Chapter III
South-Led Integration in a Fragile World
A. THE LONG SHADOW OF PAST AND PRESENT MISTAKES

Chapter I has shown that 2022 and 2023 are set to be years of slowing economic growth, not just compared to the exceptional growth numbers of 2021, but to the already downbeat predictions of earlier this year. Whether or not this translates into a full-blown global recession, deteriorating macroeconomic and financial conditions will heighten the vulnerability of households, businesses and governments, particularly in the developing world, to any further shocks.

As argued in previous reports, a growth slowdown in any particular year may be triggered and aggravated by specific events, but their intensity and impact depend on underlying trends that shape the workings of the global economy and its responses to shocks. Key trigger factors this year have been the war in Ukraine, the interest rate hikes adopted by leading central banks to bring down inflation and the sharper than expected slowdown in China. These factors have ignited a highly combustible pile of problems in financial, commodity and labour markets that can be traced to underlying trends. In particular, financialization and corporate concentration have contributed to highly skewed patterns of income distribution, rising levels of indebtedness and constrained investment (both private and public) across the world, weakening global demand and growth prospects. In labour markets, fragmentation associated with global supply chains, along with the weakening of trade union power, particularly in developed economies, has contributed to subdued wage growth. Since the occurrence of rogue events – such as health, military or environmental crises – can be mitigated but never completely eliminated, leaving social and economic imbalances to fester bears a high risk.

For developed economies, the current slowdown of growth is concerning because it signals a return to the sputtering recovery that followed the 2009 recession (TDR, 2020). Developing countries have exhibited a more uneven picture, but even China, the strongest performer of the group for the last 20 years, is now growing at its lowest rate in decades. Everywhere, slower growth of GDP since the middle of the last decade means incomes that barely keep up with population growth (figure 3.1) and lower inducement to invest, including in industrialization and the green transition.

Figure 3.1 Real GDP per capita, selected countries and country groups, 2000–2022 (index numbers, 2000=100)

A. Selected developed economies and country groups

B. China and selected country group

Source: UNCTAD secretariat calculations based on United Nations Global Policy Model and AMECO.
Note: Underlying data correspond to constant 2005 dollars. Aggregates were computed using market exchange rates as weights.
B. THE ISSUES AT STAKE: COMPOUNDING THE INEQUALITY-ENVIRONMENT DOOM LOOP

1. The inequality-recession loop

A look at the composition of demand for goods and services underscores challenges in income distribution, investment, government spending on goods and services and in trade, confirming the analysis of previous reports (TDR, 2019; 2021).

The share of total income accruing to wages is an important indicator of economic health, reflecting the cost of labour relative to total costs and the level of inequality generated by the labour market (before government transfers). As lockdowns suddenly reduced profits in 2020, labour shares across the world increased. But that process was quickly reversed as economic activity picked up again (TDR, 2020): record growth in 2021 was accompanied by a decrease of the labour share of income in both developed and developing countries. This is a common occurrence when economies come out of recessions: firms initially increase output by reducing idle capacity and underutilized work hours. But the extent to which the labour share decreases as a result depends on how quickly wages react to a tightening of the labour market. Strong labour representation can be expected to result in quicker compensation increases. In fact, over the past 50 years, wage growth has weakened in subsequent recoveries. This is particularly the case in developed countries, whilst in developing countries, wage responsiveness is clearly higher than in 1970 (as signalled by an upward 50-year trend). However, even in developing countries, wages’ response has been more muted in the post-2009 and post-2020 recoveries than in previous recoveries. Overall, at least since 2009, labour markets have been delivering a more unequal distribution of income. Added to this, when wage data for 2022 are collected, they are likely to show a loss in purchasing power which will be reflected in a lower labour share, following higher inflation worldwide. Indeed, as seen in chapter I, wages are lagging price inflation in most parts of the world economy.

Falling labour shares have, in many countries, been linked to export-driven growth strategies and welcomed as signalling a country’s gains in competitiveness. This interpretation is misleading (TDR, 2019; 2020). In fact, falling labour shares have also been the effect, not just a cause, of slowing global growth: with weak domestic demand for consumption and investment, pressure has increased on both developed and developing countries (whose investment and public spending have been constrained) to compete for higher shares of export markets. Slowing global demand and GDP growth have led to an ever-tighter race to the bottom. This phenomenon is hidden in years of upheaval, such as 2009 or 2020, but emerges clearly in subsequent recoveries. What is also clear is that for this process to be reversed and household demand to recover healthier growth rates, wage growth would have to accelerate and remain higher for many years (Taylor, 2020).

In the past decade, a growing protectionist rhetoric in developed countries has echoed the concerns of workers and smaller firms who have been on the losing side of the distributive struggle (Ferguson et al., 2020; 2021). But this has not been reflected in a clear or consistent policy shift. Developed countries have supported and protected specific domestic sectors, targeted key industries abroad, and prevented developing countries from doing the same, continuing their push for asymmetric rules in the World Trade Organization. However, these responses have not diminished the reach of the key players, such as large corporations (both national and transnational) and financial investors, whose dominant positions are protected by the rules (Baker, 2022), such as TRIPS. Thanks to their market power, these corporate players continue to advocate for a global race to the bottom in taxation, welfare and working conditions, influencing fiscal and policy space everywhere. In other words, protecting firms does not translate to protecting workers or other segments of society.
2. Fiscal and monetary policies

Government spending on goods and services, a key driver of the level of economic activity, has been decreasing as a share of national income for four decades. This has been the case in both developed and developing countries, with pressures to “rebuild fiscal buffers” increasing after each recession, based on the idea that discretionary but temporary fiscal expansions during economic shocks suffice to keep the economy close to its optimal equilibrium level (TDR, 2021).

However, it has been amply documented that such counter-cyclical expansions do not generally allow an increase in potential output, as this results from a stable growth of income, aggregate demand and technical progress (McCombie and Thirlwall, 2004; Ocampo et al., 2009; Storm and Naastepad, 2012). A purely countercyclical approach to fiscal policy not only appears insufficient to face the great challenges of reducing inequality and mitigating the impact of climate change, but also seems detrimental to its own declared objective of fiscal sustainability (as opposed to an approach that admits both countercyclical measures and enduring fiscal support to stimulate the creation of more capacity). Decades spent in pursuit of balanced budgets have intensified the cyclical fluctuations of income and employment, forcing governments and central banks to deploy large emergency disbursements in the downturns, often inefficiently (TDR, 2021).

This endemic austerity, anchored to the dogma of expansionary fiscal contraction, has deprived the global economy of critical demand support, especially after 2010, slowing down overall growth and acting as a drag on consumption and investment. When growth rates are high, declining public spending as a share of GDP (figure 3.3) may indicate that government spending is efficient (positive multiplier) or that the economy is being driven by exports (which can support growth in a few countries but not in the whole world) and debt-fuelled private demand: both unstable sources of growth. But when growth rates are low, the declining trend is a clear sign that economies are deprived of sufficient public spending.
The reversion to austerity post-2020 is still ongoing, but data indicate that it may be even sharper than post-2009. Even in 2020, the year of massive fiscal packages, government spending slowed down globally compared to 2019. The fiscal expansion in the recession year of 2020 has been smaller globally than during the global financial crisis (GFC), a fact that can hardly be reconciled with the needs of today’s global economy. Partly, this was because of the massive change in the composition of fiscal spending: during the lockdowns of 2020, transfers had priority over public works and other programmes that sustained labour demand. But in today’s spiralling climate and energy crises call for massive state-led investment (both to increase energy efficiency and to develop supply of renewable energy). China stands out in this context, as the only large economy not exhibiting a contractionary “shark fin” pattern. Given its fast and steady progress in industrialization, growing living standards and energy efficiency, it is no surprise that a growing share of total income has been devoted to government spending on goods and services.

Underneath this global pattern, the differences between developed and developing countries are remarkable. Developed countries and China still had positive growth of government spending in 2020, although slower than in 2019. All other developing countries, on average, experienced a contraction of public spending in absolute terms, although the contraction of GDP was even more pronounced. This highlights the constraints developing countries are subject to in the global financial architecture.

The year 2021 saw a global acceleration of spending in absolute terms, for both developed and developing countries, while early data for 2022 point to another downswing. One component of public spending that has regained prominence this year is military spending. If military rivalry between major economies intensifies, this category of spending is bound to gain increasing importance in the medium term. But unlike the world war years, studies indicate that a military build-up today may prove a drag on the economy, cutting into aggregate demand, as the main items of military spending have little positive effect on the economy and tend to be financed with spending previously destined to more economically impactful uses (Becker and Dunne, 2021).
Monetary policy has been at the forefront of macroeconomic stabilization efforts since the beginning of the quantitative easing (QE) programs of the United States Federal Reserve (hereafter the Fed). When the fiscal channel dried up in 2010 (after a short-lived stimulus) but growth and inflation remained low, developed countries relied on large purchases of bonds and other securities by their central monetary authorities to support long-term in 2010 credit creation, while maintaining the smooth functioning of the money markets.

Within a few years, all major central banks developed their own QE programs, sometimes exceeding the Fed’s both in value and as a share of GDP. Nonetheless, the role of the Fed has remained crucial since dollar-denominated liabilities held by entities outside the United States and the trades necessary to fund them have become even more prominent in the past decade: “US dollar funding remains below its peak of a decade ago relative to the size of the global economy, despite having grown in nominal terms. However, the share of international funding that is denominated in US dollars has risen compared with other major international currencies, reaching levels last seen in the early 2000s and making it the dominant international funding currency” (Committee on the Global Financial System, 2020).

In particular, a greater share of US corporate bonds is held by non-US-residents (Lysandrou and Nesvetailova, 2022). Moreover, in a context of low interest rates, the search for higher yields made dollar-denominated bonds issued by emerging economies particularly attractive: “EMEs as a whole, and China in particular, have become both larger borrowers and larger suppliers of US dollars, especially via the bond market” and including issuance from offshore financial centres (Figure 3.5; Shin, 2013; Committee on the Global Financial System, 2020).
As a result, the Fed’s decisions reverberate globally via at least three channels.

First, it is able to affect liquidity in key domestic and international markets. In particular through swaps and repurchase agreements (repos) of various collateral from private domestic and public foreign entities, it has repeatedly been able to prevent money market freezes, at least in the core of the global financial system. However, it has been far less efficient in disciplining cyclical expansions of global finance in a context of international capital mobility.
Second, it affects the value of the dollar and, thus, the price of imports and exports domestically and abroad. As a result, it also provides a floor for interest rates in other regions which cannot allow their currencies to depreciate too much against the dollar to avoid over-exposure of their balance sheets to dollar-denominated debt (figure 3.6). From the early 2000s until 2021, oil price movements provided a mitigating factor, thanks to their negative correlation with the dollar (figure 3.7).
Third, it affects growth and private demand in the United States including imports, thus affecting global growth.

During the Covid-19 crisis, the Fed’s accommodative stance and its activity in the international repo markets avoided extreme stress in the global money markets and allowed central banks of developing countries to reduce interest rates quite significantly. Indeed, while in many cases they themselves engaged in asset purchases, it was mostly to control portfolio risk rather than to provide a stimulus, which was predominantly supplied in the form of loans, including to public banks (figure 3.8; Aguilar and Cantù, 2021).

However, as soon as the economy of the United States started emerging from the crisis and the Fed signalled its intention to raise interest rates in May 2021, those favourable conditions reversed, forcing premature interest rate increases in many developing countries, especially those most exposed to dollar-denominated debt.

The Fed’s policy normalization aims at controlling the bubble in commodity prices and preventing higher import and energy costs from spreading into the domestic distributive structure. The announcement of May 2021 was followed by a crucial decision on the officialization of two standing repo facilities, which had been functioning in a temporary mode for some months: one dedicated to United States domestic primary dealers and soon to include additional depository institutions (Standing Repo Facility), and one for foreign and international monetary authorities (FIMA repo facility).

14 Acceptable collateral are Treasury securities, agency debt securities, and agency mortgage-backed securities.

15 “The FIMA Repo Facility allows FIMA account holders, which consist of central banks and other international monetary authorities with accounts at the Federal Reserve Bank of New York, to enter into repurchase agreements with the Federal Reserve. In these transactions, approved FIMA account holders temporarily exchange their U.S. Treasury securities held with the Federal Reserve for U.S. dollars, which can then be made available to institutions in their jurisdictions. This facility provides, at a backstop rate, an alternative temporary source of U.S. dollars for foreign official holders of Treasury securities other than sales of the securities in the open market. A temporary FIMA Repo Facility was established March 31, 2020, and the facility was made a standing facility on July 28, 2021” (Board of Governors of the Federal Reserve System, 2022)
The move showed that the Fed’s commitment to global financial stability remains unchanged. That, together with the preparedness of the central banks of many emerging economies, has so far prevented a repeat of the 2013 taper tantrum.

But the impact on the real economy cannot be stopped. With fiscal policy invariably muted, with crude oil and gas still at elevated prices, the increased cost of credit is going to affect the most fragile sectors and regions of the world economy through reduced investment, wages and employment growth and liquidity stress, hitting hard the unemployed and low and medium wage earners everywhere, as well as firms and governments with elevated external debt in developing countries (see previous chapters).

The (already restricted) macroeconomic policy space for emerging economies to respond to the challenges of rising prices of food and fuels and increasing food insecurity will become more constrained as monetary policy is tightened in the United States. The timing for this tightening of the fiscal and monetary policy space could not be worse: many governments will be forced to withdraw essential public support schemes which were introduced during the pandemic, just when a fresh cost of living crisis undermines the livelihoods of millions of people across the world.

The appreciation of the dollar will move global demand away from United States goods and towards goods produced in other economies (assuming exchange rates are flexible). While the stronger dollar may lead to (export-led) expansion in some advanced economies (such as Germany and France), many emerging economies will experience net contractionary effects from the nominal depreciation of their currencies (Hirschman, 1949; Krugman and Taylor, 1978), mostly because the stronger dollar will make the essential imports of food, fertilizers and energy more expensive, raising their trade deficits and contributing to higher domestic inflation, which by crowding out demand for domestically produced (non-essential) goods and services will weaken domestic investment and economic growth (Storm, 2022). A stronger dollar has negative effects especially on real investment and real exports in the emerging economies, primarily because the stronger dollar weakens the balance sheets of dollar borrowers whose liabilities rise relative to assets. The result is a weaker credit position of and higher risk premia for (exporting) firms in those emerging economies with relatively large external (dollar-denominated) debts (Akinci and Queralto, 2021). These firms will suffer from a general tightening of global dollar credit supply, including for trade credit (Storm, 2022).

Hence, while central bankers in the core of the international system focus pragmatically on avoiding short term systemic instability, the real economy deteriorates, a fact that is increasingly overlooked by policymakers. Indeed, there are sound reasons to believe the damage done in the short run will spill over into permanent, long-run damage: monetary policy tightening will likely cause the growth rate of potential output to decline. Higher interest rates lower aggregate demand which, in turn, leads to reduced capital formation by firms. The decline in investment lowers the economy’s capital stock and productive potential, which depresses the rate of technological progress and productivity growth, because technological change is embodied in new capital goods (Storm and Naastepad, 2012; Girardi et al., 2020). In addition, lower demand leads to lower labour productivity growth, increasing the vulnerability to wage-led inflation. Yet most economists assume long-run potential growth is determined by the exogenous forces of demography (i.e. the growth of the effective labour force) and of technology (i.e. exogenous total-factor-productivity (TFP) growth), and most believe monetary policy does not influence these two exogenous supply-side drivers. It is no coincidence that the long-run “neutrality” of monetary policy is a cornerstone of the dynamic stochastic general equilibrium (DSGE) models commonly employed by central banks (Storm, 2021).

What is particularly worrisome is that the commodity price rally initially followed expectations of a global growth rebound, but when the Fed’s moves, coupled with fiscal austerity and new international disruptions, changed the economic scenario, many financial markets remained buoyant. The economic recovery did not take place and speculators continued to profit.
3. The broken nexus between credit and capital formation

Despite the massive transformational challenge facing the global economy, investment rates across the world have been in long-term decline with sluggish growth even in the best of time (figure 3.9). This has resulted from two main factors: first, the general slowdown in growth, especially the relative reduction of labour incomes, which has slowed down the expansion of household consumption and investment; second, the accelerating process of financialization (TDR, 2018), which has led to the un-anchoring of asset creation from capital formation. Making matters worse, investment is in a well-known cause-and-effect relationship with growth, as it is strongly affected by expectations. If growth is expected to slow, investment declines, fulfilling the expectation.

Figure 3.9 Private investment, developed and developing economies, 1970–2022 (percentage of GDP)

Financialization has been fuelled by monetary and financial policies. For three decades, across developed and developing economies, credit creation has outpaced and in some cases far outpaced the creation of fixed capital, with the process continuing throughout the Covid-19 pandemic. While major economies have been awash in credit that did not find productive allocation, banking and financial regulation created many opportunities for financial speculation, including the fast-expanding non-banking financial sector (figure 3.10). In this way, short-term speculative uses of funds have outcompeted fixed investment and contributed to undermining confidence by increasing financial instability.
4. Balance of payments vulnerabilities

The immediate policy challenges facing developing countries derive from two broad types of exogenous factors: global shocks that affect the world economy at large and major macroeconomic or trade policy changes in developed countries. These challenges are rooted in developing countries’ own financial vulnerabilities and structural weaknesses linked to their role in the international trade and capital markets. In fact, in general, semi-industrialized economies face a binding external restriction on the long-term rate of expansion of their real GDP, reflected in the dynamism of their exports relative

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16 This section is based on Moreno-Brid et al., 2022.
to imports. The trade balance sets a long-term upper bound to the average annual rate at which real GDP can expand without sooner or later incurring a critical disequilibrium in the balance of payments. Of utmost social and economic importance is that this upper bound is lower than the rate of expansion of GDP required to, say, guarantee full employment and given the pattern of fixed capital accumulation.

The vulnerability of developing countries derives from their greater and more structural dependence on imports, a more unstable export basket, a more polarized economy with high levels of informality and a less reliable access to finance. Trade, in particular, is critical to development and potentially a powerful conduit of industrial upgrading and diversification but, for countries that have little influence on international prices and restricted access to large consumer markets, it is also a source of vulnerability (Capaldo and Omer, 2021). When any of those sources of fragility comes to the fore, and the financial outflows severely outpace the inflows, the foreign reserves might drain quickly, and the capacity to borrow and spend (the fiscal space) is often severely impaired, as foreign investors lose confidence and interest rates rise. At the extreme, when the solvency risk increases, the country might experience a serious credit crunch and a capital flight, driving towards default. For instance, in absence of appropriate policies that helped lowering import propensities, periods of expansion necessarily bring about a deterioration of the current account balance, higher inflation and internal indebtedness. If contextually, the government tries to run fiscal surpluses, it is the private sector that carries the burden, at least until the solvency risk transmists to the public sector. But a balance of payments crisis can emerge autonomously from the capital account, rather than from the current account: countries with smaller and less developed financial and banking systems can be quickly overwhelmed by incoming speculative capital flows and thus be driven to over indebtedness. Indeed, finance-driven boom-bust cycles have, as discussed at length in previous reports, been the prime driver of financial and currency crises in developing countries since the 1980s.

Among the challenges policymakers in emerging markets could face in this context, and to an important extent are already facing, we identify the following ones:

I - Sudden and drastic slowdown in the rate of growth of exports: This can happen if the world economy and trade lose impulse. The exports of a balance of payments constrained economy will be affected differently, depending on the specific basket of exports of goods and services and on the geographical composition of the main markets of destination. These two factors also condition the vulnerability of different countries to the introduction of environmental restrictions on certain products and commodities or of protectionist measures to favour the insourcing of selected intermediate inputs and final products due to industrial policies or geopolitical considerations (green-shoring, re-shoring, friend-shoring).

II - Sudden and drastic changes in the prices of exports or imports in international markets: The current global context of high inflation has a very heterogeneous impact between and within developing countries, benefitting or harming them depending on the effects on their terms-of-trade.

III - Rises in the benchmark interest rate in the developed world with the implementation of contractionary monetary policies and the termination of QE.

IV - Higher country risk premiums in developing countries, due to specific national/regional characteristics or to global shocks that detonate a “flight to quality” in short-term capital flows.

V - Excessive foreign debt repayment burden: A rise in the proportion of foreign debt that must be repaid in the period of analysis may push a country to an insolvency crisis, in conditions where its access to international credit becomes tightly rationed.

VI - A deterioration in the world financial markets’ perception of the developing economy’s macroeconomic strengths and external debt repayments may make the balance of payments constraint sudden and painfully binding, tightly rationing access to fresh financial resources. Recall that changes in this regard capture major modifications in the assessment of relevant
actors in the world’s capital and financial circles regarding what is a “reasonable” magnitude of the country’s current account deficit cum external debt repayments as a proportion of nominal GDP.

VII - Nominal exchange rate depreciations over and above the increase in domestic prices: Indeed, in cases where this happens, the total value of the current account deficit plus external debt repayments will increase as a share of nominal GDP measured in a common currency. If this increase is high enough, it may trigger a balance of payments crisis.

In addition, a crucial factor to pay attention to when evaluating the role of capital flows and the financial external restriction of the balance of payments is the cyclical behaviours of the nominal effective exchange rate and its close correlation with risk sentiment. For the countries analysed below, the correlation between these variables ranges from 0.4 to 0.6, indicating that when risk perception deteriorates, a sharp correction in the exchange rate follows (figure 3.11).

**Figure 3.11 Annual variations of the nominal exchange rate and Emerging Market Bond Index (EMBI), selected countries, 2004–2020 (percentage)**

- **A. Mexico**
  - Nominal exchange rate vis-à-vis the dollar
  - Country specific EMBI (right axis)
  - $r = 0.63$

- **B. Chile**
  - $r = 0.46$

- **C. Türkiye (2012-2020)**
  - $r = 0.67$

- **D. Colombia**
  - $r = 0.64$

Source: Abeles et al., 2020.

Note: For the nominal exchange rate, an increase corresponds to a depreciation of the domestic currency vis-à-vis the dollar. The correlation between the two series under the considered period is reported within the circle.
5. Losing ground in the fight against climate change

The pandemic has shown that breaking the link between economic activity and emissions is necessary to stabilize the climate. As growth picked up again in 2021, emissions soared to a new high.

If the world is to overcome its multiple imbalances – not just climate change but development and inequalities too – massive investment in transitioning the economy out of its dependence on fossil fuel is necessary.

However, this will inevitably require an initial intensification of emissions (TDR, 2019), as the capital goods required for a new energy and productive infrastructure are built. Developing countries, which, in absolute but not per capita terms, became the leading group of emitters early this century, have made tremendous progress in reducing the carbon content of their economic output. However, data indicate that progress in the developed countries in “greening” their GDP has stalled, despite their massive outsourcing of manufacturing to the global South.

Multilateral discussions on a global climate policy have continued but they have not yet generated a workable compromise on the key issues of emission targets and financing. After the 2021 United Nations Global Climate Change Conference (COP26), discussions on economic commitments, including a New Collective Quantified Goal, doubling adaptation support, new financial instruments and other national and global targets are intensifying. However, the distance between the ambitions of developed countries and their willingness to lend commensurate support to developing countries remains large.

Furthermore, the energy crisis and the geopolitical stresses of this year have generated a strong appetite for cheap fuels and energy independence, both of which have already interfered with climate policies. The immediate response to turmoil in oil and gas markets in many countries has been to demand that energy companies produce more of both (Jenkins, 2022). Meanwhile, some companies have claimed that more exploration and extraction are not financially viable in their structure of corporate governance if prices dip below the high levels of early 2022 (Worland, 2022). This subjects the government to opposing forces: on the one hand, the need to curb consumption of fossil fuels to stop climate change; on the other, the incentive to slow down the energy transition to ensure the energy sector ramps up production of fuels and reduces its costs.

With energy costs at record highs and investment weakening, enforcement of stricter emission standards and other environmental regulation that can drive up production costs has fallen down the priority list for many major economies (Bennhold and Tankersley, 2022; Eddy, 2022; Maclean and Searcey, 2022). Many new rules that have been announced are set to enter into force in a decade or further into the future. In contrast, international trade is one area where emission standards have so far remained current, with items such as the Carbon Border Adjustment Tax discussed in several treaty negotiations (Council of the European Union, 2022).

Proposals of trade restrictions based on embedded emissions echo a real concern about the large contribution of merchandise trade to climate change, which occurs both by providing an incentive to consumerism and by generating transport-related emissions. But these proposals pose two problems that do not really make them effective as policy tools. First, they assume reliable data on emissions embedded in international trade exist, while in fact, they are not yet available and given the complexity of value chains, they may never be available with the necessary detail. Second, and more important for development, the proposals would inevitably tighten the foreign exchange constraint that bedevils international trade flows for all developing countries (TDR, 2021). While such proposals are formally intended to work as incentives to decarbonize developing economies, in practice they paper over the reality of economies that are structurally at a disadvantage in international exchange and struggle to pay for imports, including costly productive inputs such as capital goods and energy. For most developing countries, this is a compelling incentive to use domestic sources of energy as much as possible, as the foreign exchange constraints pit development and climate goals against each other.
Box 3.1 Global value chains and the wage share: what lessons from global and regional trends?\textsuperscript{17}

A stable labour share, i.e. the share of labour compensation in gross value added, was a stylized fact of advanced capitalist development, based on the premise that productivity increases would accrue to labour through commensurate real wage increases, keeping (tendentially) constant the share of wages in net output (Kaldor, 1961). However, the labour share has experienced a steady decline in advanced economies at least since the early 1980s. The process did not unfold within each country in isolation. In fact, the early 1980s coincided with the start of an extensive deregulation of product, financial and currency markets (hyper-globalization), a key component of which was the building of inter-country supply schemes. Under such schemes, outsourcing and offshoring practices became prominent, to the point of configuring global value chains (GVCs).

For developing countries, which became the suppliers to leading firms in industrial economies, the process started in the midst of structural adjustment policies in response to debt crises; this implied the dismantling of decades of import-substitution industrialization (ISI) efforts and a shift towards an export-oriented strategy based on import liberalization (TDR, 2018). These trends accelerated in the 1990s and
early 2000s, changing the nature of international specialization – with a focus on tasks of production, rather than integrated final products – with an ensuing change in the international division of labour. During the latest phase of hyper-globalization (1995 to 2007), the steep trend decline in the wage share was mirrored by a notorious increase in trade integration in value-added terms, but from 2008–2009 onwards, the path became more erratic, reflecting the “great trade collapse” during the GFC, with a speedy recovery which was again subject to a sharp contraction between 2014 and 2016. Yet the global wage share maintained a declining trend (with a temporary increase between 2010 and 2015). Hence, we now live in a world of declining global wage share with faltering globalization.

In short, the relationship between trade integration and wage inequality is complex and ambiguous. Understanding and quantifying it is extremely important, however, as regressive functional income distribution represents an obstacle for socially inclusive trade schemes.

A useful way to study the connection between GVC participation and the wage share is to compute the wage share activated by alternative sources of foreign final demand. The intuition behind this approach runs as follows. The wage share of a country is a linear combination of the wage shares of its industries. Industries produce to satisfy final demand requirements at home as well as abroad. Hence, when a foreign country demands final products which are either directly supplied by the domestic economy or require domestic inputs to be produced, it is activating output at home, which generates incomes, wages and, therefore, an associated wage share. But this domestic output activation across industries occurs in different proportions according to the products composing each specific foreign final demand basket. For instance, when a country in Latin America satisfies Chinese final demand, output from primary industries will be activated in a greater proportion than if the final demand came from another Latin American country, in which case mid-to-high-tech manufacturing products are produced (and traded) in a higher proportion. Thus, if primary commodities and mid-to-high-tech manufacturing products are produced by industries with different wage shares, there are distributive implications of deepening trade integration with certain regions with respect to others. Moreover, given that the home country is often only an upstream producer of certain inputs in a GVC, it is far from apparent what are the ultimate distributive implications of final demand from certain foreign countries, especially when the domestic economy does not have relevant direct trade linkages in final products with those economies, but rather mostly indirect links by exporting inputs through others. Hence, given the different commodity composition of each final demand basket associated to a foreign source of final demand, the wage share activated at home by each foreign country will be different. This is crucial to understand the distributive profile of domestic vis-à-vis international specialization.

Based on this methodology, it is possible to obtain several important results (Wirkierman 2022).

1 - Sectoral trends across countries: Between 1995 and 2018, there was a generalized decline in the wage share across the high-tech manufacturing core of the economy, accompanied by mild increases in the median wage share for diffused intermediate inputs. Moreover, there were considerable wage share increases in agriculture, logistics, food and accommodation services and business services. That the high-tech manufacturing core of the economy experienced sharp wage share declines alerts us to the potential limits of technological upgrading: it has traditionally been argued that industrial transformation towards high-tech manufacturing is a crucial pathway to inclusive economic upgrading. Indeed, looking at the relationship between the technological content of a country's final export basket and the wage share activated by foreign final demand, i.e. the extent to which technological upgrading in GVCs is more inclusive in distributive terms, we find counter-intuitive results, suggesting the potential for technological upgrading in GVC participation to increase the activated wage share has diminished through time, especially for the global North. Broadly speaking, however, the wage share distribution across countries for each industry has become more “equally unequal” between 1995 and 2018. That is, compared to 1995, data points in 2018 seem to be more concentrated around a lower median wage share for the majority of industries.
2 - Activation and appropriation of global income and wage shares in the global North and global South:
Over the same period, the global South caught up in terms of appropriated income shares for both domestic and foreign sources of activating demand. Interestingly, the increasing share of global income (i.e. relative growth) went hand-in-hand with an increasing wage share and vice-versa for the global North. Importantly, in the global South, this growth-distribution nexus has mostly been for the income share activated by domestic — rather than foreign — demand; in the global North losses have been sharper for the wage share activated by foreign final demand, pointing to a cost-cutting mode of international competition.

The global South has also been catching up in terms of the share of global income it activates: specifically, it went from 25 per cent to over 40 per cent of appropriated income activated by foreign final demand. But while in 1995, the global North activated almost 20 per cent (of the total 25 per cent), in 2018, the share activated by the global South almost equaled that activated by the global North, hinting to an important South-South trade integration through GVCs. Moreover, the global South increased the share of income it activates in the North. This supports the argument that the “decline [in share of world exports for advanced economies] was almost entirely due to the relative decline of North–North trade” (TDR, 2018: 41). However, the right panel of figure 3B.1 suggests the catch-up of the global South in terms of appropriated wages has been considerably slower than that in terms of income.

Figure 3B.1 Domestic income and wages activated by foreign final demand

A. Domestic income
B. Domestic wages

Note: Activated/Activating area.

3 - Aggregating countries into regional groups provides further insights into how the two different sources of final demand (domestic vs. foreign) impact functional income distribution. Figure 3B.2 allows to identify cross-regional differences in wage share trajectories. Moreover, by building a bilateral matrix of

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18 Regions are: Regions are: NAM (North America), LAC (Latin America and Caribbean), WEUR (Western Europe), NEUR (Northern Europe), SEUR (Southern Europe), EEUR (Eastern Europe), ZAF (South Africa), MENAT (Middle East, North Africa, and Türkiye), IND (India), China (CHN), Developed Asia-Pacific (DASP), ASEAN (Association of Southeast Nations), ROW (rest of the world). For details on the composition see Wirkierman, 2022.
wage shares activated by each foreign source of final demand, it is possible — for a given source region — to identify the final output destinations activating the highest/lowest wage share and, at the same time, identify those activating regions inducing relatively higher/lower wage shares on others. Results evince the key regions in the global North (North-America and Developed Asia-Pacific) exert a downward pressure on wage shares of other source regions. This may be reflecting power asymmetries between lead firms and input providers along a GVC. At any rate, it is noticeable how regions in the global South that have increasingly appropriated shares of foreign-activated global income – such as China (CHN) and India (IND) – are also exerting a downward effect on wage shares of some of their trade partners. In contrast, for some regions of the world economy, intra-regional integration exerts a positive effect on foreign-activated wage shares. This is the case for Latin America and Southern Europe. This last finding should lead to a serious consideration of the potential of such regional integration strategies to foster inclusive growth.

**Figure 3B.2 Wage share trajectories according to activating sources of final demand, domestic and foreign, 1995–2018 (percentage of gross value added)**

**A. Developed regions**

- Domestic
- Foreign

**B. Developing regions and countries**

- Domestic
- Foreign


Note: See footnote 18 for the list of regions.
C. LESSONS FOR AN ALTERNATIVE HORIZON

The Covid-19 economic crisis arguably made the Fed the commander-in-chief of the global financial and monetary system. In fact, the market for global dollar funding is a complex and geographically dispersed network of financial relationships, which the Fed has transformed into the building block of “a tiered system of international liquidity provision: the first tier including those whose credit is sufficient for a swap line, the second tier including those who can offer acceptable collateral, and the third tier including everyone else. It is a global dollar system, with the Fed operating as the de facto global central bank providing international lender of last resort support to the system” (Mehring, 2022: 2).

A main concern is financial stability, and activity focuses pragmatically on those markets that appear to be systemically relevant. As a result, liquidity is not guaranteed everywhere, and pockets of gluts and scarcity persist (Eren et al., 2020). This is particularly true during a monetary tightening, but periods of financial expansion are not free from peril, especially for emerging markets that can attract disruptively large speculative inflows of capital.

This dollar system has recently proven resilient to extreme and unexpected shocks, but it has also failed to promote sustainable growth and prosperity. The pragmatism of the central bankers, who are forced to safeguard the financial stability of an unequal and stagnant economy, is not free from worrying consequences. Its success can buy the world some time, but it also inevitably intensifies the unsound separation of the financial and real economy and of liquidity and solvency concerns. This inconsistency became especially evident in 2021 when speculative increases in the prices of assets and commodities appeared as economies were still far from recovering, triggering the premature tightening. For all the pragmatism of its managers, the inadequacy of its underlying vision makes the global dollar system vulnerable to shocks.

However, the current crisis is signalling a clear alternative direction which requires some degree of de-linking from the global financial cycle, while relying on more patient capital funding that reconnects credit with development (TDR, 2005; section III.B.3). Similarly, economic models that assign control of price formation to speculative markets have proven particularly vulnerable and incapable of inducing sound investment strategies. That is quite evidently the case for energy markets.

The oil market, for instance, has become very financialized since the end of the 1990s (Gkanoutas-Leventis and Nesvetailova, 2015; TDR, 2011). It also remained a very concentrated market, with few producers, who sometimes are also refiners and distributors, as in the case of vertically integrated giants, such as Shell, ExxonMobil, Total, Chevron, BP, Eni and the like. Financial investors, as well as oil companies, act speculatively. Producers sometimes reach common agreements to influence global price, but these typically do not last very long. Oil pricing follows complex mechanisms based on the determination of benchmarks and differentials (a discount or a premium to marker), where most physical trade conditions remain private and undisclosed (Fattouh, 2011; Roncaglia, 2015; TDR, 2011).

In this context, the identification of market fundamentals is particularly tricky, as all the players, including producers and refiners, act based on expectations, while accurate data about storage are impossible to gather. The most important benchmark price, the Dated Brent, is determined by two main companies, Platts and Argus, who record the deals for spot physical trade of Brent oil made in a specific time window. When deals in that window are too few to offer an accurate picture, the benchmark is determined by looking at the futures market. But whenever physical traders intend to fix a price based on that benchmark, they will intervene in the needed time window and influence its formation. Hence, high volatility in futures prices, which are observable in real time, does not always influence physical trade but their price trend does, offering a market convention on fundamentals based on which negotiations occur. To be clear, the market convention does not have to have any relation with actual fundamentals, whatever they are defined to be (Keynes, 1930; Greenberger, 2018).
In other words, this system joins the worst of two models: the shadiness of price negotiations in concentrated markets is coupled with the risk of boom-bust dynamics, due to sudden shifts in the prevailing conventions and expectations. Indeed, this system, to which we should add the privatization and liberalization of national distribution networks in all developed countries, has produced times of very low and very high prices (TDR, 2011). This instability is not favourable for most producers, especially smaller ones and those based in developing countries, or for consumers, especially as the energy sector has a pivotal role in climate change mitigation planning (section III.B.5). It is, instead, highly profitable for speculative trading companies and vertically integrated giants.

The end of the commodity super-cycle in 2014, for instance, marked the beginning of a period of extremely low prices. A game changer was the lifting of the ban on United States oil export in 2015 and the normalization of the relations between the United States and Saudi Arabia. The price recovered for a few years until 2020, when it dropped dramatically, partly because of a fall in demand and partly because of the failure of producers to agree on a cut in production. Production actually increased, and prices of some crudes even went below zero, with the market in deep contango (i.e. future prices were much higher than spot prices) and companies running out of storage space and resorting to floating storage (Fattouh, 2021). This period was financially debilitating for many producers – and this explains their reluctance to engage in further production as prices started their climb in 2021.

Large state producers, such as Saudi Arabia, Qatar and the Russian Federation, are often accused of strategically holding onto reserves or production. However, the de-centralized shale oil sector in the United States appears to be equally hesitant to increase production when prices increase, citing Wall Street investors’ pressure as the main reason (McCormick, 2022). The story of gas is very similar and perhaps even more telling (chapter II).

**Figure 3.14 Global crude oil production, 2018–2021, and prices, 2012–2021**

Sources: OPEC, World Bank, United States Energy Information Administration.
1. Regional financial arrangements

As argued in previous Reports, overcoming the challenges discussed above – related to distribution, on a global scale. In the current system, international payments arising from trade are made in common currencies, used for domestic payments and financial transactions alike. This allows countries to retain a surplus or deficit indefinitely and makes some currencies (especially the dollar) scarce, establishing a foreign exchange constraint and making currency markets critical for the global economy. A solution is to establish a closed system for trade and investment payments in which any trade surplus has to be spent on imports or foreign investment, as Keynes advocated as early as the 1940s (Kaldor, 1964; Kregel, 2016).

A short-lived example was the European Payments Union (1950 to 1958), abandoned as European trade became more global. Short of a global clearing union, multilateral institutions can establish provisions to prevent imbalances from becoming unsustainable, as the Bretton Woods institutions were meant to ensure.

Unfortunately, existing multilateral institutions have not been able to deliver the needed support, especially for developing countries. This is why these countries have long sought regional cooperation agreements that may help ease their constraints. These can be categorized as follows (Fritz and Mühlich, 2019; TDR, 2015):

I - Regional funds for short-term balance of payments shortfalls: In practice, all these funds have proven throughout three decades to be too small to significantly withstand balance of payments crises.

II - Regional payment systems to reduce exposure to exchange rate fluctuations and promote inter-regional trade: These are mostly customs unions and payment systems that target transaction costs. They mainly exist in Latin America, although initiatives to introduce payment systems in Africa have been discussed for a long time.

III - Coordinated exchange rate policies aimed at stopping large exchange rate fluctuations and beggar-thy-neighbour macroeconomic policies.

Several agreements exist for planned monetary integration. With differing timelines, these mechanisms are all aimed at establishing a common currency and common exchange rate policies among member countries, mainly in Africa. However, they have remained largely at a pre-implementation stage, as members have not met the timelines agreed-upon in terms of economic convergence. The decade after the GFC has left most countries participating in these agreements hesitant to cede sovereignty and embark on the requested macroeconomic convergence programs.

Since the mid-1990s, financial cooperation among developing countries has increased, especially involving China, India, Brazil, Republic of Korea, Saudi Arabia and the Bolivarian Republic of Venezuela (chapter VI). This type of cooperation includes grants and concessional loans (either interest-free or at rates well below market) but sometimes also transfer of commodities, as the Bolivarian Republic of Venezuela has done with several Caribbean countries (TDR, 2007). In China’s case, significant activity has been performed by the Exim bank.

2. Steering the world economy onto a sustainable path

The above points to a clear outlook for the medium term: the world economy will remain fragile unless macroeconomic policies change course. This section explores medium-term economic prospects under two different policy scenarios. The scenarios are constructed using the UN Global Policy Model (GPM), an empirical framework of analysis of macro-financial dynamics, trade, fiscal, monetary, employment policies, demography and carbon emissions. It is based on a database that is consistent with principles of national accounting, global aggregation and stock-flow generation. It is estimated econometrically in panel-time series data.19

A “hands-off” scenario: comfort in conformity?

In one scenario, the policy stances of the past several years (decades, in some cases) are assumed to continue. Here, policymakers accommodate but do not actively interfere with market forces, based on an established playbook. According to that playbook, inflationary pressures are contained by rising interest rates; supply bottlenecks are alleviated by free trade and interventions that prop up profits (e.g., striking down a windfall tax on gasoline producers); income inequalities are mitigated by access to education and deregulation of labour markets, encouraging competition while enlarging the labour force; financial instability can be reduced when insolvent operators are not bailed out by states but held accountable for any wrongdoing; and government debt problems are corrected by cutting government outlays and by privatizing its assets.

Pressure to enter this “hands-off” scenario is strong in the real world. Most policymakers are wary of deviating from the orthodox playbook, afraid this may scare away investors who wield more power in financial markets than the government itself. The smaller the economy, the greater the disparity of power between the state and the well-coordinated network of domestic and international conglomerates. Even in large economies, corporations have considerable leverage over policy choices (Sciortilli Borrelli, 2022). Following the status quo seems prudent.

In this scenario, developing economies cannot preserve sufficient policy space to support development, unless they happen to be on the right side of a commodity boom or a geopolitical fault line, nor do they coordinate to respond to the policies adopted by the geopolitical blocs of major economies on trade, finance and climate. Developing economies are severely affected by the weakening of global demand, financial pressures, trade restrictions and any additional burden implied by climate policies (in the North).

“South-led way”

The hands-off scenario is tied into a vicious circle. Increasing disparities of power, wealth and income lead to repeated crises and eventually consume policy space. But this is only true to the extent that those disparities are considered inevitable. In fact, three factors point to an alternative policy paradigm.

First, our projections indicate that continuing with the status quo leads to worsening macroeconomic performance. The empirical analysis in this section highlights the mechanisms and outcomes that are triggered by continuing the current policies in an already weak global economy. Medium-term prospects are gloomy.

Second, widespread financial and climate instability is bound to hit both developing and developed economies. The remedies offered in the orthodox playbook do not match the scale of these crises. No major economy, and certainly not a developed economy, can avoid the difficult decision (i.e. unpopular in the markets) of abandoning the hands-off approach.

Contrary to a common tenet of the financial press, debt and balance of payments crises in the South are not simply the result of government dysfunction. They are more likely a side effect of the policies adopted by the major central banks to avoid financial meltdown in times of market turmoil, especially after the GFC, when quantitative easing and other forms of liquidity expansion found ready financial traders, corporations and governments under pressure to roll over crushing debt (Ghosh, 2022; Green, 2022; Roubini, 2022). The unstable evolution of today’s debts has been set off by this policy approach.

The evolving climate crisis adds a daunting dimension to this outlook, because of its irreversibility: the IPCC indicates that once a critical threshold of global warming is crossed, no realistic mitigation policies can prevent a vicious cycle of ecological self-destruction. The scientific guidance is that such a critical turning point is only a few years away (IPCC, 2022).

None of these crises are explored in the scenarios, as their timing and consequences cannot be predicted. But the urgency they create for a shift in policy approaches cannot be emphasized enough.
Third, policymakers in the South share critical common ground to be capable to question the asymmetries and biases in international trade and finance that favour large corporations from advanced countries (TDR, 2018). Leveraging this shared interest opens a space for a South-led way to counter the status quo.

Global economic forces and the orthodox policy playbook incentivize policymakers to compete with other countries rather than cooperate. In a typical “fallacy of composition”, economies are often pushed to compensate for diminishing trade gains by cutting costs and trying to increase their share in export markets. For decades, especially for economies with relatively low degrees of specialization, potential partners in international cooperation have also been fierce competitors in the global markets.

Since the 1990s, coordination between governments has increasingly taken place within multilateral institutions, but with little actual coordination occurring beyond developed countries. This process has not served developing countries. On the one hand, international institutions overseeing financial arrangements (such as the IMF, the World Bank or the BIS) do not ensure fair representation to developing countries (either on executive boards or in membership), and the direction given to them, to a large extent, reflects the policy priorities of developed countries. On the other hand, the WTO, despite its more representative governance structure, has so far failed to conclude a development agenda, and the few agreements made have been heavily influenced by asymmetric power relations. Meanwhile, North-South cooperation has increasingly taken the form of bilateral or more recently, mega-regional trade and investment treaties, which have reinforced trade dynamics historically dominated by the North. The critiques of such agreements are known (chapter IV; Capaldo and Izurieta, 2018).

This experience provides fresh motivation to find different arrangements, with a stronger focus on the interests of the global South. Sections III.A to III.B highlight the common challenges faced by developing countries and show how international coordination is informed by the interests of developed economies. Increasing awareness of this reality is fertile ground for new forms of South-led arrangements, and these, in turn, may be stepping stones towards a more ambitious multilateral agenda.

Hence, a South-led way must take a South-South perspective as its point of departure, building on the observed patterns of cooperation in trade, of industrial diversification, finance and exchange rate management among economies of the South. The scenario identifies the conditions for more successful and sustained achievements in a coordinated policy strategy guided by a development perspective.

This type of coordination, even if with explicit South-South bias, implies the involvement and cooperation of Northern economies. After all, trade, finance, technology and climate require global coordination. But developing economies should reach global goals starting from their specific conditions and operating under specific constraints. Seen from this perspective, the empirical scenario offered below implies a concrete policy shift which acknowledges current institutional and macro-financial constraints and accordingly leaves room for involvement of more advanced economies (which could be much greater if they adopted measures to contain the tendencies towards market concentration and financialization).

The difference from earlier North-South agreements in this simulation exercise is the core assumption of a well-defined Southern agenda as the benchmark for agreed policy decisions. Finally, the scenario incorporates the fact that the period of analysis (from the present to 2030) is too short to expect full achievement of desired goals. It should thus be regarded as a template to begin steering the global economy in a more sustainable direction.
Four distinctive features of this scenario help explain the empirical outcomes presented below.

The first feature is that it is centred on policies to advance a coordinated industrialization. Partially cut-off from intellectual property (IP)-dominated technologies of the advanced economies and with limited access to international reserve currencies to pay for imports of capital equipment, developing economies manage their structural transformation by developing their industrial sectors at a pace consistent with their potential and that of their partners within the same fora. This has two implications. For one thing, industrialization will only move away from employment-intensive technologies gradually and partially. This will facilitate the de-informalization of large sections of their labour force, consistent with the development of social, education, health and caring services (Cimoli et al., 2009). For another, it requires a proactive government with a clear developmental agenda which will also contribute to alleviate inequalities of income (TDR, 2012).

The second characteristic of the scenario is the cooperation on finance and technology to sustain the path of trade integration and industrialization, repairing the broken link between credit and development (see section III.B.3). The emphasis is on recognizing that in the current global institutional set up, finance and technology are dominated by advanced economies. As they are at a disadvantage in these two aspects, economies in the South need alternative levers. As the experiences detailed in Chapter VI of this Report show, such levers range from a “managed” framework for trade, as opposed to “free-trade”, to innovative forms of finance and exchange payments that can eventually be oriented towards formal “South-South clearing unions” (Kregel, 2016). Accordingly, if trade among Southern economies grows quickly, a significant portion of their total trade flows will be paid in either their own domestic currencies or through regional currency mechanisms. Considering that the instability of payment flows results not only from exchange rates but also from international prices, the financial institutions set up at a regional level can be geared to accommodate the underlying principles of “commodity reserve currencies” (Kaldor, 1964; Ussher, 2011). Part of the regional funding available can be increasingly allocated to regional buffer stocks that can help stabilize prices without totally disrupting the prices’ responses to productivity, technology advances and demand. Based on these mechanisms, which are assumed to evolve only over time, the growth of commerce will be tied to a reduction of external imbalances, as well as the reduction of dependency on global finance. Regional financing and currency mechanisms are assumed to help negotiate workout paths for debts owed by developing economies to Northern financial centres and to provide financial insurance at the regional level.

A third characteristic is a coordinated effort to maintain a pace of agrarian transition that is consistent with industrialization, employment generation, food security and the need to avert environmental degradation (linked to the fourth characteristic). There is sufficient evidence of employment-intensive and traditional agriculture based on small and medium-size units providing food and agricultural inputs and commodities for industrialization. In short, the simulation assumes a coordinated agricultural transformation proceeding as an “agro-ecological model of industrialization à la Lewis”, where the rise of productivity of agrarian labourers would be such as to avoid displacement that cannot be absorbed in the growing industries and services, even if the scenario also envisages an expansion of social and caring provision by the state (IPES-Food and ETC Group, 2021; Wise, 2020).

A fourth characteristic is the attention to strategies for climate change mitigation and adaptation. The technologies and financing to which Southern economies have access do not warrant a self-sustained transformation of their productive matrices. Only in so far as decisive and affordable cooperation by the most advanced economies is ensured, can developing economies embark on such transformation at a pace that can meaningfully contribute to global climate change mitigation. But movements in this direction cannot happen overnight, even if advances in low-cost and effective environmentally friendly technologies are currently available (Drahos, 2021). Thus, most developing economies will continue to rely on relatively more carbon-intensive industries than their Northern

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20 To be clear, such ‘features’ are not changes in the model assumptions that were tested econometrically and eventually drive the model behaviour. Rather, they represent “what if” policy changes that are imputed into the existing model structure (see footnote 19).
counterparts, and in this scenario are assumed to set their environmental targets pre-conditioned on the primary strategy of building the productive and urban infrastructure to facilitate social and economic development. In addition, it is contemplated that an increasing amount of resources will be required for climate adaptation. Considering that joining a global mitigation strategy is favourable for all economies, the model simulation assumes a moderate increase of support from the most industrialized partners, in the form of transfers of technology and aid. Knowing that the experience of “technology transfers” is so far disappointing (apparent during the Covid-19 pandemic), this support is assumed to be marginal but increasing over time. Thus, most of the contribution of the global South to a greener development will result from the ecological-agrarian transformation and the avoidance or minimal use of fossil fuel machinery and fertilizers, together with the emphasis on local production for the satisfaction of basic needs.

3. Scenarios compared: climate catastrophe or climate change?

The hands-off scenario extrapolates from the structural patterns of production, demand, efficiency and degrees of diversification in global energy and primary commodities. Projections are based on a historical analysis of a reference database (UNSD, 2021) coupled with parameters of fossil-fuel content.

We use the observed historical patterns (1970 to 2020) to estimate the relations among the main environmental variables, the economic, technological and financial conditions and the policies. Coherently with the discussion in section III.B.5, despite several decades of debates, commitments and pronouncements, the data show little progress.

Thus, assuming no meaningful change of policy direction through 2030, the outcomes of the hands-off scenario show that instead of decreasing, annual global carbon production is set to increase 16.5 per cent by the end of the decade, from about 17 billion (of “ton-equivalent”) at present to about 20 billion. The carbon mix is such that the annual flow of CO2 emissions will easily surpass 41 billion tons (from about 35 billion at present). An estimated increase of non-carbon energy production from the current 2.5 billion (of ton-equivalent) to 3.2 billion is not going to have a meaningful mitigation effect.

Figure 3.15 compares the main environmental variables in the two scenarios. Let us be clear: the outcomes of the South-led way imply extraordinary policy measures that ought to be undertaken, with due differences, by all countries and sustained over time. But extraordinary as they seem for the world as a whole, our simulation is based on actual, albeit exceptional, experience: observed periods of time, sufficiently long, when there were noticeable advances in our key indicators. In practice, developed economies will show annual improvements of 6 per cent per year by reducing energy content (and especially carbon) for any increase in unit of output (GDP), while developing economies (in the aggregate) are expected to gain efficiency by 4 per cent per year.

As discussed in more detail below, these energy efficiency gains are still compatible with moderately faster growth of GDP than in the baseline hands-off scenario and with sustained rates of employment. However, to ensure a significant stabilization of energy production as economies in the South progress, developed economies will experience a degree of growth moderation (Galbraith, 2014).

Efforts in terms of energy diversification include two aspects. On the one hand, all economies invest to diversify production and use. The effort of industrialized nations is larger, but everywhere the extent is comparable to a war-time military build-up. Inevitably, this implies a large involvement of the public sector, as prices, subsidies and tax incentives alone have proven inadequate to generate the needed private investment. In the design of the scenario, carbon taxes and other similar measures are fully recycled in the public budget to support climate mitigation and adaptation policies, so that the ultimate fiscal balance effect is neutral.

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21 Offering a comparable analysis of primary commodity extractions, environmental degradation, atmospheric pollution (directly or indirectly through technology) and so on would require a significantly more ambitious global model; therefore, the scenario design does not include sector-specific assumptions about primary commodities in one scenario or the other.
Figure 3.15 Global environmental outcomes in two simulated scenarios, 1990–2030 (billion tons)

A. Total energy production

B. Carbon energy production

C. Non-carbon energy production

D. Exports of energy

E. CO2 emissions

F. Cumulative CO2 emissions

Source: UNCTAD secretariat calculations based on United Nations Global Policy Model
On the other hand, international coordination is required to support development strategies in the global South. In fact, for all the reasons given above, developing economies can only commit to a slower pace of diversification. Notably, as the global economic structure of production will still rely on carbon for some time, fossil-fuel exporting economies on the lower-income scale are granted greater quotas to supply global markets than the wealthier exporters. Moreover, financial and technology transfers from industrialized economies to the South, even if moderate initially, need to be part of the policy mix. These coordinated measures are deemed to be more effective mechanisms than unilateral green-shoring or “friend-shoring” measures, in so far as they include clear and transparent conditionalities, such as measures for a slow decline in global prices (topped by carbon-taxes imposed by each economy to help sustain environmental policies) and diversification away from their most polluting sources.

With a coordinated push of this kind, we estimate the flow of CO2 emissions to decline to about 30 billion tons by the end of the decade, enough to escape from catastrophic IPCC scenarios.

4. Scenarios compared: trade, finance and macroeconomic stability

Section III.B.3 highlights the combination of threats to macroeconomic and financial stability faced by developing economies, subject to structural balance of payments constraints.

As noted earlier, our modelling strategy was to rule out the case of a full-blown financial crisis, whose specific triggers and spillovers cannot be reliably anticipated. That implies assuming away any systemic shock to debt roll-over risk. On that assumption, the policy set up of the hands-off scenario delivers slow GDP growth (as explained in more detail below) and even slower fiscal revenues growth. At the same time, governments will face increasing spending claims for climate adaptation, development and debt repayment. Global trade growth will continue to be inadequate; therefore, net export revenues, especially of economies with low degrees of diversification, will be insufficient to maintain exchange rate stability. Volatile currencies tend to be the main factor driving inflationary pressures and food crises. The usual policy recommendation of cutting domestic wages and demand will, under these conditions, make matters worse.

Thus, government debt ratios will likely increase by about 30 per cent in Africa and 60 per cent in Latin America and the Caribbean (regional aggregates). Increases in debt-to-GDP ratios of nearly 30 per cent can be estimated for Western and Central Asia (taken as a whole) and for South and East Asia (as a whole, excluding China), though parting from lower levels. Needless to say, if we remove the assumption about roll-over risk, and place these debt overhangs back into the real world of finance, the situation could become unsustainable more quickly and if not addressed appropriately would eventually solve itself in the most disruptive way. But, under the current scenario, an appropriate and sustainable domestic and external debt restructuring is not conceivable. In fact, it would require abandoning the very policy set-up that defines it: unfettered liberalization of global capital and trade flows in the South, coupled with selective protectionism in the North.

In contrast, the South-led way assumes a series of new macro-financial and trade deals, following the map of existing regional and subregional agreements (detailed in chapter IV of this Report). Hence, the main accords are established by developing countries within their geographical regions. They are designed to sustain a pace of industrialization compatible with the development of their agrarian sector. Therefore, they are consistent with: (I) the provision of wage-goods (especially food and energy), (II) the achievement of overall productivity gains and (III) overall increases of employment. This is an important point, as unchecked development processes can trigger destabilizing influences between the two sectors with ultimately self-defeating consequences.

In this scenario, economies grow sufficiently to increase the imports from the regional partners, especially in the manufacturing and agricultural sectors but without reducing imports from elsewhere (to avoid protectionist retaliations from other partners). The ensuing global increase of imports implies that, domestically, import growth matches the growth of exports.
These are all dynamics that have been empirically observed through time. But the historical assessment of regional South-South agreements also indicates that such processes are often derailed when economies encounter external shocks due to movements of prices, exchange rates, international interest rates and capital flows. Hence, the importance of the financial part of the agreements in this scenario.

For the regional accords to succeed, they have to include mechanisms that facilitate transactions in domestic currencies or in financial vehicles that can be supported on stable exchange rates. More specifically, in a context of increasing South-South trade, establishing clearing unions between the signatories of a trade deal can reduce exchange rate instability and external imbalances to the extent that economies with a trade surplus can only use it to import goods in the currency of the deficit partner. We also envisage implementation of some degree of capital controls to reduce dependency on external finance, as this tends to increase the vulnerabilities of developing economies with no palpable benefit for economic development.

Finally, next to cooperation on trade and finance between developing economies, the scenario contemplates some involvement, even if more moderate, by the more industrialized economies. Again, this element of the scenario is extrapolated from observed, if ephemeral, examples of cooperation. Thus, depending on the strength of the pre-existing links, some developing countries will seek agreements with the more industrialized economies of North America, Europe, China or Japan. The qualitative difference from the past lies in the character of trade, which here aims at promoting industrialization, food security, financial stability, employment and the achievement of climate targets in the South, but brings benefits to the industrialized economies as well, such as improved financial stability and a predictable path of growth of imports.

The main results of the regional accords are captured in figures 3.16, 3.17, and 3.18. Figure 3.16 shows trade shares in manufacturing exports of developing economies within the regional agreements, comparing the South-led way scenario with the hands-off baseline. Panels A and B shows the shares of exports of developing economies in each region relative to the total imports of the same group. Panel C shows the same measurement (exports on total imports of partner), but where the trading partner is the aggregate of the more industrialized economies involved in the regional accord. In all these cases, the scenario yields tangible gains in terms of the trade of developing economies, as well as moderate improvements in their access to the markets of industrialized partners. Worthy of notice is the fact that the degree of the advances in regional trade is partially related to the strength of the point of departure. Performance improvements in the manufacturing industries take time (investment, capacity, development of networks etc.) and tend to proceed along with improvements in external financial conditions and exchange rate stability.

The model scenario incorporates the existence of regional stabilization funds which the economies use to target regional improvements in the net external asset position. The regional scope of the objectives frees single countries of the need to maintain an aggregate equilibrium in their balance of payments, which too often results in pressure to reduce the cost of labour and internal demand, to reduce imports.

As long as the targets are consistent with the position of the group in the global context, this mechanism should facilitate adjustments of intra-regional imbalances that avoid a mutually defeating race to the bottom and help maintain inter-regional buffers. It combines a series of actions, conducted in a collective and coordinated way: export promotion (which increases the flow of external revenues); import moderation (which does not imply restrictions on initial conditions, as exports tend to increase thanks to regional market access); exchange rate stability (thanks to the clearing unions); negotiations conducted by the region to reduce debt services (regions tend to enjoy greater leverage than individual economies); and capital control management to limit excessive financialization.
Figure 3.16 Shares or manufacturing exports by developing economies linked with trade accords

Developing countries' share of developing countries' intra-regional imports

A. Between developing economies

B. Between developing economies

C. Developing countries' share of industrialized partners' imports

Source: UNCTAD secretariat calculations based on United Nations Global Policy Model

Results are presented for the aggregates of the four groups of developing economies in figure 3.17. As the figure shows, debtor groups slowly reduce the weight of their net liability positions, while net creditor groups reduce the relatively high accumulation of external assets. More granular data show that in all cases (reductions of net liability or of net assets), de-financialization (decreases of both external assets and liabilities) is the norm.
The management of exchange rates is modelled in a way similar to the modelling of external positions. Regional, not country-level, targets are proposed, and these are achieved subject to the constraints derived from trade, as well as the pressures on the balance of payments derived from accumulation of assets and liabilities. The results are presented in figure 3.18.

Panel A measures the “gain” of the aggregate exchange rate of the developing economies of each region relative to the hands-off baseline. The gain is calculated by measuring for each scenario the gap between the nominal dollar exchange rate appreciation of the group of developing countries of each region and the exchange rate appreciation of the group of industrialized economies partners in the same region. Developing countries tend to experience considerable depreciations of their currencies, as is the case for the ‘hands-off’ scenario, because of unrelenting balance of payments constraints. The mechanisms set out in the South-led way scenario reverse that tendency and therefore the gap with the exchange rate of industrialized partners is less negative. Hence, this yields a positive gain (in some cases, the currency still depreciates, but it is still less than in the baseline).

Source: UNCTAD secretariat calculations based on United Nations Global Policy Model
The model results confirm initial intuitions: groups of developing economies in net liability positions (Africa and Latin America) tend to be initially more vulnerable to global finance and therefore more prone to exchange rate devaluations. Policies to reduce net liability positions of the region (discussed around figure 3.17) and to stabilize exchange rates are generally more dramatic in order to achieve desired targets; thus, their improvements over the baseline (gains) are stronger. The case of developing countries in the Western and Central Asia region is likely influenced by the process of climate change mitigation, discussed around figure 3.15. Exchange rate improvements in this case respond to oil and commodity prices and the commitment to offer greater advances in the transformation of the productive structure away from fossil-fuels, which tends to be more import-reliant and could not be afforded at the required pace in the absence of exchange management measures. Meanwhile, the pattern of exchange rates in developing economies of South and East Asia seems to be stable over the mid-term.

Figure 3.18 Exchange rate and inflation gains, developing regions, 2020–2030

Panel B shows the same concept of gains for inflation rates, but in this case, improvements are shown as negative values. The gaps calculated in both scenarios measure the difference between the estimated inflation rate of the group of developing economies in each region and the estimated inflation rate of the group of industrialized partners in the same region. If the inflation rate of developing countries in the South-led scenario falls faster than in the hands-off baseline relative to the fall experienced by the industrialized partners, the gain shows as a negative number. The scenario yields, for all groups of developing countries, significant improvements in this sense (more “negative” gains), except for South and East Asia, as this region is broadly stable over the simulation period.

This is a very relevant result, confirming the observations made in the previous sections of this chapter about the transmission from exchange rates to inflation rates for most developing economies. Along with improvements in exchange rates (panel A), there are concomitant improvements in lowering inflation rates (panel B).

Note that Saudi Arabia, part of this group, pegs its currency to the dollar.
5. Scenarios compared: economic growth and correction of global imbalances

In the hands-off scenario, structural problems are assumed to continue unresolved through the mid-term. Developed economies, driven by a fiscal austerity bias, excessive reliance on monetary policy, growing inequalities, weak investment and an unviable climate agenda, will show weak growth performance and low rates of employment and will also be subject to instances of financial stress in the wake of unsustainable processes. Developing economies in this scenario will be affected by a similar combination of shortcomings, amplified by the transmission effects to which “balance of payments constrained” economies are subject: trade imbalances, de-industrialization, financial instability and debt overhang. In some instances, these economies will maintain respectable growth numbers for some time, but pre-conditioned on rising indebtedness, excessive reliance on commodity extraction, low productivity and poor employment conditions.

Fossil-fuel and mineral extracting developing economies, as well as some developed economies that have outperformed the rest through combinations of export capabilities and domestic saving biases, will attempt to maintain growth by relying on external demand. Unlike the episodes of global imbalances in the past, this time around, the risks will be higher because the rest of the world, including some major advanced economies, faces balance sheet stresses in both public and private sectors, and asset valuations are dangerously high. Overall, economic growth will disappoint.

Alternatively, a South-led growth strategy focused on decent employment, investment for industrialization and a sufficient provision of social and infrastructure support by the state thus seems more compelling. But constraints from both environmental threats and financial vulnerabilities that have been tightening over time cannot be ignored. The simulation strategy for this scenario is that of proposing stimuli to growth that are known to be effective, like the promotion of income and employment measures that help reverse the declining trends of wage shares, public spending in social provision and infrastructure consistent with the promotion of investment, especially in shifting away from environmental degradation, and credit provision directly linked to employment and technological advances. At the same time, financial and natural resource constraints are incorporated into the estimation of the growth possibilities. What also enters into the calculations is the need to correct current account imbalances and repair the asymmetries of economic development between nations.

The growth performance of the two scenarios is shown in figure 3.19. Four graphs capture the patterns of the Southern regional groups in the aggregate (as weighted average of the economies involved). To (merely) approach the SDGs by 2030 and escape from vicious circles of insufficient income, sluggish demand, financial vulnerability, de-industrialization and poverty, their growth rates will be tangibly higher in the South-led way than in the hands-off baseline.

Meanwhile, counterpart industrialized economies grouped in the remaining four sets will achieve more moderate increases in their growth rates. In the GPM estimations, stronger growth of these economies will trigger greater risks of heightened financial vulnerabilities. The South-led scenario does not contemplate a full rewinding of the highly leveraged global financial system or a full curtailment of global monopolies, while the patterns in the historical data suggest faster growth in the developed economies tends to be accompanied by, if not premised on, a deeper and more hazardous degree of financialization. Likewise, given the targets of de-carbonization, the timescales required to revamp the global production matrix and the achievements that are feasible on energy efficiency per unit of output, it is clear that a faster rate of global growth will not be compatible with the parameters of sustainability deemed by the scientific community. Thus, growth performance will be satisfactorily higher than in the baseline but will be tempered by the forces of nature and by the macro-financial limits inherited after decades of neoliberal policies.

23 In the GPM exercise a few industrialized economies (such as China and Europe) are part of more than one regional accord with developing economies. But for global consistency, in figure 3.19 and ff. they are included only once.
The layout of current account balances for the two scenarios is shown in figure 3.20, according to the same groupings. The chosen aggregations do not highlight the most extreme country-specific cases, like the large surpluses of Germany (merged in the European Union group), of Japan and the Republic of Korea (in the Developed Pacific and United Kingdom group), or the case of India (a large deficit case), which is merged with economies of East Asia that have historically exhibited large surpluses. Yet the presentation is sufficiently illustrative to draw two lessons. First, due to growing financial vulnerabilities of a still highly leveraged global economy, macro-financial imbalances at present are generally more contained than they were in the past two decades. Exceptions include the case of Europe, which as a whole is tending to become a large surplus area (in the past, large surpluses in Germany were...
combined with deficits in the other European Union economies). Another exception is Africa, which was in structural deficit for several decades; it shifted to high surpluses during the commodity super-cycle of the early 2000s but again showed very large deficits post-GFC.

The second observation is the contrast between the hands-off baseline and the South-led scenario, as in the latter, imbalances will be contained or significantly reduced relative to the baseline. Europe will likely reach surpluses of about 5 per cent of GDP by the end of the simulation period in the baseline, but the surplus will shrink in the South-led scenario. Other cases of relevant surplus correction include Japan (from 5 per cent of GDP in the baseline to 1.2 per cent of GDP in the alternative scenario) and the Republic of Korea (from 4.3 per cent to 0.8 per cent of GDP).

**Figure 3.20** Current account balance scenarios, selected country groups, 1990–2030 (percentage of GDP)

*Source: UNCTAD secretariat calculations based on United Nations Global Policy Model.*
In the South-led scenario, Africa as a whole will manage to revert to external balance, in contrast to the otherwise large structural deficits of nearly 5 per cent of GDP in the baseline. The South-led scenario will also yield meaningful reductions of external deficits in North America (the United States alone will reduce the deficit from 4 per cent of the baseline to 2.7 per cent in the alternative scenario) and in India (the deficit will be reduced from about 4 per cent in the baseline to 1.2 per cent in the South-led scenario).

As indicated above, the South-led scenario sets three mechanisms in motion to correct global imbalances. First, trade regionalization with a focus on industrialization in the South, accompanied by the mentioned regional currency mechanisms, has a direct effect on deficit reduction in developing economies. Second, the measures towards de-financialization, regulation and capital controls work in the same direction, especially helping developing economies. Third, the policy principle applied along the simulation is that imbalances can be corrected more effectively by setting spending targets for surplus economies than by making deflationary adjustments in deficit economies.

6. Scenarios compared: employment, distribution and the role of the State

The hands-off baseline assumes a continuum of stop-go policies to tame inflation by shocking demand, containing employment and curbing real wage income. Together with the fiscal austerity bias and the inclination to expect demand and activity to emerge from unfettered trade and financial liberalization, the simulation indicates that the global employment rate will stagnate for the rest of the decade, remaining at the low rate of 57 per cent. The distance from the averages of 62.1, 60.4, and 58.4 of the 1990s, the 2000s and the 2010s, respectively, is significant, all the more because of the global projected increase in the percentage of the elderly population, from 9.6 at present to nearly 12 per cent by 2030; importantly, their incomes will depend on a diminishing proportion of those employed. The global employment conditions, together with the increasingly concentrated structure of global production and markup pricing, will cause a fall in the labour income share from about 53.8 per cent at present to circa 52 per cent by 2030. This, apart from being socially explosive, implies a mix of global deflationary pressures, debt overhang and constraints to policy space.

By way of an alternative, the South-led route assumes a greater involvement of the public sector everywhere, which by not being geared to short-term profit gains is best positioned to privilege employment creation where this is lacking, adopt wage-income policies where welfare and domestic demand are unsatisfactory and adopt supply-side inducements to lift bottlenecks in production, trade, trade-finance and credit where supply-driven inflation bites. The global employment rate in this scenario could rebound to nearly 60 per cent. This is not extraordinary; it would be close to what was achieved by 2007 but instead of arriving on the back of a global financial bubble, it will be on the back of an environmentally sustainable, state-led investment push which would crowd-in the private sector.

As indicated in figure 3.21, the employment outcomes of the baseline for developing groups are disappointingly low. They are on a declining slope for Africa and Western and Central Asia, not unrelated to the fact that most of these economies are heavily dependent on primary commodities and energy extraction, known to be poor employment generators. In the other two groups of developing economies there is a perceptible rise, but after the sharp downturn of the past few years. Hence, the benefit of the South-led scenario; by being centred on industrialization and counting on the support of the state, it would prove more effective at reversing the trend and promoting employment. For the more industrialized economies, the gains in employment rates are meaningful but less striking, partly because of the moderation of economic growth in these economies and partly because the patterns in the historical data suggest a slower response of employment to economic recoveries from recessionary episodes (“jobless recoveries”).
As the case of employment creation, figure 3.22 highlights both the need to overturn the estimated sharp decline of wage shares in the hands-off baseline and the effectiveness of an alternative strategy based on industrialization, public sector support, financial stability and a transformation of the productive matrix away from fossil fuels. Especially in developing economies, wage shares are strikingly low, and this implies profit shares are strikingly high. A South-led way offers considerable room for improvement, yet these economies will still remain at some distance from the patterns of distribution in the 1990s, as well as from those observed in the more industrialized economies.
Figure 3.22 Labour income share scenarios, 2020–2030, selected country groups
(percentage of GDP)

Source: UNCTAD secretariat calculations based on United Nations Global Policy Model
D. CONCLUSION

This chapter outlines a strategy for South-led industrialization and coordination aimed at avoiding environmental meltdown and promoting employment generation globally, while rebalancing income distribution and favouring development through a sustainable path. In this strategy, trade, finance, credit and macroeconomic policies are coordinated and instrumental to the overarching goals of employment generation (especially in the North) and green industrial development (especially in the South). This is in contrast with the reality of increasing compartmentalization between key policy areas, with fiscal policy, monetary policy and trade policy all aimed at different objectives and with a systematic under-estimation of their regressive impact on income distribution and welfare (Wolf, 2022).

Results indicate that changing the course of the global economy towards a fairer and more sustainable future will take time. We project growth to reach 2.3 per cent and 5.4 per cent by 2030, respectively, in developed and developing economies. Thanks to the concatenation of industrialization and agrarian development goals in the scenario presented above, we also project that an additional 530 million jobs will be created globally, while with the current patterns and no policy change, the estimated increase will be 330 million jobs. The focus on employment and the technical progress triggered by trade and specialization in the South-led strategy would contribute to sustain increases in the share of labour income across all economies, yielding gains of 1.7 and 2.6 points relative to the baseline, in developed and developing economies respectively. Most importantly, the policy changes we explore will liberate much needed policy space for developing countries and allow a successful energy transition.

The burning question concerns the political will. The experience of the last four decades does not give much room for hope. Worse still, the accumulation of policy failures during the period have eroded the initial conditions for a sustained and equitable recovery so much that even with the best of policy efforts, the results are not likely to be sufficient to avert systemic economic, social and environmental failure. But a window of opportunity is opened, and while the room for the global South to take a leading role in changing the scenario – by leveraging its weight across key regions – exists, the responsibility (and resources) for moving in the right direction still rests with the advanced economies.

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