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FROM AID-DRIVEN TO INVESTMENT-DRIVEN MODELS OF SUSTAINABLE DEVELOPMENT

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Executive summary

This paper makes the case for a big push on investments for sustainable development in emerging markets and developing economies (EMDEs).[1] It identifies priority sectors for such investments that have had high-level endorsement at multilateral gatherings over the last few years. It discusses the implications of a big investment push for absorptive capacity at both macroeconomic and microeconomic levels, and for access to finance. It provides an empirical framework based on currently available data that can be improved over time as new information becomes available and priorities get updated. It does not provide an exhaustive list of all the investment priorities that individual countries or development agencies have identified. For example, the range of estimates for adaptation investments is very large and requires additional work to unpack. As another example, gender-responsiveness and disability-inclusion are typically not integrated into the estimates. Such uncertainties can lead to a broad range of answers to the question of how big an investment push is needed. Our paper provides some granularity on this matter as a contribution to the work of the Independent High-Level Expert group (IHLEG) on climate finance and the forthcoming report of this group on the roadmap from Baku to Belem.

The urgent need for a big investment push in developing countries

Emerging markets and developing economies (EMDEs) are at the center of a global sustainable development challenge. These countries face slow growth, rising debt, demographic pressures, and climate risks. The traditional aid-driven model—constrained and donor-led—is inadequate given these severe challenges. This paper calls for an investment-led approach in which EMDEs define their sustainable development priorities and the global community builds customized financing packages to support the resulting investments. Achieving inclusive prosperity and planetary stability will only be possible if a multi-decade push on investment for sustainable development (ISD) is implemented in most EMDEs.

The new growth story of the 21st century

Technological advances now enable a growth model that is sustainable, inclusive, and resilient. Clean energy, digitalization, and resource-efficient systems allow

[1] In this paper, we use the term EMDEs to cover all developing countries, small island states, and vulnerable countries. Although China is also part of the EMDE group, it is excluded from the empirical analysis as it has the resources and capacity to make investments for sustainable development on its own account, without reliance on multilateral cooperation.

EMDEs to bypass outdated, high-emission pathways. Many markets have already reached tipping points thanks to cheaper and more accessible green technologies, debunking the notion that climate action hinders growth—Well-designed strategies can deliver both development and decarbonization. What is needed is public and private investment to drive the required economic transitions at scale and with urgency. A suite of economic models, calibrated to country-specific conditions, suggests that a large ramp-up in public and private investments is feasible, while sustaining stable macroeconomic conditions and retaining creditworthiness in EMDEs and while respecting limitations in the provision of concessional finance by rich countries.

Integrating climate, nature, and development priorities is essential, not optional
The idea that climate action and nature protection hinder development is both outdated and counterproductive. In reality, climate and nature investments can simultaneously drive growth, reduce poverty, and build resilience. These investments tackle market inefficiencies, spur innovation, and improve health, jobs, and productivity. Delaying action on climate change and biodiversity loss to focus on development is a false choice: The impacts of climate change and biodiversity collapse are already eroding livelihoods, food security, and health, especially for the most vulnerable. Aligning climate, nature, and inclusive development is not just possible—it is essential for lasting prosperity.

Priority investments for EMDEs

The paper highlights four critical areas for incremental investment:

1. **Human capital**: Africa's youth boom demands large-scale additional investment in education and health. Returns are high—10% per year of schooling and up to $4 for every $1 in health. Annual spending in EMDEs on human capital should rise by 3.8 percentage points of GDP by 2035, with greater increases in low-income countries.
2. **Physical infrastructure**: EMDEs should expand clean energy and urban systems, requiring a 5.8% of GDP boost in investment. Grid upgrades, renewable energy, and public transport are key to meeting growing urban demand.
3. **Adaptation and resilience**: Floods, droughts, and extreme heat are escalating. Adaptation spending should rise by 1.5% of GDP to prevent over $200 billion in annual damages and safeguard livelihoods.
4. **Natural capital**: EMDEs house critical biodiversity. Investments in reforestation, sustainable agriculture, and ecosystem restoration offer high returns (up to

$30 per $1 spent). Incremental priorities total 0.4% of GDP, especially in Latin America and Asia.[2]

Altogether, EMDEs will need $6 trillion more annually by 2035—about 11.4% of GDP. This increase is roughly evenly split between public and private spending priorities, and over 70% of the financing should be available from domestic sources.

The geographic distribution of a big investment push in EMDEs
Investment needs vary widely by region. Each region needs to invest more in each area, but some regions show comparatively large gaps in selected sectors.

- **Africa**: Needs large increases in human capital, the energy transition and adaptation.
- **Asia**: Should reorient investment toward human capital and infrastructure.
- **Latin America**: Faces major gaps in nature and sustainable agriculture financing.

Tailored strategies aligned with regional contexts are essential to closing these gaps.

Policies to implement a big push
Investment accelerations require strong institutions, policy reforms, and public-private collaboration. Country platforms—nationally led and inclusive of national development banks and the private sector—can align investments with strategic priorities. Public and private investments complement one another; governments must build enabling systems, while the private sector drives innovation and delivery.

Financing should combine domestic resource mobilization, concessional finance, blended instruments, and innovative mechanisms like debt swaps and carbon markets. Evidence shows that past investment surges have fueled growth and improved macroeconomic indicators, suggesting considerable scope for private finance.

Implications for action
Without bold action, EMDEs risk deepening inequality, climate vulnerability, and stagnation. The paper outlines three key imperatives:

[2] It is important to note that these estimates principally cover nature and biodiversity and do not include the full extent of likely investments needed in sustainable agriculture and degraded lands.

1. **Build global consensus**: Support investment for sustainable development as the pathway to prosperity and climate resilience, with implications for developing investment programs using country platforms strengthened by policy and institutional reform. Such pathways also have implications for how providers of official external finance should use fiscal rules and debt sustainability assessments in validating such investments.
2. **Rethink fiscal space**: Support those EMDEs with credible reform agendas, even if debt levels are high. Shift from rigid debt thresholds to a focus on investment quality and implementation.
3. **Deepen and broaden channels through which global finance can flow**: More types of finance for sustainable development are needed and the volumes of each type should be higher. Upcoming forums (COP30, G20, FfD4) can reform the development finance architecture to make it capable of mobilizing the $1.3 trillion climate finance gap and additional gaps for other development priorities.

With the right mix of ambition, policy, and financing, EMDEs can lead a global transformation toward sustainable growth.

I. Introduction: The urgent need for a big investment push in developing countries

Many EMDEs are seeing a slowdown in human, physical, social, and natural capital growth rates compared to pre-2019 levels. They are not taking advantage of opportunities now afforded by new technologies, nor are they able to respond to the shocks and uncertainties coming from the global economy. Official wisdom is that fiscal policy in most countries should aim at "reducing public debt and rebuilding capacity to spend and respond to new pressures."[1] However, at current levels of spending, such an approach risks leaving countries even more vulnerable by underfunding adaptation and resilience programs, along with other sustainable development programs.

This paper argues that prudent fiscal policy has more to do with the quality of fiscal spending than with its quantity. The paper documents potentially high-return fiscal investments and spending consistent with improved macroeconomic conditions and individual welfare. Such public and private investment could amount to a double-digit increase in spending over the next decade, as a share of GDP, financed by a combination of domestic savings, reallocations away from subsidies and fossil fuels, and external borrowing. The paper then explores the implications for changes in the international financial architecture.

Context

The next 20 years will be decisive for achieving sustainable development in the face of accelerating climate change, biodiversity loss, and rising inequality. Climate impacts—including rising temperatures, extreme weather, and ecosystem collapse—are advancing faster and with greater intensity than previously anticipated, raising the risk of irreversible tipping points. Meanwhile, biodiversity is declining at an unprecedented rate, undermining ecosystems that support food, water, and livelihoods. Inequality is also deepening, with vulnerable communities—people living in poverty, especially women—disproportionately affected by climate shocks, environmental degradation, and economic instability. Delaying integrated action on these interlinked crises threatens to reverse development gains and risks pushing parts of the world beyond habitability.

At the same time, powerful shifts are underway. Digitalization, AI, and clean new technologies, especially in energy, are reshaping sectors and creating new avenues for economic and social transformation. Yet these intersect with mounting risks: food, water, and energy insecurity, conflict and fragility, and profound shits in demography and urbanization. The global landscape is also being reshaped by evolving geopolitics, aid, trade, and the role of multilateral institutions. How should countries respond?

Emerging markets and developing economies other than China (EMDEs)[3] are on the frontlines of these intersecting challenges. They face slow economic growth, rising debt burdens, and stalled progress toward the sustainable development goals (SDGs). The World Bank warns that, based on recent trends, all but six of today's low-income countries (LICs) will remain so through 2050,[2] while many middle-income countries struggle to escape the middle-income trap.[3] It is in EMDEs that the global battles to expand economic opportunity, limit climate impacts, and protect nature will be most intense—and most at risk of being lost without urgent international support. The consequences will be most severe for EMDEs themselves, but the global spillovers will be far-reaching.

Yet, most EMDEs remain severely constrained in their ability to respond at the scale required. Only a handful can mobilize the investments needed to secure

[3] It is standard practice to include China in the EMDE country grouping. We have, however, excluded China from this group in this paper because China has the resources and capacity to develop sustainably without financial support from other countries and is better treated as a provider of development support to others than as a potential aid recipient.

their own sustainable development. The prevailing aid-driven model has proven inadequate—too small, too rigid, and too externally led—to unlock the necessary investments in human, physical, social, and natural capital. Without a new approach and significantly greater international support, the world risks cascading failures on both climate and development, precisely where success is most critical.

From an aid-driven to an investment-driven approach

Aid and official non-concessional official finance are in short supply and rationed across countries. Today, most developing country governments start their planning processes by assessing how much finance they can mobilize from this limited pool of official finance. They then move to prioritizing projects that fit within this envelope. Because this process is severely constrained by the perceived access to existing sources of finance, it traps countries into business-as-usual (BAU) paths. Thus, the first objective of this paper is to make the case for a big investment push and to describe the sectoral areas where the changing global context has affected the scale and composition of current investment priorities for sustainable development in different groups of countries.

We call this an investment-driven approach. It reverses the programming sequence by first encouraging EMDE policymakers to articulate their priorities for sustainable development given the challenges they face and then to assess financing options accordingly. Based on this, a second objective of the paper is to lay out the implications of an investment push. These may be absorptive capacity constraints, at both macroeconomic and microeconomic levels. They may also be financial constraints. We identify the broad contours of financing gaps in the current system and what might be sensible means for matching financing with investments. To do this, we develop a financing package at a country-by-country level that is sensitive to different sectors, geographies, and country income level. For example, the appropriate financing package for adaptation in a low-income country may be quite different from the same investment in an upper-middle-income country. Similarly, the type of financing needed for nature preservation is quite different from the financing needed for a transition to low-carbon energy.

The quantification of both the investment priorities and the financing gaps is based on currently available data. Our framework, however, can hopefully yield improved estimates over time as more granular data becomes available. As such, it should be viewed as a work in progress rather than a definitive blueprint for reform.

In the final analysis, the magnitude of external resources needed will be driven by individual country demand for investments in specific sectors. From this perspective, the numbers for investment and its financing should not be interpreted as a grand global plan, but rather as a map for understanding gaps in priority investments and in the international financial architecture, as a precondition for then thinking about what needs to be done to ensure that every country with a well-prepared investment program sees the possibility to access external finance in an appropriate way. We recommend that the design of the development finance system should accommodate peak demand from all eligible developing countries, in much the same way as the design of a motorway should have enough lanes to handle peak traffic flows.

Why an investment big push in EMDEs matters urgently now

EMDEs are central to the world's future. They are where the most critical battles—to expand opportunity, reduce poverty, and confront the climate and nature crises—will be won or lost. What happens in these countries will define global outcomes. Meeting this moment requires a sustained surge in investment to tackle four urgent and interconnected challenges. This paper assesses the scale and priorities of the financing needed to meet them.

First, there is a huge **human development** challenge. By 2050, Africa alone will have over 830 million people under the age of 25, more than double today's youth population and half of the continent's projected working population in 2050.[4] Health and education investments made today will dictate prospects for this next generation of African youth and for the economic conditions on the continent for the next fifty years. Delaying action would mean locking in disadvantage for an entire generation.

Second, the provision of **physical infrastructure** is critical—for the clean energy transition as well as other sustainable infrastructure like water, digital infrastructure, and transport. EMDEs account for almost all the expansion in urbanization in the world—adding at least 1.7 billion more town and city dwellers between now and 2050.[5] The nature of the physical infrastructure that will be built to accommodate these people and to address the growing stresses on natural assets, such as potable water, will shape the cost and access to power and other public services as well as greenhouse gas emission trajectories long into the future. This is a priority because, left unaddressed, climate change could push between 32 and 132 million additional people into poverty by 2030,[6] and climate-driven economic shocks could reverse decades of development gains.[7]

Third, there is a challenge to build **resilience** in the developing world. Around one billion people in EMDEs are directly exposed to substantial risk of fluvial, pluvial, or coastal flooding and many more are exposed to other natural disasters, including droughts.[8] Without scaled-up adaptation, effective mechanisms to address loss and damage, and targeted investments to ensure a just transition, climate shocks could undo decades of development and push tens of millions back into poverty.

Fourth, EMDEs must preserve **nature** and make **agriculture** more sustainable while driving development. Most of the world's 36 biodiversity hotspots are in EMDEs, placing these countries in the complex position of pursuing national economic development while simultaneously protecting vital planetary natural resources.[9]

The scale of the challenges is enormous, and unlike past development problems, they all demand urgent action. Delay will lead to lasting economic and human costs. These challenges also matter for the planet: EMDEs already account for roughly 40% of global emissions and are projected to drive most of the growth in emissions over the coming decades.[10] Their development choices—what energy systems they build, what infrastructure they adopt, how they manage land—will largely determine whether the world meets the goals of the Paris Agreement.

Historically, those countries that have contributed least to the problem are most vulnerable to its effects. Under the principle of common but differentiated responsibilities (CBDR), developed countries carry a moral obligation to lead on emissions reductions and support low-carbon development in poorer nations. Development requires energy, but energy does not require carbon.

Addressing these challenges requires a big push in public and private investment, sustained over the next two or three decades. It would allow EMDEs to leapfrog the polluting, sprawling and inefficient systems of the past, because much of their infrastructure is yet to be built. For many countries, this will mean mobilizing additional investment and savings; for others, reallocating existing savings to the new priorities. In all cases, strong international support will be essential to unlock domestic investments.

The headline figures for climate action in EMDEs through 2035 in this paper follow those provided in the 2024 report by the Independent High-Level Expert Group on Climate Finance (IHLEG).[11] Here, we provide details by geography, sector, and country income classification. We also factor in additional investments that address human capital and sustainable infrastructure beyond clean energy.

Priority investments are defined as those that have been identified in international conferences as crucial for achievement of goals (for example, the Paris climate target and the biodiversity finance target agreed to in Rome) or that have been otherwise identified as critical by a thematic specialized organization (for example, modelled work undertaken by the United Nations Environment Programme on adaptation and nature finance). For health and education, inter-ministerial conversations have already acknowledged that achievement of the relevant sustainable development goals may not be feasible by 2030, and a lowered level of critical foundational investments has been identified at UNESCO and WHO gatherings.

Taken together, the estimated incremental investment required to meet sustainable development and climate and nature goals could amount to $4.1 trillion per year by 2030, rising to $6 trillion by 2035—equivalent to about 11.4 percentage points of the GDP of EMDEs in that year. This is a gross investment figure: Savings will come from reduced spending (including on fossil fuel energy production, exploration, and consumer subsidies), lower energy bills, and avoided damage. Our calculations suggest that the public sector should be responsible for roughly half the total incremental spending, while the private sector—businesses and households—would fund the remaining half. Less than 30% (or 3% of GDP) would be financed by external resources in an optimal scenario, with the balance between official and private finance dependent on country and sector. The vast bulk of financing for all countries comes from domestic sources, either newly mobilized or reallocated from other activities.

Integrating climate, nature, and development: A unified investment strategy
Climate change, biodiversity loss, and development must be addressed together—not as competing goals, but as deeply interconnected challenges. Climate investments—in clean energy, adaptation and resilience, loss and damage, nature, and a just transition—are essential drivers of inclusive growth, improved health and education, job creation, and poverty reduction. Treating these priorities in isolation risks failure on both fronts.

Many of the most effective development investments are also powerful climate and nature solutions. Restoring degraded land enhances food security and sequesters carbon. Expanding public transport connects people to jobs while cutting emissions. Decentralized solar power boosts energy access, reduces air pollution, and lowers costs, especially in underserved communities. Building climate-resilient infrastructure and agriculture helps safeguard communities and livelihoods from escalating climate risks.

The notion of an inevitable trade-off between climate action and development is outdated. In many regions, clean energy is cheaper than fossil fuels.[12] Smart policies can phase out toxic subsidies, protect low-income households, and mobilize investment at scale. When aligned with development priorities, climate action becomes a catalyst—not a constraint—for a more sustainable, resilient, and inclusive future.

To succeed, countries must adopt an integrated investment strategy. Fragmented approaches will fall short of the scale, speed, and impact this critical decade demands.

II. The new growth story of the 21st century

The global economy is on an unsustainable path. Climate change and biodiversity loss demand an urgent shift in how the world produces and consumes. Stern et al. (2023) articulate a new growth story for the 21st century; one that delivers growth that is sustainable, resilient, and inclusive, driven by rapid technological innovation and systemic transformation across energy, transport, urban planning, agriculture, and industry.[13] They argue that "large-scale deployment of low-carbon technologies, enabled and accelerated by artificial intelligence (AI) and digital enablers, will transform energy, transport, production, built environment, land-use and ocean systems over the next 25 years."

This new growth model proposed by Stern et al (2023) is underpinned by six mutually reinforcing drivers: accelerated innovation in clean technologies; increasing returns to scale; greater resource efficiency; more productive systems (including cities, energy grids, and transport networks); increased investment; and improved health outcomes. Together, these drivers not only reduce greenhouse gas emissions but also build resilience against climate-related shocks, safeguarding future prosperity.

Economic tipping points, where clean technologies become cheaper and more accessible than fossil-based alternatives, are already transforming key markets. Renewable energy sources such as solar PV and wind are now the least-cost options in much of the world, even when battery storage is included.[14] Electric vehicles, heat pumps, and green ammonia are rapidly approaching similar tipping points, offering substantial opportunities for developing countries to leapfrog outdated, polluting technologies. Initiatives like the World Bank's billion-dollar Hydrogen for Development partnership to ensure developing countries gain

access to the finance, technology, and skills needed for new technologies, illustrate the urgency and scale of investment required.[15]

In all these cases, proven technologies are changing the market and providing opportunities for developing countries to leapfrog technologies. However, the new growth story is about more than technology—it fundamentally includes strengthening resilience and ensuring inclusivity. Climate change disproportionately impacts vulnerable communities and threatens developmental gains. Hence, embedding resilience into infrastructure investments, urban planning, and policy frameworks is critical. Similarly, active policies are needed to ensure that the economic opportunities provided by green technologies translate into broad-based social and economic benefits, creating good jobs, while reducing poverty and inequality—a so-called just transition.

In this broader context, the economic narrative has evolved significantly. The idea that greening growth is expensive and will slow the growth of prosperity in EMDEs no longer holds in most instances.[16] While it is true that rich economies generally have higher per capita emissions than poor countries, there is a surprisingly large variation in performance, and the causal relationship is weak. Some high-income countries are also among the world's lowest per capita emitters, and some low-income countries are high emitters even by global standards.[17] Detailed sector-by-sector cross-country analysis further shows that rapid sectoral value-added growth in agriculture, buildings, energy, and transport is possible without substantial emissions growth in the best-performing countries; only industry shows a strong positive correlation between growth and emissions.[18]

Evidence also does not support the notion of an inevitable trade-off between climate action and poverty reduction.[19] While climate policies can have adverse effects if poorly designed, well-crafted strategies can reduce emissions while supporting growth, jobs, and poverty alleviation. The challenge is not how to balance climate and development goals, but how to design policies that achieve both effectively.

Many developing economies increasingly recognize the new growth opportunities embedded in green transitions. India, for example, is pursuing one of the most ambitious expansion plans for renewable energy of any country in the world because it sees its low-carbon strategy as crucial to mobilize technology, innovation, and investment. Through this, Indian policymakers believe they can grow key economic sectors for the two to three decades it will take for India to become an advanced economy. Similarly, other developing nations are aligning

their policies to deliver transformative change and economic growth.[20] The African Union has adopted a Green Recovery Action Plan to guide investments through 2027. Likewise, the G20 is encouraging "Scaling up investment to meet development needs and global challenges requires a big push on investments."[21]

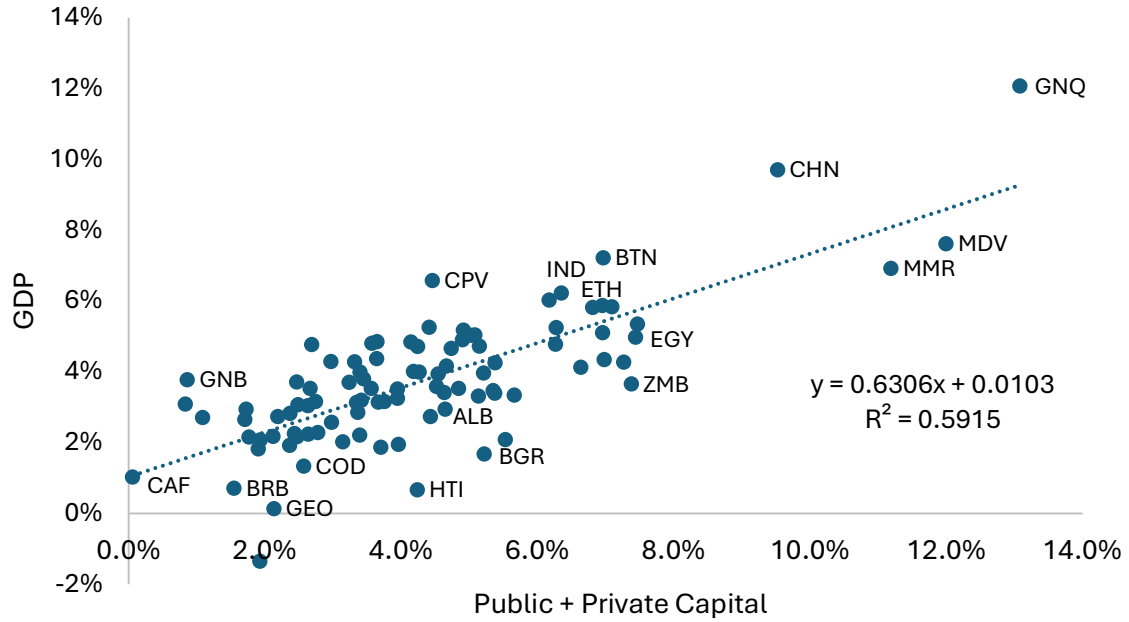
Investment accelerations

What is needed now in many EMDEs is higher levels of investment in human, physical, social, and natural capital. In most countries, particularly in Africa and Latin America, the potential to scale up investment is limited by low levels of domestic savings. The result is a gross fixed capital formation rate that barely suffices to replace depreciation on the existing physical capital stock, let alone finance the systemic transformations that are called for in the new global economic context.[22]

Without investment, economic growth has lagged in many EMDEs. There is strong evidence that better results could be achieved, at least for physical capital accumulation—the estimation of human, social, and natural capital stocks and changes over time is less well researched. For instance, the World Bank investigated 192 "investment accelerations" episodes when physical investment per capita accelerated by over 4% per year over 6 years—between 1950 and 2022. During these episodes, which took place across 104 countries, average growth rose by two percentage points, from 4-6% per year, driven by faster expansion in productivity, in public and private capital stocks, and in employment. Inflation fell, while fiscal and external balances improved. Progress toward development outcomes accelerated.[23]

Data from the IMF further supports the conclusion that physical investment is a central driver of growth. The cross-section relationship over a forty-year period for EMDEs is shown in **Figure 1** below. There are, inevitably, some examples of countries with positive growth of physical capital that did not generate growth (such as Haiti), but the overall relationship between growth in the stock of fixed capital and economic growth is strong and robust.

Figure 1: Long-term real GDP and public + private capital growth rates, 1980-2019



Source: IMF Investment and Capital Stock Database; World Development Indicators
Note: Includes 95 IDA, IBRD, and Blend eligible countries. GDP in constant 2015 USD used for calculating growth rates.

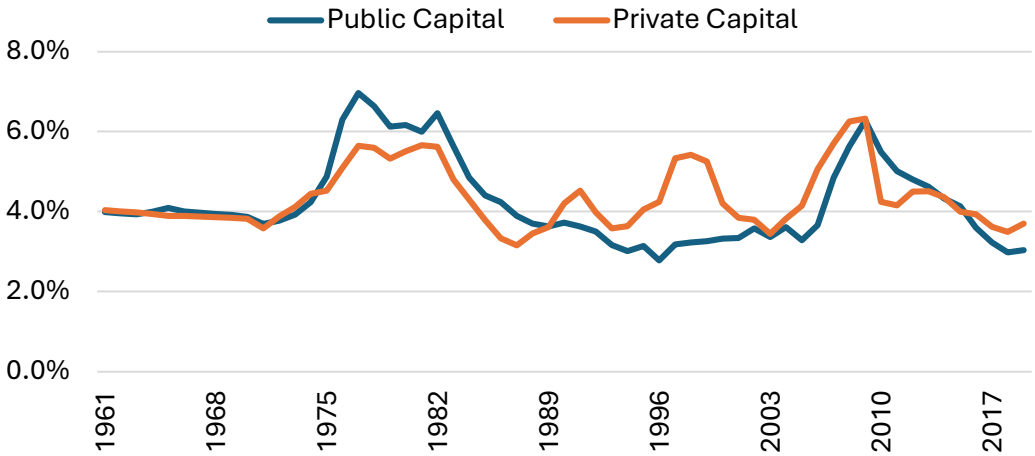
Both public and private investments are required to affect the transformations envisaged in the new growth story. A key issue for policymakers is to assess the right balance. If private investments are the main drivers of change, then the public sector's role should be focused on macroeconomic stability, sectoral policy reforms, and other types of institutional strengthening to create a sound enabling environment for private investments. Where, however, there are investments that do not generate adequate financial returns, then the responsibility for investment falls on the public sector.

Simplified, the question becomes one of whether public and private investments in physical capital should be viewed as substitutes or complements and whether this assessment differs between emerging market economies, where the private sector is more mature with greater access to capital, compared to low-income countries.

It is instructive to look back at the historical experience of investment and capital accumulation in EMDEs. A long-term study of the public and private capital stock shows a tight correlation between the growth rates of the two series, both in emerging markets (**Figure 2**) and in low-income countries (**Figure 3**). The booms

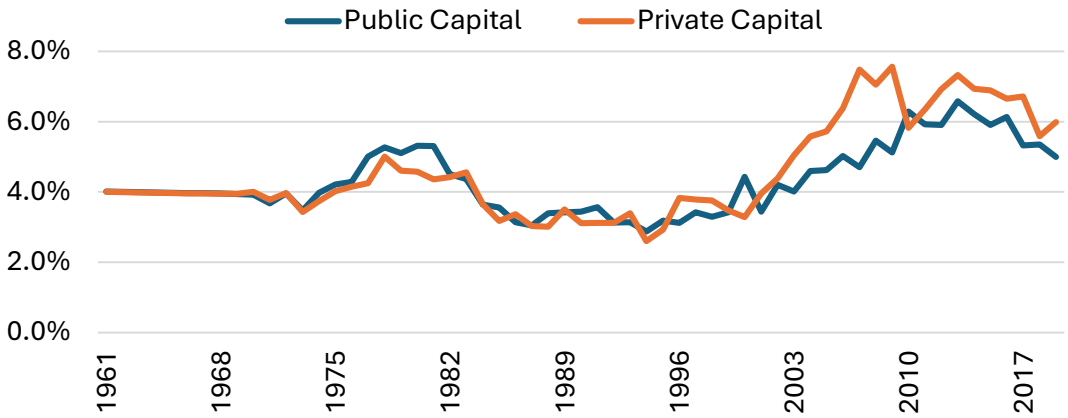
and slowdowns for both series occur at the same time. Most recently, both EMDEs and low-income countries show a decline in the capital stock growth rate in the aftermath of the global financial crisis in 2009 and the start of rising protectionism and the backlash against globalization that ensued. (While the database underlying the analysis does not extend beyond 2019, other evidence suggests the declining trend in the growth of the public capital stock has continued. The World Bank's Global Economic Prospects, 2024, reports that public investment growth in EMDEs has halved since the global financial crisis.[24])

Figure 2: Growth rates in real public and private capital stocks in emerging market economies, 1961-2019



Source: IMF Investment and Capital Stock Dataset, 2021.

Figure 3: Growth rates in real public and private capital stocks in low-income developing countries, 1961-2019



Source: IMF Investment and Capital Stock Dataset, 2021.

The key takeaway from Figures 2 and 3 is that public and private investments are largely complements. They move together in lockstep. And while the composition of the new investments required to pursue the 21st century growth strategy will be different from the past, there is a strong likelihood that public and private investments will remain complements in the future. Both are influenced by the cost of capital in global financial markets; they are both responsive to domestic economic cycles; and they both depend on each other to achieve successful outcomes. In the area of climate action, for example, a successful energy transition requires private investments for electric power generation, electric vehicles, heat pumps, and other appliances, while public investments are needed to modernize the grid, for storage and backup capacity, and for a just transition.

The urgency for an investment push

The distinguishing feature of current times is the urgency of starting and sustaining a big investment push for multiple decades.

Social stability is being threatened by slow economic development, and a generation of young people is at risk of losing the opportunity for a decent life.

Planetary boundaries are being transgressed, and the longer the delay, the greater the chance that irreversible tipping points will be reached.[25]

Roadblocks to investment accelerations

The idea that a big investment push can accelerate economic growth in EMDEs has long antecedents in development thinking, going back to Paul Rosenstein Rodan's 1943 paper.[26] In his original discussion, the benefits of large investments covering multiple sectors stem partly from coordination benefits (for example, firms can invest in export industries if ports are simultaneously upgraded) and partly from increasing returns to scale.

The theoretical benefits of a big push, however, have not always been realized in practice. There are examples of successful "big-push" programs, including the Marshall Plan for reconstructing Europe, and select industrial policy programs in Asia,[27] but also examples of failed big-push programs, including import-substitution in Latin America and premature heavy industry investments in some ASEAN countries.

Any big push program needs to address three concerns. Is there capacity to identify and execute bankable projects? What are the macroeconomic implications for inflation and current account deficits? Can already heavily indebted countries take on still more debt without suffering a debt servicing crisis?

Identification of bankable projects

Many international development institutions undertake independent ex post evaluations of the projects they support in developing countries. For example, the average mean return on over 4000 World Bank-financed projects that closed between 1956 and 2012 was 22% with no discernible difference across geographies, income levels, or government capabilities. More than three-quarters of all projects had returns of over 10%, while only just over 5% of projects had negative returns.[28] Similarly, the Millennium Challenge Corporation reports a mean closeout rate of return of 15.1% on 78 projects in low-income countries between 2005 and 2020.[29]

This microeconomic evidence suggests that carefully prepared projects can be successfully implemented across a range of developing countries. The existing pipeline may be thin, but, as we argue below, it can be rapidly developed. Putting in place new mechanisms to identify bankable projects, for example, through building country platforms, can provide one solution.

Macroeconomic implications

At a macroeconomic level, a big investment push must be carefully developed within a sustainable macroeconomic framework. A large investment push can create problems of short-run macroeconomic fluctuations. For example, when Germany introduced its Renewable Energy Sources Act of 2000, it led to significant fiscal expenditures and labor shortages.[30] The United States' Inflation Reduction Act of 2022 may raise interest rates and lower private consumption in the initial transition phase.[31]

Such problems are less acute in EMDEs because most of their economies still have excess capacity, surplus labor, and underemployment, so an expansion of demand does not translate as readily into higher inflation. EMDEs must nevertheless worry about current account deficits, exchange rate impacts, and public indebtedness in considering macroeconomic consequences of a big investment push. The evidence compiled by the World Bank on investment accelerations, cited above, however, suggests that macroeconomic impacts may even be beneficial on average as growth accelerates.[32]

A meta-study conducted by the IMF of model results for 65 EMDEs yields the following conclusions.[33] A ten-year average scaling up of public investment by 4.5 percentage points of GDP, coupled with an improvement in the efficiency of public investment, can lead to higher annual per capita growth of 1.4% over a decade,

implying that per capita incomes rise by 15% in ten years. Public debt/GDP ratios would initially rise by about 20 percentage points of GDP but then start to fall.

The study cautions against overly large and front-loaded investments, suggesting that an option of raising public investment systematically by 0.5 percentage points of GDP per year would be beneficial in avoiding excessively rapid tax increases or public borrowing increases that could crowd out private investments in the short run. Such a phased approach also helps link investments with different sources of finance that may not be readily scalable in the short run. For example, simulations show that access to official external concessional resources is valuable in providing a fiscal buffer and can reduce the need for aggressive tax increases that could otherwise shrink private consumption. The investment acceleration suggested in this paper is consistent with this phasing—a scale-up of 0.5 percentage points of GDP in public investment and a similar amount of private investment results in the average 11% of GDP in incremental investment that is envisaged. (There are exceptions, of course, for enclave projects that could permit even more rapid scale-up. For example, Namibia increased its investment rate from 20% of GDP in 2022 to over 27% of GDP in 2023 without any major macroeconomic effects because the investment was largely financed by foreign investment.[34])

In short, an appropriate phasing and speed of a public investment push should differ across countries, depending on their macroeconomic characteristics and on opportunities for raising the efficiency of public spending, but the overall strategy of a big investment push yields solid benefits for the macroeconomy and for private consumption growth in the long run in all the reviewed cases.

Avoiding indebtedness problems

The balance between external borrowing and domestic resource mobilization in financing investment must be carefully struck. With less external borrowing, higher public investment would have to be financed through higher tax revenues or borrowing in local capital markets, which would inevitably constrain private consumption and crowd out private investment, reducing growth and jobs. Higher external borrowing, on the other hand, will cause public debt/GDP ratios to rise.

EMDE finance ministers, supported by international financial institutions, have been cautious about exceeding guideline thresholds for public debt/GDP developed by the IMF and World Bank in their debt sustainability assessments. These guidelines, however, are just that—guides to prudent fiscal policy in a quest to maintain creditworthiness and access to global financial markets. In reality,

there are many considerations other than public debt ratios that are of equal or greater significance in affecting creditworthiness.

The key issue to avoid over-indebtedness is not the volume of investments but ensuring high quality.

Figure 4 below shows the assessment of the riskiness of debt for all low-income countries plotted against the country's investment ratio. The figure clearly shows that, on average, there is no relationship between the level of debt distress and investment rates. For instance, Senegal has one of the highest investment rates of any low-income country, and a large, occasionally double-digit, current account deficit. However, the investment is resulting in rapid growth, which, along with reasonable institutional strength, permits Senegal to retain a moderate rating in the IMF's Debt Sustainability Assessment. Conversely, Ghana struggled to bring down its current account deficit by sequentially cutting back on investment for a decade but nevertheless defaulted on its debt obligations in December 2022 as growth and domestic tax revenues faltered.

Figure 4: Comparing debt distress to investment rates for IDA-eligible countries

Source: International Debt Statistics, IMF World Economic Outlook October 2024, IMF DSA Reports
Notes: IDA-eligible per the FY25 World Bank Country and Lending Groups. Excludes Djibouti as an outlier and others due to missing data. Investment to GDP is 2024 data. For countries in debt distress, a six year average prior to the debt crisis is used instead.

The larger point is that cross-country risk classifications are largely explained by differences in governance and the quality of institutions. The implication is that countries that decide to embark on a big investment push must also introduce measures to strengthen policies and institutions. Not only will this improve the returns to investment, but it will also bring down the cost of capital by reducing risk levels.

III. Priority investments for EMDEs

Among the myriad priorities for sustainable development in EMDEs, four broad areas stand out as needing transformation to seize new opportunities and to protect against shocks: (i) human capital; (ii) physical capital, comprising the energy transition and other sustainable infrastructure; (iii) adaptation and resilience and (iv) natural capital, including biodiversity and sustainable agriculture. In each area, most EMDEs are massively underinvesting, and sectoral studies have identified investments that have very high estimated returns, either in the form of net, new benefits, or in the form of avoided losses.

We have collected detailed data for different countries and groups of countries from the best available sectoral analyses undertaken by international organizations on (i) education; (ii) health; (iii) the energy transition; (iv) other sustainable infrastructure; (v) adaptation; (vi) loss and damage; (vii) the just transition and (viii) natural capital and sustainable agriculture. (The Technical Annex to this paper has details.)

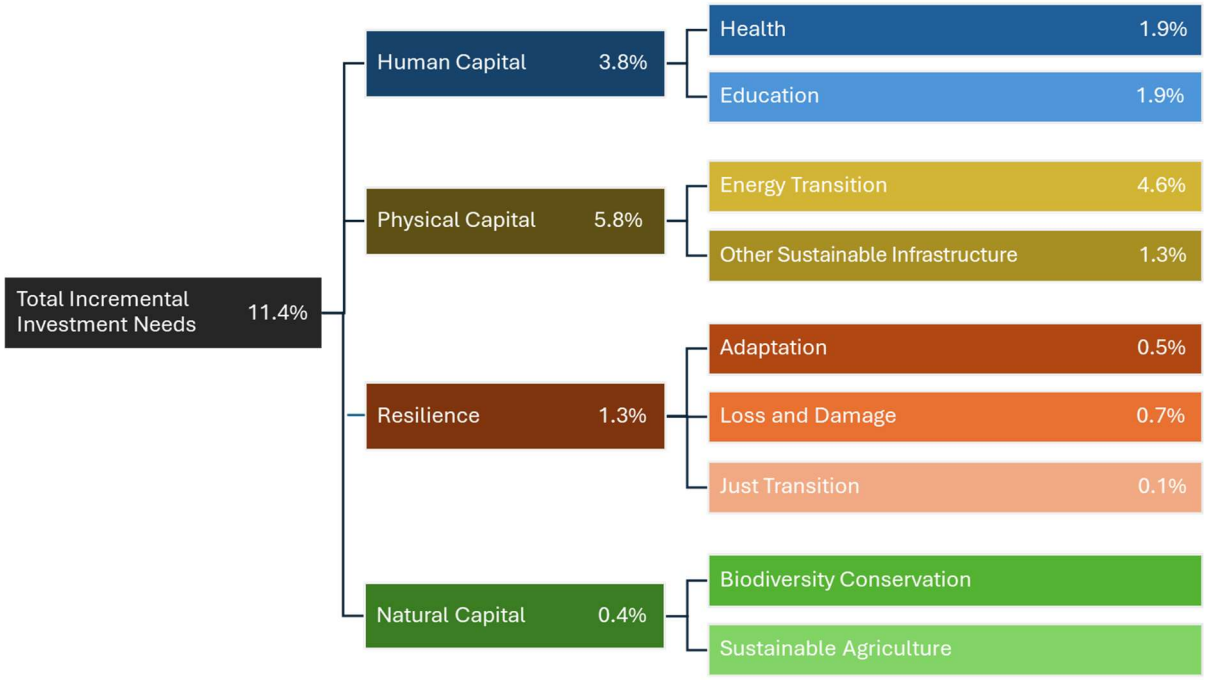
To aggregate these numbers into a consistent database, we have undertaken three transformations. First, the geographic scope has been standardized. Definitions of broad concepts like "emerging markets and developing countries" vary across studies. We have taken all eligible borrowers from the World Bank Group in 2024, plus small island states (SIDS) and members of the V20 group of vulnerable countries.[4] Second, studies have been undertaken at different time periods and often report "investment needs" or priorities as decadal averages. We have transformed these into investment pathways between now and 2035. Third, each study uses its own units, sometimes expressed in per capita terms,

[4] See the World Bank Country and Lending Groups: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups; Small Island Developing States: https://www.un.org/ohrlls/content/list-sids; and the Vulnerable 20: https://www.v-20.org/

sometimes in constant U.S. dollars, and sometimes as a percent of GDP. We convert all these into 2022 U.S. dollars.

Taken together, the identified investment priorities add to 11.4 percentage points of EMDE ex-China GDP by 2035 compared to 2022 **(Figure 5)**. Note that for each individual sector, there are other estimates suggesting even greater needs—for example, for the care sector, for sustainable agriculture, and for adaptation and resilience. There may be validity in these alternatives, but wherever possible, we have selected numbers that have been endorsed at official international meetings.

Figure 5: Incremental investment priorities in 2035 relative to 2022 (Percent of GDP)



Source: Authors' estimates. See the supplementary technical annex for details on sources for each sector.

1. Human capital

Education. Empirical evidence from decades of research suggests that the average annual earnings of an individual rises by 9% for each year of education.[35] The stability of the results over time, and evidence of additional benefits from innovation and equality of opportunity has resulted in a consensus objective to achieve universal secondary education everywhere.

However, continued growth in the number of school-age children, especially in Africa, and the scarring from school absences during COVID-19, have meant that

child learning has suffered in recent years. Recovering from this and restoring sustained investment in education remains a priority, both for individual earnings and for the broader benefits this brings in the form of innovation and equality of opportunity. Low-carbon energy is more valuable in a society where the workforce is educated and can use it effectively, and an educated workforce is needed to put in place new green technologies.

There are also indications that educated youth value the future more and are more likely to behave and vote for pro-climate outcomes,[36] and that secondary school education for girls reduces population growth.[37] Such behavior changes add to the societal benefits of broad-based education.

Health. A similar narrative applies to health. Research suggests that improved health has contributed about the same to income growth as education. Health interventions increase the number of labor hours worked and expand productivity. The estimated benefits are $2 to $4 for each $1 invested.[38] They are particularly high in lower-middle-income countries. About 70% of the benefits derive from prevention of disease—through vaccines, nutrition, sanitation, and better childbirth practices—rather than from treatment of disease, so the priorities included here reflect what is needed to improve primary health care to reach minimum acceptable levels.[39]

Sustained investments in human capital remain the strongest foundation for long-term economic growth and transformation and must be prioritized, especially in the aftermath of severe cutbacks during COVID-19. On average, EMDEs should be spending an average of 3.8 % of GDP more by 2035. In LICs, where the needs are greatest and the initial spending is lowest, the needed increase is far higher, especially in health. LICs should be spending 14 percentage points of GDP more on human capital by 2035.

Some estimates of the investment and financing gaps in health and education in EMDEs are very modest. UNCTAD's "Financing for Sustainable Development Report 2024" shows a gap of only a few hundred million dollars.[40] We hold the view that human capital cannot be considered an add-on, but is integral to inclusive and sustainable development. For example, many of the highest priority adaptation investments are in health.[41]

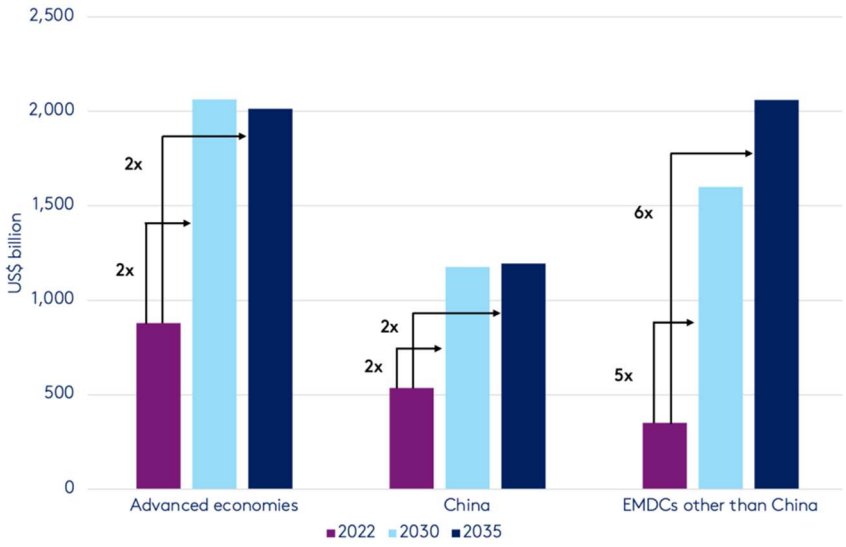
2. Physical capital

The clean energy transition. Reports by the International Energy Agency (IEA)[42] set out the requirements for investment along a pathway that leads to net-zero emissions (NZE) by 2050. The main drivers of this scenario are a tripling in renewable energy capacity deployment by 2030, a doubling of the rate of improvement in primary energy intensity from 2% per year to 4% per year, and a 75% reduction in methane emissions. The NZE scenario entails a demand for electricity that is about one-third higher than the Stated Policies Scenario run by the IEA.[43]

In this global scenario, the investment needs comprise significant investment in solar and wind power, along with grids and batteries for storage to boost electrification from 20% of total energy in 2023 to nearly 55% by 2050.[44] Because renewables would make up almost all the new added capacity, the share of fossil fuels in electricity supply would decline to 10% by 2050 from current levels of 80%.[45]

Because EMDEs are starting from such a low base, the increment to their investments in an energy transition is higher than that in other regions. **Figure 6** below, reproduced from the IEA, shows the comparative picture.[46]

Figure 6: Clean energy investment needs by economic region, 2022 to 2035



Note: Clean energy investment needs are estimated based on IEA projections, supplemented with additional figures to account for early coal phase-out and just transition-related costs.

Source: IHLEG (2024) adapted from the IEA World Energy Outlook (2024)

In the IEA scenario, EMDEs account for 49% of the new investments required globally by 2035 for a clean energy transition. The scale of what is needed is unprecedented. EMDEs account for almost all the expansion in urbanization in the world—at least 1.7 billion more town and city dwellers between now and 2050.[47] On the one hand, this may ease the task of providing electricity to the 750 million people in EMDEs that currently have no access.[48] Younger, urban populations may also more readily switch to clean cooking technologies compared with an older, rural population. On the other hand, serving urban populations, especially informal settlements, can pose its own challenges of illegal connections and grid capacity management.

In addition to addressing the backlog of energy demands, EMDEs are likely to grow faster than advanced economies, adding pressure to meeting the demand for energy. Combining the demographic and economic drivers with the fact that the starting point for EMDE investments in the clean energy transition are quite low leads to the conclusion that annual investments should expand by six times between 2022 and 2035, compared to doubling in advanced economies and in China.[49]

Expansion at this rate implies that EMDEs will need to invest about 5.8 percentage points of GDP more on physical infrastructure in 2035, four-fifths of which would be oriented to a low-carbon energy transition.

The largest absolute increases would be in upper-middle-income countries. The magnitudes are daunting but have been considerably reduced due to a roughly 40% drop in the price of Chinese-made solar PV modules in 2023 and by lower cost of wind turbines.[50]

It is important to emphasize that the energy transition envisaged in this scenario does not require EMDEs to sacrifice growth and development for the sake of improving planetary health. The investments are win-win. Consider the case of Nigeria. Intermittent power supply has caused firms and households to invest in diesel and petrol-fueled back-up generators that are both expensive and dirty. The Nigerian government believes such self-generated electricity makes products one-third more expensive.[51] The implication is that investment in stable access to electricity will free up savings that would otherwise be invested in back-up generators. The Nigeria Integrated Energy Plan[52] indicates that most of the electrification needed will be through solar-powered mini-grids and home solutions, especially in the north of the country, where irradiation is higher.

Alongside this transformation of the supply side, considerable investments would need to be made on the demand side to electrify transport, buildings, and industries. Much of this demand-side investment would come from business and households, in the shape of electric vehicles, heat pumps, household appliances, and newly maturing electric processes in the hard-to-abate industrial sectors including fertilizer production. However, some of the costs would be borne by the public sector for greening its own demand, as well as for subsidies to accelerate electrification and enhance use of light rail and public transport.

Other sustainable infrastructure. Some, but not all, parts of the transport infrastructure are included in the energy transition, such as charging stations for EVs and the development of public electric rail mass transit systems, but other elements are excluded. Importantly, key systems for urbanization of water, sanitation, and the digital economy, including telecoms, also have to be factored into the equation. A modest estimate of the needed incremental expansion in these investments is 1.3% of GDP by 2035.

3. Resilience

We define resilience as encompassing three interlinked but distinct investment and financing priorities: adaptation, loss and damage, and ensuring a just transition. Each responds to a different facet of risks arising from both climate impacts and the climate transition—involving preparing for, absorbing, and recovering from shocks—and requires tailored policy and financial strategies.

Adaptation aims to reduce the vulnerability of economies and communities to current and future climate shocks. These investments—ranging from drought-resilient agriculture and urban flood defenses to early warning systems—are primarily designed to avoid economic and human losses, rather than generate direct economic returns. The “Adaptation Gap 2023” report compiles the modelled adaptation costs from selected sectoral studies to estimate an overall adaptation investment need in developing countries. Adaptation investments largely address climate shocks: droughts, extreme heat, storms, flooding, and wildfires. UNEP provided details by income and region that we have used in suggesting that adaptation spending should rise from 0.4% in 2022 to 0.9% of GDP by 2035 (Annex II).

Loss and damage, by contrast, address the consequences of climate impacts that cannot be avoided through mitigation or adaptation. These include both rapid-onset events like storms and floods, and slow-onset changes such as sea-level rise or desertification. While adaptation reduces future exposure to risk, loss and

damage finance is about managing unavoidable harm, including direct compensation, emergency response, and rebuilding efforts. The Insurance Development Forum carries a stark warning that underinvestment and inadequate planning are leaving developing countries exposed to over $200 billion in annual damages per year (1% of GDP), rising through 2050.[53] We estimate that current spending in EMDEs is around 0.4% of GDP and should rise to at least 1.1% by 2035 to adequately support recovery and resilience (See Annex II). This funding must go beyond immediate relief to include institutional capacity, data systems to track non-economic losses, and mechanisms for equitable, context-specific disbursement.

Ensuring a just transition refers to the social and economic transformations required to shift toward low-carbon, climate-resilient economies in a fair and inclusive manner. Investments focus on safeguarding livelihoods, reskilling workers, expanding social protection, and diversifying regional economies—particularly in areas dependent on fossil fuels or carbon-intensive industries. While current spending is minimal (0.04% of GDP in developing countries), estimates suggest this needs to rise to around 0.13% of GDP by 2035 (See Annex II). Support must be tailored to national contexts, with particular attention to informal workers and vulnerable groups. A just transition ensures that no one is left behind as countries decarbonize, and that climate policies reinforce rather than undermine social cohesion and development.

Despite growing clarity on the importance of resilience investment, four challenges complicate the task of estimating financing needs:

1. **Uncertain cost estimates**: There is considerable debate over the volume of spending needed for adaptation, loss and damage, and a just transition.
2. **Policy interaction effects**: Taxes and regulations can be used to promote resilient standards so the amounts of investment required depend on policy change.
3. **Interlinkages across investment areas:** Another issue is to estimate the interaction between spending on resilience and spending to replace lost and damaged capital. In EMDEs, only approximately 10% of natural catastrophe losses in 2024 were insured.[54] If resilience and insurance spending rise, estimates for loss and damage should be lower. In this paper, we use the results from a modelling approach developed by the U.N. Environment Programme that accounts for such details. The UNEP notes that these amounts are significantly lower than estimates derived by adding up National Adaptation Plans. They are also lower than many country estimates for adaptation made

by the World Bank in country climate and development reports. For example, in the CCDR for Vietnam, the World Bank estimates economic losses of 8-9% of GDP between 2030 and 2040 in its intermediate climate scenario, far higher than the amounts included in the UNEP model.[55]

4. **Data gaps on current spending**: Identifying the incremental spending priorities for adaptation, loss and damage, and a just transition is further complicated by a lack of sound baseline estimates for what is actually being spent today. These priorities are neither standard budget codes nor are they classified in a common way across countries. The few estimates available for spending build on identifiable external financing and exclude domestic financing that is likely to be the largest component. However, what seems evident is that existing spending the three components of resilience is small. We estimate that EMDEs should be spending around 0.4 percentage points of GDP more on adaptation by 2035. Because climate shocks are a here-and-now issue as well as a worry for the future, adaptation is an immediate priority. EMDE governments have long been making this case, and there is now broad agreement on the priority of adaptation spending. However, most countries have limited experience with the best approaches to adaptation so additional examples and knowledge sharing of what works are desirable. The most seriously affected countries, and thus the countries with the most urgent need to invest in adaptation, are thought to be in South Asia, Africa, and the Middle East.[56]

While imperfect, existing models underscore that current levels of investment in all three pillars of resilience are insufficient and that returns may be very high.[57] We estimate that EMDEs will need to increase resilience spending by around 1.2 percentage points of GDP by 2035. Climate impacts are no longer a hypothetical future threat—they are already reshaping development prospects today. This makes adaptation an urgent priority, particularly for the most vulnerable regions in South Asia, Africa, and the Middle East. Loss and damage and just transition finance must follow closely behind, as part of a comprehensive resilience strategy that ensures developing countries can not only withstand climate shocks but also recover equitably and grow sustainably.

4. Natural capital

Investing in natural capital is essential to halt biodiversity loss, ensure food and water security, and sustain rural livelihoods. We define two main pillars under this agenda: **biodiversity conservation** and **sustainable agriculture**.

At the 16th Conference of Parties (COP) on biodiversity in Cali, Colombia, parties "considered a new Strategy for Resource Mobilization to help secure $200 billion annually by 2030 from all sources to support biodiversity initiatives worldwide, in line with Target 19 of the Kunming Montreal Global Biodiversity Framework." This amount can be disaggregated into a country-by-country assessment of the need to protect biodiversity and the natural land and water scape (the 30x30 agenda), to develop water resources and manage wastewater, to pursue sustainable agriculture and develop sustainable supply chains, and the like.[58] The biggest-ticket spending items relate to agroforestry, reforestation, and protected areas.

Nature has often been viewed through a lens of biodiversity and planetary health but is increasingly being viewed as an economic asset in its own right. Bhattacharya et al. (2024) cite studies suggesting "every $1 invested in ecosystem restoration can yield returns of $7-$30" through improved resilience, productivity, and ecosystem services."[59]

Our analysis builds on the UNEP's "State of Finance for Nature" (2023), which groups nature-related investments into three categories:

- **Sustainable Land Management (SLM)** includes agroforestry, cover cropping, and optimal grazing. These practices preserve ecosystem functions while supporting agricultural productivity and rural incomes. Because SLM can generate revenue through carbon markets and higher yields, it presents strong potential for blended finance and private sector engagement.
- **Restoration** efforts, such as reforestation and the rehabilitation of mangroves, peatlands, and salt marshes, are the most capital-intensive. These investments rebuild carbon sinks, protect against floods, and enhance biodiversity, but require significant upfront costs and long-term commitments.
- **Protection** of ecosystems—by expanding protected areas, preventing deforestation, and halting land conversion—is the most cost-effective category. It accounts for 80% of the additional land area needed for the 30x30 target, yet only 20% of incremental financing needs.

Roughly half of future biodiversity investments will go toward restoration, 30–35% toward SLM, and around 20% toward protection. All three approaches must be implemented in ways that promote social inclusion, including secure land tenure

for Indigenous peoples and local communities, support for community-led conservation, and the creation of alternative income sources.

There is an overlap between nature-based solutions and resilience. Some of the common elements, such as mangrove restoration, are already included in estimates for resilience investments. These have been removed from the natural capital heading above to avoid double-counting. Nevertheless, the totals for natural capital remain substantial—incremental investments of 0.4% of GDP are needed.[5] Asia and Latin America are the two regions where the gap between current and desired natural capital spending is the largest. Africa already spends considerably more than other regions on natural capital, so is correspondingly better placed to meet its future needs (See Annex II).

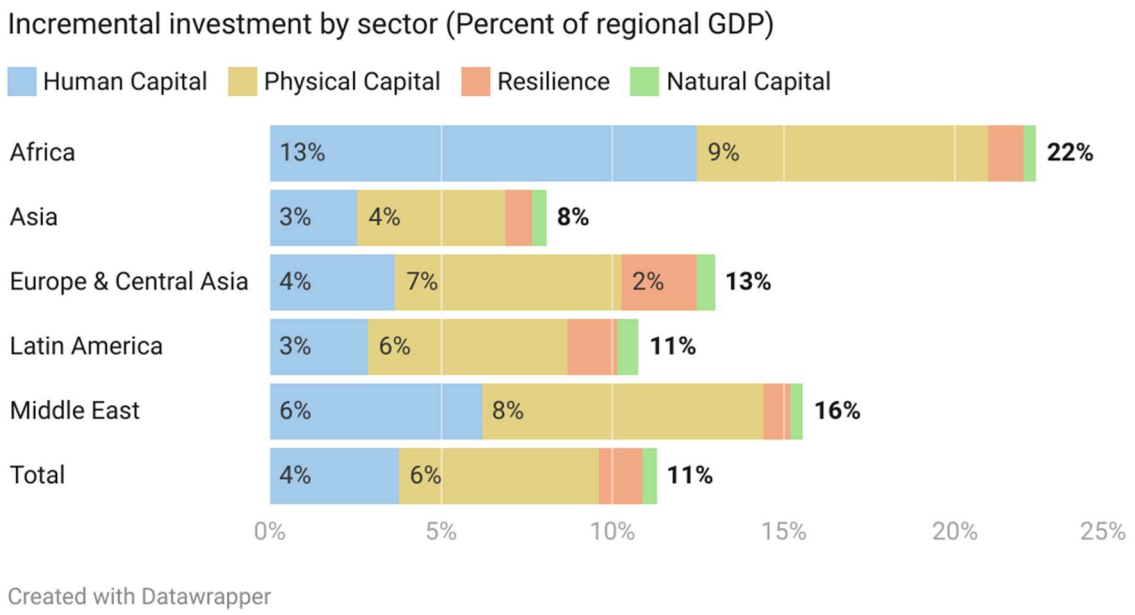
Data challenges remain a constraint. Although biodiversity conservation needs are increasingly well-understood across geographies and ecosystems, estimates for sustainable agriculture are far less precise. There is limited data on the baseline and required spending levels across different farming systems, and existing frameworks do not consistently track public and private investments in sustainable practices. These gaps hinder comprehensive planning and resource mobilization.

IV. The geographic distribution of a big investment push in EMDEs

The need for incremental investments depends on the baseline level of initial investments and the assessment of what needs to be done in the future. Both show significant regional variation among EMDEs. Africa and the Middle East are the regions where incremental investments should be the highest **(Figure 7)**. In Africa, per capita spending on human capital is very low and so not only is the increment in total spending high, but the share of the increment that should be devoted to health and education is also far larger than for other regions.

[5] It is important to note that these estimates principally cover nature and biodiversity and do not include the full extent of likely investments needed in sustainable agriculture and degraded lands.

Figure 7: Incremental investment priorities for EMDEs in 2035 relative to 2022



Source: Authors' estimates. See Supplementary Technical Annex for details on sources for each sector and the scope of EMDEs.

Asian EMDEs have the fastest growth in the developing world. They are already investing in the energy transition and other sustainable infrastructure, and need to do far more of this, but compared to other regions they have a relatively large gap in loss and damage (where they are among the most vulnerable) and in health and education to sustain growth and to provide the skilled workforce required for green and digital jobs.

Europe and Central Asia and Latin America, on the other hand, have large investment gaps in infrastructure and, in the case of Latin America, in adaptation and in nature.

The Middle East has average investment gaps across sectors, but among the lowest levels of investment in the priority areas.

Because the level of investment starts from such a low base, the largest percentage increases are in adaptation and in nature. Across all EMDEs, annual investments of $204 billion are needed for nature by 2035, compared to an estimated $22 billion in 2022, the latest year for which data is available. Of that increment of $182 billion, $49 billion—over one-quarter— should be invested in Latin America.

V. Policies to implement a big push

Investment accelerations rest on strong policy and institutional foundations. They are usually associated with improvements in the enabling environment for private sector development—sound fiscal and monetary policy, coupled with structural policy reforms in key sectors where priority investments are oriented. In parallel, public investment management must improve. Attention needs to be given to the full cycle of planning public investments, allocating finance to specific projects, and implementation through procurement, project management, and management of public assets.

Beyond these basics, a set of key obstacles is coming into focus: how to develop a coordinated multi-year program of public and private investments; and how to identify and allocate the right types of capital to these projects.

Developing a pipeline of investable projects—the growing role of country platforms

Country-led platforms, developed in partnership with key stakeholders such as development finance institutions and the private sector, can serve as a foundation for mobilizing investment and driving scaled, transformative progress in climate and development finance. There is a growing momentum on the adoption and implementation of country platforms.[60] The Brazilian G20 Presidency has put particular emphasis on country platforms as a powerful instrument to enhance collaboration and attract private investment and finance, with Brazil launching its own country platform supporting its Ecological Transition Plan in October 2024. There are now eleven countries with ongoing platforms focused on sector transitions and climate resilience, including Egypt, Indonesia, Senegal, South Africa, Vietnam, and a further 18 countries that are actively considering setting up country platforms.

The International Partnership Group was constituted by major G7 countries to support the Just Energy Transition Programs (JETPs) in several of these countries. The initial focus was on energy transition, but lessons from these country platforms can help the development of a new generation of country/sector platforms that respond to other priorities including nature, resilience, and health. High-level political commitment, multi-stakeholder engagement, and robust governance structures are necessary to build a durable whole-of-country approach. Strong involvement and support from the MDBs and development partners, combined with an early engagement of the private sector, is of vital importance. Robust financing packages including sufficient concessional

financing for early-stage support and predictable long-term financing of the right mix is essential but often challenging to put in place, more so in the current environment where aid is being cut and where one major donor—the United States—has indicated the withdrawal of its support for country platforms. Nevertheless, strengthening implementation and the announcement of a new set of country platforms is expected to feature prominently in the COP and G20 agendas this year.

Mobilizing financing for investment—where might the money come from?
The investment data presented above reflects a combination of public and private investments that will need domestic and external, official and private, concessional and non-concessional financing. Some financing happens spontaneously, such as household expenditures on medicines and textbooks. In other cases, financing channels need to be strengthened to accommodate the scale-up in volumes that is anticipated. What is important to bear in mind is that the public share of incremental investments is roughly one-half, or around 5.6 percentage points of GDP.

Domestic public resources constitute the dominant share of development financing and will have to account for the vast majority of the increase in overall financing, probably in the region of 70%.[61] For example, IHLEG (2024) estimates domestic resources presently account for 70% of climate finance.[62] In countries where investment rates are already high, domestic public resource mobilization (DRM) can largely take the form of a reallocation of budget priorities. In other countries, local financial markets, such as national development banks, can contribute more.

For many countries, however, some increase in tax revenues will be required. DRM in this form is foundational, given its role in anchoring creditworthiness and macroeconomic sustainability and in easing constraints on fiscal space. There is significant scope to raise tax revenues, but this depends on the resumption of economic growth. On average, each one percentage point increase in GDP in EMDEs leads to a 1.1% increase in tax revenues.[63]

Partly because of sluggish economic performance, growth in EMDE tax revenues has stalled since the Global Financial Crisis in 2008 and in the aftermath of the recent polycrises. Progress on carbon taxation has also been slow and uneven, and environmentally harmful and socially inefficient subsidies continue to be a major drain on public resources.

The IMF estimates that there is considerable untapped potential to increase tax revenues from multiple sources, amounting to an aggregate 5 percentage points of GDP for emerging markets and 6.7 percentage points in low-income countries.[64] They assign priority to the 41 IDA countries with tax ratios below 15% of GDP. Further gains of up to 30% can come from more efficient public spending on physical and social infrastructure. A much more systematic effort is needed to strengthen domestic public resource mobilization. The IMF and World Bank, along with the OECD and UN, have committed to this effort through a platform for collaboration on tax, and a new proposed Joint Domestic Resource Mobilization Initiative.[65]

External financing: The new collective quantified goal on climate finance agreed to deliver at least $300 billion per year by 2030. But it called on "all actors to work together to enable the scaling up of financing to developing country Parties for climate action from all public and private sources to at least $1.3 trillion per year by 2035."[66]

Although the “Baku to Belem roadmap to $1.3T” is aimed at scaling up climate and nature finance to EMDEs, a much larger volume of external finance will be needed to cover priorities additional to climate, particularly for human capital and non-energy sustainable infrastructure needed for growth. In the Independent Expert Group report to the G20 finance ministers, the share of climate and nature in total incremental financing needs by 2030 was estimated at 60%.[67] Applying this share to the $1.3T agreed to in Baku would imply a roughly $2 trillion external financing gap by 2035.

Concessional finance is the anchor of this goal. Concessional finance from rich countries is the largest component of development finance to EMDEs. Country programmable aid (CPA), the amount of aid available for investments in developing countries, amounted to $153 billion in 2022.[68] It is channeled through bilateral and multilateral agencies and covers a range of activities, including all the priority sectors considered above.

There is simply no way that CPA can provide the scale of concessional finance that is needed, and indeed, current prospects are for a significant reduction in aid. A range of options for leveraging aid, therefore, needs to be pursued to reduce the impact of aid cuts on development finance. Different donors will have their own preferences, but the core objective of using CPA’s catalytic effect to achieve leverage and impact remains critical for all donors.

One source of leverage is through guarantees for DFIs and blended finance structures. New guarantee mechanisms such as the International Finance Facility for Education (IFFEd) and the Green Guarantee Company can leverage aid by a factor of 7-10x. The aid itself reduces risk to a multilateral, bilateral or private lender. Most of the resulting flows are oriented to middle-income countries, but as indicated, these are the countries with the largest financing gaps.

A second source of aid leverage is to use multilateral channels. Agencies such as IDA leverage donor contributions by borrowing on international capital markets and on-lending higher volumes as credits at concessional rates to low-income countries. Far higher leverage is now also available for on-lending to other middle-income countries, thanks to new opportunities for donors to provide hybrid capital to financial institutions such as IBRD and AfDB.

Thanks to the spread of these new channels and instruments, the quantum of development finance mobilized by aid can be many times the volume of aid itself.

Not all concessional aid needs to be appropriated through the budget. Advanced economies have considerable SDR holdings that can be recycled to developing countries. The IMF's Poverty Reduction and Growth Trust (PRGT) and the Resilience and Sustainability Trust (RST) are operational lending vehicles for rechanneled SDRs. The PRGT has now received $57 billion of SDRs[69] to provide liquidity support to low-income countries, allowing a sustainable annual lending level of about $3.6 billion.[70] The RST has received $48 billion in pledges which will allow $29 billion in affordable financing.[71] Some countries, notably the U.S. and Germany, have faced legal impediments to SDR recycling and have attempted to compensate in different ways. The debate in the European Central Bank is ongoing as to whether SDR recycling would create assets that are sufficiently liquid to retain their reserve asset characteristic or whether such recycling would constitute monetary financing of fiscal activities, which could be illegal under EU law.[72]

While valuable as a short-term palliative, as was the case following the 2021 SDR issuance, SDR recycling will only become a significant part of the long-term development finance landscape if there are regular annual issuances of some $100-200 billion, as suggested by some scholars.[73]

Multilateral non-concessional finance represents the most scalable form of finance based on a combination of greater paid-in capital, and balance sheet optimization, and other policy measures to operate at a risk that continues to protect AAA status. Studies suggest a need to triple multilateral disbursements by

2030 and expand further through 2035.[74] Already, MDBs have reached their collective goal to generate additional lending headroom of $400 billion over the next decade.[75] In November 2024, the G20 endorsed efforts to further stretch ambitions to better, bigger, and more effective performance in its G20 Roadmap.[76]

Non-concessional bilateral development finance arms of DAC countries and export credit agencies already play a major role in financing development in developing countries at all income levels. Their impact and scale can be strengthened by using blended finance structures which, to date, have mobilized $2.3 of non-concessional finance for each $1 of aid in infrastructure projects.[77] A stronger partnership between bilateral financial institutions, the MDBs, and national development banks through the Finance in Common network would improve coordination and impact on programmatic investments.

Private finance is potentially the largest source for external development financing, but it is starting from a much lower base. External private finance will have to increase by more than 15 times to meet the large financing needs for climate mitigation goals.[78] It requires better platforms for pipeline development, appropriate instruments and structures for de-risking, aggregation, and credit enhancement, improved data to close the gap between perceived and actual risks, and tackling regulatory and incentive barriers on the supply side.

A recent OECD conference identified a range of specific actions where donors can make a contribution, working with development finance institutions (DFIs) and the private sector.[79] These include increased aid volumes for private finance mobilization, strengthened coordination, reform of bilateral DFIs, increased transparency, further use of local currency approaches, and work to reduce negative effects of regulatory barriers such as Basel III and Solvency 2.

There have also been valuable suggestions coming from other initiatives such as the World Bank lab, the Friends Group for Private Climate Finance for Development led by the State Secretary of BMZ, the 4P, and the Finance in Common lab. There are good prospects for a breakthrough this year through the different processes, including FfD4, the G20, the roadmap from Baku to Belem, GFANZ, and other coalitions. A systematic effort to draw together the key stakeholders, including the relevant private sector players could set out a roadmap for action but also give impetus to specific deliverables by the time of the COP30 Summit.

Carbon markets have an important potential role to play in financing the climate transition, which is as yet largely untapped.[80] Compliance markets through which

firms pay government-mandated carbon pricing are central to the sovereign policy toolkit to provide incentives for the climate transition and raise public revenues. The voluntary carbon market (VCM)—distinct from regulatory compliance markets as it involves the trade of verified emissions reductions or removals—offers a potential source of vital funding for key transition priorities in EMDEs. Yet, the VCM has faced significant challenges and waning investor confidence. A positive outcome from COP29 was the agreement on Article 6.4 standards and a framework for their future revision, creating an opportunity for EMDEs to more effectively develop and oversee carbon offset initiatives.

Debt swaps for climate or nature have existed for some time, however, a new generation of significantly larger transactions could help alleviate debt burdens while channeling increased funding toward climate action and environmental protection.[81]

Barbados (2024), the Bahamas (2024), Gabon (2023), Ecuador (2023) and Belize (2021) have each committed to expand specific types of nature conservation—coral reefs, tropical forests, mangroves—with savings derived from refinancing of existing debt at lower interest rates and reduced face values.

Global Solidarity Levies constitute new avenues for international taxation to finance climate action and sustainable development. At COP28, President Macron, Prime Minister Mottley, and President Ruta jointly launched a Global Solidarity Levies Task Force to explore feasible options. The objective of the initiative is, by COP30, to bring together a coalition of the willing, ready to implement one or more levies whose proceeds will be used for climate and development. The International Maritime Organization recently approved a draft agreement for a shipping levy, to be formally adopted in October, representing a first step.[82] A levy on aviation fuel also has potential.

Private philanthropy can support country-led climate and development platforms and support activities where flexible, catalytic concessional finance is critically needed. It can build partnerships through more systematically co-financing activities such as capacity-building, research, and bringing down the cost of capital for investments.

South-South cooperation on climate finance has been growing and was estimated to be around $18 billion in 2023.[83] Prospects for a continued increase are strong and could make a major contribution to meeting the large financing needs and transferring relevant know-how. The potential contribution of China,

with its enormous capacity in infrastructure and the energy transition is particularly noteworthy.

All the above sources of capital will be important. What is required now is for each development finance provider to identify credible ways through which they can scale to meet demand and to commit to finding solutions to meet demand wherever practical. A belief in the large-scale expansion of development finance providers is key to raising ambitions for the rapid economic transformation of EMDE policymakers.

VI. Implications for action

Sustainable development in many EMDEs risks stalling. Progress is too slow to meet the aspirations of growing population, particularly young people who are feeling the effects of government inability to invest in their human capital. Transitions to low-carbon economies are moving slowly and without the urgency dictated by science. Natural disasters linked to climate change threaten the livelihoods of millions, and natural resources are being degraded across most EMDEs. These challenges are compounded by slow economic growth, high public indebtedness, weak state capacity, and limited and costly access to global capital markets.

While technical solutions, involving policy reform and investment by the public and private sectors, have been outlined at a general level, they are not being implemented at scale. Projects remain stuck in planning stages due to coordination failures and financing uncertainties. Investments cannot be financed without bankable projects. Bankable projects are costly to plan and so are only developed when there are reasonable assurances of finance. EMDE governments must coordinate programs for long-term transformation with multiple financiers and must balance internal politics of sustainable development in the long run with needs to raise near-term living standards.

Breaking through these logjams requires urgent action on three fronts:

1. Build a shared commitment to a bold investment push

A first action area is to build a consensus that a large investment push, coupled with economic reforms, is the best way forward. This is not yet broadly accepted—in today's climate of global economic uncertainty, many hesitate to launch major new investment programs. Additional reforms are still too often treated by the international community as prerequisites for financing, stretching

out implementation timelines. Yet mounting evidence shows that the costs of inaction—or slow action—can be severe for both people and planet, potentially triggering difficult-to-reverse downward spirals.

EMDEs have been slower to join the push for higher investment rates, in part due to constrained fiscal space and high interest rates on global capital markets. But sectoral studies suggest that in most countries, the tipping point has now arrived: Transformative investment opportunities in the green economy are increasingly aligning with economic returns.

There are clear priorities for where investment needs to be expanded to meet new imperatives for growth. A ramp-up in human capital, infrastructure systems, resilience, and nature and sustainable agriculture is called for. Transforming these systems will require new forms of planning and coordination to develop bankable projects and establish durable country platforms. Crucially, these areas must not be treated as competing priorities—development, climate action, and nature protection are deeply interlinked and must be tackled together. That integration must be reflected not only in national strategies but in how investments are planned, financed, and delivered across ministries and sectors.

2. Expand fiscal space for investment

A second action area is to think about fiscal space in a way that differentiates investment and recurrent spending. Countries with sound investment programs that are also willing to undertake reform should receive financing assurances from the international community to move forward. The immediate challenge for the international community is to provide sufficient liquidity and assurances of long-term finance at affordable terms to permit EMDEs to launch transformative investment programs. In some instances, this may require moving rapidly to reprofile existing debt obligations and to accompany such interventions with credible economic growth programs. The Common Framework as currently applied, provides neither the speed nor the investment and growth recovery that are warranted. Longer-term, there is a need to refresh debt sustainability assessment models to provide better guidance on default risks and on loss-given-default parameters. The latter, in particular, helps differentiate between liquidity and solvency problems.

3. Redesign the development finance architecture

Third, principles and norms to guide the reset of the development financial architecture that is already underway are needed. The full ramifications of the U.S.

withdrawal from the Paris Agreement, elimination of USAID and reduction in support to several international agencies are as yet unclear, but immediate impacts include emerging financing gaps in the Green Climate Fund (and potentially IDA and the African Development Fund), in JETP programs, and virtual standstills in bilateral programs of the U.S. including for climate and health.

Added to this, reform momentum in the MDBs and the IMF has slowed.

The crucial short-term need is to minimize declines in the volume of development finance by leveraging greater quantities of aid with bilateral, multilateral, and private loans. Many IDA-blend and other middle-income countries might welcome a new package of larger development finance volumes, albeit on somewhat harder terms. For low-income countries, the trade-offs are sharper. But blended finance will still be important for selected investments with reasonable financial returns, for example in the digital sector or the energy transition.

Longer-term, there is a need for all development finance providers to scale up, with significant implications for the shareholders of multilateral and bilateral non-concessional lending institutions. Additionally, new sources of concessional finance must be urgently sought. The idea that budget-financed aid will suffice, if only the political will can be mobilized to attain the 0.7% aid target, must be discarded. Innovative areas for concessional finance must be considered. A greater focus on bringing down the cost of capital is warranted.[84]

The next 12 months—with the Fourth International Conference on Financing for Development and the setting out of a roadmap from "Baku to Belem to deliver the $1.3 trillion per annum needed in external climate finance"—provide a unique opportunity to rethink and reform the configurations of climate finance and ODA that can deliver progress on investments for sustainable growth in EMDEs.

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