



**Bridging the
North-South Divide:**
A Shared Responsibility
for Economic and
Ecological Justice

With the scientific contribution of

Deloitte.

Executive Summary

The financial debt of developing countries and the ecological debt of industrialized nations are deeply interconnected—both resulting from and reinforcing a global imbalance that falls hardest on the Global South. Since 2010, public debt in developing nations (excluding China) surged by 133%, surpassing \$15 trillion in 2024. Rising interest rates post-COVID-19 significantly increased borrowing costs, with debt service payments reaching the highest level in two decades. This pressure overwhelms many governments in those countries, crowding out the resources they need for essential social investments and for climate-adaptation measures that are vital to their citizens' safety and prosperity. Against this backdrop, 3.3 billion people live in countries that allocate more to interest payments than to either education or health, while a staggering 47 emerging economies cannot invest in climate adaptation without risking sovereign default.

At the same time, industrialized nations carry a significant ecological debt, reflecting their historical contribution to global greenhouse gas emissions and natural resource exploitation, a continuing trend as they keep on consuming far more resources than developing nations. As of 2024, high-

income countries use six times more resources while generating 10 times the climate impact of low-income ones in terms of biodiversity loss, air pollution, soil erosion, and water stress.

There is growing awareness among industrialized nations of their ecological debt and the need to address global imbalances, reflected in recent climate finance commitments. Yet these efforts still fall short, while the surging demand for critical raw materials—driven by digital and green transitions— risks deepening the Global South's dependency on their exports and worsening local environmental harm. Evidence shows that the burdens of resource extraction, ecosystem degradation, and pollution disproportionately affect communities least equipped to respond, as all the 20 most climate-vulnerable countries are classified as developing economies.

Without shared responsibility and coordinated global action, these interconnected emergencies risk widening existing disparities, entrenching cycles of economic crisis, and environmental degradation.

Introduction

The financial debt of developing nations and the ecological debt of industrialized countries are inextricably intertwined, both stemming from and perpetuating the global imbalance that disproportionately burdens developing countries^a. Both financial and ecological debt constrain social and economic progress, and weigh heavily upon the most vulnerable populations, particularly in the Global South. Addressing one without accounting for the other risks exacerbating global inequalities and undermining efforts toward the universal right of human dignity.



Financial debt

Since 2010, public debt of developing countries (excluding China) has grown by 133%, exceeding \$15 trillion in 2024. Concurrently, their debt-to-GDP ratio has surged from 39% to 56%¹.

In the wake of rising interest rates following the COVID-19 pandemic, borrowing costs for low- and middle-income countries^b have significantly surged: rates on loans from official creditors increased by 2.1 percentage points to an average of 4% in 2023, and those on loans from private creditors increased by 1.4 percentage points to 6%². In 2023, developing countries (excluding China) spent a total of \$971 billion servicing their foreign debt—the highest level in 20 years³. Consequently, 3.3 billion people live in countries that allocate more to debt service than to healthcare, while 2.1 billion reside in countries that spend more on debt service than on education⁴. The rising cost of capital, coupled with low credit ratings, forces many countries to choose between repaying their debt or investing in social and environmental programs. The allocation of Special Drawing Rights (SDR) by the IMF^c, particularly in the

wake of COVID-19, further illustrates the difficulties faced by developing countries in servicing their debt. Following the latest SDRs General Allocation in 2021^d, total SDRs Holdings^e in developed countries was around 216% that of developing countries, and increased to over 240% as of December 2024, despite poorer nations requiring more substantial support to manage their economic and health crises. This skewed allocation exacerbates the financial vulnerabilities of low-income countries, limiting their capacity to respond effectively to economic downturns.

While 47 emerging economies cannot invest in climate adaptation without risking sovereign default⁵, as many as 34 African countries will require significant debt relief to align with United Nations 2030 Sustainable Development Goals and Paris Agreement targets⁶. This situation is compounded by the disproportionate impact of climate change on developing countries, which are often more vulnerable to extreme weather events such as droughts, floods, and hurricanes. Lacking sufficient resources for climate adaptation, these nations endure more



severe economic and social damage, further limiting their capacity to invest in resilience and recovery.

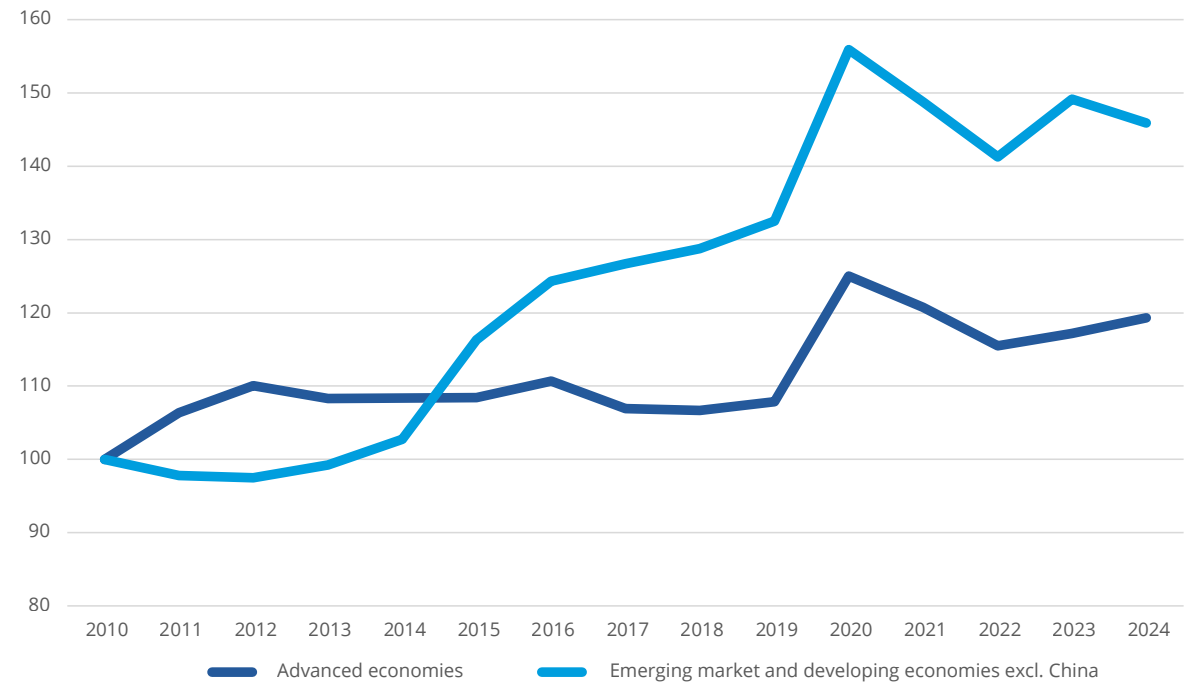
Burdened by mounting short-term debt obligations and constrained by limited maneuverability, developing countries commonly resort to intensive exploitation of their endowments of natural resources and raw materials. This reliance not only accelerates environmental degradation but also entrenches their dependence on commodity exports, hindering long-term economic diversification and sustainable development^f.

This cycle of unsustainable debt perpetuates economic dependency and prevents the least developed countries from forging independent paths towards prosperity. Currently, 28 developing economies – home to 16% of the global population – are caught in a debt trap, with 11 already defaulting since 2020 due to severe fiscal distress⁷. At the same time, inequality remains high in developing countries. In fact, 48 out of 49 high-inequality countries⁹ are

developing ones, potentially impacting their capacities for revenue collection as well⁸. The evolving geopolitical landscape further compounds default risks, as military conflicts, emerging trade disputes and rising tariffs threaten to intensify the financial strain on the most vulnerable economies⁹.

These factors, alongside shifts in global power leading to protectionism and the restructuring of supply chains, create volatile investment climates and unpredictable economic policies. Additionally, restrictions on market access and supply chains' reorganization, influenced by geopolitical tensions, severely disrupt the economies of developing nations, complicating their efforts to manage the debt burden. The race for technological supremacy further challenges these countries, as they struggle to adapt to a digital economy predominantly shaped by corporations based in the Global North, exacerbating their economic sovereignty and financial strains.

Figure 1: Government Gross Debt as a Share of GDP¹ (Index 2010-2024, 2010=100)



Ecological debt

While developing countries may carry a financial debt to wealthier nations, advanced economies hold a significant ecological debt. Climate change, resource exploitation, environmental degradation, biodiversity loss, and water stress have been disproportionately burdening the Global South, despite its marginal role in causing these issues. In 2023 alone, over 20 million displacements were weather-related¹⁰, of which more than 70% occurred in developing countries (excluding China)^h, and it is estimated that as many as 216 million people could be climate migrants by 2050¹¹.

Within the broader concept of ecological debt, climate debt has gained particular prominence. It represents the historical and ongoing responsibility of high-income countries for the majority of greenhouse gas (GHG) emissions that have driven climate change. Today, high-income countries' GHG emissions per capita are four times higher than lower-middle and low-income countries¹².

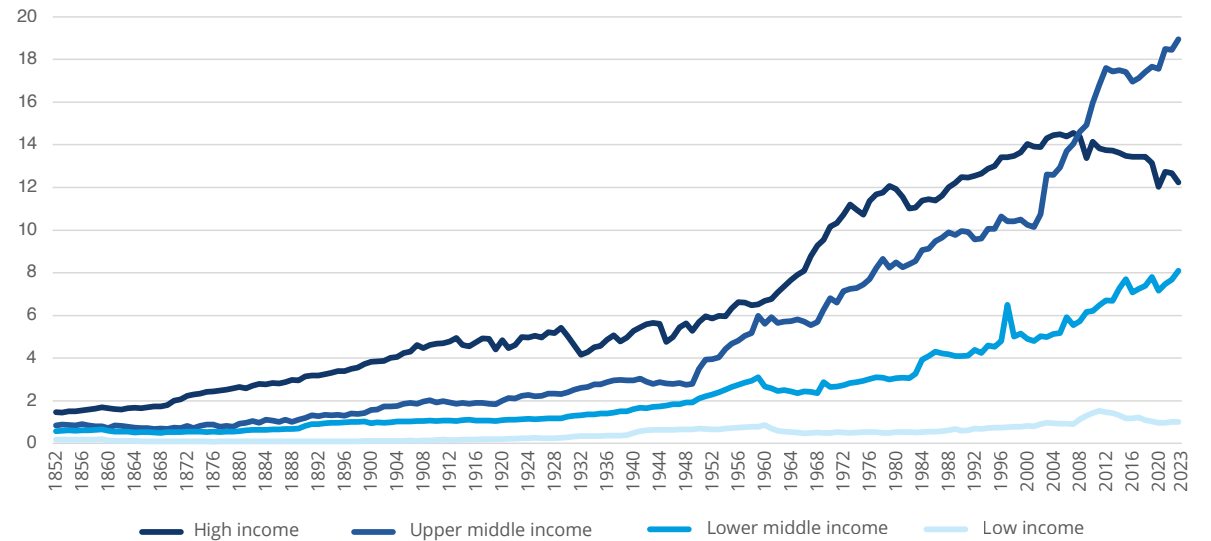
High-income and upper-middle-income countries respectively represent 46%

and 35% of cumulative CO₂ emissions – which account globally for 70% of total GHG ones – between 1850 and 2023¹³. The sum of CO₂ emission damages has been estimated to reach \$139 trillion by 2035¹⁴. The disproportionate impact of these emissions is demonstrated by the fact that the 20 most vulnerable countries to climate crises are all classified as Developing Countries¹⁵, stressing the need for enhanced climate justice effortsⁱ. To this end, developed countries mobilized \$115.9 billion in climate finance for developing countries in 2022. However, less than 10% of this amount was allocated to low-income countries, compared to 40% to lower-middle-income countriesⁱ, underscoring persistent disparities in resource distribution. The latest United Nations Climate Change Conference (COP29), held in Baku in November 2024, ended with the adoption of a new collective goal on climate finance: developed countries committed to mobilizing at least 300 billion dollars annually by 2035 to support developing nations in addressing climate change¹⁶. It represents a tripling of the previous goal of \$100 billion annually, though, if inflation

and rising costs are included, it falls short on ambition. Many representatives from vulnerable countries stressed that the figure is still inadequate to meet the

actual needs and criticized the lack of progress on reducing GHG emissions and phasing out fossil fuels, which have been postponed to future conferences.

Figure 2: Annual CO₂ Emissions in Billion Tonnes¹³

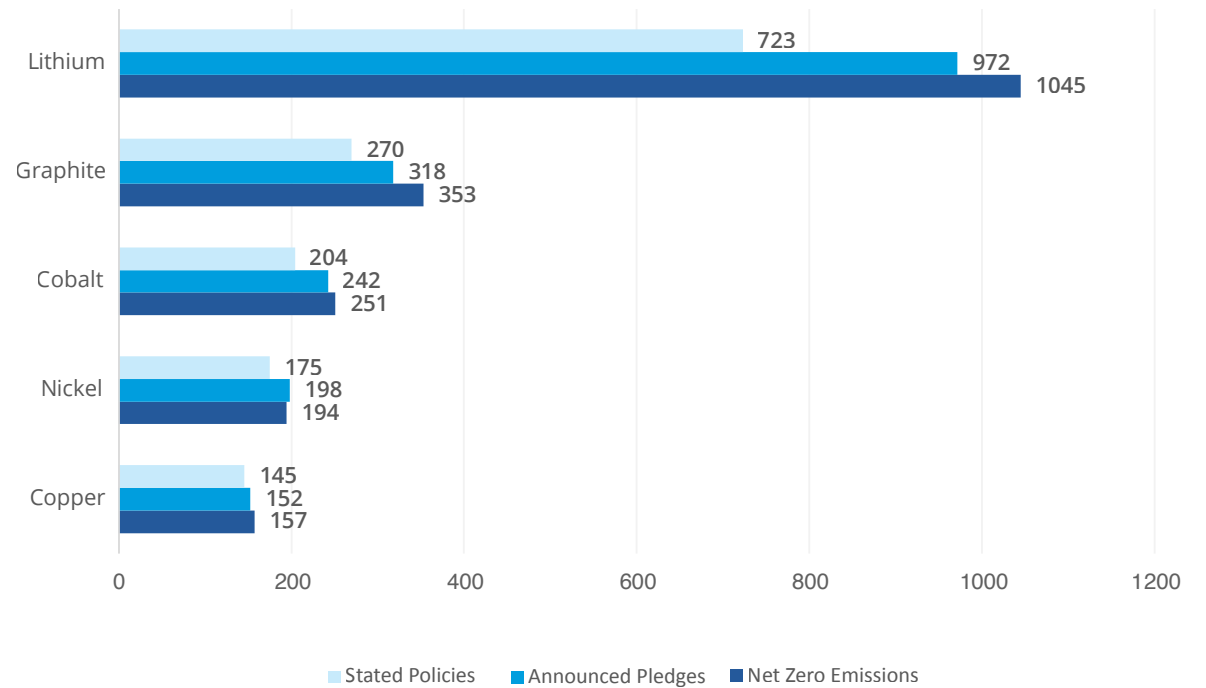


Ecological debt also reflects the historical imbalance in the consumption of natural resources. Wealthier nations have been extracting critical materials from less developed countries for centuries, often without fair compensation. This ongoing exploitation fuels technological and economic progress in the Global North while reinforcing economic dependence in the Global South. This situation is exacerbated by global geopolitical strategies, such as international trade agreements and military engagements, which directly influence environmental policies and exacerbate the ecological debt.

In 2020, the annual global extraction of materials reached 95 billion tonnes, with preliminary estimates suggesting it may exceed 106 billion tonnes in 2024, growing at an average annual rate of 2.3%. In this context, high-income countries use six times more resources while generating 10 times the climate impact of low-income ones in terms of biodiversity loss, air pollution, soil erosion, and water stress¹⁷. High-income nations, representing only 16% of the world's population, are responsible for 74% of global excess material use – such as fossil fuels, metals, minerals and biomass¹⁸.

Moreover, the digital and green transitions are driving unprecedented demand for critical raw materials essential for manufacturing semiconductors and clean energy solutions¹⁹. The global semiconductor industry, valued at \$627 billion in 2024, is expected to reach \$1 trillion by 2030²⁰, and the global market of the top six mass-manufactured clean energy technologies - solar PV, wind turbines, electric cars, batteries, electrolyzers and heat pumps – is predicted to grow from \$700 billion in 2023 to over \$2 trillion in 2035²¹. As a consequence, the demand for key energy transition minerals is expected to grow with a significant CAGR₂₀₂₃₋₂₀₃₀: lithium at 16%, graphite at 11%, cobalt at 6%, nickel at 5%, and copper at 3%. Additionally, demand for lithium is forecasted to increase sixfold by 2050¹⁹. The current strategy to achieve climate neutrality by 2050, to “boost the economy through green technology, create sustainable industry and transport, and cut pollution”, requires a massive upsurge in the scale of extraction. This growing need for critical materials further amplifies the ecological debt that industrialized nations owe to developing ones, as the burdens of resource extraction, ecosystem degradation and pollution disproportionately fall on communities with the least capacity to bear them²².

Figure 3: Key Energy Transition Minerals: Projected 2050 Demand in 3 Scenarios¹⁹
(Index, 2023=100)



While acknowledging the considerable potential of Global South countries to harness their mineral wealth as a catalyst for economic development and social progress, the current limitations in manufacturing capabilities for key renewable energy technologies represent a challenge. As a result, their economies are often over-dependent on natural resource exports. Between 2019 and 2021, 67% of developing nations were commodity-dependent, in contrast to only 12% of developed ones²³. Data show that commodity dependence hinders human capital development²⁴: in 2021, 29 in 32 low-performing countries in Human Development Index scores^m were commodity dependent, with commodities accounting for 82% of their exports²⁵.

Beyond its social implications, an overreliance on raw material exports also carries significant environmental consequences¹⁸. Driven by consumption in developed economies, excessive resource exploitation in developing ones accelerates ecosystem degradation, with 90% of land-based biodiversity loss and water stress linked to resource's extraction

and initial processing¹⁸. According to the International Institute for Environment and Development, "developed countries are the largest net importers of embodied biodiversity loss, associated with commodities coming from developing countries"²⁶. Additionally, 21 of the world's 37 largest aquifers are depleting faster than they can recharge²⁷, and over 2 billion people live in countries experiencing water stress²⁸. Despite recording a significant reduction in per capita water withdrawal (-24%), high-income countries still consume 2.6 times more water per capita than low-income nations¹⁸.

As financial and ecological debts remain increasingly intertwined, the Global South faces the dual burden of servicing external debt while bearing the brunt of climate change and resource exploitation, amid the challenging geopolitical and economic scenario. Without coordinated global action that addresses these interconnected emergencies, there is a growing risk that existing disparities will widen further, entrenching cycles of economic crisis and environmental degradation.



Endnotes

- a. The developing economies broadly comprise Africa, Latin America and the Caribbean, Asia without Israel, Japan, and the Republic of Korea, and Oceania without Australia and New Zealand. The developed economies broadly comprise Northern America and Europe, Israel, Japan, the Republic of Korea, Australia, and New Zealand (UNCTAD, 2025 [Link](#)). The IMF groups developed economies as “advanced economies” and developing economies as “emerging markets and developing economies” (IMF, 2023 [Link](#))
- b. The World Bank Group assigns the world’s economies to four income groups: low, lower-middle, upper-middle, and high. The classifications are updated each year on July 1, based on the GNI per capita of the previous calendar year (World Bank, 2024-2025 [Link](#))
- c. The SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries’ official reserves. To date, a total of SDR 660.7 billion (equivalent to about US\$943 billion) have been allocated. This includes the largest-ever allocation of about SDR 456 billion approved on August 2, 2021 (effective on August 23, 2021). This most recent allocation was to address the long-term global need for reserves, and help countries cope with the impact of the COVID-19 pandemic. The value of the SDR is based on a basket of five currencies—the U.S. dollar, the euro, the Chinese renminbi, the Japanese yen, and the British pound sterling (IMF, 2025 [Link](#))
- d. Under the IMF’s Articles of Agreement, new SDRs are allocated to all participating member countries in proportion to their IMF quotas. A country’s quota, which reflects its relative position in the global economy and determines its financial contribution as well as its voting power in the IMF, thus directly sets its share of any new SDR allocation (IMF, 2025 [Link](#))
- e. SDRs Holdings reflect a country’s residual stock of SDRs in a given year.
- f. Countries are considered to be commodity dependent if more than 60 per cent of their merchandise export value comes from commodities (UNCTAD, 2023 [Link](#))
- g. High-inequality countries are those with an income and/or consumption Gini coefficient greater than 40. The Gini coefficient measures the inequality among the values of a frequency distribution, such as income or consumption levels, and varies between 0 and 100, with 0 representing perfect equality and 100 perfect inequality (World Bank, 2024 [Link](#))
- h. Including China, over 95% of weather-related displacements were in developing countries. Computed by Deloitte on IDMC primary data, 2024 [Link](#)
- i. Climate justice [...] refers to the unequal historical responsibility that countries and communities bear in relation to the climate crisis. It suggests that the countries, industries, businesses, and people that have become wealthy from emitting large amounts of greenhouse gases have a responsibility to help those affected by climate change, particularly the most vulnerable countries and communities, who often are the ones that have contributed the least to the crisis (UNDP, 2023 [Link](#))
- l. Distributed as follows: 9.6% low-income countries, 40.1% lower-middle-income countries, 29.8% upper-middle-income countries, 2.9% high-income countries, 17.6% unallocated by income group (activities with regional or multi-country scope) (OECD, 2024 [Link](#))
- m. The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions (UNDP, 2025 [Link](#)).

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