FOOD AS AN ASSET: HEDGING, SPECULATION AND PROFITING FROM CRISES

Financial instruments and insurance products, known as commercial hedging tools, play a crucial role in risk management across all industries. Particularly vital in sectors such as agriculture, commodities, trade and investments, these tools contribute to market liquidity. They become even more significant due to their role in maintaining stable commodity prices, which in turn, rely on a stable commodity derivatives market. A notable aspect of this market are deferred settlements, a concept where transactions are settled at a later date. Derivatives are based on the principle of deferred settlements, and on the basis of being “a contract whose value depends on the price of underlying assets, but which does not require any investment of principal in those assets. As a contract between two counterparts to exchange payments based on underlying prices or yields, any transfer of ownership of the underlying asset and cash flows becomes unnecessary” (BIS, 1995:6–7).

Commodity futures markets bring together commercial operators who either produce, store or process commodities, and speculators, i.e., non-commercial operators who buy and sell futures contracts but have no specific interest in the use of the commodity; rather, they aim to make a profit exclusively from price fluctuations (Kornher et al., 2022; IPES, 2023).

A degree of speculation, and speculative liquidity, is essential for the stable operation of any financial market, as it helps price discovery and hedging. However, excessive speculation makes price swings larger than would have been the case based on supply and demand conditions alone. Under certain conditions, excessive speculation can become an independent driver of those price fluctuations. Excessive speculation, including in commodity markets, is intimately linked to the use of financial derivatives. These instruments mushroomed following the heightened uncertainty and unstable expectations that followed the end of the Bretton Woods system in 1973.

Speculation on food futures markets dates back to the mid-nineteenth century, when farm production expanded in the United States. At the time, small-scale farmers, being directly indebted to the banks which sold land, had to seek opportunities in markets much further afield. As international channels for trade in cereals had only just started to develop, control over the food chain became concentrated in the hands of a few powerful intermediaries, who are the ancestors of today's food multinationals (Vargas and Chantry, 2011). These markets came under federal oversight in the late 1930s, with stricter regulation introduced following the farming crisis and the Great Depression.

Over the past few decades, the structure of food speculation has become more complex. Two parallel forces have driven this shift: the maturing of speculation in financial markets on the one hand, including through the use of derivatives; and the liberalization of agriculture markets, on the other (Vargas and Chantry, 2011). This process has seen private equity funds, asset management companies, institutional investors, banks, and other financial institutions invest in "alternative assets" such as commodity futures, agricultural land and the crops it produces, which had hitherto been avoided by most investors as too high-risk (Murphy et al., 2012). Partly as a result of this process, the financial activities of non-commercial hedgers in commodity markets have become associated with excessive speculation and its impact on price levels, most dramatically seen during the commodity price crisis of 2008–2010 (Bicchetti and Maystre, 2013).

The current crisis accentuates two major effects of these developments. First, there is ample evidence that banks, asset managers, hedge funds and other financial institutions continue to profit from the most recent bout of commodity market volatility (Schmidt, 2022; Oliver Wyman, 2023; Ross and Gibbs, 2023). Second, by actively managing risk, commodity trading firms have assumed many financing, insurance and investment functions typically associated with the activity of banks. In this context, very large international trading firms, or ABCD-type companies<sup>3</sup> have come to occupy a privileged position in terms of setting prices, accessing funding, and participating directly in the financial markets. This not only enables speculative trades in organized market platforms, but a growing volume of transactions between individuals, or over-the-counter trades, over which most governments in the advanced countries have no authority or control (Suppan, 2010; Vargas and Chantry, 2011; Murphy et al., 2012).

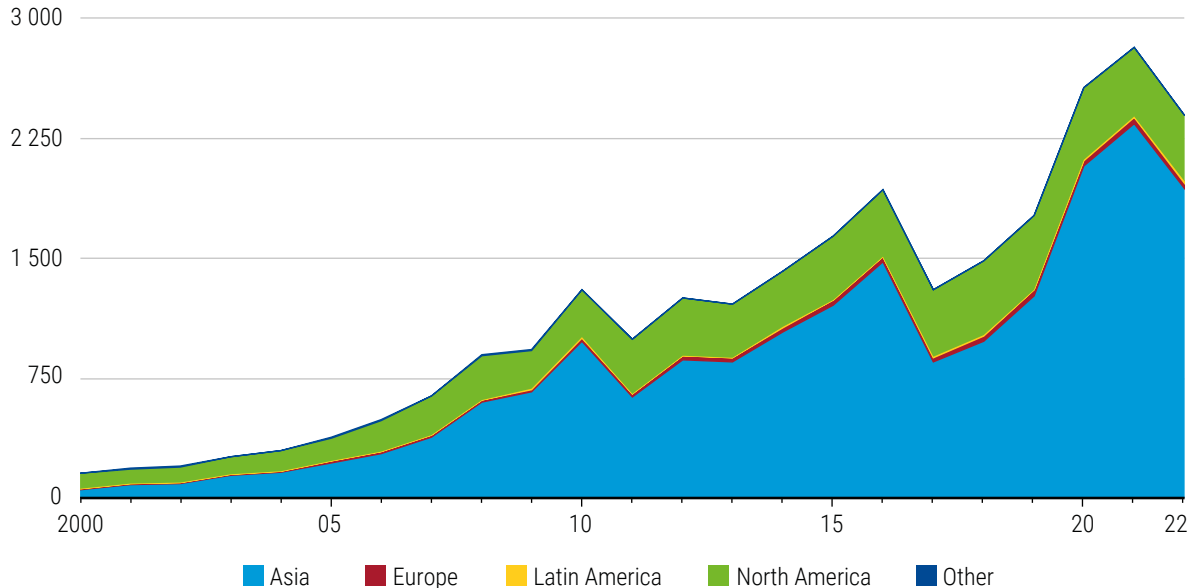
Continuous lack of systemic regulatory oversight over the emergent segments of commodities trading reinforces this position. Market-based speculation, and operations in exchange-traded derivatives represent only a fraction of derivatives traded globally. Financial derivatives on agricultural commodities are mostly traded over the counter, which makes monitoring market trends and regulating risks in this sector a challenge (Schmidt, 2022).

In this instance, the geographical structure of global commodity derivatives trade is instructive (figure III.3). Many market-based instruments are traded in North America and Asia, reflecting major trading zones for key commodities, while Europe accommodates mainly OTC trading.

<sup>3</sup> Large firms of a size and stature akin to the four big commodity traders, Archer Daniels Midland, Bunge, Cargill and Louis Dreyfus Company, known as ABCD because of the coincidence of their initials.

**Figure III.3 Most exchange-traded agriculture derivatives are traded in Asia and North America**

Volume, by region  
(Number of contracts, millions)



*Source:* UNCTAD calculations based upon FIA ETD Tracker database.

*Note:* Derivative contracts include futures and options.

Data from the Bank of International Settlements (BIS, 2023) shows that outstanding over-the-counter commodity derivatives relating to energy, food and non-precious metals experienced a sharp increase after 2020, with their gross market value increasing from less than \$200 billion to \$386 billion at the end of 2021 and peaking at \$886 billion by mid-2022. This represents more than a fourfold increase compared to their 2015–2020 average. During the second half of 2022, this indicator declined by 45 per cent. Yet it still yielded a year-end value of \$486 billion in 2022.

Notional principal values of these outstanding derivatives remained above \$1.5 trillion at the end of 2022, its second highest since records began, after reaching an all-time-high of more than \$2 trillion in mid-2022 (BIS, 2023). These trends reflect the uncertainty triggered by the war in Ukraine and other geopolitical tensions affecting commodities markets.

The central role of OTC operations in commodities trading points to one of the major challenges of regulating this notoriously inscrutable industry. The opacity of the global food trading sector has implications for the availability of data and therefore, definitive conclusions: only eight out of 15 main food trading companies examined in this chapter are publicly traded and required to publish consolidated accounts.<sup>4</sup> The lack of

<sup>4</sup> Given the diversified nature of the trades the largest agriculture corporations engage in, coupled with a high level of opacity inherent in current reporting, a pragmatic approach to sample selection was chosen. It was based initially upon current membership by “agricultural” firms in a leading trade body for the commodities sectors, the Commodities Market Council (CMC). As of March 2023, agricultural firms participating in the CMC are attributable to 9 distinct corporate groups. This membership is dominated by United States-centric firms. To help balance this bias out, 6 other major players from groups organized around several other major agriculture economies were identified. For all 15, the current structure of the corporate groups was mapped out, to identify which entities, from which jurisdictions, were producing consolidated and audited accounts on behalf of the corporate group as a whole. These steps were followed by assessment of available financial reporting by those entities. The data is gathered from the Orbis dataset provided by the commercial data publisher, Bureau Van Dijk. This is both because Orbis is the only consolidated source of information on the activities of public and private companies at a global level, but also because Orbis helps to standardize financial reporting to facilitate better comparisons for a global set of corporations. This also means that some firms, most notably Cargill and Noble Group, do not provide information at the standard required for the analysis undertaken here. While groups such as these do provide some figures publicly on their website, these represent unaudited and selective information which is unsuited to this analysis.

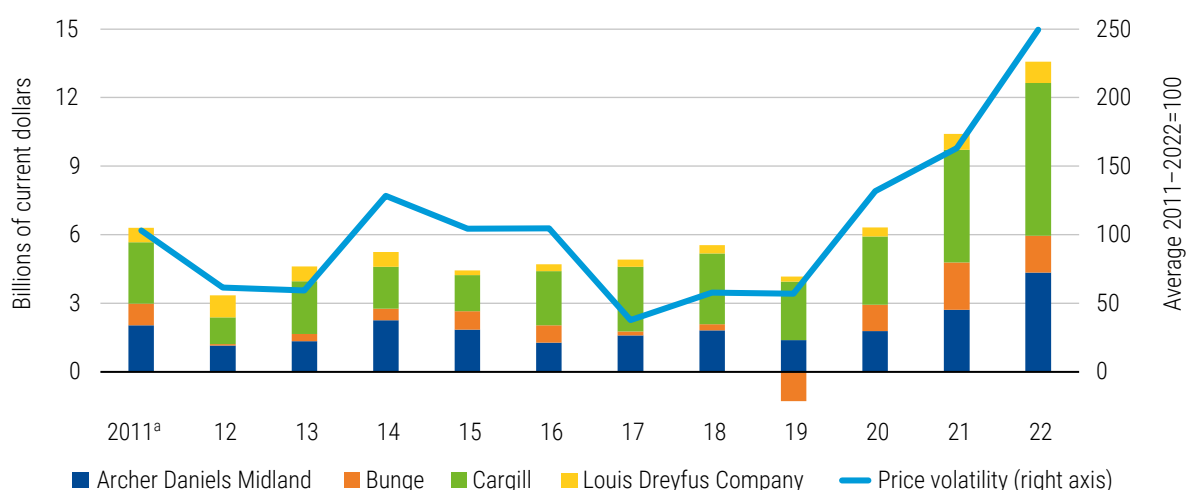


transparency within this sector means that generalizations about profit trends for individual companies, and a conclusive verdict on the exact impact of corporate profits on the overall price dynamics, are difficult to draw at this stage.

What does appear to be clear from analysing sector-wide profit trends is the relationship between companies' profits and price volatility. Figure III.4 presents the relationship between the (net) profits of the "ABCD" companies and food price volatility during the last decade.

**Figure III.4 Profits of the "ABCD" food companies surge during periods of price volatility**

Profits of selected large agricultural trading firms and food price volatility



**Source:** UNCTAD calculations based on FAO *Real Food Price Index*, Blas and Farchy (2021: Appendix ii), Eikon Refinitiv, and Louis Dreyfus Commodities' Financial Results Reports (various issues).

**Note:** The underlying indicator for volatility corresponds to the yearly average of the monthly standard deviations of the FAO *Real Food Price Index* divided by the average of such figure for the 2011–2022 period. An hypothetical value of 200 would mean, for instance, that at a suppositional year, the average of the monthly standard deviations would have been twice as large as the average of the monthly standard deviations for the 2011–2022 period.

<sup>a</sup> Cargill's 2011 profits do not include the sale of its stake in the fertilizer group Mosaic that year.

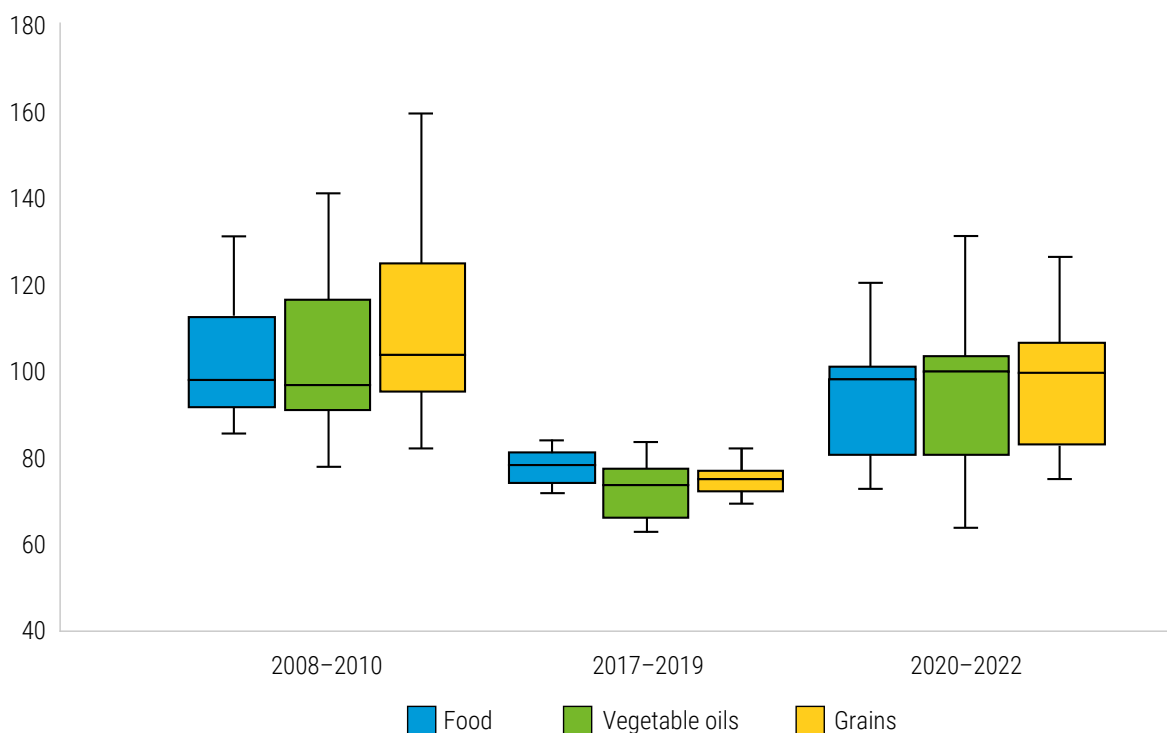
As figure III.5 shows below, global food price volatility during the crisis of 2020–2022 is close to the levels of the commodity price crisis period of 2008–2010.

Two major issues are notable here. First, the profits of four major food traders rise during periods of market volatility and during crises, and this trend has been particularly pronounced during the pandemic. Second, in the context of compounding crises, the sources of the super-profits in the food trading industry warrant closer attention.

As noted in the seminal study by Oxfam (Murphy et al., 2012), prices in volatile commodity markets are as much about *anticipated* supply and demand as they are about existing conditions and potential risks. The level of risk and volatility in the trading of standardized and generic products pushes companies to look for strategies that will increase their stability and predictability. To achieve this, a range of financial techniques designated for commercial hedging can be used, such as futures and options. Commodity exchanges can also serve this purpose if traders, in addition to using publicly available information, trade using independent information derived from an intimate knowledge of specific events and their own plans to supply or demand commodities. However, in an inadequately regulated system, instruments officially designed (and regulated) as hedging tools are being used for speculating in food prices.

### Figure III.5 Food price volatility increases during crises

Summary distribution of selected food price indexes, deflated by United States consumer price index  
(Index numbers, 2010=100)



*Source:* UNCTAD calculations based on data of the United States Bureau of Labor.

Figure III.6 gives an indication of this phenomenon in the food commodities trading industry. It shows that profit indicators reflecting the dynamics of the core business of companies in the sector have followed a common trend since 2006. Yet in 2020, pre-tax profits, which can serve as an indicator of the profits (and losses) from purely financial operations (i.e., non-core business operations) became extreme, greatly exceeding profits/losses from their core business operations. These are: operating revenues, gross profits and earnings before interest, taxes, depreciation and amortization (EBITDA).

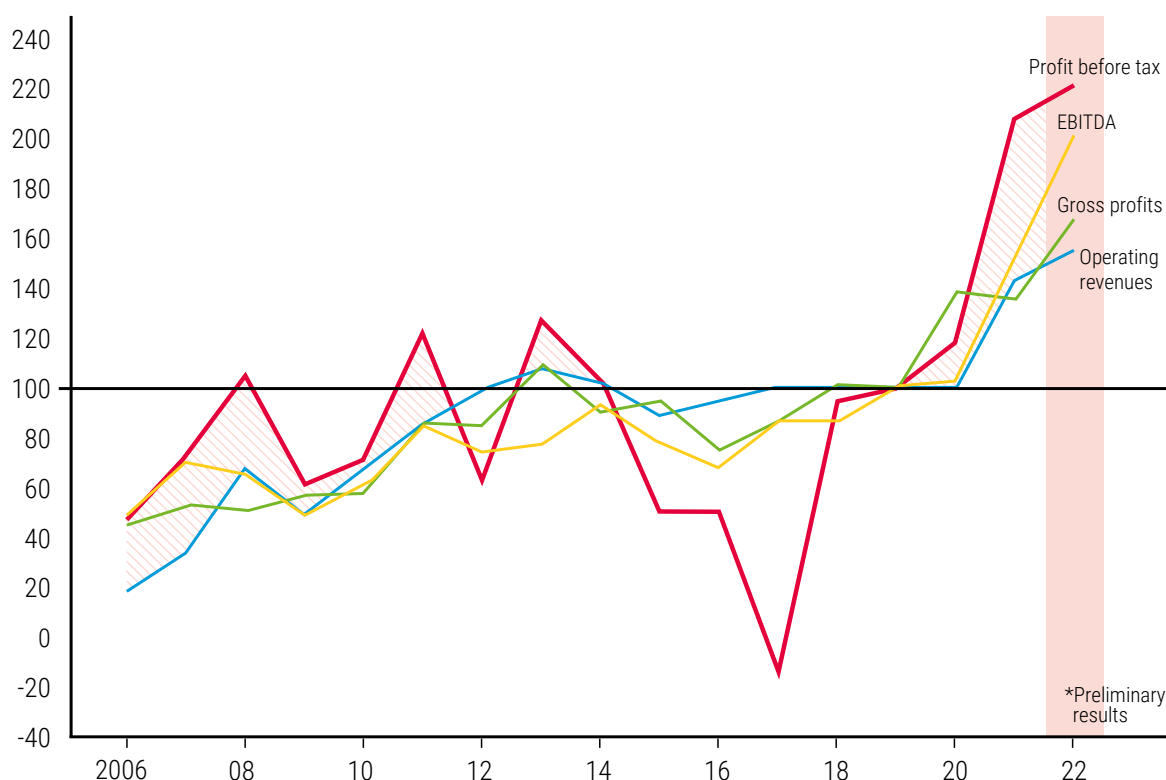
This contrast in profit indicators leads to three key observations.

First, food trading companies have come to rely on the use of financial instruments and markets not simply to hedge their commercial positions, but to strategically ride the wave of market volatility (in other words, to speculate) using techniques of financial engineering. Second, market and price volatility appear to have a much more pronounced role in the sector's financial operations, in contrast to their core commercial activities. Third, financial instruments and techniques designed for hedging a range of commercial risks are being used by the sector for speculative purposes. This is enabled by the current regulatory architecture of commodity trading as a whole, which remains diluted and fragmented.

**Figure III.6 Financial operations drive profit growth in the food trading sector**

Median food traders' profits and revenues

(Index numbers, 2019=100)

*Source:* UNCTAD calculations based on Orbis database.*Note:* Based on available corporate data from Akira Holding, Anderssons, Archer Daniels Midland, Bunge, Cargill, CGB Enterprises, CHS, CMOC Group, COFCO International, Glencore, GrainCorp, OFI Group, Noble Group, Scoular and Wilmar International.

Hedging activity, regardless of whether it is officially a hedge under the existing rules, or a hedge to bypass onerous regulations, should have a negligible impact on financial performance because, if done properly, that is the objective of the hedge. Most derivatives trading takes place in OTC markets, which are largely unregulated. Major commodity traders classify the bulk of their derivatives assets as normal speculative investments that contribute to the profit of the group as a financial gain (or loss). However, the unique nature of derivatives trading means it does not consistently deliver predictable results. Financial gains from derivatives activities are not equivalent to “financial income”, but instead, are manifested as “fair value adjustments” based upon the difference of the original face value of the contract, and whether, over time, value differences generate gains or losses to be accounted for. Depending on how companies present their accounts, these “adjustments” can materialize in different places in the income statement present in annual reports. For some companies in the sample, the magnitude of these adjustments is consistent across time, except during periods of excessive derivatives speculation (discussed below). During such times, company accounts report unusually large adjustments, which boost overall profit levels and drive the observations detected in figure III.6. This attests to the disproportionate role that non-operating activities (speculation) play in the current era of super profits. This aligns with the timeframe during which excessive speculation in the OTC markets surged, as shown below.

Over time, large commodity trading companies have become major financiers. They act as creditors to governments and private entities, carry out proprietary trading (i.e., speculating on the future direction of prices, leveraging their large informational advantage), issuing financial instruments such as “secured amortizing notes” to third party investors such as pension funds, etc. (Blas and Farchy, 2021). Driven by the need to hedge their business transactions, and with the resources and opportunities to speculate, commodity traders today are key participants in derivatives trading. In 2017, the European Central Bank (ECB) found that 11 commodity dealers cover more than 25 per cent of the Euro area market in commodity derivatives, with more than 95 per cent of derivative contracts being non-centrally cleared OTC derivatives.<sup>5</sup>

There is mounting evidence that speculative activity in financialized food markets increases dramatically during crises, including the current period of 2020–2022/2023. Kornher et al. (2022) examine the drivers of excess price volatility of commodity futures markets and find that, following the period of extreme market volatility between 2007 and 2011, markets stabilized until the onset of the pandemic in 2020. Since the end of 2021, excessive price volatility surrounding commodity futures trades has grown significantly. The share of speculators (non-commercial traders) in hard wheat and maize corresponds to price spikes and has risen sharply since the end of 2020 (Kornher et al., 2022). In 2022, the share of long positions held by non-commercial traders was estimated at around 50 per cent, a figure similar to the period of high speculative pressure in 2007–2008 (Kornher et al., 2022).

*“There is mounting evidence that speculative activity in food markets increases dramatically during crises.”*

More recently, data compiled by French commercial bank, Société Générale, suggests that a group of 10 leading “momentum-driven” hedge funds made an estimated \$1.9 billion trading on the food price spike at the start of the war in Ukraine in wheat, corn and soybean trades, after a period of years in which they had largely made losses on these food commodities in the same three-month period (Ross and Gibbs, 2023). Their activity contributed to speculative price rises and exacerbated the food crisis for millions around the world. Researchers have found that in the Paris Milling Wheat market – the benchmark for Europe – the proportion of buy-side wheat futures contracts held by financial speculators increased from 35 per cent of open interest in May 2018 to 67 per cent in April 2022 (Agarwal et al., 2022).

*“A group of 10 leading hedge funds made an estimated \$1.9 billion trading on the food price spike at the start of the war in Ukraine...their activity contributed to speculative price rises and exacerbated the food crisis for millions around the world.”*

These findings are confirmed by the analysis of speculation in OTC derivatives presented in figure III.7. The available current data from the Bank of International Settlements indicates that financial speculation in commodities, including food, has risen dramatically during the two recent crises, 2008–2010 and 2020–2022.

The Bank of International Settlements offers two metrics which provide two ways of understanding the key dynamics in these markets. The first measure is “notional value of outstanding” OTC derivatives (blue line in figure III.7.A). It is a metric of value that aggregates the total “face value” of an underlying set of contracts. The second measure is the “gross market value of outstanding derivatives” (orange line in panel figure III.7.A). This differentiates the pool of contracts into those that are currently generating a profit, versus those that are generating a loss. The latter metric is particularly important for evaluating when speculation pursues “overtake” break-even risk management hedge interests. Put simply, the blue curve in figure III.7.A shows the volume of

<sup>5</sup> IMF (2023: 63) notes that “[m]ajor data gaps exist in the reporting of derivative exposures across [nonbank financial institutions] (NBFIs). Important details such as the direction of positions – long versus short – and information about counterparties are often missing in disclosures. For exchange-traded and centrally cleared over-the-counter derivatives, detailed data are available through central counterparties but are highly confidential and, therefore, require robust data-sharing arrangements with the relevant supervisors. Recent over-the-counter derivative-market reforms in the G20 have helped introduce central clearing requirements for interest rate and credit derivatives across a broad range of advanced and major emerging market economies. However, the reforms have generally not extended to foreign exchange and commodity derivatives.” Moreover, BIS data still provides no disaggregation within the catch-all category that includes energy, food and other non-precious metals.

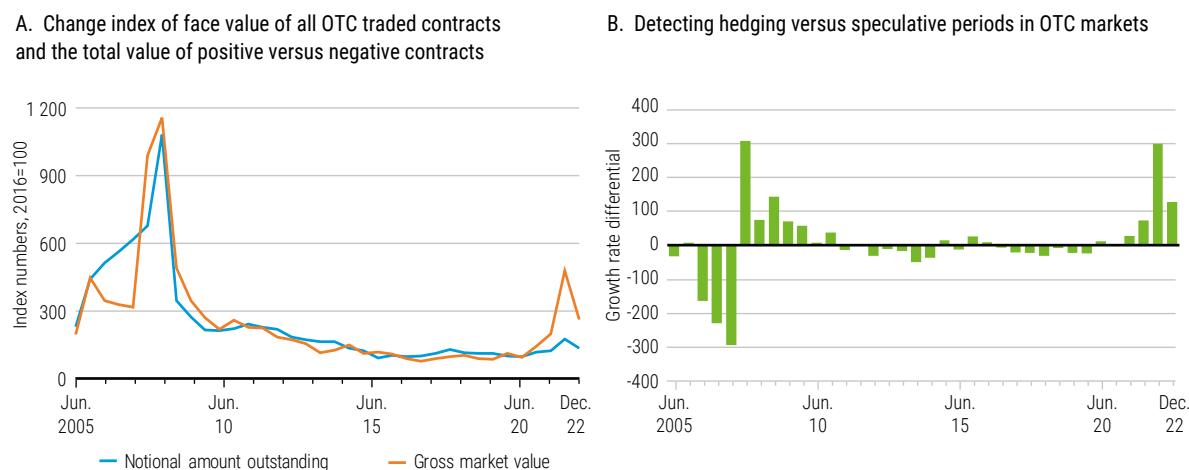
bets taken in OTC commodities. Major increases in the orange curve indicate periods when there were more profit-making bets in the market.

Taken together, the panels in figure III.7 present the evolution in the structure of speculative trades in OTC markets during the past two financial cycles. The data suggests that the OTC commodity markets have evolved through four phases. The first is the lead up to the global financial crisis, when the rapid growth of OTC markets coincided with a predominance of loss-making contracts (orange line in III.7.A), with a notable correction and growth in contracts that were profit-making immediately after the onset of the crisis in late 2007. This period of excessive profit making contracts gave way to a long period of stability with little volatility in the composition of profit versus loss-making contracts in the OTC markets from, roughly, 2010 until the end of 2020. Between 2021 and December 2022, the underlying composition of the OTC markets, compared to 2007–2009, has been marked by a disproportionately large number of profit-making contracts.

These metrics distinctly show when there are shifts towards excessive speculation in the OTC markets. They also show how this measure more effectively correlates with the timing of systemic shifts when profits are generated from financial activities, as reflected in corporate accounts. Together, the two measures indicate the timing of excessive speculation. The determining feature in when this happens appears to be external to the companies themselves. This reflects differences in how market investors estimate prices, compared to industry insiders' more precise knowledge of actual prices.

Moreover, as can be seen from figure III.7.A, while the speculative bout of 2007–2010 was driven by new entrants into the commodity markets supplying new liquidity (banks and other financial institutions), the current peak is mainly associated with the activity of the incumbent market players (see the much less dramatic rise of the blue curve in figure III.7.A reflecting the more limited injection of new liquidity).

**Figure III.7 Hedging and speculation in OTC commodity markets**



**Source:** UNCTAD calculations based upon BIS Global OTC Derivatives Market database (<https://stats.bis.org/statx/srs/table/d5.2>).

**Note:** Calculations based upon biannual gross market value and notional amount outstanding data for “Total instruments” and “Other commodities” covering the period June 2005 and December 2022. Panel B: Growth rate differential is measured as the difference in growth rates between the indices of gross market value and notional amount outstanding.

It is instructive in this instance that in the documentation presented by one of the ABCD giants, a listed company under strict obligation to disclose to the public the exact nature of its activities, it is made clear that:

The majority of the Company's derivative instruments *have not been designated as hedging instruments*. The Company uses exchange-traded futures and exchange-traded and OTC options contracts to manage its net position of merchandisable agricultural product inventories and forward cash purchase and sales contracts to reduce price risk caused by market fluctuations in agricultural commodities and foreign currencies. The Company also uses exchange-traded futures and exchange-traded and OTC options contracts as components of merchandising strategies designed to *enhance margins* (Archer Daniels Midland, 2022, emphasis added).

The transformation of food trading companies into financial institutions is a problem long noted by analysts (Murphy et al., 2012; Gibbon, 2013). The blurred distinction between hedging operations by commercial traders and financial speculation poses not only a financial contagion risk but is also a factor in price inflation. This warrants a revision to the existing regulatory architecture of commodity trading. While the phenomenon of excessive speculation in commodities is linked to deregulation policies (de Schutter, 2010; Oxfam, 2011; Winders, 2011), there are growing concerns that financial activities within today's food trading industry give rise to unnoticed financial stability risks and strengthen corporate influence over strategically significant markets (FSB, 2023). Not only does this add to the challenges of detecting and curbing excessive market speculation in commodity and food trading; it also further complicates regulation of the shadow banking system and imperils financial stability. It also conceals risks and exposures in the poorly regulated yet highly interconnected and systemically important industry. These issues are addressed in the next section.

*"The blurred distinction between hedging operations by commercial traders and financial speculation poses a financial contagion risk and is a factor in price inflation."*

## C. OF LOOPHOLES AND LOOPHOLING

"What might happen under legislation that would allow most OTC derivatives to remain in dark markets, thus preventing regulators from having timely access to all trading information, a prerequisite for effective regulation?", asked one contributor from the Institute for Agriculture and Trade Policy, to a 2010 UNCTAD symposium on commodity market regulatory pathways (Suppan, 2010).

More than a decade after the use of OTC derivatives in food markets raised concerns among regulators, some clear lessons can be drawn. They point to the incomplete, fragmented and diluted approach to regulating commodity trading. Increasingly, these concerns relate to heightened financial stability and opacity risks in the industry, where regulatory gaps have widened further since 2010. These gaps are being exploited by the corporate groups that dominate commodity trading. Moreover, commodity traders have not only circumvented existing regulations but also consistently avoided further attempts to regulate the financial dimension of their activities.

Regulatory competition, unique industry characteristics and efficiencies, as well as economies of scale, are typical arguments used by the industry to advocate the merits of the fragmented regulatory approach which has prevailed until today. Despite efforts to increase oversight, the food markets sector has resisted, arguing that it is indirectly supervised by banks.

To a large extent, current gaps are the outcome of regulatory loopholing in the post-2010 financial architecture. These include caveats and exemptions to market-level regulations introduced in the wake of the global financial crisis; company-level techniques of financial and regulatory arbitrage; a persistent lack of a harmonized approach to regulating commodity traders generally, and of food companies more specifically.

*"Commodity traders have circumvented existing regulations and consistently avoided attempts to regulate the financial dimension of their activities."*

*“The majority of food trading companies are not regulated as financial institutions but are treated as manufacturing companies.”*

There is also a more fundamental reason for the lack of appropriate regulatory treatment: the majority of food trading companies are not regulated as financial institutions but are treated as manufacturing companies. The ongoing crisis in the global food system underscores the need to rethink the regulation of food and commodity traders at a more coherent and systemic level.

## 1. Dodd-Frank: an opportunity missed

Historically, the most important source of the public regulation and monitoring of futures exchanges has been the government of the United States, driven by farmer and consumer interests. Until the financial crisis of 2007–2009, futures exchanges in other jurisdictions, except for some developing countries, were typically subject only to light forms of self-regulation and little or no public monitoring. In the European Union, regulation of commodity derivative markets centred on the behaviour of *market participants* – in terms of capital requirements, organizational requirements and requirements to follow conduct-of-business rules, and even here with wide exemptions – rather than of *markets* (Gibbon, 2013).

Following the commodity price boom of the 2000s, financial market regulation concerns began to feature in the regulatory agenda of the United States and the European Union. Signed in 2010, the Dodd-Frank Act aimed to roll back the preceding liberalization of OTC and exchange-based trading. The Act prioritized measures and requirements for better (re)-capitalization of banks, and more discipline in the credit operations of commercial banks (Kornher et al., 2022). In the area of commodity trading, the main provisions in the Act were usefully summarized by Gibbon (2013):

- (i) OTC swaps “taking a standard form”, when traded by financial entities with portfolios with a notional value of more than \$8 billion, will have to be cleared through centralized clearing houses and subject to reporting and margin requirements. The United States Securities and Exchange Commission (SEC) has announced a margin requirement equivalent to 15 per cent of the notional value of the acquired position. Crucially, “non-financial entities” hedging risk *will be exempted from the central clearing requirement* but will be subject to a requirement for central notification. Additional margin requirements were considered for non-cleared swaps.
- (ii) Banks shall *spin off their commodity swap activities* to independent entities excluded from Federal Reserve Insurance arrangements and not engage in derivatives trading not directly related to the trading they do for customers (the so-called “Volcker rule”).
- (iii) Federal position limits shall be extended to all exchange-traded commodity contracts, and the aggregation of individual positions on a commodity for position limit purposes shall occur across all exchanges and trading venues, including non-United States exchanges and swap venues. The eligibility for hedgers’ exemptions from position limits shall be narrowed to entities with positions exclusively in cash-settled contracts.
- (iv) Spot month position limits shall normally be set at 25 per cent of the estimated deliverable supply.
- (v) These rules shall also apply to activities on foreign exchanges and other trading.
- (vi) Venues by “United States persons”, foreign-registered subsidiaries of firms and foreign firms whose activities are likely to impact on the economy of the United States, except where foreign exchanges set rules that are deemed to be identical to domestic ones.
- (vii) In early 2012, additional Presidential authority was granted for the Commodities Futures Trading Commission (CFTC) to increase margin requirements for oil futures and options contracts (Gibbon, 2013).



Not long after the initial adoption of the Act, its key principles started to be diluted, under the influence of industry interests, inter-agency competition, technical difficulties of implementation and opportunities of international arbitrage.

The coalition of companies using derivatives includes companies such as Bunge, John Deere and Cargill, which engage in both commercial hedging and financial speculation. The coalition has argued that OTC trades between financial institutions and non-financial institutions (such as the coalition members), should be exempt from requirements to clear those trades on public exchanges. At least three reasons are typically given to justify the exemption.

- First, non-financial firms pose no systemic financial risk and hence they should not be prevented from “customizing” their interest rate, currency rate, balance sheets and credit risk in bilateral deals with financial institutions;
- Second, the higher margin requirements of trading on exchanges will pose huge cash-flow problems for coalition members and imperil market liquidity;
- Third, if bilateral trades are pushed from the dark OTC market to exchanges or derivatives clearing platforms, trade risks will be concentrated in such quantity that these centralized clearing platforms will be unable to confirm and verify trades operationally (Suppan, 2010).

Some of the key effects resulting from regulatory loopholing in financial derivatives that ensued soon after the inception of the 2010–2011 regulatory norms are examined in box III.1. The overall outcome of diluting the set of financial reforms was the creation of an important regulatory loophole that is being used by financial institutions to speculate in commodity derivatives to this day.

#### **Box III.1 It's all in the footnote: Dodd-Frank and financial regulatory arbitrage**

With the adoption of Dodd-Frank, OTC trading for financial derivatives was supposed to be formalized and moved to central clearing platforms to boost market transparency. The measure was aimed primarily at swaps and security-based swaps (Kornher et al., 2022). Other important regulatory reforms included new position limits and restrictions on the use of swaps. However, although at the time the Commodity Futures Trading Commission (CFTC) issued comprehensive rules on position limits, the authorities failed to enforce them fully. Some funds, such as the commodity index and similar funds, were left unregulated. Regulation of swaps in particular became the centre of the regulatory loopholing that would soon ensue.

To understand its origins and the impact on the sector, a critical distinction needs to be drawn between “branches” and “affiliates” or “subsidiaries” in the structure of banking and corporate operations. The distinction is legally important and impacts the identification of the persons subject to legislation; it also defines how to potentially avoid (arbitrage) the application of legislation.

A branch is merely an office of a legal person; transactions concluded by personnel out of this office are transactions of the legal person owning the branch. An affiliate, or subsidiary, as opposed to a branch, is a separate legal person having its own legal personality, assets, and personnel. This separate legal person is an affiliate or subsidiary because its equity capital is owned by a parent company, which is itself also a separate and autonomous legal person. But legally speaking, as a matter of principle, it is an autonomous legal person. The activities

conducted in the office can be exactly the same under both legal configurations. In the first case, they are attributed to the owner of the branch; in the second they are those of a separate legal person (the subsidiary), although 100 per cent of the share capital of the subsidiary may be owned by the “parent” company.

Under the International Swaps and Derivatives Association (ISDA) documentation applicable at the time, a legally separate subsidiary would in effect benefit from an unlimited parent guarantee. In the context of financial trading, for counterparties, this meant that the situation was almost “as if” they traded with the parent company, or a branch. The trade could be subject to local rules, but with a United States bank holding guarantee. This opened the possibility to enjoy the best of many different worlds: for instance, to trade under a more relaxed regime while benefiting from the parent’s guarantee and the backing of the United States federal government in case of a bailout.

Dodd-Frank purportedly closed this possibility with Section 722(i). But the CFTC introduced a loophole in its own legislation making it possible to adapt the form of past practices and keep the substance. The July 2013 Guidance made “[United States] persons” in swaps trades subject to all Dodd-Frank’s swap rules, regardless of the physical location of the swap execution.

However, footnote 563 of the Guidance stated: “The Commission agrees with commenters who stated that Transaction-Level Requirements **should not apply** if a non-[United States] swap dealer or non-[United States] major swap participant (MSP) relies on a written representation by a non-[United States] counterparty that its obligations under the swap are not guaranteed with recourse by a [United States] person.”

Consequently, newly (officially) “de-guaranteed” foreign subsidiaries were no longer subject to Dodd-Frank. It has been reported and understood among swaps industry experts that a large portion of the United States swaps market shifted from the largest United States bank holding companies and their United States affiliates, to their newly de-guaranteed “foreign” affiliates, even though those swaps remained on the consolidated balance sheets of these United States institutions (Greenberger, 2018). Also, these huge United States bank holding company swaps dealers were often “arranging, negotiating, and executing” these purported “foreign” swaps in the United States, through United States personnel but then “assigning” those fully executed swaps to their newly “de-guaranteed” foreign subsidiaries, asserting that these swaps were not covered by Dodd-Frank even though completed in the United States.

By arranging, negotiating, and executing swaps in the United States, with United States personnel and then “assigning” them to their “foreign” newly “de-guaranteed” subsidiaries, these swaps dealers once again have the best of both worlds: swaps execution in the United States under the parent bank holding companies’ direct control, but the ability to move the swaps abroad out from Dodd-Frank (Greenberger, 2018:126).

The 2013 Guidance and Policy Statement was superseded on 23 July 2020 by the CFTC which issued its Final Rules regarding the cross-border application of various requirements under the United States Commodity Exchange Act. Importantly, however, the definition of a “[United States] person” has been further narrowed. For example, a collective investment vehicle owned by [United States] persons was considered a “[United States] person” in the Guidance (although such a legal vehicle does not have legal personality). In the Final Rules, it is not a “[United States] person” anymore (CFTC, 2020).

Although a fully accurate estimate of the extent to which swaps have moved abroad from the United States is not available, it is estimated that up to 95 per cent of certain lines of swaps trading had moved outside the United States under the de-guaranteed loophole and thus were considered not to be subject to Dodd-Frank swaps regulations. An international race-to-the-bottom of swaps regulation ensued (Greenberger, 2018). Partly as a result of this regulatory loopholing, Greenberger estimated that, in the United States, the ratio of speculators versus hedgers, historically around 30 per cent speculators to 70 per cent commercial hedgers, has inverted: 70 per cent speculators to 30 per cent hedgers (Greenberger, 2013).

In the European Union, the European Commission broadly modelled its approach to OTC trading on Dodd-Frank. Yet its key regulatory issues, such as the regulation of OTC derivatives and the enforcement of aggregate positions limits for all market participants, have been controversial and divisive (Suppan, 2010). After the G20 meeting in Pittsburgh in 2009, position limits became a cornerstone of the regulatory approach.

Position limits imposed on market actors are supposed to ensure that derivatives markets work for the *commercial* producers, and not for purely *financial* operators with no intrinsic interest in the commodities themselves. Importantly, this means that industrial and financial market participants are to be treated differently. The classical method used is to set position limits and provide bona fide exemptions for commercial producers as in the Dodd-Frank Act. In the European Union, the Markets in Financial Instruments Directive (MiFID), notably MiFID I and II, apply to commodity derivatives, but include a number of key exemptions. Under MiFID II, a specific “ancillary activity exemption” is available where a firm’s activities relating to commodity derivatives are “*ancillary*” to its main business.

## 2. Global food traders: Commercial hedgers or financial institutions?

At its core, the problem of regulatory gaps centres on the dichotomy between the regulatory treatment of commodity traders as manufacturing corporations on the one hand, and their increasingly more profitable (yet unregulated) activities in financial markets, on the other. The concept behind this distinction between *commercial* and *financial* market participants is that an industrial business should only look for security in prices; not betting for the sake of it. However, large grain processors with access to a wealth of information regarding food markets have a clear interest in using their hedging activities as a profit centre. In the process, they tend to change their business model and start operating like a financial actor, with the benefit of exemptions designed for purely commercial hedgers.

*“Large grain processors with access to a wealth of information regarding food markets have a clear interest in using their hedging activities as a profit centre.”*

By using a series of subsidiaries located in appropriate jurisdictions, food monopolies have found a way to combine several advantages:

- A superior knowledge of the agricultural commodities markets (real-time supply and demand and prospective knowledge of their evolution);
- An ability to store agricultural commodities to harness price surges when they occur, ABCD have invested heavily in infrastructure for storage and built significant grain reserves; but with no obligation to disclose their grain stocks;
- Secrecy of their operations and the benefit from derogations to the rules applicable to pure financial actors. ABCD have all legally structured their operations using hundreds of subsidiaries incorporated to take advantage of the various menus of regulations (or lack thereof) offered by the different jurisdictions, including secrecy jurisdictions, around the world (table III.1).

Although some of the challenges of implementing regulatory reforms are due to the operational complexity and opacity of the global food trading industry (indicated in table III.1), many key arguments against closer regulatory attention are constructed by group politics.

**Table III.1 Global food trading companies: Number of subsidiaries**

Global ultimate owner	Number of subsidiaries
Glencore	877
Archer Daniels Midland	825
Cargill	780
COFCO International	734
Wilmar International	619
CHS	353
Bunge	352
OFI Group (includes Olam)	207
Akira Holding (includes Louis Dreyfus Corporation)	187
Andersons	150
CMOC Group	100
GrainCorp	60
Noble Group	56
CGB Enterprises	46
Scoular	20

*Source:* UNCTAD calculations based on Orbis database.

The core of regulatory arbitrage opportunities lies in the use of the concept of legal personality and subsidiaries. As the investigation shows below, in the case of major food giants, using hedging for purely speculative purposes appears to take place at the level of subsidiaries, often not being reported at a consolidated (GUO, Global Ultimate Owner) level.

Increasingly, however, in the context of 2020–2023 crises, there is growing recognition that such regulatory dichotomy poses a range of potentially systemic risks to financial stability (FSB, 2023), price stability and economic security (UNCTAD, 2022) and corporate governance, including through risks of illicit financial flows (OECD, 2023; Public Eye, 2023).

In 2012–2013, the Financial Stability Board (FSB) considered classifying large physical commodity trading houses (which are without exception major participants in derivatives markets) either as shadow banks or as “systemically important non-bank financial institutions” or both. This would have made them subject to greater regulation.<sup>6</sup> The industry pushed back, insisting that commodity trading is a highly complex, globally interconnected manufacturing sector managing a range of specialized risks on a large scale (Baines, 2017). In

the event, the FSB concluded there was insufficient evidence to consider trading houses as shadow banks but left the door open for future revision of this stance (Gibbon, 2013).

In the absence of close regulatory oversight, the transformation of commodity trading houses into shadow financial institutions continued unabated. Following the implosion of the 2008–2010 commodity bubble, many of the world’s largest banks have scaled down their commodity trading operations. Some institutions (e.g., Barclays, Deutsche Bank) have exited the business. These departures opened the space for less regulated entities such as commodity trading firms. As a result, “large trading companies have gained access to increasingly sophisticated instruments that offer them greater financial flexibility and enable them to avoid any controls by banks” (Public Eye, undated).

At the global level, large commercial groups (“ABCD”-type) with real commercial hedging needs have been developing additional financial strategies designed to enhance profit margins, further challenging the regulatory framework of the industry and posing potential threats to financial stability (FSB, 2023). Some of these risks came to the fore during the energy crisis in 2020 when commodity companies faced severe liquidity difficulties (Longley and Chin, 2022). Lévy-Garboua (2022) has called such traders “semi-financial” players, with one foot in finance (their liabilities, which make greater use of leverage than a company, albeit much less than a bank) and one foot in the real world (the raw materials they hold). Yet this real world is close to the financial markets, due to the extreme volatility of prices (Lévy-Garboua, 2022). Implications for financial stability arise from the fact that central banks are helpless when addressing such entities. They require intermediary institutions to take on the functions typically carried out by banks when dealing with commodity traders. From the perspective of central banks, only banks and, to a greater extent, central clearing platforms, are well-suited to this role.

<sup>6</sup> At the time, the initiative followed the disclosure of long-term lending to independent companies by Glencore worth \$3 billion, and the trend for the largest trading houses to operate hedge funds or index funds or both, either alone or in partnership with investment banks (Gibbon, 2013).

Academics have long suggested that global food trading corporations have expanded the scope of control over the industry to become not simply oligopolies, but cross-sectoral value chain managers (Clapp, 2015). Crucially, this includes control over the financial assets. Yet methodologies or monitoring tools that would help capture the scale and impacts of this transformation at a systemic level were, up to now, lacking. The idea that the commodity trading industry will self-regulate means there is an absence of established regulatory guidelines in the industry, making it challenging to differentiate between commercial and financial institutions.

With this task becoming more urgent in light of recent volatility and crises, a new method is proposed below to advance this discussion.

### 3. How to differentiate between financial and commercial companies, using the “asset dominance” ratio

Analysis of the food trading sector’s profitability presented in section B above established that non-operating activities were the main source of heightened profit growth in the food trading sector during 2020–2022. But what is the best way to gauge the level and impact of the financial activity undertaken by a global non-financial corporation?

The answer to this question presented below has its origins in corporate accounting methods.<sup>7</sup> In corporate accounting, financial instruments used in intrafirm financing are typically described on the balance sheet of entity filings. The method used here is based on examining the corporate filings of 13 of the major global food commodity traders and comparing the accounts of the corporate parent with the accounts of group subsidiaries. The result is measured by an indicator called the asset dominance ratio (ADR), which aims to capture financial (as opposed to “real”) economic activity carried out inside a corporate structure. This is achieved by comparing information presented in the balance sheet with income statements in corporate filings. More specifically, ADR points to heightened use of intragroup transfers within private corporate groups. Intragroup transfers are financial transactions between legally independent entities within a corporate group.

As table III.1 shows, large companies such as food traders consist of a parent company and tens, in some cases, hundreds of subsidiaries. A great deal of intrafirm transfers take place among the parent and subsidiaries, and between subsidiaries themselves. There are two main types of such intragroup transfers: (a) transfer pricing, which involves trading activities between group members; and (b) intragroup financing, which involves using financial instruments to create debt or equity relationships between group members.

In corporate accounting, balance sheet items represent an approximation of all forms of financial investments by the reporting entity (e.g., a subsidiary or the corporate parent); while income statements document the amount of revenue harvested from those investments during the reporting period. Due to the known problem of tax avoidance through transfer pricing, corporate intrafirm trading is subject to considerable regulation. The regulation of intragroup financing, however, is less developed than transfer pricing, and is a concern for regulators. The study presented here is predicated on the assumption that tracking intragroup financing requires comparing balance sheets and income statements because financial instruments are accounted for on the balance sheet. This helps simplify the complexity of financial reporting within multinational corporations.

More precisely, ADR is computed as the mean average of all reported balance sheet items compared to the mean average of all income statement items presented by the corporate entities under examination. Note that:

- An ADR figure at or below 1 describes an industrial corporation in this sector;
- An ADR of more than 1 indicates that financial investment activity outweighs the earnings activities from core business and investments.

This metric focuses on the use of financial instruments in intragroup financing and gives weight to certain reporting patterns. Findings show that the use of intragroup financing is significant in generating excess profits.

<sup>7</sup> The method was developed on the basis of a research project on corporate arbitrage (CORPLINK, EU Grant agreement ID: 694943, DOI: 10.3030/694943).

It is commonly performed by select members of a corporate group whose primary role is corporate financing and treasury functions. The use of financial instruments is often reported in multiple places within accounting categories, and the magnitude of assets and liabilities involved is much larger than the values reported on the income statement.

For governance purposes, it is important to compare not only the subsidiaries within a group but also the consolidated parent company's reporting. Consolidated reporting, oriented towards shareholders, excludes intragroup transfers. Thus, analysing changes in excess values produced by subsidiaries excluded from consolidated reporting is crucial from the point of view of: (a) financial stability, (b) tax avoidance and fiscal revenues; (c) risks of illicit financial flows (IFF).

Figure III.8 illustrates the change in asset dominance ratio between the consolidated parent (GUO in most cases) and group subsidiaries for the 13 companies in the sample. It presents an analysis of the corporate activity, including at the level of subsidiaries, between two time periods:

- the period when hedging predominates in the OTC markets (2014–2018);
- the period of speculation on OTC markets and excessive corporate profits (2019–2022).

This analysis pinpoints shifts in the reports of these corporate groups, which indicate these entities are taking advantage of the profit opportunities that have arisen in recent years.

The distinction between data presented by the consolidated parent group (*y axis*) and data presented by the group's subsidiaries (*x axis*) is key. The diagonal in the graph depicts the points where subsidiary reports match the information presented in the consolidated public reporting. As positioned in figure III.8, being at or below 1 (e.g., GrainCorp in the sample) depicts an accounting profile of a typical industrial corporation. The diagonal differentiating the two halves of the graphic where there is a difference in the information presented by the financial reporting: one which is "hidden" (subsidiary level) and one which is "already public" (consolidated parent).

In figure III.8, the ADR is the ratio of the sum of all available balance sheet items to the sum of all available income statement items. The change in the ratio is illustrated by an arrow, where the starting point is the period of 2014–2018, and the endpoint of the arrow is the period of 2019–2022. Red arrows indicate corporations where asset dominance ratio has increased at the subsidiary level, while black arrows indicate the decrease of asset dominance ratio at the level of the parent.

Three key conclusions can be drawn from these findings:

*"Profiteering reinforces the need to consider corporate group membership and the behaviour of major players in the food trading sector."*

- First, the cases showing growth in asset dominance are observed primarily at the subsidiary level within the group, indicating increased use of intragroup transfers.
- Second, this suggests that the amount of excess profits being made could be underestimated when only looking at public profit and loss reporting.
- Third, profiteering is not limited to a specific sector but is specific to individual firms. There are concerns that excess profits may be linked to market concentration, benefiting only a few global players in the commodity trading community. This reinforces the need to consider group membership and the evolving behaviour of major international players in the sector.

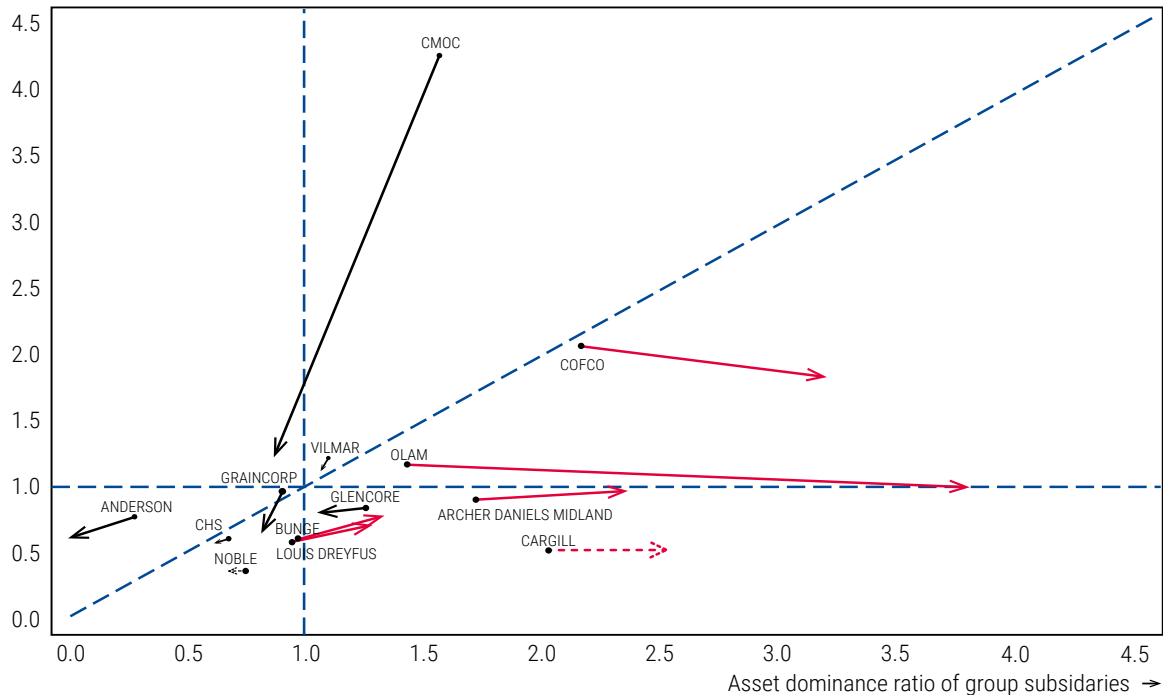
It is pertinent that these three issues crystallized in the commodities sector at the peak of the energy crisis in 2020–2021, when market volatility threatened the financial stability of clearing houses and required the support of public liquidity injections. The financial crisis of utility companies highlighted the risks of liabilities on hidden balance sheets and underscored banks' exposure to commodity firms facing sharp market volatility (Petrou, 2022; Foroohar, 2020).



**Figure III.8 Large food traders become unregulated financial institutions**

Change in asset dominance ratio between the consolidated parent and group subsidiaries in the food trading industry 2014–2018 and 2019–2022

↑ Asset dominance ratio of consolidated parent



**Source:** UNCTAD calculations based on Orbis database.

**Note:** Dataset on 13 corporate groups in the sample compiled in March 2023 from Orbis (BVD) data service. Corporate group definition: ownership >50 per cent by GUO entity (for Chinese SOEs, the GUO is the corporate entity owned by the Government of China). The asset dominance approach measures the ratio of the sum of *all* available balance sheet items to the sum of *all* available income statement items. The change between 2014–2018 and 2019–2022 is illustrated by an arrow. Red arrows indicate corporations where asset dominance ratio has increased at the level of subsidiaries, while black arrows indicate the decrease of asset dominance ratio at the level of the parent and the subsidiaries.

As monetary tightening continues in advanced economies, there are growing market fears that similar financial structures may arise and threaten the stability of individual companies, as well as the international financial system (FSB, 2023). Therefore, it is necessary to adopt rules to the effect that commodity derivatives play their useful social function while preventing excessive speculation in the financial markets for food and dysfunction of food systems globally (Thomas, 2023; OECD, 2023).

## D. REGULATORY LESSONS

When asked who is monitoring the food system globally, beyond the prism of antitrust, a former senior economist at the United Nations Food and Agriculture Organization replied: “*Nobody*” (Thomas, 2023).

The absence of harmonized global rules provides ample opportunities for regulatory arbitrage, which is exploited differently by different market participants. As noted above in section C, large United States banks use “de-guaranteed” subsidiaries to evade Dodd-Frank. Other actors use exemptions available thanks to their commercial activities in order

*“The commodities sector is lightly supervised, much of it is opaque and regulation of key actors is close to non-existent.”*



to conduct what amounts to financial speculation. The United Kingdom Financial Services Authority (which oversees the world's second largest agricultural commodities market outside the United States) does not even distinguish between commercial and financial traders (de Schutter, 2010). As a result, the commodities sector is lightly supervised, much of it is opaque, and regulation of key actors is close to non-existent (Jones, 2022).

The current fragmented and outdated approach to regulating the global food industry has many causes. But with new types of risks and shocks confronting an already complex, opaque yet strategically important system, it is time to revisit the menu of available regulatory pathways. Such a challenge is vast. Below, measures are outlined relating to what are considered the root causes of the current regulatory gaps: the flawed distinction between commercial and financial operators, and an outdated set of systemic regulations that have not kept pace with financial, technical and legal innovation available to corporate groups. Possible solutions centre on three interrelated levels of policy reform that capture the connection between market practices and financial activities:

1. Market-level reform: close loopholes, facilitate transparency;
2. Systemic-level reform: recognize aspects of food traders' activities as financial institutions and extend relevant regulations;
3. Global governance-level reform: extend monitoring and regulations to the level of corporate subsidiaries in the sector to address the problem of unearned profits, enhance transparency and curb the risks of illicit financial flows.

Crucially, all three levels of necessary action require much more cooperation on data quality, disclosure and corporate transparency in the sector. The ongoing crises highlight that the historical approach, which distinguishes between commercial and financial operators in agricultural commodity derivatives, is ill-suited to the current economic and legal structures of global trade in certain agricultural products and their associated derivatives. While data transparency is necessary, it is insufficient for market participants to discover prices. What is required is a process in which all market participants contribute daily price information, and which is accessible to all participants and regulators on a daily basis.

Following the UNCTAD vision to reform the financial regulatory framework, scaling up could take place in a three-fold manner:

- 1. Market-level:** close existing loopholes, facilitate market transparency and competition (Dodd-Frank, CFTC, MiFID, European Commission).

Consider applying several rules to all the exchanges around the world:

- Improve stock (public and private) information. Excessive speculation is made easier by a lack of transparency on stock levels. Information about one's inventory can be made a pre-condition to act on the derivatives market. The information can also be used to evaluate whether combined positions correspond to a hedging strategy or to excessive speculation.
- Build a highly disaggregated dataset with volume/weight of commodity, import price value, source and destination countries, all company names obtained via customs declarations linked to each unit of commodity movements, and time stamps for shipment and receipt.

Both proposals can build on the experience of the Agricultural Market Information System (AMIS), an inter-agency platform to enhance food market transparency. It was launched in 2011 by the G20 Ministers of Agriculture following the global food price hikes in 2007, 2008 and 2010. By bringing together the principal agricultural commodity trading countries, AMIS assesses global food supplies (focusing on wheat, maize, rice and soybeans) and thus helps alleviate market uncertainty.<sup>8</sup>

<sup>8</sup> AMIS is composed of G20 members plus Spain and seven additional major exporting and importing countries of agricultural commodities. Together, AMIS participants represent a large share of global production, consumption and trade volumes of the targeted crops, typically in the range of 80–90 per cent.

- Clearly distinguish between commercial hedging and financial speculation, with the understanding that the historical segregation between commercial/financial does not apply to today's structure of the world agricultural commodities exchanges (de Schutter, 2010).

Current practices and unsupported assertions by market participants seeking minimal oversight of their trading activities cannot be the sole focus with respect to bona fide hedging recognitions. Legitimate hedging relating to physical commodities through derivatives markets must not be jeopardized by those seeking exposures for investment, speculative, or dealing reasons.

- Access to commodities derivatives markets could be restricted to traders and specialist brokers.
- The holdings of any single trader should be known to all. Strict position limits should be placed on individual holdings, such that they are not manipulative. UNCTAD (2011a) noted that determining appropriate levels of position limits is difficult, but as a first step, it might be useful to adopt position points at which traders would be required to provide additional information.
- The limits currently set in the United States and Europe are too high. For the same reason that the United States sets federal limits applying to all markets, this needs to be globally set. Position limits must address a proliferation of economically equivalent instruments trading in multiple trading venues. Position limits at the exchange level cannot suffice (Behnam, 2020).
- Improve market transparency in physical commodity markets, commodity futures exchanges and OTC markets. Require market participants to disclose their positions and trading activities (UNCTAD, 2011a, 2011b). There should be clearing to the maximum extent possible of OTC derivatives, so that there is real time reporting of all transactions made without information privileges for OTC traders. The small minority of OTC derivatives which cannot be cleared should nevertheless be reported within a short time lag.
- The unfair competitive advantage conferred by the OTC trade data reporting delay not only impedes price discovery but makes it harder for exporters and importers to manage price risks and investment, as UNCTAD has repeatedly noted. If developing countries continue to spend a high portion of hard currency reserves on food and energy imports, while the rate of return in commodity investments remains unpredictable, the “distortion of development” will intensify (Suppan, 2010; UNCTAD 2011a).

**2. Systemic-level:** Promote competition in commodity markets to curb the concentration of market power in the hands of a few large players.

Systemic reforms can include laws such as breaking up monopolies, promoting the entry of new market players, considering measures such as antitrust laws, adherence to modern international financing reporting standards (IFRS) in commodity trading, and supporting the participation of small farmers and producer organizations in commodity markets.

Regulation should support the development of physical markets to reduce the destabilizing impacts of unregulated financial instruments and promote price discovery based on physical supply and demand fundamentals. This could include measures such as supporting the development of commodity exchanges in developing countries and promoting the use of physical delivery contracts in commodity trading. Also, contingency plans need to be developed to deal with potential market disruptions.

More fundamentally, regulators should revisit the plans of 2010–2012 and recognize the financial aspects of food traders' activities as systemically important and extend relevant regulations. Like the previous set of measures, these date back to policy discussions in the wake of the 2007–2009 financial and commodity price crises. At the time, lack of evidence was cited as a reason not to pursue a closer regulatory focus.

Notwithstanding the existing rules, there is widespread agreement that as of late, the dynamics and price signals of supply and demand have been overwhelmed by financial speculators, making price discovery, and hedging, challenging, if not impossible (Tarbert, 2023). There are also warning signs from the financial risks in

*“Regulators should recognize the financial aspects of food traders’ activities as systemically important and extend relevant regulations.”*

the underregulated energy market, where amidst the uncertainty of 2022, utility companies did not have enough working capital to meet big collateral calls. It became apparent that government regulators and private sector risk managers had failed to prepare for the crisis (Tett, 2022).

Measures to help mobilize fiscal resources, curb regulatory arbitrage and enhance corporate transparency also need to be expanded and updated. Conservative estimates suggest that today, multinational enterprises (MNEs) avoid tax payments of at least \$240 billion per year, due to outdated international taxation rules. These rules allow multinationals to treat each national subsidiary as a separate “arm’s-length” entity for tax purposes, and to move profits to low- or no-tax jurisdictions. The study presented above demonstrated some of the effects of this fragmentation for companies in the global food trading industry. Chapter VII of the 2022 *Trade and Development Report* analysed the problem of corporate arbitrage in the area of foreign direct investment (FDI).

There are mounting calls from academia and civil society to address the problem of corporate arbitrage at the regulatory level. For instance, tax and other forms of regulatory arbitrage can be prevented by recognizing that multinationals are global unitary businesses, and by abandoning the arm’s-length principle. Multinationals’ profits could then be divided among countries according to a formula based on the location of revenues, employees and so on (Ghosh, 2023).

**3. Global economic governance:** The evidence presented above underscores two dimensions of the regulatory impact of the financialization of food trading. At the level of companies themselves, their transformation into shadow banks poses systemic, regulatory and stability challenges. Additionally, there is a link that needs to be examined between the speculative activity of food traders in the financial markets, and price instability.

More and more evidence is emerging not only about profiteering in food and commodity trading, but of the role of unregulated financial activities and institutions inside commodity trading giants. An estimate of the scale of the phenomenon was provided above, but more research is needed. In addition to system-wide measures to strengthen regulation in food commodities and enhance food security – such as harmonized and clearer rules, enforceable controls to limit the destabilizing influence of high-frequency trading and position limits (Kornher, 2022) – regulators and policymakers should apply some of the financial stability measures developed for the banking system in 2011–2012 to large food trading giants.

This requires further work on the nature of systemic risk in the highly financialized industry. This can only effectively be done as part of the reform to the global financial ecosystem, an idea strongly endorsed by the first Financing for Development Conference organized by the United Nations in 2001. Since then, efforts at global reforms have been slow and often non-inclusive, while the unresolved problems of financial and resource asymmetries only continued to deepen (Ryding and Rangaprasad, 2022). In light of recent crises, such efforts should include regulation of corporate behaviour including at the subsidiary level, to address the problem of unearned profits, opacity and risks of illicit financial flows. This direction of work could capitalize on the plans for a United Nations Tax Convention (see Tax Justice Network, 2022) and be usefully supported by the work of the Independent Commission for the Reform of International Corporate Taxation established in November 2022 (ICRICT, 2023).

Some lessons from the recent attempts to increase transparency and regulate super profits in the energy sector are relevant here. Several countries have levied windfall taxes on the oil industry, following the dramatic rise in profits in the sector amidst the energy and inflation crisis of 2022. A similar strategy could be imagined with regards to the profits derived from speculation on the food commodities derivatives markets. At the same time, levying windfall taxes does not address the main issue for developmental purposes, which is to have commodities derivatives markets fulfilling their role: providing hedging solutions for producers and processors.

There are, moreover, numerous issues with the *retroactive* taxation of speculative profits. The first is that the profits have often been booked in tax havens whose cooperation is unlikely. Second, retroactive taxation creates constitutional issues in many jurisdictions. In some countries, it is unconstitutional, and, in many

others, courts accept retroactive taxes only in limited circumstances, such as closing a blatantly abused loophole. A windfall tax would most likely be litigated in many forums with substantial chances of success. A windfall tax does not deliver on the opportunity created by illuminating that there are serious issues with the rules applying to the world food commodities derivatives markets. Although States may need to address their constituents' desire for the correction of what they perceive as an unfair outcome, the structural issue needs to be addressed via other means.

In this respect, a 15 per cent global minimum tax rate agreed to in 2021 by 136 countries, further to a plan by the OECD, is often seen as a major step towards countering tax avoidance and artificial arbitrage strategies by multinational groups of companies generally. Yet this is a compromise measure agreed after fraught international negotiations. Alternative measures, such as a median global tax rate of 21 per cent, as proposed by ICRICT, would serve to offset the potential revenue lost, making a significant difference to developing countries (Ghosh, 2023).

The tax is not and was not designed to address the specific issues raised by the strategies developed by global food traders. Their activity, as shown above, underscores the need for multilateral efforts to identify the true beneficial owners of all assets, financial and physical. As Ghosh argues, moving towards a global asset registry should be the ultimate aim, but this step shows that like-minded countries can cooperate without a global agreement. In July 2023, Latin American and Caribbean countries hosted the first regional ministerial meeting for a more inclusive, sustainable and equitable global tax order (Nicholls, 2023), aimed at addressing the development aspects currently not met by the architecture of global taxation. While this is only a start, it is a meaningful move towards a common approach to taxing multinationals and combating regulatory and jurisdictional arbitrage (Ghosh, 2023).

The role of monopolies in strategically important markets in times of crises and the complexity of global corporate and financial structures that enable speculation and profiteering, not only require close attention, but also smart policies (Lusiani, 2022). Regulation of these interconnected problems needs to be targeted to the specific issues at hand, at a multilateral level. The initiatives outlined in this chapter provide a systemic framework to the measures on food price and food security agreed by the G20 members in June 2023.

Crucially, in light of the lessons of past crises and the analysis presented above, reforms need to be conceived in an integrated way, targeting key priorities across the system. More specifically:

- (a) The problem of excessive financial speculation in commodities markets needs to be addressed along with the problem of unregulated activities in this underregulated sector;
- (b) The issue of corporate control over key markets cannot be resolved by anti-trust measures alone but requires a coherent framework of national competition and industrial policies;
- (c) International cooperation and commitment are critical in the effort to enhance data quality and transparency in commodity trading and curb the risks of financial instability and illicit finance.

More generally, the case of a commodity price crisis and corporate profiteering in food trading indicate that an international tax architecture that works for the benefit of all countries needs to be an integral element of the International Financial Architecture, examined in detail in Part II of this Report.

## REFERENCES

- Agarwal K, Win T and Gibbs M (2022). Betting on hunger: Market speculation is contributing to global food insecurity. *The Wire*. 6 May.
- Akyüz GA and Gursoy G (2020). Strategic management perspectives on supply chain. *Management Review Quarterly*. 70(2): 213–241.
- Allianz (2023). European food inflation – hungry for profits? Allianz Research. 14 April.
- Archer Daniels Midland (ADM). 2022. 10-K2022 FY Annual report. Filed: 14 February 2023. <https://capedge.com/filing/7084/0000007084-23-000010/ADM-10K-2022FY>
- Baines J (2017). Accumulating through food crisis? Farmers, commodity traders and the distributional politics of financialization. *Review of International Political Economy*. 24(3).
- Barret P (2022). How food and energy are driving the global inflation surge. IMF blog. International Monetary Fund. 12 September.
- Behnam R (2020). Statement of Dissent of Commissioner Rostin Behnam Regarding Position Limits for Derivatives. Commodity Futures Trading Commission. 15 October.
- BIS (1995). *Issues of Measurement Related to Market Size and Macro-prudential Risks in Derivatives Markets*. Bank for International Settlements. Basel.
- BIS (2023). OTC Derivatives Statistics. May. Bank for International Settlements. Basel.
- Bicchetti D and Maystre N (2013). The synchronized and long-lasting structural change on commodity markets: evidence from high frequency data. *Algorithmic Finance*. 2(3–4):233–239.
- Blas J and Farchy J (2021). *The World for Sale: Money, Power, and the Traders Who Barter the Earth's Resources*. London: Penguin.
- Carbonnier G and Mehrotra R (2019). Abnormal Pricing in International Commodity Trade: Empirical Evidence from Switzerland. Discussion Paper No. R4D-IFF-WP01-2019. Swiss Programme for Research on Global Issues for Development.
- Clapp J (2011). *Food*. Cambridge, United Kingdom: Polity Press.
- Clapp J (2015). ABCD and beyond: From grain merchants to agricultural value chain managers. UWSpace. <http://hdl.handle.net/10012/11493>
- Clapp J and Howard P (2023). The Hunger Profiteers. *Project Syndicate*. 8 August.
- Clapp J and Isakson R (2021). *Speculative Harvests: Financialization, Food and Agriculture*. Practical Action Publishing.
- Daunton M (2023). *The Economic Government of the World*. London: Penguin.
- de Schutter O (2010). Food Commodities Speculation and Food Price Crises. Regulation to reduce the risks of price volatility. United Nations Special Rapporteur on the Right to Food. Briefing Note No. 2. September. Available at [https://www2.ohchr.org/english/issues/food/docs/briefing\\_note\\_02\\_september\\_2010\\_en.pdf](https://www2.ohchr.org/english/issues/food/docs/briefing_note_02_september_2010_en.pdf).
- Financial Stability Board (FSB). 2023. The Financial Stability Aspects of Global Commodity Markets. Financial Stability Board. 20 February.
- Farooq R (2020). The next subprime crisis could be in food. *Financial Times*. 13 September.
- GCRG (2022). Global Impact of the war in Ukraine: Billions of people face the greatest cost-of-living crisis in a generation. Global Crisis Response Group. Brief No. 2. June.
- Ghosh J (2023). Finding the money to fix the world requires a rethink on tax. *The Economist*. 13 June.

- Gibbon P (2013). *Commodity Derivatives: Financialization and Regulatory Reform*, Danish Institute for International Studies (DIIS). Working Paper No. 12.
- Gkanoutas-Leventis A and Nesvetailova A (2015). Financialization of the Oil Market. *Energy Policy*. 86: 891–902.
- Greenberger M (2013). Closing Wall Street's Commodity and Swaps Betting Parlors: Legal Remedies to Combat Needlessly Gambling Up the Price of Crude Oil Beyond What Market Fundamentals Dictate. *George Washington Law Review*. April 2013. 81(3).
- Greenberger M (2018). Too Big to Fail – U.S. Banks' Regulatory Alchemy: Converting an Obscure Agency Footnote into an “At Will” Nullification of Dodd-Frank's Regulation of the Multi-Trillion Dollar Financial Swaps Market. INET Working Paper No. 74.
- IATP and GRAIN (2023). A corporate cartel fertilizes food inflation. Institute for Agriculture and Trade Policy. 23 May.
- ICRICT (2023). ICRICT's letter to United Nations Secretary-General António Guterres. Independent Commission for the Reform of International Corporate Taxation. 17 March.
- IMF (2023). *Global Financial Stability Report*. April. International Monetary Fund. Washington, D.C.
- International Panel of Experts on Sustainable Food Systems (2023). Breaking the Cycle of Unsustainable Food Systems, Hunger and Debt. Special Report. IPES. March.
- Jones H (2022). LME nickel debacle shows need to scrutinize commodities, says IOSCO watchdog. *Reuters*. 26 April.
- Kornher L, von Braun J and Algieri B (2022). Speculation risks in food commodity markets in the context of the 2022 price spikes. ZEF Policy Brief No. 40. Centre for Development Research. University of Bonn.
- Lévy-Garboua V (2022). Shadow Commodity Trading. *Finance and Gestion*. 20 June.
- Longley A and Chin Y (2022). Commodity Markets Contend With a Growing Liquidity Crisis. Bloomberg. 13 September.
- Lusiani N (2022). Tax and Monopoly Focus: Reframing Tax Policy to Reset the Rules of the Monopoly Game. Tax and Monopoly Profits. Roosevelt Institute. 27 October.
- Murphy S, Burch D and Clapp J (2012). *Cereal Secrets. The world's largest grain traders and global agriculture*. Oxfam Research Reports.
- Nicholls A (2023). Latin America and Caribbean Tax Summit in Cartagena: A Caribbean Perspective. Caribbean Trade Law. 4 August. Available at <https://caribbeantradelaw.com/2023/08/04/latin-america-and-caribbean-tax-summit-in-cartagena-a-caribbean-perspective/>.
- OECD (2023). Oil commodity trading and addressing the risk of illicit financial flows. Development Co-operation Directorate. OECD Publishing. Paris.
- Oliver Wyman (2023). Commodity Trading's \$100 bn year. Record trades, intense volatility, extraordinary endurance. March.
- Oxfam (2011). Not a Game: Speculation vs Food Security. Policy Paper. 3 October. Available at: <https://www.oxfam.org/en/research/not-game-speculation-vs-food-security>
- Oxfam (2023). Big business' windfall profits rocket to “obscene” \$1 trillion a year amid cost-of-living crisis. Oxfam. 6 July. Available at <https://www.oxfam.org/en/press-releases/big-business-windfall-profits-rocket-obscene-1-trillion-year-amid-cost-living-crisis>.
- Petrou K (2022). Central bankers cannot afford to ignore the pain in commodities. *Financial Times*. 13 April.
- Public Eye. Undated. *Trends and developments in the global agro-food sector*. Available at <https://www.publiceye.ch/en/topics/soft-commodity-trading/trends-and-developments-in-the-global-agro-food-sector>



- Public Eye (2023). War and crises – and commodity traders are making record profits. January. Available at: <https://www.publiceye.ch/en/topics/soft-commodity-trading/war-and-crises-and-commodity-traders-are-making-record-profits>
- Ross A and Gibbs M (2023). Top hedge funds made \$1.9bn on grains ahead of the Ukraine war food price spike. *Unearthed*. 14 April. Available at: <https://unearthed.greenpeace.org/2023/04/14/ukraine-wheat-food-price-crisis-speculation/>
- Ryding T and Rangaprasad P (2022). 20 years after Monterrey, the UN Financing for Development process is as important as ever. Eurodad. 16 March. Available at: [https://www.eurodad.org/20\\_years\\_after\\_monterrey](https://www.eurodad.org/20_years_after_monterrey)
- Schmidt P (2022). Food price speculation in the aftermath of the Ukraine war, European Economic and Social Committee. Nat/873.
- Scott F, Cowley C and Kreitman T (2023). Tight Labor Markets Have Been a Key Contributor to High Food Inflation. Economic Bulletin. April. Kansas City Federal Reserve. Available at: <https://www.kansascityfed.org/research-staff/francisco-scott/>
- Staritz C, Newman S, Troster B and Plank L (2018). Financialization and Global Commodity Chains: Distributional Implications for Cotton in Sub-Saharan Africa. *Development and Change*. 49(3).
- Suppan S (2010). Commodity regulatory pathways not yet chosen. UNCTAD Public Symposium. 10–11 May. Geneva.
- Tarbert H (2023). The CFTC needs to investigate the role and impact of speculation in commodity markets. Better Markets. 8 March.
- Tax Justice Network (2022). UN tax convention proposed at General Assembly. TJN. 14 October. Available at: <https://taxjustice.net/press/un-tax-convention-proposed-at-general-assembly/>
- Tett G (2022). Brussels ignores derivatives at its peril amid energy crisis. *Financial Times*. 8 September. Available at: <https://www.ft.com/content/b58480fb-b9de-4316-af21-b82167ef3e20>
- Tett G (2023). Five reasons investors should expect the unexpected. *Financial Times*. 9 June.
- Thomas H (2023). Murky world of global food trading is too important to ignore. *Financial Times*. 21 June.
- UNCTAD (2011a). *Price Formation in Financialized Commodity Markets: The Role of Information* (United Nations publication. New York and Geneva).
- UNCTAD (2011b). Policy actions to mitigate the impact of highly volatile prices and incomes on commodity-dependent countries, and to facilitate value addition and greater participation in commodity value chains by commodity-producing countries. UNCTAD, 2 February. Available at: [https://unctad.org/system/files/official-document/cimem2d14\\_en.pdf](https://unctad.org/system/files/official-document/cimem2d14_en.pdf)
- UNCTAD (2022). A Double Burden: The effects of food price increases and currency depreciations on food import bills. 16 December.
- UNCTAD (2023). Trade and Development Report Update (April 2023). Available at: <https://unctad.org/publication/trade-and-development-report-update-april-2023>
- Vargas M and Chantry O (2011). Ploughing through the meanders in food speculation. Mundubat.
- Winders B (2011). The Food Crisis and the Deregulation of Agriculture. *The Brown Journal of World Affairs*. 18(1):83–95.





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