

Climate Change, Natural Resources and Geopolitics

Rabah AREZKI



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Climate Change, Natural Resources
and Geopolitics

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The volume is aimed at fostering our understanding of the shifting environment for resource rich countries impacted by radical transformations linked to climate change, technology and geopolitics. On the climate change front, efforts by the international community to achieve net zero emissions have launched an ambitious but uneven energy transition away from fossil fuels leading to both potential losers and winners. Among the potential winners are the resource rich countries endowed with minerals critical for the energy transition. On the technology front, in addition the decarbonization process, digitalization will also raise the demand for critical minerals and (hopefully cleaner) energy in extraordinary ways. On the geopolitical front, the race between superpowers to access critical materials and energy resources to power the technological transformations is not only driving demand for these resources but also potential (geo-)political realignment of resource rich countries vis-à-vis super-powers. The volume also explores ways in which policies can avoid a repeat of past mistakes in the management of natural resources which contributed to the coining of the phrase “resource curse” to describe the paradox that resource dependent countries were performing poorer than others. The new boom in resources should this time serve to promote both an ethical, sustainable and inclusive development.

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Rabah Arezki

Introduction

by Rabah AREZKI

Over the past decades, the pace of change affecting the global economy has been rapid. The entry of China into the World Trade Organization was followed by a spectacular economic convergence lifting hundreds of millions of individuals out of poverty. That rapid economic development in China and the galloping demographic of developing countries is affecting the balance of power between the global north and global south. A new geopolitical order is emerging with issues of national security gaining prominence in investment and trade decisions in the global economy.

The breakthrough in climate negotiations brought about the signing of the Paris COP21 Agreement in 2015 has brought the struggle against climate to the forefront of policy makers' agenda. The combination of the action against climate change and the new geopolitics is leading to a race to secure access to critical minerals which developing countries have in relative abundance also given their unbalanced economic structure. Navigating that complex environment for developing countries is paramount to avoid being left behind. International organizations which were created after World War II also have to navigate that new and complex environment, play a more balanced role acknowledging the rise of the global south and push low-income countries through the finish line to alleviate poverty.

Navigating the challenges climate change and geopolitics will not be easy. The competition between economic super-power to dominate the world economy by winning the technological race will shape the new world order. The stakes are high and the access to critical minerals to shape that transition is at the center of that competition between economic super-powers. Would developing countries be left behind? Could they also benefit from climb up the global value chain? Would the extraction of critical mineral damage the environment and population? How should international financial institutions support countries navigate these complex challenges? These are few of the questions addressed in the volume.

The volume is aimed at fostering our understanding of the shifting environment for resource rich countries impacted by radical transformations linked to climate change, technology and geopolitics. On the climate change front, efforts by the international community to achieve net zero emissions have launched an ambitious but uneven energy transition away from fossil fuels leading to both potential losers and winners. Among the potential winners are the resource rich countries endowed with minerals critical for the energy transition. On the technology front, in addition the decarbonization process, digitalization will also raise the demand for critical minerals and (hopefully cleaner) energy in extraordinary ways. On the geopolitical front, the race between superpowers to access critical materials and energy resources to power the technological transformations is not only driving demand for these resources but also potential (geo-) political realignment of resource rich countries vis-à-vis super-powers. The volume also explores ways in which policies can avoid a repeat of past mistakes in the management of natural resources which contributed to the coining of the phrase “resource curse” to describe the paradox that resource dependent countries were performing poorer than others. The new boom in resources should this time serve to promote both an ethical, sustainable and inclusive development.

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The volume’s holistic approach of linking the issues of climate change, natural resources and geopolitics is new in the literature. Addressing climate change and its consequences on both the supply and demand for natural resources, and the latter macroeconomic and development consequences for developing countries are intimately but often overlooked. Add to these issues the geopolitical dimensions which drives the behavior of superpowers and not only drive economic dynamics but also military and political developments. Issues of national security and sovereignty are taking a precedence over economic efficiency consideration and that is reshaping trade and investment decisions worldwide.

The book divides the treatment of these complex and intertwined topics into three parts.

Part I offers an overview of challenges of developing countries navigating the trade-offs between addressing climate change and fighting poverty.

It also delves into the issues of unleashing climate finance for the energy “addition”, and not just the transition, that is especially relevant for Africa. All international financial institutions including the International Monetary Fund would need to reinvent themselves. They would need to support the struggle against climate change but especially to support developing countries which lack financing. Developing countries would need to reform both electricity, transport but also financial sectors to bring in the private sector which has been pervasively lacking.

Part II explore the interlinkages between technological transformations mainly decarbonization and natural resources. The demand for critical minerals is exploding. The macroeconomic and environmental consequences for developing countries could be dramatic. There will be winners and losers from this race to secure critical minerals. Policy makers should be aware of the potential roller coasters in prices induced by the demand for these minerals but also the technological uncertainty surrounding the demand pool for these resources. The governance agenda around critical minerals should draw from the past and avoid a remake of the resource curse.

Part III focuses exclusively on the shifting geopolitical environment surrounding developing countries not least the prioritization of national security over economic efficiency. That is affecting trade and investment decisions by governments and corporations alike hence affecting in developing countries in important ways. The new cold war is radically different from the old cold war. Indeed, the two cold wars have been separated by a period of globalization which is allowing economic superpowers and partner countries to ally in complex ways overall multiple dimensions. That has helped many middle powers to take advantage of the new cold war and is redrawing the map of alliance globally in very complex ways. That new geopolitics could lead to important risks of instability. International organizations are not immune from this rapidly evolving environment. They are also caught up in that new complex web of influences linked to the new geopolitics. The risk is that middle income countries are given more prominence in loans from international financial institutions. Hence that would crowd out financing to low-income countries which need the most attention to navigate climate change and to eradicate poverty.

Hopefully, the audience for this volume will include policymakers involved in the design of economic, environment and social policies at the national and international levels to influence the debate on the best policies for economic stability and inclusive growth in developing countries. As the contributions in this volume make clear, the order is tall and complex.

Part 1

Climate Change

How to Slow Climate Change While Fighting Poverty

Rabah AREZKI¹

Falling aid budgets and ballooning debt in the developing world are impediments to climate action. Green aid projects can bring poorer countries on board.

This year's U.N. Climate Change Conference, or COP27—which opened on Nov. 6 in Sharm el-Sheikh, Egypt—has been called “Africa’s COP.” Voices from developing economies, most prominently Barbadian Prime Minister Mia Mottley, have become louder in demanding that richer countries compensate them for “loss and damage.”

That term, used in climate negotiations, refers to the irreversible consequences caused by climate change to which poor countries or communities cannot adapt. When options to adapt exist, they are not affordable to these countries or communities. The debate over loss and damage is occurring at a time when the future of traditional aid is in doubt. Indeed, political support for aid budgets has been dwindling.

Donor countries have increasingly been under pressure from a series of crises—from the global financial crisis in 2008 to the COVID-19 pandemic to Russia’s war in Ukraine—which have raised their debt levels. Fiscal and

1. This text was first published by **Foreign Policy** in November 2022: Arezki A. (2022) "How to Slow Climate Change While Fighting Poverty", *Foreign Policy*, November 7, <https://foreignpolicy.com/2022/11/07/cop27-green-aid-slow-climate-change-while-fighting-poverty/>.

monetary space is increasingly limited, and taxpayers are facing rising costs of living. Politicians in advanced economies will increasingly face the difficult choice between giving citizens more financial support at home and providing aid internationally.

In the past few years, several donors have announced significant reductions in the amount of allocated development aid. The United Kingdom, an historically committed aid donor, is a case in point. Last year, the British government passed a motion to reduce its aid by 0.2 percent of gross national income. The recent turmoil the country faced in financial markets signaled potentially more global turbulence, which will push even richer countries to consider cutting foreign aid further. Other countries, such as Australia, Japan, and Saudi Arabia, have also scaled back their aid packages.

What is needed, however, is not less but more aid to help developing countries tackle the dramatic consequences of an unprecedented series of crises. Indeed, developing countries, unlike advanced economies, had no fiscal, monetary, or social space at the onset of these crises. Former U.S. Treasury Secretary Larry Summers recently warned about the dangers for the international community of not stepping up to support developing countries. He pointed to the mounting risks to the global economy, which will have disproportionate consequences for developing countries and risk further fracturing the cohesion of the global community.

One key priority for the global community is not only to increase aid but to make it much greener to help developing countries tackle the challenge of climate adaptation. Green aid encompasses financial and technical assistance to governments and direct investments in projects in both mitigation and adaptation to climate change.

Examples of green projects include building dams to generate hydroelectricity, such as the Three Gorges Dam in China, and preserving forests, such as in the Congo Basin or the Amazon, which have a major role in the global climate system. Other avenues for green project investments include managing biodiversity and coastal areas, fostering ecotourism, and addressing environmental health hazards.

These projects can be operated at the regional, national, or community level. Adaptation projects, which developing countries need most, urgently have become the orphan of the fight against climate change. That is because governments in developing countries lack the financial resources. And without a financial backstop, the private sector will not invest in certain green projects, especially those linked to adaptation.

The need for green aid has never been greater, especially as private sector investment flows toward green projects are faltering. Indeed, the high hopes for private sector-led green investment raised by the Glasgow Financial Alliance for Net Zero, a coalition of leading financial institutions committed to accelerating the energy transition, have been dampened.

The coalition carried the promise to tap into the massive global saving glut and direct a large chunk of it toward green investments. The \$130 trillion announced last November in available financing from investors toward green assets is being scaled down, and private sector actors are quietly renegeing on their climate finance promises.

Russia's war in Ukraine has rekindled concerns about energy security and put the energy transition on the back burner. High natural gas prices have led large economies such as Germany but also China and India to resort to coal. It is ironic that European countries, which have for years reprimanded developing countries for their use of dirty fuels, are now scaling up their consumption of coal.

Developing countries have long been arguing that it is in their rights to exploit fossil fuels and that the burden of cutting emissions should be on richer nations. Relying on dirty energy becomes even more important if they fear aid may not be forthcoming. More green aid in the form of financial guarantees can help boost private investments in green projects that would not otherwise be viable. To avoid gridlock between rich and poor countries at COP27, green aid must play a central role as a catalyst for the private sector to invest in climate action.

The World Bank Should Become the 'IMF of Climate'

Rabah AREZKI, Philippe LE HOUÉROU²

The United Nations should entrust the World Bank Group with a clear mandate on global climate stability by monitoring countries' commitment to cut greenhouse gas emissions.

The latest Intergovernmental Panel on Climate Change report raises grave concerns that countries are falling behind their commitments to cut greenhouse gas emissions. The window to make required changes is worryingly narrowing. Climate stability, like global macrofinancial stability, is public goods. Yet, while the International Monetary Fund has an operational mandate to preserve global macrofinancial stability, the U.N. Framework Convention on Climate Change only sets out the basic legal framework and principles for international climate change cooperation. It doesn't pair the operational mandate on climate stability with a global institution. The World Bank could be that very institution.

The United Nations, through the Conference of the Parties, has nurtured the historical Paris Agreement on climate change adopted in 2015, covering climate change mitigation, adaptation, and finance. Rather than imposing top-down targets, the bottom-up structure has allowed countries to choose nationally determined contributions, or NDCs. The Paris Agree-

2. This text was first published by **Devex** in July 2022: Arezki R., Le Houérou P. (2022) "Opinion: The World Bank Should Become the 'IMF of Climate'", *Devex*, July 21, <https://www.devex.com/news/opinion-the-world-bank-should-become-the-imf-of-climate-103644>.

ment also has a provision for a “global stocktake” every five years. The U.N. now needs to designate a “super implementer” working closely with the secretariat of the UNFCCC.

▶ Why the World Bank?

Rather than waiting for another desperate warning from the IPCC, the U.N. should entrust the World Bank Group, an intergovernmental organization that is part of the U.N. system, with a clear mandate to monitor countries’ commitment to cut GHGs and accelerate the energy transition of the global economy.

Critics would argue that the bank’s governance structure weights donor countries’ control proportionally, which is fundamentally different from that of the U.N. Yet, that move to entrust the bank alongside the UNFCCC secretariat would give further impetus to the bank’s shareholders to boost lending toward climate stability. This move would combine the bottom-up approach of the Paris Agreement toward NDCs championed by the U.N. with the world of development finance championed by the World Bank.

In addition to its obvious financing capacity, the bank is well equipped to take on a renewed mission to achieve climate stability. First, the bank has a universal membership, which spans globally—its original loan was to France following the devastation of World War II. That universal membership could come in handy to help monitor the NDCs to curb GHGs.

Second, the bank has built vast expertise in policies, knowledge, and investments spanning all climate-relevant sectors like energy, transport, water, agriculture, construction, manufacturing, mining... as well as social sectors. It is helping some member countries to design their national plans to combat climate change including by producing new country climate diagnostics.

Third, the bank has also built expertise through private sector investment directly through the International Financial Corporation and indirectly through advising governments on policies to foster and catalyze private sector investments.

The IMF mandate provides a template for redefining the bank's mandate. In other words, the bank should become the "IMF of climate." The template provided by article IV of the IMF's Articles of Agreements is particularly relevant for the bank's proposed new mission. According to article IV, IMF's member countries have an obligation "to collaborate with the Fund and other members to assure orderly exchange arrangements and to promote a stable system of exchange rates."

Specifically, members should avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members. In practice, IMF's regular monitoring of economies and provision of policy advice goes much beyond exchange rate issues, allowing it to identify weaknesses that could lead to financial and economic instability.

The World Bank could play the same monitoring and policy advice role for international climate change cooperation. In the context of these consultations, the bank should monitor policies toward achieving climate stability, in turn complementing the regular inventories countries submit to the UNFCCC and the review process under the Paris Agreement for implementation of NDCs.

► Green Funds and Finance

Economists have put forth carbon pricing as a solution to address climate change to account for the negative externality associated with the use of fossil fuels—and in turn, shape consumers' and investors' behavior. But navigating the transition is complex and attention has shifted toward distributional issues. Evidence also suggests that citizens are not ready to pay more for energy during the transition, at least in the short run. The backlash against fuel subsidies reforms in low- and middle-income countries and against "carbon taxes" in advanced countries, including the yellow vests movement in France, is telling.

The bank is well equipped to help support policies for climate stability including carbon pricing with an appropriate design of schemes to address

distributional issues. More broadly, the bank's technical expertise should be mobilized to foster the acceptability of bold climate actions with mechanisms to compensate losers within and between countries.

To do so, the World Bank should coordinate the ever-growing funds aimed at combating climate change but whose actions have become fragmented; and work closely with U.N.-backed funds, such as the Adaptation Fund, Global Environment Facility, and Green Climate Fund. The bank should also strengthen its existing partnerships not only with the U.N. and IMF, but also with regional development banks, bilateral aid agencies, and NGOs that are actively involved in climate and green finance.

The biggest GHG emitters—the United States, China, and the European Union—should show the way and commit to undergoing surveillance on their commitments to reduce GHG emissions. That would encourage other World Bank member countries to do the same. Whether or not they borrow from the bank, under that new mandate, member countries would be enjoined to collaborate with the bank on how to amend their policies and limit the effects of their climate policies on countries most directly affected, such as island nations.

The World Bank is in a unique position to document individual countries' environmental policies through its consultations with member countries on an annual basis, just like the IMF article IV consultations. The bank could produce an annual update on "national climate action" in consultation with individual countries' authorities, to share with all member countries.

▶ The Private Sector

The World Bank could integrate its financing capacity and efforts to foster the private sector directly and indirectly in the context of these consultations. Besides carbon pricing, appropriate regulations and standards could help promote private sector solutions as well as encourage technological innovation and transfer to combat climate change.

The bank has championed the agenda to mobilize development finance to maximize finance for development. It should now focus its policy rec-

ommendations and development interventions more squarely on climate-related investments. For example, it should scale up the use of guarantees toward projects that will allow countries to ignite the necessary private sector investments needed to accelerate their transition toward renewable energies.

The bank played a key role in launching and building the world's green bond market. Going forward, the bank should use its expertise to further green, nature, and blue bond markets, and impact investing tailored to the investment needs of different countries to combat climate change.

► Standards

Last and not least, to avoid “greenwashing” the bank should be at the center of introducing international standards and data disclosure to facilitate its function of climate surveillance and to help promote transparency, which has been a point of contention in the UNFCCC negotiations. The World Bank should curate climate standards under the UNFCCC, in turn providing an anchorage to monitor progress toward reducing emissions.

All in all, the proposal for a renewed mission for the World Bank that we are putting forward today should help rekindle much-needed multilateralism by bridging the gap between the world of development finance with that of international climate policy to save humanity from the existential threat posed by climate change.

Unleashing Climate Investment in Africa

Rabah AREZKI³

► Introduction

Africa has been a relatively small contributor to climate change. The continent is a small source of greenhouse gas (GHG) emissions, accounting for about 3.8% of global carbon emissions.⁴ The development gap between Africa, advanced economies and emerging markets explains the relatively low carbon footprint of the continent. Only 48.3% of the population in sub-Saharan Africa has access to electricity.⁵ But emissions in Africa have been rising steadily over the past decades, due to rapid urbanisation and population growth in the continent.

That means that Africa, home to 60% of the world's poor, needs investments that will not only improve living standards – including expanding access to electricity – and create good jobs, but also help build climate resiliency and address other environmental concerns. For that, it needs to mobilise massive investments financed from domestic sources, but also importantly from foreign sources considering relatively low saving rates in the continent. To that end, African economies need to tackle the long-standing issues of absorptive capacities to tap into the growing interest of global investors in climate-friendly investments. This chapter explores the needed interventions and financing options to catalyse climate investment in the continent.

3. This text was first published by **CEPR Press** in: Schoenmaker D., Volz U. (eds) (2022) *Scaling Up Sustainable Finance and Investment in the Global South*, CEPR Press, Paris & London, <https://cepr.org/publications/books-and-reports/scaling-sustainable-finance-and-investment-global-south>.

4. See <https://ourworldindata.org/co2-emissions>.

5. See <https://ourworldindata.org/grapher/share-of-the-population-with-access-to-electricity?tab=chart&country=Sub-Saharan%20Africa>.

The dramatic drought and ensuing famine in Madagascar and in the Horn of Africa are stark reminders of how vulnerable the continent is to extreme weather events. These events worsen living conditions, especially for economically marginalised groups. Beyond the effect on weather systems, climate change will have far-reaching consequences in the continent in terms of global health, mass migration and security. It is therefore essential for Africa to formulate policies and explore financing options to invest massively in both 'addition' and 'transition' for its energy systems.

The remainder of the chapter is structured as follows. Section 2 argues that both adaptation and mitigation efforts are essential in Africa's struggle against climate change. Section 3 presents climate investing as an infrastructure financing problem involving development finance actors. Section 4 explores complementary policies to address bottlenecks and catalyse climate investment. Section 5 discusses climate finance options. Section 6 concludes.

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► Adaptation and Mitigation Efforts

Both adaptation and mitigation efforts are essential to Africa's response to climate change. Adaptive efforts such as planting drought-resistant crops, building up flood and wind defences or redesigning communications systems generally are not capital intensive. But mitigation involves, among other things, major changes to infrastructure that require substantial greenfield investment. A combination of adaptation and mitigation policies are needed to shape Africa's response to climate change and its consequences.

On the adaptation front, efforts should be concentrated in agriculture, which employs a large segment of Africa's poor. Agriculture in the continent should orient towards drought-resistant varieties, crop diversification, and changes in cropping patterns to limit the effect of climate change on crop yields. Climate change has increased the occurrence of extreme events, including floods and droughts, in the continent. What is more, climate change is worsening the living conditions of economically marginalised groups, especially youths, who are at risk of falling prey to

radicalisation. Adaption will help lessen the dramatic consequences of climate change for Africa and beyond.

On the mitigation front, energy systems, which are underserving Africa's population, need to be transformed. This transformation will both help power Africa and reduce emissions by leading to a move away from coal and fossil fuels. Africa has a large potential to 'green' its energy sector, including by using solar, hydro and wind to power generate electricity. For example, according to the World Bank, solar radiation is amongst the highest in large parts of Africa (ESMAP 2020). This huge potential in renewable energy generation can substitute for subsidised fossil fuel consumption.⁶ The technological changes driving the transition from fossil fuels to renewable sources present sizable economic opportunities for Africa, especially as the cost of renewables such as solar and wind is now lower than that of fossil alternatives, according to the International Energy Agency. Authorities in Africa should tap the region's vast pool of renewable resources to accelerate the transformation of their energy systems, which would have the double benefit of reducing CHG emissions while keeping energy costs from rising. In isolated and lagging regions, promoting decentralised energy systems could also help economically empower local communities. Yet, the continent has a pervasive lack of needed capital, technology and governance (Collier and Venables 2012). The high upfront investment costs, combined with higher cost of capital, are a big hurdle for investment in African countries. Unless this situation is rectified, Africa will continue to rely on its abundant oil, gas and coal reserves both for domestic energy and as a source of foreign exchange receipt.

The transformation of energy systems in Africa is also paramount because of the risks associated with stranded assets. If we are to meet our climate goals, a large fraction of the world's fossil fuel reserves will need to be kept underground. Africa's known reserves of hydrocarbon and other minerals have been growing amidst large discoveries in the past decades (Arezki *et al.* 2019). McGlade and Ekins (2015) estimate that world reserves of fossil fuels are much larger than the 'carbon budget'. In other words, the billions of barrels of oil and other fossil fuel deposits in Africa cannot be burned.

6. Overall, installation of new renewable capacity in Africa lags the rest of the world though so it has been rising steadily in the continent (IRENA 2020).

In addition to reserves, the structures and capital used in extraction and in exploitation of fossil fuels are also at risk of becoming stranded.

Energy consumption in Africa is heavily subsidised and also needs reform. These subsidies introduce a range of distortions, including wasteful consumption, misallocation and harmful effects on the environment from local air pollution and traffic congestion (Coady *et al.* 2019). But reforming them has proven difficult. Because the region has few functioning social welfare systems, subsidised energy prices are an important part of an inadequate social safety net.⁷ Several oil-importing countries in the region have phased out fuel subsidies, but not without difficulties. For the region's oil- and gas-exporting countries, low domestic energy prices have also historically formed an important element of the social contract, in which political elites capture riches from the extraction of hydrocarbons and compensate citizens through a variety of direct and indirect channels, including energy subsidies.

Consequently, it is not uncommon for subsidy reform efforts to be abandoned when governments are faced with street protests or if tensions build up when domestic energy prices increase. Evidence from Indonesia and Nigeria indicates that the perception of corruption in the implementation of targeted transfer programmes increases public resistance to fuel subsidy reform among poor citizens, who consume the least fuel and who stand to lose the most from any reductions in targeted programmes (Kyle 2018, McCulloch *et al.* 2021b). These challenges to removing subsidies raise important question about the political acceptability of carbon pricing as a policy tool to address climate change (Klenert *et al.* 2018). Appropriate steps are needed to build trust in government and quality of basic public services, including transportation, electricity, water and health, to wean off citizens off fuel subsidies.

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► Climate Investment as an Infrastructure Financing Problem

Many of the mitigation efforts will be in the form of infrastructure. A potential source of funding for infrastructure projects such as those required

7. See <https://social-assistance.africa.undp.org/data>.

for energy companies are institutional investors that are on the lookout for higher-yielding investment projects that help build climate resiliency. One of the big challenges to channelling global savings into infrastructure investment is the need for a pipeline of potential projects that can be securitised with the cooperation of the public sector. Building a pipeline for projects requires building capacity in the public sector for project preparation, appraisal and design to eventually turn them in bankable projects, including through the use of guarantees.

Beyond this important domestic capacity consideration, Arezki *et al.* (2017) identify the main institutional obstacles that prevent the flow of savings towards infrastructure investment and propose a key institutional fix to unlock the current savings glut and reverse the trend of secular stagnation. The authors argue that the solution is to reshape public–private partnerships (PPPs) in infrastructure and the classic model of multilateral development bank (MDBs). Traditionally, PPPs have been bilateral contracts between a private concession operator and a government agency, while development banks offer financing to projects that could not attract private funding but have a high development impact. Arezki *et al.* (2017) propose a model in which PPPs can involve three, or even four, partners, with the additional partners being a development bank and long-term institutional investors. The new model for development banks is to transform them into ‘originate-and-distribute’ banks for PPP infrastructure projects. This approach aims to maximise much-needed private sector financing.

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► Policies to Catalyse Climate Investment

Fighting climate change requires more than just spending on infrastructure projects. It also requires policies to foster technological breakthroughs and appropriate tax and trade policies to incentivise sustainable activities – especially in logging and land management.

Sovereign borrowing cannot be the exclusive driver of climate-friendly investment; Africa needs to massively attract private investors. A big problem is that the sovereign debt situation of many African countries has deteriorated considerably over the last two years. This has an impact on

the willingness of international investors to go into countries, given that potential sovereign defaults may impact their investment even if it doesn't involve any lending to the government. Timely debt restructuring and relief, championed by the international community where appropriate, will help unlock the potential for private-sector climate investment. Beside efforts by the international community to help fix the debt situation, the authorities on the continent need to do their part and address absorptive capacity issues both upstream and downstream of the energy sector.

On the upstream front, the lack of disclosure and the scarcity of data on the environmental impact of investments in Africa discourage investors. This lack of disclosure is in stark contrast to the rising demand for more information among shareholders in advanced economies. International shareholders are demanding to evaluate the environmental and social consequences of their investments. In addition, governments must take steps to modernise and broaden their thin financial sectors to permit the kinds of financing activity needed to support global investment.

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Domestic financial systems in the continent are 'clogged conduits' for foreign investment. Too often, domestic financial sectors are too thin and are subject to a form of 'financial repression', channelling savings away from the private sector. Sovereign borrowing cannot be the exclusive driver of climate-friendly investment.

Specifically, most countries lack currency convertibility and have strict capital controls, limiting the prospects for investment and ability to borrow. These restrictions and lack of currency swap instruments affect banks that borrow in foreign currency. In turn, these obstacles make it difficult to fund projects which generate receipts in local currency, making these projects not bankable.

The production and distribution of electricity is largely overregulated in many African countries. Electricity tariffs are tightly controlled and are too low for the sector to be viable. The sector suffers from a chronic lack of investment, with resulting power outages. To make the power sector efficient and attractive to investment, there is a need for unbundling of the generation segment, which is competitive, and the distribution sec-

tor. In other words, the generation segment should be separated from the non-competitive distribution segment.⁸ Promoting competent and independent regulators at the national and regional levels is crucial to achieve efficiency and attract needed investments.

On the downstream front, transport is another sector that needs investment to reduce its carbon emissions. In Africa, inefficient public transportation blocks emissions reforms and is the main reason for pervasive fuel subsidies. Developing decarbonised transportation assets – including railways and other mass transit options – will help ensure energy demand predictability and stimulate investment in the electricity sector.

But high financing costs and tight caps that preclude companies from raising tariffs to cover those costs make it difficult to enable bankable power purchasing agreements. The tightening of global financing conditions is adding to rising financing costs and may cut most African countries off from capital markets, making it difficult to borrow for climate investment. What is more, the thirst for energy security in Europe and beyond following the invasion of Ukraine has triggered a resurgence in deals on fossil fuel assets in the continent. This may derail Africa's trajectory towards decarbonisation.

There are several other barriers to investment, including the lack of domestic climate and social standards, that governments must address to encourage climate finance in Africa. Economic and societal goals need to come into focus. There is a need to develop local firm capabilities over and beyond foreign direct investment and needed transfer of technology. Over and above environmental goals and standards, the focus should also be on creating good green jobs, especially for the large pool of youth that constitute a large majority of the population in the continent.

► Climate Finance

In many respects, the Paris Accord was a breakthrough in terms of global climate governance, with the goal of limiting global warming to below

8. See <https://fsr.eui.eu/unbundling-in-the-european-electricity-and-gas-sectors/>.

2°C, and preferably to 1.5°C, compared to pre-industrial levels. Countries have agreed to nationally determined contributions with national plans highlighting their climate actions. But rich countries are failing to live up to their promises in terms of financial support to help poorer countries develop cleanly and adapt to climate change. The pledges by rich nations amount to \$100 billion per year in funding from 2020 onwards. Arguably, we are well below this \$100 billion per year. Indeed, it is still unclear whether the \$100 billion will come from concessional funding, the private sector or technology transfers.

Climate finance offers a variety of instruments that need to be used accounting for absorptive capacities in the continent. Carbon credits, for example, allow companies to offset their GHG emissions in return for investments in carbon reductions made elsewhere, such as in a developing country. Investors that make carbon-reducing investments in, say, Africa, receive credits that they can sell to an enterprise in an advanced economy that needs to offset its emissions. Use of carbon credits, each worth a tonne of carbon, needs to be scaled up, especially for Africa. As an illustration, only 77 projects for 'reducing emissions from deforestation and forest degradation' (REDD) in Africa were registered under the Verified Carbon Standards (VCS) and 185 million credits were issued by the end of 2020.⁹

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Other types of instruments can attract needed funds to Africa. Green bonds are fixed income instruments that specifically support climate- or environment-related investment. Africa currently accounts for only a tiny fraction of the global issuance of green bonds.¹⁰ While green bonds may be more appropriate in more mature markets where there is less demand uncertainty, they and other nature and blue bonds may be an important substitute for resource-backed loans granted by China, which have tended to be opaque. Blended finance combines public or philanthropic interventions such as guarantees with private money on a development project. As argued by Garbacz *et al.* (2021), the advantage of guarantees in blended finance is that they do not immediately require outflows of funding, including from donors or public entities. Guarantees are also useful to mitigate commercial, credit and political risks, and help shift the risk-return

9. See <https://verra.org/datainsights/data-and-insights-january-2021/>.

10. See <https://www.stockholmsustainablefinance.com/publication/green-bonds-in-africa/>.

profile of investments and alleviate credit restrictions for underserved borrowers. A top priority to scale up climate investments in the continent is definitively guarantees, including from development banks. Insurance markets, which are severely underdeveloped in the continent, are also important instruments to help create markets. Impact investing is another source of climate investment which could be particularly appropriate for Africa. Impact investors provide capital to companies and organisations to achieve social and environmental goals. The relatively small size of the private sector in Africa and the multiple obstacles make this form of investment appropriate for the continent, and it can also help avoid the pitfalls of the sovereign as the sole conduit of private investment.

▶ Conclusion

The transformation of Africa's energy systems will require large investments. Luckily, there is growing interest in climate-friendly investments among the global financial community. To tap into this interest, African economies must tackle longstanding issues that constrain the ability of their energy systems to absorb investment. Sovereign borrowing cannot be the exclusive driver of climate-friendly investment. The private sector, both domestic and foreign, should be part of the solution for climate finance on the continent. Traditionally, high financing costs and caps that preclude companies from adjusting tariffs to cover these costs make it difficult to develop bankable purchasing power agreements. Developing decarbonised transportation assets – including railways and other mass transit options – will also help reduce GHG emissions, ensure energy demand predictability and stimulate investment in the electricity sector.

It won't be easy. There are problems related to the economic governance of the energy sector, and also complementarities between the energy sector and other sectors that hamper the ability of African economies to absorb investment. In turn, these problems discourage the global investor community. However, if authorities can force the right changes, African economies – especially those with little available capital – will be able to tap into the growing interest of global investors in making climate-friendly investments in a socially acceptable manner. And a beneficial side effect

would be that the investments would help fix the increasingly onerous and unreliable access to energy and other public services that have exacerbated social tensions.

What is more, the new investor preferences in advanced economies for climate-friendly investments can promote green investments in developing countries in Africa. Shareholders wish to protect the environment and create societal benefits, and demand more disclosure and transparency from companies operating on the continent. Instilling more transparency and disclosure could lead to long-lasting governance gains for the continent and narrow the gap between the ultimate stakeholders in Western countries (such as pensioners) and African stakeholders (such as nature workers). By embracing disclosure standards, African authorities would help attract more investments and ensure these investments have the intended societal and environmental impact.

One development that may abet the greening of Africa's energy system is the recent opening of the Africa Continental Free Trade Area. Regionalised energy markets are bigger and can attract and catalyse investments. Moreover, regionalising regulators and other institutions could provide comfort to investors, as it would allow them to rise above the domestic politics that plague national regulators. Regionalising institutional arrangements, including tenders and the regulatory apparatus, is thus paramount. The European Union provides an interesting model for the regionalisation of energy markets and networks industries such as transport. Capital market integration is an important avenue to fund large-scale, cross-border climate-related projects, as well as to help the region to integrate into the global financial economy and promote inclusive development.

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Part 2

Natural Resources

Transnational Governance of Natural Resources for the 21st Century

Rabah AREZKI¹¹

Natural resources—whether they are water, land, underground, or in the air—should be seen as common goods, meant to be shared by all. That means their governance arrangements—to be tailored according to the specific property of each resource—should be in harmony at the local, national, regional, and global levels to ensure they are used sustainably and in a way that protects the environment and the people who depend on them. This has proven to be very complex.

Throughout history, harmonious sharing of common goods has seldom been achieved. Today's scramble for natural resources by major powers is far from new. It stems from a long-standing and fundamental asymmetry between advanced and less-advanced economies—not only in terms of access to and demand for natural resources, but in terms of advances in technology, military might, and state and private sector capabilities in general.

A good example is the competition among 19th century European empires for natural resources such as copper, tin, rubber, timber, diamonds, and gold. The advance of steam engine navigation made access to and transport of these resources much easier for these empires. The resources were essential to powering industrial revolutions. People in the colonies where the resources were located, benefited little, if at all. As a result, for-

11. This text was first published by **Brookings** in July 2021: Arezki R. (2021) "Transnational Governance of Natural Resources for the 21st Century", *Brookings Future Development commentary series*, July 7, <https://www.brookings.edu/articles/transnational-governance-of-natural-resources-for-the-21st-century/>.

mer colonies have a complex history with which a number of countries, including many in Africa, continue to grapple.

Fast forward to today. The race for natural resources to power the simultaneous energy and digital transitions the world is experiencing rages among the major powers. Both transitions rely heavily on technologies that require such resources as rare earth metals for semiconductors, cobalt for batteries, and uranium for nuclear power. But the transitions also mean that historically valuable natural resources and their associated investments—prominently oil and other fossil fuels—will eventually become stranded, with severe consequences for countries almost totally reliant on those assets, especially those with weak state capacity. The last oil price super-cycle might already be underway, the end of which could herald an increase in the number of failed states.

That race for natural resources has become more acute as major powers have entered into strategic rivalries—especially between the United States and China, but also between China and Europe. This time an appropriate transnational governance of natural resources is essential to achieving an orderly, sustainable, and inclusive exploitation of natural resources so these transitions do not leave people, especially those in developing countries, behind.

Developing countries have had difficulties managing their natural resources—so much so that the term “resource curse” was coined describing the paradox of countries rich in natural resources performing worse than countries that are resource poor. Volatility, loss of competitiveness, excessive indebtedness, and internal and external conflicts are behind the poorer performance of resource-rich countries. Research has shown that good institutions, unsurprisingly, moderate that curse. But which ones? There are two key areas:

The policies and institutions that govern the opening of the resource sector to attract investment and hence generate revenues for the state.

The quality of redistributive institutions that govern how the proceeds from the exploitation of these resources are used and benefit people, including in terms of human capital.

Moreover, regulation at the national level has often failed to address issues of overexploitation of natural resources as well as displacement, environment degradation, and risk to biodiversity, which are often best managed by local communities. The work of the late Elinor Ostrom has shed important light on the design of self-organized user communities to achieve sustainability in the exploitation of natural resources.

Several international initiatives have focused mainly on transparency. They include the Extractive Industry Transparency Initiative and the Natural Resource Charter. A number of NGOs have been very active in the space. Legislation in the United States and the European Union (EU) strive to hold accountable their multinational corporations by mandating that those companies disclose their payments in countries in which they operate. It is more difficult to hold state-owned enterprises accountable because of a lack of transparency and a complex web of interests and cross-subsidies. The development of environment, social, and corporate governance norms (ESG)—with roots in the socially responsible investing movement that began in the 1970s—are means by which investors and others can gauge how responsibly a corporation behaves environmentally. But it is unclear whether ESG assessments are sufficient to force firms to internalize the complex sets of externalities at different levels required to achieve sustainable behavior. It is also unclear whether and how these norms could be enforced. One encouraging sign is that consumers in advanced economies appear to be changing their behavior concerning the environment. But investor behavior, especially in developing countries, may not be so amenable to change. The challenge with all these initiatives is the difficulty in translating them into the right context and fostering ownership, especially at the local and national levels. More needs to be done to integrate local, national, regional, and global actors to achieve better outcomes.

For example, the EU's relationship with regions such as Africa and the Middle East—and especially with China—will be crucial to shaping the transnational governance of natural resources. Transnational governance should account for the interdependencies related to peace and stability, global health, and climate issues in a world increasingly organized into blocs. If externalities are to be internalized, it will require:

- Technology transfers from advanced to developing economies to provide the tools to address the threat of climate change and meet climate goals.
- Access to international capital markets through, for example, green, nature, or blue bonds instead of opaque resource-backed loans with non-traditional creditors such as China.
- Ways to ensure that foreign direct investment (FDI) delivers on local contentment and jobs to address rising discontent in communities where mining or other extractive industries operate.

More generally, advanced economies such as the EU should acknowledge the shift in the development paradigm from one exclusively centered around extraction and exports of natural resources to that of promoting domestic productive capabilities locally and hence good jobs. Specifically, the process of deepening the African continental free trade agreement should be accompanied by coherent arrangements at the regional level on tax, trade, competition, and financial policies. The integration of the EU carries valuable lessons in that regard that could be shared and learned. Focusing on energy, agriculture, and mineral resource sectors as foundational elements of that integration and partnership will ensure the sustainability of these investments for all parties.

The New Curse of Critical Minerals

Rabah AREZKI, Rick VAN DER PLOEG¹²

A race is raging among the super-powers over critical minerals in developing countries to power the simultaneous energy and digital transitions the world is experiencing. The extraordinary growth in demand for critical minerals is putting upward pressure on prices and stimulating new critical mineral discoveries all around the world. In developing countries, the new bonanza from critical minerals presents opportunities but also important risks. This column argues that absent governance system shifts, the risk for developing countries is to face a “new curse of critical minerals”.

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While both the energy and digital transitions rely on technologies that require such critical minerals, the clean energy transition is most prominently associated with the intensive use of these minerals. Technologies including wind turbines, solar PVs, electricity networks, electric vehicles and nuclear power require minerals such as copper, lithium, nickel, silicon, cobalt, rare earth elements and uranium. Demand for these minerals is expected to grow very quickly as the clean energy transition gather pace.

In the face of that growth in demand, the limited supply of critical minerals is already putting upward pressure on their prices. The International Energy Agency (2021) forecasts that mineral demand for clean energy technologies would rise by at least four times by 2040 to meet climate goals, with particularly high growth for minerals needed for electric vehicles. Graphite, nickel, lithium, and rare earth minerals are expected to wit-

12. This text was first published by **VoxEU/CEPR** in July 2024: Arezki R., van der Ploeg F. (2024) “The New Curse of Critical Minerals”, ©VoxEU/CEPR, 4 July, <https://cepr.org/voxeu/columns/new-curse-critical-minerals>.

ness explosive demand under the scenario meeting climate goals. In this column, we argue that the bonanza from the exploitation in developing countries create both opportunities but also important risks especially for developing countries (Arezki and van der Ploeg, 2023).

The production of critical minerals is relatively scattered. Yet the salient issue is where is the residual production of critical minerals net of domestic consumption (i.e., exports), especially of raw critical minerals, concentrated. The production of critical minerals is highly prevalent in the major economic blocks namely China, the United States and European Union. These blocks typically consume more of what they produce hence making them dependent on exporters of raw critical minerals. Australia, Russia, Kazakhstan, Democratic Republic of Congo, Mozambique, Chile, South Africa, and Zimbabwe as well as many others are important exporters of raw critical minerals and thus are courted by superpowers which strive to ensure secure supplies of such minerals.

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The geography of mining versus process of critical minerals is very telling. China completely dominates the processing of copper, nickel, cobalt, rare earths, and lithium, but China only dominates in the production of rare earths while Chile and Peru dominate in the production of copper, Indonesia dominates in the production of nickel, DRC dominates in the production of cobalt, and Australia and Chile dominate in the production of lithium. It is mind-boggling that China is the dominant producer in the world economy of offshore wind, onshore wind, solar, and electrical vehicles and has 40-45% global shares in the production of fuel cell trucks, heat pumps, and electrolyzers (Leruth, Mazarei, Régibeau, and Renneboog, 2022).

Many developing countries including Zimbabwe attempt to maximize the value of their raw critical minerals by setting up cartels. Historically, in response to the unfair share they believed they received from the exploitation of these critical minerals, developing countries have set up producer cartels, such as the Organization of the Petroleum Exporting Countries (OPEC). While these cartels may get higher prices for these critical minerals and add revenue to government coffers, in practice advanced economies eventually find alternative suppliers (for example, non-OPEC producers) or develop alternative products (such as synthetic palm oil or shale oil).

Moving up the value chain would be a better route but that too has proven difficult. The risk of cartelization is another source of concerns for major economic powers dependent on exports from developing countries. The uneven distribution of production of critical minerals is, however, likely to diffuse as elevated prices will steer exploration investment efforts and eventually lead to more discoveries (Arezki and van der Ploeg 2019). A case in point is lithium production which price has fallen after fear of scarcity in the face of extraordinary demand growth.

The ramping up of mining activities around critical minerals will have severe environmental, health, and social consequences. Indeed, mining activities can cause irreversible damage to the environment and is also an important source of emissions of greenhouse gases undermining climate goals. Mining of critical minerals is intensive in the usage of water and can contaminate water especially in places where standards and controls are weak. What is more is that in places where labor standards are weak, working conditions can be very harsh and child labor is also rampant including in the Democratic Republic of Congo. Still, the DRC has become the darling of the US and the EU despite huge governance challenges on account of the DRC negotiating contracts away from China.

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The risk of environmental damage is exacerbated by NIMBY (not in my backyard) politics of industrialized countries which abundantly consume these critical minerals. There is ample room here for international corporations especially those headquartered in industrialized countries to step up their efforts and adhere to their home standards to avoid an environmental and health disaster in most vulnerable countries where these minerals are extracted. If not confronted, these environmental degradations will leave behind people in developing countries where critical minerals are extracted.

The new geopolitical environment whereby developing countries become the center of attention of major powers is likely to slow down or reverse democratization in many developing countries. That is because new “geopolitical rents” for leaders aligning with superpowers are now back. That is not auguring well for citizens and the prospects for improved economic governance in developing countries.

Leaders of countries like the Democratic Republic of Congo have been courted simultaneously by China and the US. That is despite the poor track record in terms of governance and human rights abuses. The bonanza from critical minerals is however not necessarily good news. Developing countries have traditionally not managed well the proceeds from the exploitation of their natural resources. That has been at the expense of their citizenry. The new geopolitical environment may make things worse.

The track record of developing countries in managing their natural resources have indeed been subpar so much so that the term “resource curse” was coined describing the paradox of countries rich in natural resources performing worse than countries that are resource poor. The macro-institutional consequences of traditional resources offer lessons of what to avoid when managing booms in critical minerals. Moreover, regulation at the national level has often failed to address issues of over-exploitation of natural resources as well as displacement, environment degradation, and risk to biodiversity, which are often best managed by local communities. The work of the late Elinor Ostrom has shed important light into the design of self-organized user communities to achieve sustainability in the exploitation of natural resources which can be salient for getting the governance of critical material booms right.

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Various existing international initiatives have focused mainly on transparency such as the Extractive Industry Transparency Initiative (EITI). The development of environmental, social, and corporate governance norms (ESG) has roots in the socially responsible investing movement that began in the 1970s. It is unclear whether and how the ESG norms could be enforced also considering their voluntary nature. One encouraging sign is that consumers in advanced economies appear to be changing their behavior with regards to the environment. But investor behavior, especially in developing countries, may not be so amenable to change. The challenge with all these international initiatives is the difficulty in translating them into the right context and fostering ownership, especially at the local and national levels.

To avert a new curse of critical minerals, developing and advanced economies need to build a new model of international governance that account

for interdependencies related to peace and stability, global health, environmental and climate issues in a world increasingly organized into blocs. If externalities are to be internalized, a new international mode of governance will effectively deliver technology transfers from advanced to developing economies to provide the tools to address the threat of climate change and meet climate goals including by moving value chains of critical minerals. That international governance should also promote effective access to international capital markets through, for example, green, nature, or blue bonds instead of opaque resource-backed loans. Developing countries also need to shift their domestic governance to ensure that foreign direct investment delivers on local content, environmental protection, and jobs to address rising discontent in communities where mining or other extractive industries operate.

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North Africa's Hydrogen Mirage

Rabah AREZKI¹³

The prospect of billions of dollars pouring into hydrogen projects threatens to distract leaders from addressing domestic crises

Today the rich deep blue of the Mediterranean Sea serves as the incongruous backdrop for thousands of tragic journeys by refugees and migrants heading north toward Europe. On June 14, 2023, a refugee boat capsized off the coast of Greece and left hundreds dead. In 2022, no fewer than 160,000 people attempted to cross miles of open water, often in overcrowded or makeshift boats, according to the United Nations High Commissioner for Refugees. Almost 40 percent of them were from Tunisia or Egypt. More than 2,300 died.

The migrants were desperately seeking safety and economic opportunity, and thousands more continue to risk their lives every day for the same reason. The flow of migrants has raised tensions between the Northern Rim and the Southern Rim of the Mediterranean, a body of water that has served as the crossroads between Eastern and Western civilizations for millennia.

Even as tensions over migration run high, the Northern Rim and the Southern Rim have renewed their cooperation over energy issues. In addition to traditional oil and gas exporters such as Algeria and Libya, other nations, including Egypt, Lebanon, Israel, and Mauritania, are poised to get in on the action, thanks to several major fossil fuel discoveries.

13. This text was first published on **F&D** – © **International Monetary Fund**: Arezki R. (2023) "North Africa's Hydrogen Mirage", *Finance & Development Magazine (F&D)*, September, <https://www.imf.org/en/Publications/fandd/issues/2023/09/north-africa-hydrogen-mirage-rabah-arezki>.

Amid the global energy transition, investors are anxious to pour billions of dollars into many of these countries to turn the new fossil fuel finds into hydrogen. The element is the key feedstock for fuel cells, which use chemical reactions to generate electricity cleanly, with water as the main byproduct. Notwithstanding the considerable technological challenges ahead, demand for the gas in Europe and elsewhere is widely expected to surge as vehicles, factories, and other energy users seek to reduce greenhouse gas emissions.

For Southern Rim nations, however, this tantalizing opportunity for economic development risks turning into just another Sahara mirage. That's because the hype surrounding hydrogen may continue to distract the regions' leaders from addressing the tough domestic social issues that are behind the migration crisis. If the technology does become viable, revenue from hydrogen exports to Europe could just perpetuate rent-seeking behavior by political and economic elites at the expense of their own citizens.

Certainly, the fallout from Russia's invasion of Ukraine helped cement energy cooperation between the two sides of the Mediterranean. The war put energy security at the top of the policy agenda as European nations scrambled to replace Russia's natural gas and oil. More resources from the Southern Rim flowed north, generating foreign exchange revenue.

Political leaders from Italy, France, and Germany visited their counterparts in Algeria, Egypt, Libya, and Mauritania to expand cooperation on energy issues. These high-profile contacts resulted in promises of more fossil fuel exports and new investments in extraction and transportation, including pipelines. Such investments will ensure that fossil fuels from the Southern Rim keep flowing north to Europe.

► New Focus on Renewables

Critics have blasted Europe's advanced economies for their not-in-my-backyard policies of relying on developing economies to do the dirty work of producing fossil fuels and extracting minerals critical for the energy transition. In addition to the climate and environmental risks, the Southern Rim and the rest of Africa face the danger of being left behind once Europe

resolves its energy security issues. The economic concentration around fossil fuels and associated capital investments expose these nations to the risk of stranded assets or the threat of stringent restrictions on fossil fuel trade.

The European Union has made great strides in advancing its energy transition. Investments in renewable energy have increased rapidly, but the race to replace energy from Russia also showed how hard it is to quickly ramp up renewable and other cleaner energy sources. Still, the formidable decline in the cost of producing renewable energy has been a key driver behind these investments.

As for the Southern Rim, nations there will face greater macroeconomic and financial challenges in the energy transition, partly because of the relatively higher cost of capital. Some Southern Rim nations have made progress toward reducing greenhouse gas emissions. Egypt and Morocco are ramping up renewable energy. Morocco built the Noor-Ouarzazate complex, the world's largest concentrated solar power plant, covering 3,000 hectares. Others, like Algeria and Mauritania, are gearing up to install large solar and wind projects.

These days hydrogen is at the center of attention in the Mediterranean region. Hydrogen is easily the most abundant element in the universe, offers a clean source of energy, and can come from a variety of sources. "Gray hydrogen" is produced from natural gas but without carbon capture and storage. When carbon capture and storage are added, the hydrogen is labeled "blue," but the costs are higher. "Green hydrogen" is produced using nuclear power, biomass, or renewable energy like solar or wind. Its costs are still relatively high.

Enthusiasm around green hydrogen is raging. Projects costing billions of dollars are under consideration in Mauritania, Algeria, Egypt, and other countries. A German developer and Mauritania signed a memorandum of understanding with a consortium for a \$34 billion project with annual capacity of 8 million tons of green hydrogen and related products.

Hydrogen projects could help keep energy flowing from the Southern Rim to the Northern Rim. The infrastructure to transport hydrogen is already under development, although projects so far focus on the intra-European

market. A large chunk of the prospective hydrogen investments may end up in Europe, with Italy and Spain gearing up to become big producers. Portugal, Spain, France, and Germany signed an agreement to build a Mediterranean pipeline that would supply 10 percent of the EU's hydrogen by 2030. The energy ministries of Italy, Germany, and Austria signed a letter of support for the development of a hydrogen-ready pipeline between North Africa and Europe involving Italy's gas grid operator.

Such mega investments could have important macroeconomic implications, especially for the smaller and less diversified economies of the Southern Rim. Challenges will involve exchange rate appreciation and current account swings from deficit to surplus. Policymakers will also have to tread carefully because of contingent liabilities associated with large projects, such as failure or abandonment.

While the shift in geopolitics accelerated by Russia's war in Ukraine is furthering energy integration across the Mediterranean, the new push for industrial policy and economic sovereignty in Europe is working to limit integration. These are new risks North African countries will have to manage, and they suggest the need for greater attention to addressing domestic issues.

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► Domestic Issues

Big hydrogen projects hold out the promise of generating revenues that could help address the needs of Southern Rim citizens. Access to reliable and abundant energy is surely a building block for industrializing economies. Yet, if history is any guide, the abundance of energy alone is not sufficient to achieve economic development. Countries in the Southern Rim have a lot on their plates, and social cohesion is at stake. The authorities need to regain the confidence of their youth and address long-standing domestic issues, whether social, economic, or regional. The desperation of young people from the Southern Rim drives them to risk their lives crossing the Mediterranean, signaling the pervasiveness of these issues.

There are, of course, great differences between oil-exporting and oil-importing Southern Rim nations. Importing nations such as Morocco and Egypt have overhauled or removed fuel subsidies or price controls with accom-

panying mitigation measures such as cash or in-kind transfers to ease the impact on poor households. Oil-exporting countries such as Algeria and Libya have tended to stick with subsidies despite their high economic and environmental costs. In economies with little political accountability, this reflects an enduring social contract under which citizens accept subsidies and look the other way as political and economic elites capture the revenues generated by fossil fuels and now, most likely, hydrogen.

Across the Southern Rim, distrust of government and perceptions of corruption remain high. The lack of economic opportunities stems from the lack of a dynamic private sector. Unemployment is higher for individuals with more education than for those with less. In many of these countries, the legacy of a state-administered economy with large, government-owned enterprises crowds out independent businesses and creates the conditions for a parallel informal economy.

And state-owned banks have long underpinned shadowy flows of funds that support the state-owned enterprises and limit fair competition. In countries where the footprint of the state is less significant, it is a crony private sector that typically captures the wealth, distorting competition. Whether in systems where state-owned enterprises or a crony private sector dominates, millions of young people have been left behind. In both cases, the perception of corruption and rampant inequality are gravely undermining social cohesion.

The prospect of hydrogen exports may help improve external fund balances. But it may also reinforce rent-seeking activities to the detriment of other aspects of a nation's economy. To avoid repeating past mistakes, the sector must show utmost transparency to limit corruption.

Authorities should also try to maximize not only the revenues they derive from hydrogen production but also the benefits for citizens, including localization policies. An energy sector that is geared for exports will not yield the kinds of jobs that will be needed for young people, who represent the majority of the population in the Southern Rim.

It is thus important to carry out reforms that go beyond the energy sector. Restructuring must be broader and aimed at removing roadblocks to creating decent jobs for young people. That would help address their grow-

ing sense of desperation. But carrying out such changes in the context of widespread distrust isn't easy.

The sequencing of reform could build trust. In a nutshell, changes must start with the political and administrative elites and cronies “walking the talk” before introducing changes that affect the broader population. Specifically, it will help to get rid of corporate subsidies stemming from import monopolies and more generally to promote fair competition by limiting the abuse of dominant positions by state-owned enterprises or cronyism. In addition to greater transparency in the energy sector, the use of distributed solar power would blur the distinction between consumers and producers. That may make citizens more accepting of evolving market prices. Only then could labor market restructuring and exchange rate stabilization bear fruit.

Among nations on the Southern Rim, regional cooperation is at an all-time low. Rekindling cooperation would help create a larger market that would be more attractive for new investment, similarly to the development of the EU. A coming-together of North African nations could help in the renegotiation of better trade deals with EU partners and others.

Rather than grasping at the mirage of collecting prospective rents from hydrogen exports, leaders in the Southern Rim should pay more attention to building trust at home and providing opportunities to the young people who are voting with their feet at the peril of their own lives.

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End of the Line

Rabah AREZKI, Per Magnus NYSVEEN¹⁴

▶ A Looming Oil Price Super Cycle Will Likely Be the Last

After a pandemic and a price war sent petroleum prices tumbling in 2020, they are again on the rise. A new oil price super cycle—an extended period during which prices exceed their long-term trend—seems to be in the making, driven by:

- **Pervasive supply shortages** from the lack of investment that has continued since the 2014 collapse in oil prices and, more recently, reduced investment in shale oil production.
- **Demand growth** triggered by a strong recovery in China and India, a big stimulus package in United States, and global optimism about vaccines. Some of these factors have persistent components and will likely more than offset any downward pressure on consumption that becomes part of a new normal post-COVID-19 environment.

Nevertheless, this could be the last super cycle for oil because major economies appear committed to replacing fossil fuels, and mass car manufacturers have responded by committing to replacing internal combustion engine vehicles with electric vehicles over the medium term. This shift will transform the oil market into one consistent with climate goals, but poses a risk of disorderly adjustment for economies dependent on oil, with far-reaching effects that in some cases could spill over their borders.

14. This text was first published on *F&D* – © International Monetary Fund: Arezki R., Nysveen P. M. (2021) "End of the Line", *Finance & Development Magazine (F&D)*, <https://www.imf.org/external/pubs/ft/fandd/2021/06/the-future-of-oil-arezki-and-nysveen.htm>.

▶ Oil Investment Crunch

Even with relatively lower oil prices, extraction and exploration companies have been highly profitable. At the same time, perhaps in recognition of a less buoyant future, they have reduced their investment. Production in oil fields and the number of wells are declining, and reserve depletion is rapid. The drop in both capital expenditure and replacement of oil reserves has persisted since 2014.

COVID-19 has exacerbated the investment decline. For example, shale oil output—which has a shorter production cycle and therefore is more sensitive to changes in investment—is now increasing by half a million barrels a year, compared with 2 million barrels a year before the onset of the pandemic. While the Biden administration’s announced ban on drilling on federal land in the United States will have little direct impact on shale production, it signals a shift in federal government sentiment against the oil industry.

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Shale producers have adopted a noticeably more cautious investment posture. As a result, they will be operating with positive cash flows—cash flow was previously directed toward investment spending. This reduced investment will lessen the role of shale as swing production and plants the seeds of a price super cycle. On the other hand, the Organization of the Petroleum Exporting Countries will likely increase production to counter that upward pressure on price.

▶ The Debate Over Peak Demand

Several commentators and major oil market players, including BP and Shell, argue that global demand for oil peaked in 2019 at about 100 million barrels a day and that it will never again reach that level because of pandemic-related structural changes. That view seems supported by the sharp reduction in oil consumption for transportation, including jet fuel. After travelers started cancelling flying plans in March 2020, jet fuel consumption collapsed and only began to creep up as travel restriction started to ease.

Those who believe consumption has peaked still anticipate that gasoline consumption will rise in mid-2021, despite the higher prices that will happen because of the inevitable lag between any demand-induced increase in crude oil production and the increase in refined products to meet demand. With vaccine developments and optimism from a proximate re-opening of the global economy, it is expected that oil consumption will continue to recover, but to a level lower than what prevailed before the pandemic—effectively the peak of oil consumption.

Yet proponents of the view that oil demand has peaked overlook the structural increase in consumption that will eventually offset any downward shift from COVID-19. Rising living standards and a growing middle class in China and India will lead to increased demand for individual cars and air travel. So even if economic growth slows, the large numbers of people crossing the income threshold that enables them to afford a car will support demand for travel. In emerging markets such as China and India, any shift toward electric vehicles will likely be slower than in advanced economies given concerns over the availability of charging stations. The rate of adoption of electric vehicles will, by and large, be the major driver of future oil demand because road fuel accounts for half of global oil demand.

The structural increase in oil demand, together with a persistent reduction in production from insufficient investment, will likely precipitate—and keep alive for some time—an oil price super cycle. But will an increase in oil prices prompt more investment and lead to another price bust as has happened in the past?

► Technology and its Consequences

Technological innovation may make things different this time. Large investments will likely be discouraged by the new technology at the heart of carmaker plans to replace internal combustion engine vehicles with those that run on electricity. The stock market capitalization of electric carmaker Tesla points to the imminence of the transformation of the automobile market. Tesla's capitalization dwarfs that of traditional carmakers—even

though those manufacturers produce vastly more cars than Tesla. That disparity has prompted traditional car manufacturers to commit to replacing vehicles powered by internal combustion engines with those powered by electricity, which in turn has triggered massive research and development on electric vehicles by manufacturers seeking to grab shares of the new market (see table).

Table 1. Industry shift

Traditional car manufacturers are increasingly replacing vehicles powered by internal combustion engines with electric vehicles.		
Car manufacturer	Production targets	Target year
VW Group	30 percent of total global sales of electric vehicles	2030
Nissan	Electric vehicles 100 percent of sales in key markets	2030
Renault	30 percent of total vehicle sales battery electric, 35 percent hybrid vehicles	2025
Toyota	5.5 million global electric vehicle sales, at least 1 million of them battery electric and the rest some version of electric, including hybrids	2030
GM	100 percent of global sales to be zero-emission vehicles	2035
Hyundai-Kia Group	Cumulative battery electric vehicle sales to reach 1 million units	2025
Kia	Electric vehicles to account for 40 percent of global sales	2030
Ford	100 percent of European vehicles sales to be battery electric	2030
Honda	Two-thirds of global vehicles sales to be electric	2030
Daimler Group	At least 50 percent of total car sales to be electric	2030
BMW	Electric vehicles to account for 30 percent of year-over-year sales growth	2020-30
Volvo	100 percent of new vehicles sales to be fully electric	2030
Mazda	5 percent of total sales to be fully electric and all new vehicles to have an electric component	2030
PSA Group	100 percent of vehicles to be electric	2025

Source: Rystad Energy.

A frenetic ramping up of production of electric vehicles is not without risk, however. It could cause supply to exceed demand—which would lead to negative cash flows, illiquidity, and bankruptcies of car manufacturers. The automakers' bet is driven both by the commitment of governments to achieving zero net carbon emissions and by the belief that consumers will want to adopt cleaner modes of consumption—transportation accounts

for about a quarter of global energy-related carbon dioxide emissions. But it is unclear whether consumers will merely pay lip service to cleaner consumption or actually change their behavior. Will higher carbon prices become less important to consumers than concern about an inadequate charging infrastructure for automobile batteries?

That said, mass manufacturing will eventually make the price of electric cars attractive, and a spike in oil prices would hasten the conversion to electric vehicles. This last oil price super cycle will be consistent with climate goals and associated with commitments by large economies to net zero carbon emissions in the medium term. However felicitous a development that will be for the global climate, however, it poses a risk that the oil reserves so many oil-dependent economies count on will be less valuable—especially for reserves where extraction costs are high. The reserves and the investment surrounding them become, in effect, stranded assets. That could lead to severe economic woes, including bankruptcies and crises, in turn leading to mass migrations, especially from populous oil-dependent economies, many of them in Africa. Other larger oil-dependent economies in the Middle East, central Asia, and Latin America are also an important source of remittances, employment, and external demand for goods and services that benefit many neighboring countries. The end of oil, then, could not only devastate oil-dependent economies but could also overwhelm their neighbors. It is not all bad news for countries with mineral deposits important to the energy transition. Cobalt, essential for car batteries, will be in much higher demand. Uranium could be valuable as well as electricity generation moves away from fossil fuels and nuclear power becomes more attractive.

The end of oil thus makes economic transformation imperative. Oil-rich countries must diversify to become resilient to the changes in energy markets. An appropriate governance framework to manage proceeds from oil in good and bad times has always been important to fostering economic diversification. But with stranded assets a new risk, radical shifts in governance in oil-dependent economies are urgent. Dubai, for example, facing the depletion of its oil reserves, transformed itself into a global trade hub. Countries and businesses reliant on these markets must formulate policies to address this transformation, including the development of renewable

energy. To jettison their hidebound economies, which have led to low productivity and waste, oil-rich economies should commit to reforms that lessen obstacles to innovation and entrepreneurship. Reforming corporate governance and legal systems, promoting markets that have no barriers to entry and exit, and ending favoritism for both state-owned enterprises and politically connected private firms will help attract investment and change attitudes toward innovation (Arezki 2020).

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Part 3

Geopolitics

Economics in the New Age of National Security

Rabah AREZKI¹⁵

ABIDJAN – The global economy has entered a new age of national security. The COVID-19 pandemic highlighted the vulnerability caused by over-reliance on global supply chains and the failure of coordination in tackling global health risks. But what has really ushered in this new era is Russia's unprovoked invasion of Ukraine and sabotage of the global economy.

Beyond its human and economic toll, the war in Ukraine has sharply increased the divisions between the Western and Eastern geopolitical blocs centered around the United States and China, respectively. Russia has weaponized its energy and food exports to divide Europeans and has sought to stoke anti-Western sentiment in developing countries. China has sided with Russia and affirmed its support for the Kremlin's security concerns. Tensions over Taiwan, a leading global semiconductor manufacturer, are another major flash point in US-China relations.

These developments should be seen as aftershocks of the world economy's increasing polarization, underpinned by the asymmetry of the two superpowers' political systems. It is no coincidence that several frozen conflicts have recently become active, and that many medium-size and regional powers are behaving more assertively.

15. This text was first published by **Project Syndicate**: Arezki R. (2022) "Economics in the New Age of National Security", *Project Syndicate*, August 26, <https://www.project-syndicate.org/commentary/will-global-fragmentation-produce-new-economic-thinking-by-rabah-arezki-2022-08?barrier=accesspaylog>. © Project Syndicate, 2022.

Unlike the Soviet Union during the Cold War, China is both a strategic and an economic rival to the US. China's growing trade and financial ties with the Global South help to explain the shift in many poorer countries' allegiances vis-à-vis America. But the decision by many developing countries in March to abstain from voting on United Nations General Assembly resolutions condemning Russia's invasion of Ukraine surprised US and European officials.

The growing geopolitical and economic split between the superpowers should prompt a paradigm shift in economic thinking. Economists have long regarded national security as a separate field of study with little relevance to their analysis of markets – and for good reason: their profession, like the global economy, has flourished amid the relative stability of the post-World War II era.

The Bretton Woods institutions and the World Trade Organization – with the West and specifically the US providing an implicit backstop – have helped support the global economy's expansion. Since 1960, global GDP has increased about eightfold. And as a result of the Chinese economy's formidable rise in recent decades, China's GDP (measured at market exchange rates) could surpass that of the US by 2030.

But today's geopolitical polarization risks fragmenting the global economy in multiple ways. There are strong indications that this is already happening. Former US President Donald Trump's "America First" approach and instigation of a tariff war with China dealt a sharp blow to free markets and free trade, and Joe Biden's administration has followed suit. US Treasury Secretary Janet Yellen recently advocated "friend-shoring" supply chains to trusted allies as part of America's strategic response to the growing Chinese challenge. But deciding who counts as a "friend" may be difficult; using criteria such as a country's commitment to democracy could result in a rather small group.

In parallel, a growing number of countries have shown interest in joining the BRICS, a group comprising Brazil, Russia, India, China, and South Africa. China is promoting a new global governance system supported by new organizations. And China and Russia are looking to develop alterna-

tives to the SWIFT payment system. That, too, will not be easy, not least because payment systems are intertwined with issues related to reserve currencies. A litmus test for China is whether it can find an alternative to US Treasuries in which to invest its sizeable foreign-exchange reserves.

There have been many historical episodes of fragmentation, including trade wars, but perhaps none so pervasive between two economic and strategic superpowers. The trend is evident in stock-exchange delistings, sectors such as microchips and telecommunications technology, agricultural land sales, energy, and the defense industry. And the fragmentation of supply chains for both goods and services could increase further as a result of non-tariff barriers such as security, privacy, and phytosanitary standards or problems related to the interoperability of electronic and digital equipment.

The trade-offs between economic efficiency and national security are enormous. Deviating from globalized markets will no doubt reduce efficiency, stoke inflation, and leave hundreds of millions of people worse off. Economists should therefore rethink their approach to topics such as comparative advantage, market integration, and how to promote convergence.

In this new environment where security of supply has become paramount, the design of value chains will have to minimize the risk of weaponization. And while free markets define efficient pricing better than any other mechanism, fragments of the global economy will likely function independently with autonomous pricing and sourcing.

Tackling increasing economic fragmentation and curbing its costs will undoubtedly require economists to address the underlying sources of division. Building trust and limiting uncertainty between the two superpowers and their allies will thus be vital. But that will require something altogether different from fresh economic thinking.

Not Your Grandfather's Cold War

Rabah AREZKI¹⁶

The US-China rivalry is escalating, but its dynamics are very different from the clash between the US and the USSR.

As tensions between China and the United States are escalating, there is much talk among scholars and commentators about a new Cold War between the two powers. US officials have also indicated that they are thinking of relations with Beijing in those terms.

Yet, the situation in global politics and economy today is quite different from the post-World War II era, when the Soviet Union and the US faced off. Back then, countries were stuck between a rock and a hard place and had to choose a side.

Of course, there was the non-aligned movement, which promoted decolonisation and sought to stave off an escalation into a nuclear war between the USSR and the US, but many of the members of the movement still had to choose a camp to join.

What sphere of influence a country would fall into was determined not only by ideology and the interests of political leaders, but also by threats and coercion coming from the great powers. Indeed, throughout the Cold War, Washington and Moscow backed a series of coups and insurgen-

16. This text was first published by **Al Jazeera**: Arezki R. (2023) "Not Your Grandfather's Cold War", *Al Jazeera*, May 23, <https://www.aljazeera.com/opinions/2023/5/23/not-your-grandfathers-cold-war>. The views expressed in this article are the author's own and do not necessarily reflect Al Jazeera's editorial stance.

cies in Africa, Latin America and Asia, trying to sway countries into their spheres of influence.

Today, the ability of superpowers to instigate regime change with impunity is considerably more limited. That is because they risk an immediate and massive backlash from global public opinion, which is amplified by technological interconnectedness and social media.

Furthermore, China, unlike the Soviet Union, is not just a strategic rival to the US, but also an economic one. This means countries caught in the middle of the China-US rivalry would be able to “bargain” not just on defence but also on economic terms.

Globalisation also makes the choice of exclusive alignment much more costly. Today, choosing a side would mean turning one’s back on economic gains from investment and trade with the other camp.

That is why it is unlikely that history will repeat itself and deliver a cold war similar to the one in the previous century. The tensions between the US and China are playing out in a different way in the global arena today.

Alignment, for example, is not exclusive, as states try to engage with one power in one sphere and with the rival in another. This means that the process of de-globalisation which some observers have warned about is unlikely to dominate in the coming years.

Instead, what we are likely to see is re-globalisation. That is, globalisation is taking a new path that is defined by global interconnectedness due to technological advances and which is no longer solely driven by the pursuit of efficiency in trade and investment.

In other words, the process which in the past created global supply chains and entangled great powers and smaller countries into tight trade relations is changing to reflect new global realities.

Tensions between the US and China and their attempts to isolate each other economically are influencing trade and investment decisions. Su-

perpowers now have new considerations in approaching trade relations, such as the security of supply and rewards for partner countries.

The US and its allies are arguing that outsourcing production in key industries to China and maintaining a high level of technological integration with Chinese companies are threatening national security. That is why they have started moving such production to other countries which may not provide the best conditions for it from an economic standpoint but which are nevertheless perceived as more politically dependable.

Small and middle countries are, thus, being rewarded with investment and trade or even aid for helping with this process of “decoupling” – or “derisking”, as European Union Commission Chief Ursula von der Leyen recently called it.

Instead of just offering lower taxes to foreign corporations and reducing the cost of doing business, smaller countries can now take advantage of these new geopolitical rents from the great powers, which have to spend much more political and economic capital to create new allies and keep old ones.

Countries at the forefront of that re-globalisation include large emerging markets, exporters of fossil fuels and critical materials for the energy transition and digitalisation, and countries in geostrategic locations. Large emerging markets such as Brazil, India, Indonesia, Mexico and Turkey are flirting with both superpowers and making the most of their multi-layered relationships.

Gulf countries, especially Saudi Arabia, have long been exclusive allies of the US which was backstopping their security in exchange for energy supply. That exclusive relationship is shifting, not least, because the US has become energy independent. China, which has become a major importer of oil from Saudi Arabia and other Gulf countries, is gaining influence in the region. Gulf countries are now courted by the two superpowers and that allows them to get political and economic favours from them more easily.

In Africa, countries, such as the Democratic Republic of the Congo (DRC) have long been open to large investment projects in infrastructure and mining from China. Today, the US and its European allies are also engaging the DRC, trying to pull it closer with promises of vast export markets for its raw materials, major investments and development of their electric vehicle battery value chains.

By contrast, the Solomon Islands, which is located in the South Pacific, an area of a traditionally strong military presence by the US and its allies, has recently rebalanced its relationship in favour of China. The island nation not only granted Beijing major infrastructure projects to develop, including ports, but it also signed a new security pact with it, which could pave the way for a Chinese military base on its territory, considerably expanding its reach in the region.

While some nations may benefit from China-US tensions, the world as a whole is likely to suffer. This is because re-globalisation will undoubtedly lead to a loss in economic efficiency and potentially exacerbate poverty.

Trade and investment flows overall are likely to decrease, undermining the economies of many developing countries. This would curb wealth and job creation and affect millions of households.

Furthermore, re-globalisation will not mitigate the risks associated with the growing tensions between the US and China. The conflict in Ukraine, which some see as a proxy war between the US and China, and tensions over Taiwan reflect the dangers of their rivalry.

The temptation of the two superpowers to weaken each other by provoking regional conflicts could heighten the risk of direct military confrontation. In this respect, the new cold war resembles the old one, with the shadow of a global war and nuclear annihilation looming large.

Lessons from history must be learned and the US and China need to establish effective mechanisms of de-escalation. Dialogue and trust building between the two superpowers could limit the economic and geopolitical fallout of their clash for the rest of the world.

The Multilateral Financing Paradox

Rabah AREZKI¹⁷

WASHINGTON, DC – Multilateral development banks (MDBs) have become the darling of policymakers nowadays. In a recent speech, US Treasury Secretary Janet Yellen called on the World Bank and other international lenders to support developing countries struggling with the effects of rising inflation and aggressive interest-rate hikes. And a recent independent report commissioned by the G20 concludes that these institutions are uniquely positioned to help governments achieve the United Nations' Sustainable Development Goals.

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The G20 report argues that MDBs could expand their lending without hurting their AAA credit ratings, were it not for excessive capital-adequacy requirements that limit lenders' ability to take risks. But which countries would benefit the most from an increase in multilateral financing?

While multilateral development banks play a critical role by providing long-term loans at concessional interest rates to low-income countries (LICs), the overwhelming majority of their financing goes to middle-income countries (MICs). A recent OECD report finds that 70% of MDB loans went to MICs in 2020, following a large increase in lending to lower-middle-income countries (LMICs).

In other words, the problem is one of allocation, not volume. Clearly, MDBs must significantly increase their lending to developing countries strug-

17. This text was first published by **Project Syndicate**: Arezki R. (2023) "The Multilateral Financing Paradox", *Project Syndicate*, January 25, <https://www.project-syndicate.org/commentary/multilateral-development-banks-financing-lower-income-countries-by-rabah-arezki-2023-01>. © Project Syndicate, 2023.

gling with extreme poverty and limited institutional capacity. Unlike MICs, most LICs have little to no access to capital markets and are in dire need of financing, owing to the disproportionate effects on their economies of the COVID-19 pandemic, the war in Ukraine, and climate change. Why, then, is multilateral lending so skewed toward MICs?

The reason is rooted in the MDB financing model. International lenders like the World Bank, the African Development Bank, and the Inter-American Development Bank rely on their perfect credit ratings to borrow cheaply and lend at higher rates to MICs that have not yet reached investment-grade status or lost it. At the same time, lending to LICs is somewhat separate and financed mostly by direct contributions from shareholding governments to LIC-focused bodies like the World Bank's International Development Association. Without lending to MICs, the argument goes, the MDB model will not be viable. But with more MICs graduating to investment-grade ratings, multilateral lending could eventually dwindle.

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Many LICs have been trying to reduce their dependence on MDBs; several countries have even managed to borrow in international financial markets for the first time in decades. But the current confluence of economic and geopolitical crises has stalled these plans. In the face of aggressive monetary tightening, most LICs have effectively lost access to capital markets, leading to painful negotiations with creditors and a looming debt crisis.

Ghana's recent default could be a harbinger of future financial calamities. In recent years, the emergence of non-traditional creditors like China has allowed LICs to diversify their borrowing. But the opaque nature of resource-backed loans has raised doubts about the sustainability of such financing, which seems to have dried up. There are, however, some encouraging signs that China might join the Bretton Woods institutions in allowing LICs to restructure their debts.

While MDBs should increase their lending to LICs, doing so is more complicated than many seem to realize. A major obstacle is these countries' limited absorptive capacity, which leads to a scarcity of bankable projects. Likewise, the fact that most LICs have underdeveloped private sectors makes it difficult to scale up investments, particularly for lenders like the

World Bank's International Finance Corporation, which focuses on support for private firms. Moreover, the International Monetary Fund's strict debt-limit policies can impede developing countries' ability to borrow from MDBs – preventing LICs from accessing dozens of billions of dollars at a time when they need it most.

There is no easy solution to this conundrum. Sending MDB staff to LICs could help to build these countries' institutional capacities and implement projects. And increased coordination between multilateral lenders and the IMF could help to prevent future bottlenecks. But merely pressuring MDBs to lend more could be ineffective and even counterproductive. For example, lenders could be tempted to prioritize budget support – designed to encourage developing countries to undertake structural reforms that they might have pursued anyway – over longer-term investment projects.

Simply put, lending more is not enough. To benefit LICs and their populations, international lenders must also focus on scaling up meaningful, transformative investments. Then, and only then, will the MDB model finally reach its full potential.

Grand Bargain for Bretton Woods

Rabah AREZKI¹⁸

This system was born of a dream of prosperity and peace. And considering the existential threats facing humanity today, it is arguably even more important to resurrect it.

The Bretton Woods system arose out of the ashes of World War II.

Emerging from the famous Bretton Woods Conference in 1944, the agreement set out rules and institutions to govern the modern monetary system, including the International Monetary Fund (IMF) and what is now known as the World Bank Group—two institutions that have become mainstays of the global system of economic governance.

Historically, this system has been centered on the United States and Europe giving weight to economic power. An informal and enduring arrangement between them ensures the head of the IMF is European, while the head of the World Bank is a U.S. national, and the U.S. retains veto power on both. This status quo was all well and good until China burst onto the global scene after joining the World Trade Organization in 2001. And ever since, there have been many discussions about reforming voting power to reflect this shift in economic weight, but progress has remained largely elusive.

¹⁸ This text was first published by **Politico**: Arezki R. (2023) "Grand Bargain for Bretton Woods", *Politico*, September 12, <https://www.politico.eu/article/bretton-woods-grand-bargain-imf-world-bank-usa-europe-china-brics-economy/>.

However, the push for better representation—not just for China but also the rest of the global south—has quieted over the past years. Indeed, China has formed its own multilateral development bank—the Asia Infrastructure Investment Bank (AIIB)—and launched the Belt and Road Initiative as a tool for geostrategic influence, especially in the developing world. Moreover, 40 or so emerging and developing economies are knocking at the door of the BRICS bloc, with six of them—Iran, Saudi Arabia, Egypt, Argentina, the UAE and Ethiopia— invited to join at the latest summit in Johannesburg.

Such an expansion would effectively double the size of BRICS to about 30 percent of world GDP, 46 percent of the world population and, incidentally, 43 percent of global oil production. The choice of countries seems to consecrate China's dominance over the bloc, as well as a China-centered global south. Crucially, however, the broader appeal of BRICS is not that it offers a well-defined model of economic and political governance to these countries, rather it is more of an anti-Western drive—and that's worrisome.

This wave of anti-Western sentiment now poses a major threat to the legitimacy of Bretton Woods, and the fragmentation of the very institutions that underpin the global economy is at stake—as well as that of the global community.

To be sure, it is not the credibility of these institutions that's in doubt. Over the past 80 years, they have accumulated vast experience in macroeconomic management and economic development, while also cultivating the art of multilateral governance. And as China and BRICS-led institutions are about to find out, this will be hard to replicate. In fact, the ramping up of loans by the AIIB has already been slow, and it has engaged with the World Bank in cofinancing projects.

Discussions on reforming the World Bank, meanwhile, have thus far focused on how to boost lending volumes, and on the need for embracing the fight against climate change. In this regard, a proposal relating to the capital adequacy framework of multilateral development banks (MDBs) has caught attention, as it focuses on further leveraging the balance sheet of these institutions, while retaining their triple A ratings.

Yet, this approach would only release a few dozen billions of dollars in

lending at best, falling short of the trillions required to address development needs and the energy transition in developing nations. Former U.S. Treasury Secretary Larry Summers and his co-author N.K. Singh have, however, issued a call for a major capital increase for MDBs with the ambition of reaching much larger numbers in terms of lending volumes.

Still, Western countries have reached debt levels that prevent them from driving such capital increases, therefore, China and other emerging markets should step into the Bretton Woods institutions at a rate commensurate to their relative shares in the global economy. Such a move would, in effect, recognize the massive change in economic weight—as well as their growing share of greenhouse gas emissions. Bigger shares of capital for emerging markets will obviously mean a bigger voice for the global south, but it will also mean more responsibility, including when it comes to climate change.

Thus, a grand bargain for Bretton Woods is in order.

Indeed, this bargain could help decisively stop the fragmentation of the global community and, with it, not only fight climate change effectively but also avert the ongoing debt catastrophe in low-income countries.

Given the emergence of China as a major creditor for these nations, not having a prominent place for Beijing inside the tent of Bretton Woods has made the IMF's and the World Bank's debt restructuring efforts difficult. Against this backdrop of a looming debt crisis, low-income countries—and especially African countries, which are home to over 70 percent of the world's poor—are facing socioeconomic instability, wars and coups. The fragility of these nations has only been exacerbated by climate change, with a reversal of earlier gains in health, education and wealth. And in an interconnected world, this situation will spill over to neighboring countries and beyond.

Alongside these worrying trends, the discussions regarding the Bretton Woods institutions to date appear rather naive. Granted, poor countries are disproportionately affected by climate change—which they have incidentally not created—yet anticipated World Bank reforms to extend relat-

ed lending across the board could crowd out these countries. The priority should instead be for these institutions to avoid the economic divergence of low-income countries—something that should unite superpowers, China, the U.S. and Europe alike.

Critics will, of course, argue that this is not politically feasible. And, indeed, parliaments in Western countries are unlikely to approve changes to the representation of the Bretton Woods institutions —especially European countries, which (individually) stand to lose the most from such realignment in voting power. Yet, Europe has major stake in averting catastrophe in Africa, and it has been a leading voice in tackling climate change. It is now time to match words with actions before it is too late.

What is more, there has been an acceleration in anti-Western sentiment ever since onset of the war in Ukraine, and there is a real risk that this sentiment will further engulf the legitimacy of the Bretton Woods institutions by isolating them from the global south—the very countries they are supposed to operate in. Stopping the ongoing economic and social disaster in low-income countries is a noble cause that needs the coordination of the whole international community—not more bilateral initiatives tainted with self-interest.

The Bretton Woods system was born of a dream of prosperity and peace for the world. And considering the mounting existential threats facing humanity today, it is arguably even more important to resurrect the dream now. But to do so, we must use the full potential of truly inclusive institutions as shields to protect the world's poorest countries—and to curb climate change.

Climate Change, Natural Resources and Geopolitics

The volume is aimed at fostering our understanding of the shifting environment for resource rich countries impacted by radical transformations linked to climate change, technology and geopolitics.

On the climate change front, efforts by the international community to achieve net zero emissions have launched an ambitious but uneven energy transition away from fossil fuels leading to both potential losers and winners. Among the potential winners are the resource rich countries endowed with minerals critical for the energy transition.

On the technology front, in addition the decarbonization process, digitalization will also raise the demand for critical minerals and (hopefully cleaner) energy in extraordinary ways.

On the geopolitical front, the race between superpowers to access critical materials and energy resources to power the technological transformations is not only driving demand for these resources but also potential (geo-)political realignment of resource rich countries vis-à-vis super-powers.

The volume also explores ways in which policies can avoid a repeat of past mistakes in the management of natural resources which contributed to the coining of the phrase "resource curse" to describe the paradox that resource dependent countries were performing poorer than others. The new boom in resources should this time serve to promote both an ethical, sustainable and inclusive development.

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