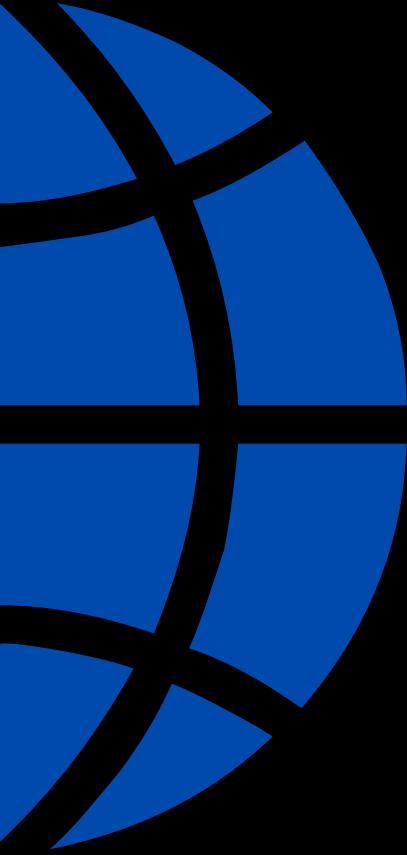


Healing a Broken World

Capital for the Common Good

Center of Excellence on Human-centered Global Economy
September 2023



Healing a Broken World

Capital for the Common Good.

Channelling capital to serve the United Nations Sustainable Development Goals and the planetary agenda of the G20 group of nations.

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Executive Summary

Capital for the Common Good introduces the concept of Sustainable Capital Goals (SCGs) to serve the UN Sustainable Development Goals (SDGs).

The Digital Economist calls for redirecting capital flows to create real value for societies in the form of goods and services rather than to generate revenue through purely financial instruments. In addition, we advocate preferential allocation of capital to sustainable investment opportunities – above all, those that can help ensure a livable future in the face of the growing climate crisis. Beyond defining the SCGs themselves, we recommend the development of a new Crossborder Financial Backbone led and supported by governments of the Global South, to ensure that sustainable capital is deployed to flow from the “closed loop” of the Global North to meet the urgent needs of the Global South. The Digital Economist proposes to help capital flow in the path of least resistance. Capital for the Common Good recommends not just a new Crossborder Financial Backbone, but also a shift toward real-time data and international issuance standards.

Real-time data are key to identifying risks in financial institutions and markets, yet financial issuance is currently not fully automated and carries significant market risks. These are not sufficiently anticipatable, as evidenced by the recent meltdown of the Silicon Valley Bank.

By agreeing on common international issuance standards, and using new technologies, like [ACTUS](#) and the [ISDA CDM](#) it is possible to fully automate the flow from issuance origination to asset owners, where we can now move from natural language contract description to fully automated, executable and verifiable contracts, which provide greater regulatory transparency.

Automation also enhances accessibility of issuance by reducing costs, and enables wider participation in financial markets.

Greater inclusivity and transparency can also promote greater sustainable investment in capital markets, aligned with ESG objectives and UN Sustainable Development Goals. In this paper, we discuss the journey to a common inclusive automated real-time issuance platform and the benefits it brings to treasury, capital markets, business and society.

The Digital Economist is a pioneer at the new frontiers of economics — a digital, human-centred convener and converter, navigator and guide.

We are trusted advisors to governments and international institutions. Leaders rely on us for support with policy, strategy, advocacy and diplomacy.

Throughout these activities, we are committed to accelerating the delivery of the UN Sustainable Development Goals, fulfilling humankind’s common promise to itself.

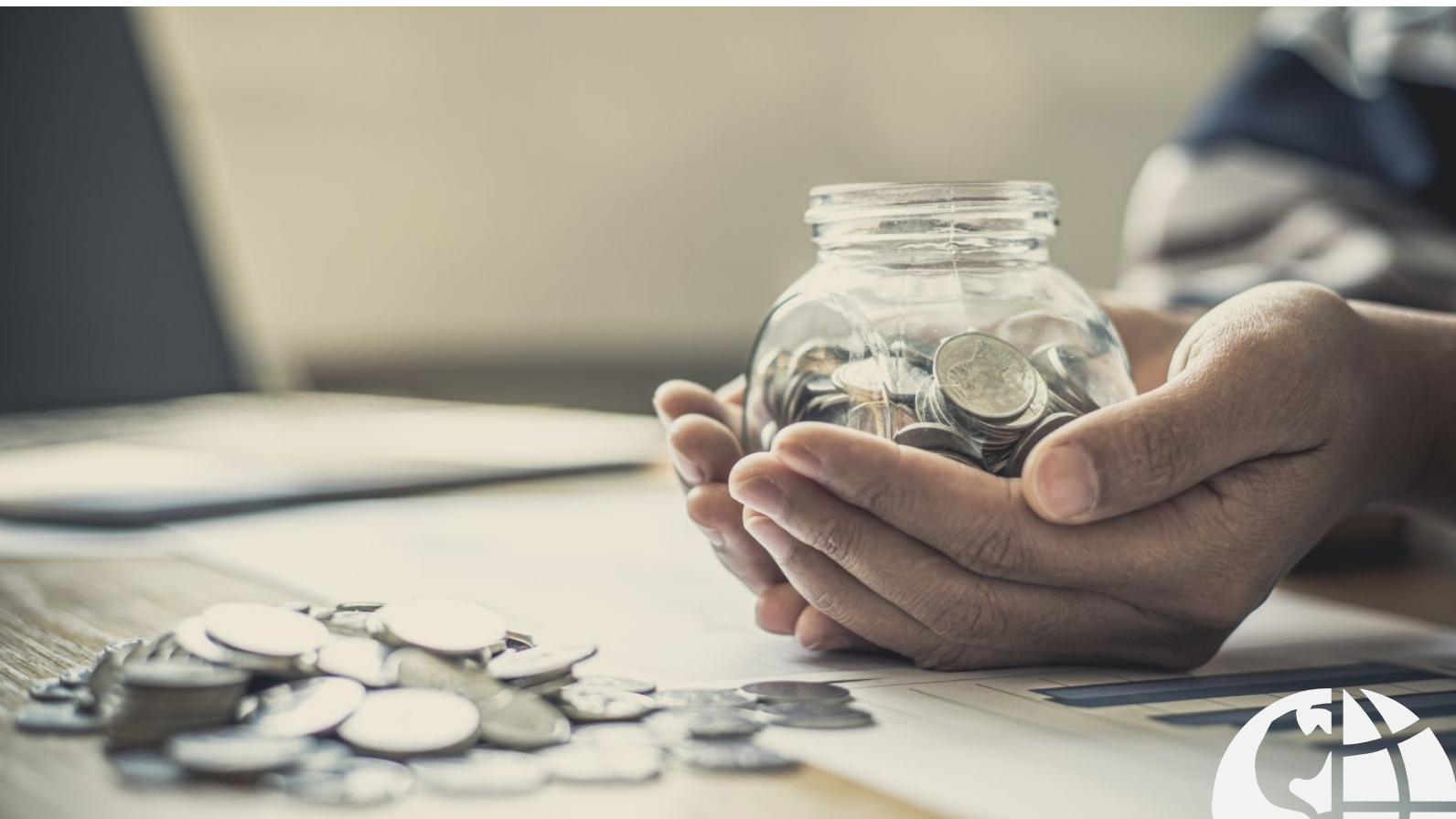
Our impact ecosystem includes:

- A think tank
- A strategic advisory team
- A robust international network of partners and collaborators (including the World Bank and UN agencies)
- Digital tools for convening and deploying capital

We have been mandated to convene capital for human-centred projects ranging up to US\$ 125 billion, with a focus on emerging markets and the Global South.

As we introduce the Sustainable Capital Goals, and the means to achieve them with greater transparency and ease, we are issuing a call to action. We are asking you to join us in convening a community with a common purpose, to address the urgent needs of our species and our biosphere. The Digital Economist is fully committed to ensuring the Global South can access the investment and the capital it needs to fund societal development, including climate adaptation, mitigation and resilience.

We urge and invite you to join us on the journey to better human and planetary outcomes.





Setting The Scene

The world needs an effective response to a triple planetary crisis – climate emergency, biodiversity loss, pollution – which threatens the future of the planet.

This is compounded by the confluence of the climate crisis with corruption and conflict. We are not owners of the Earth – we are simply borrowing the planet from future generations. Our burning platform is the threat to the lives of our children, our grandchildren and their children.

Capital, which looks for certainty and stability, now faces the reality that there is no such thing as “normal.” What was predictable and reliable in the past may no longer apply. Geopolitical risks and the extreme manifestations of climate change can undermine the best-laid plans for stable investment and higher returns. These unprecedented challenges mean that traditional capital allocation strategies may no longer be effective in generating wealth for countries and households. Though this new reality requires a more flexible and nuanced approach to investment and financial planning, those who are able to identify and achieve Sustainable Capital Goals (SCGs) stand to create significant wealth.

Economic decisions and capital flows that seek to pursue the certainty of yesterday are ill-equipped to navigate the capricious and arbitrary phenomena that threaten previously deployed capital and new investments alike.

Significant barriers remain in the structure of global finance. The dominant harbor for capital is titled investments – bonds, securities, tokens and similar instruments based primarily on tangible physical assets.

Any investments in climate resilience, such as food security, zero-emission mobility, or climate resilient infrastructure, need to be structured to fit this dominant reality in capital flow.

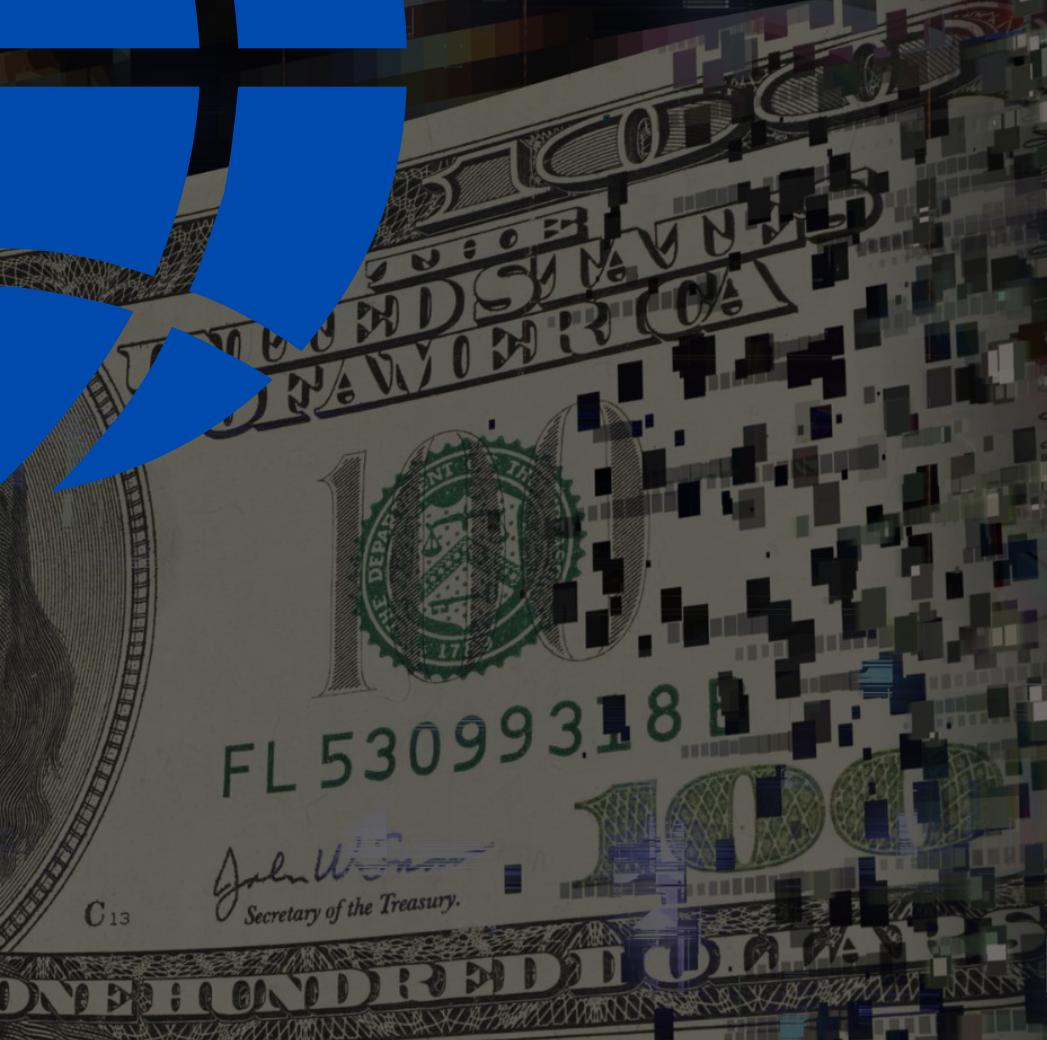
The profusion of intermediaries and the capital needed to fund innovative transformation – e.g. startups, climate infrastructure, existing enterprises – creates a hindrance to the smooth and effective alignment of resources with opportunity.

In *Capital for the Common Good*, a distinguished workgroup convened by The Digital Economist considers how capital can be optimally deployed to meet our existential crises, while also ensuring that there will be a viable future for the value created by today’s investments.

Our signal concept, further elaborated in this paper, is defined as achieving Sustainable Capital Goals. Sustainable Capital will ensure and accelerate the achievement of the United Nations Sustainable Development Goals, leading to a sustainable future for humankind.

The alternative is a future of flux, turmoil and instability: the opposite of the stability and predictability capital seeks. The prospect of chaos and violence becomes all the more likely as climate refugees, war refugees and refugees from corrupt governance overwhelm efforts at controlled and predictable migration.





The thinking behind this work

Building on The Digital Economist's published work on leadership, this paper offers a sweeping examination of how we can find an actionable path forward for our biosphere and all who exist in it. What we call for is a fundamental reset

In researching and writing this paper, we have drawn on the work of Thomas Piketti on the role of capital in stable economies and societies as well as that of Barbara Henderson on the urgently needed overhaul of capitalism (Reimagining Capitalism in a World on Fire Henderson 2020). Additional sources of knowledge and inspiration include Nassim Nicholas Taleb's work on antifragility (Antifragile: Things That Gain from Disorder Taleb et al. 2012), Eleanor Ostrom's work on governing the commons, Jean-Jacques Rousseau's evocation of the Common Good. Above all, we looked to the [Kouroukan Fouga](#) – the world's first governing constitution advancing gender equity and human rights as the normative framework of everyday life. This remarkable constitution emerged in West Africa in the 13th century of the Common Era.

Capital feeding on capital to generate capital within a closed loop, creating neither jobs nor improvement to quality of life in the form of goods and services, is inherently inequitable and unstable. Leadership without a moral compass will inevitably lead to systemic disadvantages and hinder the creation of wealth in less developed countries. In contrast, leadership that practices humility, ethics and adaptability to ever-changing conditions coupled with a focus on the best use of capital leads to an abundant and thriving global community.

In other words, "business as usual" will inevitably lead to upheaval and uncertainty that imperil all forms of capital – fiscal, natural, human and spiritual – because current capital deployment is focused on short-term gains and extraction of natural resources.

When tens of millions of young people joined the global climate protests that began on March 15, 2019, demonstrating on the streets in numerous countries, their message was clear and simple: follow the science.

Climate science predicts that a warming planet will disrupt everything we consider "normal" and continue to unleash chaos.

The natural sciences tell us it is futile to dwell on whether calamitous climatic change is part of a natural cycle or anthropogenic: it is here, and we must adapt and mitigate to ensure the biosphere remains capable of supporting abundant life.

Political science predicts that conflict stemming from natural resource destruction and resource wars will continue to spread misery and devastation, and severely limit the scope for "safe" capital investments.

Economic science tells us that gross imbalances in the concentration of wealth deprive economies of the fuel needed to achieve full productive capacity and grow middle classes equipped with the disposable wealth to allow spending beyond mere necessities.



Social science tells us, echoing Gandhi, that poverty itself is the most pervasive form of violence. Entrenched poverty frays the social fabric and provokes even more instability and violence, leaving few “safe harbors” for capital to grow and flourish.

So we at The Digital Economist are listening to those 2019 protesters and stand with the billions who will inherit a world they consider broken.

While it may be broken, it is not irreparable. Through repair, we can strive towards regeneration.

Below are three examples of critical focal points for the sustainable deployment of capital:

- Food security: Using controlled environment agriculture to grow food abundantly in urban centers, deserts and other areas where there is no arable land to ensure food security for all. Advanced aeroponic technology feeds crops grown vertically indoors, with a nutrient mist responding to the needs of the plants. It uses a fraction of the water of land-based agriculture and indoor hydroponics, and has up to five times the canopy yield of horizontally grown crops.
- Sustainable mobility: Investing in both final-stage research and development and market-ready technology in all forms of travel and transport is crucial to achieving sustainable mobility. Concerted capital investment in sustainable mining of rare earths, semiconductor manufacture and public charging infrastructure fuelled by renewable electricity are all key areas of investment for passenger and freight movement.

- Climate resilient infrastructure: Building the significant public works needed to protect areas threatened by climate emergency, and making new construction, infrastructure and buildings fully sustainable is essential in creating climate resilient infrastructure

To change the status quo, we must first develop an open mind. It will require us to be receiving, understanding and willing to work. This can begin with a few people, but to make it happen, we need to shift the mindsets of entire societies the world over. To realize this, education is a prerequisite. Our traditional formal education system supported and partly created an unsustainable growth-based economy. Now, education must teach sustainable development through compassion and inclusion as core values that reflect long-term thinking. Education in sustainability must be a part of sustainable deployment of capital. The role of education in transforming mindsets is crucial, and formal schooling is the largest and longest training ground.



Capital needs to be allocated toward making education a two-step process:

- 1) Raise the consciousness of societies regarding the gravity of climate crises, corruption and conflict to foster a cognitive and emotional shift toward sustainable values, capital deployment and lifestyle.
- 2) Equip societies with the needed actionable tools to contribute to a sustainable lifestyle in balance with earth.





The Challenge And The Opportunity

The Opportunity

The period 2022–24 offers the most promising opportunity, through the agendas of the G20 Group, to accelerate the achievement of the SDGs by using Sustainable Capital Goals.

From the 2022 Indonesian presidency of the G20, the 2023 Indian presidency, and the 2024 Brazilian presidency, there is an unprecedented convergence of three of the largest democracies and economies of the Global South – and an opportunity to offer actionable paths forward toward a just and inclusive future for humankind.

The Challenge

With the lived experience of extremes in weather that affect every part of the planet, a critical mass of human awareness is forming around the *strophe*, or turning point. Our collective action in the next two decades will determine whether this *strophe* becomes a *catastrophe*, a point of no return for our biosphere and all life forms that inhabit it.

This observation in our 2022 paper [Our Duty of Care](#) led us to call for a new social contract for our times: to converge and concentrate a truly global effort to implement mitigation, adaptation and climate resilience. This must include the private sector, which has come to see sustainability as a significant value-creation opportunity, especially when aligned with the UN Sustainable Development Goals.

To reach the United Nations Sustainable Development Goals, we are invoking Sustainable Capital Goals, the catalyst that will open the most promising paths to a sustainable and inclusive future that leaves none behind. And in an age where artificial intelligence and machine learning are transforming the nature of work, we must ensure that those wishing to work can do so with meaning and purpose – sustainable labor is an integral part of this evolution.

This is an endeavor that must include everyone, particularly the investors and capital pools already committed to funding climate resilience. These parties are already leading the energy transition and decarbonization as well as technologies and installations to pursue net-zero economies.

Robust public-private partnerships will be needed to overcome the limits of international consensus that result in disappointment at each COP summit as well as the constraints faced by private capital, which requires a predictable path charted by rule of law to govern investment.

The keepers of global financial flows, particularly in capital markets, face a recurring question: how can capital flow securely and predictably in a world of millisecond trading and creative financial instruments with no direct attachment to real-world value creation.



Further, institutional asset owners, with control of the largest pools of capital, anticipate that stagflation, high interest rates and mounting national debts will impact risk/return profiles of traditional responsible investments. These [keepers have an increasingly clear understanding](#) that climate change is an existential risk for humanity and are aware of the climate risks for their business. [Moving their portfolios toward sustainable and climate resilient assets](#) is not only the right thing to do, but a business decision that is expected from any responsible leader in the financial sector.

The confluence of planetary crises makes it challenging for capital to find safe passage, let alone safe harbor. Especially when capital itself continues to be deployed in the unsustainable patterns of the past.

Yet if we can navigate through these perils, there is a destination promising robust and resilient creation of both value and wealth. There is significant evidence that the path to low-carbon economic systems requires investments that can expand growth, create better jobs, guarantee high and sustained profitability and a more sustainable and just planet.

The Digital Economist believes there is still time to change the course of these capital flows and divert them to uses that have positive impact. Intentionality sits at the heart of now well-established yet somewhat nascent investment allocations to impact investing and ESG (environmental, social and governance) aligned investing.

	Financial-only	Responsible	Sustainable		Impact		Impact-only
	Delivering competitive financial returns						
	Mitigating Environmental, Social and Governance (ESG) risks						
	Pursuing Environmental, Social and Governance opportunities						
	Focusing on measurable high-impact solutions						
Focus:	Limited or no regard for environmental, social or governance (ESG) practices	Mitigate risky ESG practices in order to protect value	Adopt progressive ESG practices that may enhance value	Address societal challenges that generate competitive financial returns for investors	Address societal challenges where returns are as yet unproven	Address societal challenges that require a below-market financial return for investors	Address societal challenges that cannot generate a financial return for investors
Examples:		<ul style="list-style-type: none"> • PE firm integrating ESG risks into investment analysis • Ethically-screened investment fund 	<ul style="list-style-type: none"> • "Best-in-class" SRI fund • Long-only public equity fund using deep integration of ESG to create additional value 	<ul style="list-style-type: none"> • Publicly-listed fund dedicated to renewable energy projects (e.g. a wind farm) • Microfinance structured debt fund (e.g. loans to microfinance banks) 	<ul style="list-style-type: none"> • Social Impact Bonds / Development Impact Bonds 	<ul style="list-style-type: none"> • Fund providing quasi equity or unsecured debt to social enterprises or charities 	

Source: Spectrum of Capital by [Bridges Fund Management](#)

After all, capital is just a tool. The intent with which it is deployed makes the difference between a future of chaos, and one in which we summon the will and resolve to offer hope and scope to future generations. Economic decisions and capital flows that pursue the certainty of yesterday are ill-equipped to navigate today's capricious and arbitrary phenomena.

Less than 15 years after the subprime meltdown and subsequent financial and economic crisis, our traditional financial sector has been imperiled by something as mundane as interest rate exposure in one relatively small regional bank.

Economic theory suggests that capital flows to the highest valued usage, or value-added. This holds true whether the value-added results from production of goods and services or from purely financial activities like trading financial instruments or accruing interest. As Thomas Pickett illustrates with many examples in *Capital for the 21st Century*, the history of such deployment indicates that economies in which capital gravitates toward higher returns in goods and services are more stable than those in which purely financial instruments offer better returns. Capital feeding off capital to generate more capital is an inherently unstable system.

Significant barriers remain in the structure of global finance. The dominant harbor for capital is titled investments – bonds, securities and similar instruments based primarily on tangible physical assets. Any investments in climate resilience, whether food security, zero-emission mobility or climate resilient infrastructure, need to be structured in new ways (blended finance vehicles and emerging financial products) to align both with existing asset allocation methodologies as well as offer a path to a more sustainable future.

Countering climate change and social inequality also require changes in infrastructure and logistics. The question is then, how to finance tangible assets that address both issues, rather than invest in those that exacerbate them.

A more effective path needs a focus on the core problems of the support systems of banking transactions – and more specifically, on cross-border financial market infrastructures. This backbone represents more than a quarter of the global capital market ecosystem, approximately \$50 trillion. Enhancing this infrastructure by adding elements that foster greater stability and transparency, while also easing capital flows toward sustainability is discussed in further detail in the following section.

Finding Practical and Actionable Solutions

The recent financial disruptions, like many of those in the last half century, expose serious shortcomings in the good functioning of cross-border finance, despite robust financial regulation. Why is that so? In retrospect, the lack of timely granular data reported in a data standard capable of supporting current and forward-looking financial analysis contributed much to the crises.

Over time, the very well designed and robust monolithic cross-border backbone created in the 1960s has unfortunately transformed itself into a complex, opaque and suboptimal ecosystem. Many of the eminent figures in G20 would be the first to recognize that everyone who is close to the field recognizes that this system thwarts regulators' ability to optimally monitor the financial world in real time.

Data used by regulators look back to what has transpired, while risk demands data that look forward. Relying on static data impedes our ability to assess and manage risk, which by nature is dynamic and volatile. Our traditional finance ecosystem lacks the capacity to process real-time data, with the result that important information is lost in translation, especially at the edge of interconnectedness of financial firms. FinTechs and the innovative applications of emerging technologies can offer several useful tools, but these tools don't often find their way to governance applications, perhaps due to lack of visibility. This adds up to *prima facie* evidence that the current analytic tools in finance, risk, and regulation lack the robustness to protect our diligent collective efforts in past decades to strengthen the financial industry.

Financial platforms decide much of what happens in the international arena, and these are plagued by imbalance, because the Global South is inadequately represented. By purchasing power, China and India are two of the world's three largest economies, with the United States in second place. That can change. But it won't happen by itself.

We propose a new financial world order through a Cross-Border Financial Backbone convened and supported by governments in the Global South.

The current socio-economic inequities and imbalances are evidence that the current global financial system has systematically replicated the structures of exploitation that existed in the colonial era, and the Global South has so far not resisted. Together, we can define a new and better path. This will benefit all parties and render the international financial ecosystems more robust and resilient.

International financial architecture depends on central securities depositories. These:

- Allow the registration and safekeeping of securities
- Enable the settlement of securities in exchange for cash
- Track how many securities have been issued and by whom
- Trace each change in the ownership of these securities

Any transaction in securities must be followed by a post-trade flow of processes. These processes lead to the settlement of the trade, which means the delivery of securities to the buyer against the delivery of cash to the seller. There is no direct connection between the issuer of the securities and the buyer, with transactions flowing through intermediaries. Another aspect to be considered is the absence of real-time financial data on the status and performance of the securities.

There are now only two international central securities depositories (ICSDs), international financial market infrastructures that facilitate the exchange of securities among international investors across jurisdictions. These are Euroclear bank, a Belgium-based financial services company and Clearstream Bank, a Luxembourg-based financial services company owned by the German Stock Exchange, covering around US\$ 50 trillion and growing. There is ample room to enhance the market infrastructure, so that it is no longer a hegemony. We have the opportunity to make it more inclusive and open, especially if it is supported by the governments of the Global South.



In essence, this hegemony impedes the flow of capital to the Global South, since it does not include all emerging markets. Yet for the economies of the Global South, there is little choice other than to use the two existing ICSDs as safe harbor for capital. To be clear, it's not just the G20 and India – the world's largest democracy and a country with breathtaking economic growth – that rely on the current international financial system. Oil-rich nations like Saudi Arabia and the Emirates do the same thing. And it's understandable, because the perceived returns look as if they were the best available option those countries have. In fact, any alternative coming from the Global South is cleverly crafted to make it a nonviable alternative. Yet at The Digital Economist we have the means to create alternative venues. [There is a compelling argument](#) made by Mark Carney, co-chair of the [G30 Group of Economists](#), that these established patterns of capital flow in the international financial system are a barrier to optimal investment in climate adaptation, mitigation and resilience.

A new and truly open multilateral market utility owned and governed by member states – [as is being convened by India in rallying the Global South](#) into an economic collaboration – can change the game. A new Cross-Border Financial Backbone developed and supported by member governments would be a logical continuation of this cooperative leadership in the Global South. Such a platform can foster resilience and robustness as well as fairness and liberation from this modern form of financial dependence.

The Digital Economist further believes it is essential for all regulators to shock-proof the global financial system with real-time knowledge of the interdependencies between financial institutions and their counterparty risks.

Open-source standards already exist. [ACTUS](#) (a “Liaison A” of ISO TC68), for example, enhances visibility and predictability, while [Common Domain Module \(CDM\)](#) is a standardised, machine-readable and machine-executable data and process model. These systems accelerate the adaptation and incorporation of distributed ledger, smart contracts, cloud computing and artificial intelligence into financial ecosystems.

Such sharable technology will serve as a powerful tool in avoiding future shocks.

International standards have proven to be extremely useful in safeguarding the US\$ 50 trillion cross-border assets held by central banks, sovereign wealth funds and quasi-government entities. This new digital infrastructure will also open up new opportunities for the private sector.

These digital advances will be fully compatible with the existing international financial market infrastructure. The big shift is that they will allow a fully automated uploading of the prospectus in the existing databases, which is critical for day-to-day operations of intermediaries.

The International Swaps and Derivatives Association (ISDA) notes that the common domain is a “*standardised, machine-readable and machine-executable blueprint for how financial products are traded and managed across the transaction lifecycle.*”

Such digital technologies enhance transparency and alignment between regulators and market participants, enabling consistency in regulatory reporting. They do so by providing a standard representation of trade data and supporting machine executable reporting requirements.

This means regulators can rely on granular, structured, fully transparent, real-time and dynamic forward-looking data, which they can examine with effective and efficient analytical tools.

What Comes Next: A New Path for Global Capital

The Digital Economist believes that as we seek to steer capital toward investment opportunities that support a sustainable future, we must consider the power of digital science, digital tools, data science and their true potential for the benefit of humanity in:

- More efficient capital allocation
- Largely automated securitization of large portfolios of SME debt to provide working capital to enterprises and initiatives in emerging economies
- Incentivization of the massive capital pools, e.g. through streamlined and standardized ESG asset rating, to facilitate investment in renewable technologies

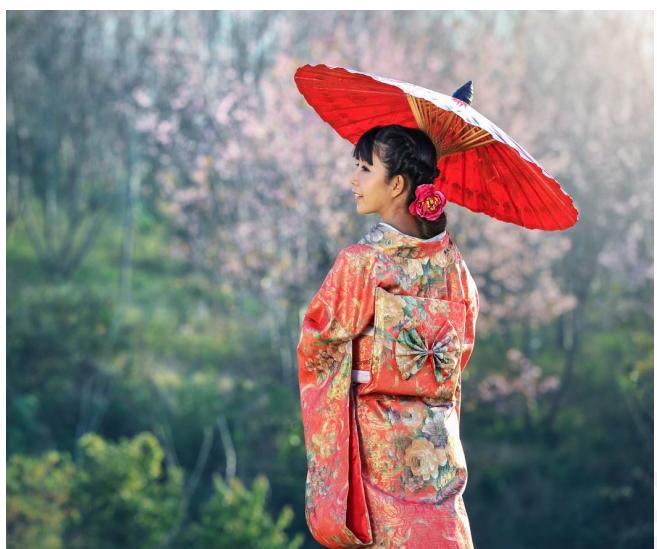
Digital tools can be transformative in reforming the infrastructure of cross-border financial markets to ensure that those with innovative ideas to pursue a sustainable future and those with capital can find each other efficiently. To achieve this, we count on governments to lead the way and act as role models in defining the path to full digital issuance, starting from their own \$30 trillion of assets.

This is our best hope in an age where uncertainty is the only certainty.

Some Steps to Begin

Sustainable Capital Goals and their achievement through digital technology require some key first steps. Accordingly, we recommend that decision- and policymakers:

1. Regain focus on a sustainable future for everyone
2. Rethink and rewrite economic science to ensure it works for everyone
3. Base policymaking on bias-corrected evidence and outcome-driven program management
4. Establish new development models anchored in enablement, not aid or trade
5. Use culture as a way of healing
6. Empower generalist inventors with tools to build cross-subject solutions to multi-pronged problems, with open and transparent data flows and access to information
7. Build a new, complementary, more inclusive and modern cross-border financial backbone to cater for the ones left behind by conventional financial flows





Capital at the Confluence of Climate Crisis, Corruption, and Conflict

On March 15, 2019, an extraordinary event unfolded the world over, startling evidence of the difference that one ordinary person can make in the world.

All across the world, in nearly 100 countries, millions of children left their classrooms to join a “strike”, demanding meaningful action to address catastrophic climate change.

Within six months, what began as a solitary act of silent protest by a reserved and plain-spoken Swedish child became a global movement. It was inspired by Greta Thunberg, then age fifteen, who spoke that day at a rally in Stockholm – one among the two thousand gatherings in communities spanning the globe.

“We have only been born into this world, we are going to have to live with this crisis our whole lives. So will our children and grandchildren and coming generations,” Thunberg said. “We are not going to accept this. We are striking because we want a future and we are going to carry on.”

The young people lead where adults dared not venture in responding to climate change. All the demonstrations were organized using digital tools. In Singapore, with its strictures against public assembly, the rally is a virtual one, held in real time on social media platforms.

And as it had since Greta’s movement began, the movement was fuelled by a simple act of defying authority: skipping school on Fridays to demand action on climate change with three simple words: *Follow. The. Science.*

Since Greta’s act of civil disobedience began 30 weeks before the March 2019 protests, students had been skipping school on Fridays to spur action. The March 15 rallies are the biggest global event yet, timed to coincide with the end of the five-day United Nations Environmental Assembly in Nairobi.

And well-meaning though the summit was, one could see why the young are frustrated. The final communique was a masterful exercise in recognizing the obvious and promising in elegant diplomatic language to, “uh … do … er … something, you know?”

The dead giveaway is that the summit’s resolutions were non-binding.

Greta’s generation understands far better than its elders what we face. “Climate change is worse than Voldemort,” declared one rally poster in Wellington, New Zealand. The trouble is that many of the adults who run the world have no idea what that means.

The scientists, however, do. The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. In its October 2018 status report, it amplified the conclusions and warnings of previous ones.

Every subsequent report since has done the same: while our capacity for effective action remains elusive.

To put it in plain language, we have between two to three decades – at which point Greta and her peers will have barely reached middle age – to achieve net-zero emissions of carbon dioxide before the planet becomes unsustainable for human life as we know it.

The tragedy is that we've known so for decades.

The intensity of climate change has become ever-more prominent since that momentous day in November 1989, when the British Prime Minister of the day, Margaret Thatcher, aroused the United Nations with an urgent call for action to avert climate catastrophe.

"What we are now doing to the world, by degrading the land surfaces, by polluting the waters and by adding greenhouse gases to the air at an unprecedented rate—all this is new in the experience of the earth. It is mankind and his activities which are changing the environment of our planet in damaging and dangerous ways."

Margaret Thatcher's ardent conservatism was founded upon the word "conserve": proper preservation and stewardship of all we have and are, tending our patrimony for the benefit of generations yet to come. And as the only scientist among the world leaders of the day – she read chemistry at Somerville College, Oxford, and worked as a research scientist before turning to law and then politics – she was keenly aware of the perils of anthropogenic climate change.

Since her warning, carbon emissions have continued to grow well beyond the 1990 emission levels that were set as an international benchmark.

Emerging from the COVID-19 pandemic, the world awoke to a future of constant flux. The pandemic brought a hard stop to the global economy. The money central banks printed to stave off economic disaster brought a reckoning in inflation and erosion of value.

Russia's February 2022 full-scale invasion of Ukraine, and the subsequent geopolitical turmoil, accelerated the confluence of the existential crises facing humankind: the corrosive confluence of climate emergency, corruption, and climate.

The polarity between rich and poor, the threatened impoverishment of what had been the middle class in the Global North and more particularly in the Global South, seems to be hardening the tribal resolve between the haves and have-nots.

We emphasize that wealth goes beyond traditional financial and economic metrics to include overall wellbeing and quality of life. This can be measured by various indicators like life expectancy, access to healthcare, education, employment opportunities, social support networks and overall standard of living. In addition, non-human stakeholders such as the flora and fauna of the planet, its oceans and atmosphere are also assets that enhance overall wealth. When deploying capital, it is essential to think about how it can affect each of these aspects positively.



At the turn of the millennium, the power and potential of beneficial capital flows and barrier-free trade was erasing boundaries between nation-states, promising a new era of value creation. Yet as the 21st century continues to unfold, cultures and societies are erecting new barriers – not just around their nations, but around their tribes: the communities of like-minded people driven by the social media algorithms of the digital age.

Within this reality, public- and private-sector stakeholders around the world have so far failed to coalesce in a comprehensively effective and well-funded effort to sustain inclusive societal development and climate resilience with a particular focus on the most vulnerable.

As our team at The Digital Economist wrote in our [2022 Report, Meeting the Climate Challenge](#), the well-intentioned measures adopted during the annual UN climate meetings remain unfulfilled. And sincere pledges made in international fora inevitably run aground on the hazardous rocks of domestic politics and the narrative-changing pull of geopolitics.

This is one of the reasons we called for a new social contract (in the chapter *Our Duty of Care*) to meet the climate emergency, based on our 6-D vision for sustainability (in the Chapter *Finding Common Ground*). And while we believe there is much actionable potential in applying our 6-D lens (Dignity, Development and nuclear Disarmament as a foundation for Decarbonisation, Decentralisation and Digitisation), we are keenly aware that a much more concerted effort is needed to ensure steady capital flows for sustainability.

Sincere pleas are not enough. As the anguished eloquence of UN Secretary General Antonio Guterres continues to fall on deaf ears, it becomes ever-more evident that capital – agnostic in seeking a profitable return – must be given compelling reasons to invest in sustainability, and to see it as both a profit center and a long-term guarantee of durable returns.

We have to acknowledge the potential consequences of our current path, which includes a corroded hulk of a biosphere, economic instability and the destruction of capital due to unpredictable climate events. These challenges will have a significant impact on the wellbeing of individuals and society at large.

At the same time, since the subprime meltdown that roiled global capital markets in the first decade of this century, deployable capital has become increasingly concentrated. Yet the keepers of this capital find it challenging to invest with certainty and confidence. Philanthropy is shifting radically to meet the demands of the 21st century, centering on the need for cross-sector partnerships and input from the communities themselves as well. Donors are now keen to understand the long-term sustainable financial model which underpins the project or business for long-term sustainability and economic viability.

It becomes increasingly likely, with every manifestation of the climate catastrophe – abetted by corruption and conflict – that “safe harbor” for capital is a chimera. The insurance industry calculates that [hundreds of billions of dollars of capital was wiped out by climate emergencies](#) in 2022 alone.



The referees of global financial transactions – institutions like Euroclear, which are privy to data on several trillion euros of transactions daily – can and should use their unique position to influence [antifragile capital flows](#) that can thrive in chaos and disorder.

Erecting high-rises in major cities and keeping them empty just to make maximum profit on asset valuation within five years, not bringing any benefit to the real economy, is capitalism at its worst. The same applies to derivatives like credit default swaps (CDSs) and many more of the instruments bought and sold within milliseconds by day traders.

The recent US\$ 20 billion in property damage caused by riots in France, as well as protests in Hong Kong, Chile and elsewhere, reflect the fact that members of the public will not remain passive when their quality of life is threatened. While protestors may focus their anger at government policies, the uncertainties, inequities and injustices they are rising up against are also the direct results of current capital flows.

For this reason, we need to rethink fiduciary duty. The metrics with which we measure wealth and value-added, as many leading economists and activists have called for, must be revised to include all human and non-human stakeholders, from staff and the communities in which corporations operate to the environment and biodiversity and the Earth's oceans and atmosphere. Focusing on profit and shareholder value alone is not only shortsighted and unjust, but also simply poor risk management.

We need to develop a more balanced set of financial performance metrics as well as a robust and resilient global financial ecosystem. Just as the UN and the global community have agreed on definitions of Sustainable Development Goals, we must define Sustainable Capital Goals and put in place structures to ensure capital flows toward these goals.

This will place us in a position to fund such necessities as abundant food production through controlled-environment agriculture, zero-emission mobility of people and goods and easing or eradicating tariffs and other barriers that undermine global equity.

We are currently halfway through the timeframe foreseen to achieve the [UN Sustainable Development Goals, which drive the 2030 agenda](#) adopted by the United Nations General Assembly in 2015.

While progress is notable, it has yet to reach the momentum of an unstoppable force. In *Capital for the Common Good*, The Digital Economist proposes an actionable path to accelerating success in pursuit of the 2030 agenda, also known as the Global Goals.

We believe that there is a missing element in the concept of Sustainable Development: the ease and availability of targeted, reliable and predictable capital flows to achieve a peaceful and prosperous world where freedom from fear and freedom from want become a way of life.

If we are to unravel [the Gordian knot of corruption, conflict and climate emergency](#), we need a new benchmark: Sustainable Capital.



Sustainable Capital drives Sustainable Development.

What is Sustainable Capital? In the broadest frame, it is capital deployment that creates both economic value and societal value, and recognizes each as sides of the same coin. In this paper, we began by defining Sustainable Capital Goals (SCGs) as a foundation of achieving Sustainable Development Goals (SDGs).

The Digital Economist fully supports the [UN's view that the economic and social justice promised by the SDGs](#) can be delivered more quickly and effectively with the widespread use of digital tools, including capital flows enhanced by a new cross-order financial backbone developed by and supported by the governments of the Global South.

Further, we explore the actions needed to ensure that SCGs drive SDGs in deeper detail. Yet before we do, it is worth considering the existential threat facing both our species and our biosphere, and the urgency of practical and achievable action. We note that investment decision-makers need to be further incentivised to take societal goals into account. A global consensus on how to prioritize, weigh and rank these societal goals is key.

The results of climate change are already destroying millions of livelihoods and billions in capital investment. At random, with scant warning. How do we cope? With every unprecedented disaster, local authorities are quick to say this was a once-in-a-century event, once in a millennium flood/ cyclone/ blizzard. And imply that it won't happen again. Yet, every year we experience new world-record disasters.

It's the new normal. As the past five years have shown, the climate emergency is fully upon us. Floods in the Arabian desert. Rain where it hasn't fallen for decades. Fires break out in the Boreal forest, melting permafrost. Everywhere we look, rampant pollution, the climate crisis and mass extinction continue to consume our planet.

It's going to get worse.

And where are we?

Standing in the rubble of coastal Florida, a climate denier asked if taxing carbon would have prevented the disaster. Of course not. We can't stop climate change. It is the height of human arrogance to think that these processes, once set in motion and fuelled for decades, can be brought under our control within the short or middle term. But we will adapt. We will mitigate. We will build resilience.

We must do our best to find a path to a sustainable future. Have we been able to find the resources, the will, and the common resolve we need to address the triple crisis? Clearly not. In the face of this existential crisis, where science differs only on the extent and scope of the catastrophe already upon us, our best collective efforts aren't good enough.

Yet this is all the more reason to convene practical action to address the climate emergency. We need all of civil society, all enterprises committed to a triple bottom line of environmental, societal and governance outcomes — and most importantly, every citizen who wants to make a difference. It will need all of us, to achieve the [Glasgow Climate Pact](#) reached at COP26, and the [United Nations Sustainable Development Goals](#) (Agenda 2030).



From Vision To Action: G20 India And The Next Global Agenda

The Indian presidency of the [G20 group of nations](#) (more than 20 countries, as it includes the entire European Union) evokes the theme of a global family. The [Sanskrit slogan of the Indian Presidency, Vasudhaiva Kutumbakam](#), is literally translated as all who belong to the Earth. This unifying planetary vision from the earliest Indo-European philosophy permeates every aspect of the meetings and events leading up to the G20 summit in September.

The Digital Economist believes that this planetary theme helps bring further clarity and focus on delivering Agenda 2030, achievement of the United Nations Sustainable Development Goals.

Representing nearly nine tenths of global economic output, the G20 itself captures all the dynamics presented in the larger United Nations – including the diplomatic standoffs that frequently arise at the UN, and more particularly within the Security Council. The Indian presidency, preceded by Indonesia and to be succeeded by Brazil, continues the evolution of a vision anchored in the Global South with promising implications for our common future.

The inclusive direction promoted by India – which itself puts women-led development at the forefront of its socio-economic agenda – offers promising paths for capital to serve the common good. What is needed to make this more than a political intent and make it an effective development tool, is the two key recommendations we offer: establishing Sustainable Capital Goals and achieving them through a new cross-border financial backbone.

These measures will help female entrepreneurs and other underrepresented parties access capital, ranging from microcredit to significant capitalization of enterprises – nonprofit, social and for-profit – devoted to sustainability.

This is amply reflected in India's G20 focus areas:

- Green Development, Climate Finance & [Lifestyle for Environment \(LiFE\)](#)
- Accelerated, Inclusive & Resilient Growth
- Accelerating Progress on [Sustainable Development Goals \(SDGs\)](#)
- Technological Transformation & Digital Public Infrastructure
- Multilateral Institutions for the 21st century
- Women-Led Development

This ambitious agenda, we believe, will be well served by summoning Sustainable Capital Goals to achieve the Sustainable Development Goals. The next section details the characteristics of what we propose to call Sustainable Capital Goals.

Capital Preservation, Rather Than Destruction

Investing capital in enterprises whose end use is to destroy the invested capital of others is the first consequence of armed conflict. As we see in the dozens of acts of armed aggression around the world – whether by crime, guerrillas, terrorists or full-scale armies – this is inherently an unsustainable and unproductive use of capital.

We start by getting smarter about how spending on armaments is deployed. The principal threats to national security – terrorism, drugs smuggling, human trafficking, cyber crime, biological threats like pandemics – will not be met by renewing nuclear arsenals. Nimble Zodiacs are better able to stop human smuggling than a new fleet of aircraft carriers, for instance. Sustainable capital, in terms of planetary defence, means investing in the capacity to deal with the perils of today's world, while using the skills and knowledge of the military to build planetary defenses like the hard infrastructure of climate resilience.

The money invested in maintaining and developing new generations of nuclear armaments is sunk capital, in that, this is capital deployment that cannot create further wealth and value, and be recycled. It is capital as a destructive force, rather than a creative force. Given that the five permanent members of the United Nations Security Council are also the principal purveyors of nuclear weapons and arsenals – perpetuating investment in these weapons of planetary destruction while purporting to promote and preserve a peaceful, stable and rules-based international order – illuminates the scope of this challenge. Considering that significant shares of economic output in the G7 group of nations depend on perpetuating the established patterns, how do we shift resource allocation away from capital destruction to capital preservation?

If we literally pursue nuclear disarmament, stopping the further production of nuclear weapons given that there is enough destructive power in existence to extinguish humankind several times over, we can redeploy capital for beneficial ends.

A recommitment to the negotiations and treaties that took place at the turn of the millennium and lead to the phased and planned reduction of nuclear arsenals becomes an essential step, if capital is to be freed up for planetary defense.

Societal Development as a Value-Creation Engine

Politicians tend to think in electoral cycles. Policymakers who feed the decision-making agenda know that capital investments in societal development yield better outcomes in the medium- and long-term. We see sustainable capital in pursuit of the Sustainable Development Goals as an actionable path to long-term prosperity, stability and both social and economic equity.

Yet it should be self-evident that optimal use of planetary resources and alignment of capital with achieving social development goals, will lead to wealth and value creation.

Achieving the foundational human rights – Freedom from Fear, and Freedom from Want – will unleash human creativity and accelerate the blossoming of human potential for the many. When the essential elements of a clement civil life are in place – universally accessible education, healthcare, clean water, clean air, safe communities – they become the normative framework of everyday life. This is what drives sustainable economic growth.

Sustainable development begins with affirming the importance of the role of government in society. To maintain its legitimacy it has to have a clear view of the social contract it needs to fulfill. This applies to all nations, regardless of their form of government, as social cohesion and social license – the consent to be governed – are more effective where hope rather than fear animates everyday life.

However, a government's ability to deliver on a credible social contract is underpinned by economic development and growth to drive its financial capacity to provide infrastructure and public services. The main driver of all successful economies has been the market economy and capitalism.

All the strong economies in the world are market economies. The China miracle with a market economy has created consistent high levels of economic growth. It averaged 9.45% GDP per annum growth from 1978 to 2019 driven by the remarkable entrepreneurial spirit and focus on wealth creation of the people. This has been supported by a real commitment to infrastructure development and a strong focus on public services by the government.

The prevailing theory has been that with limits to resources, market-driven pricing and the profit motive, these factors help drive the efficient use and allocation of resources. Interestingly, we are now starting to move into a new phase of economic growth that is becoming decoupled from resource use.

Historically, technological progress has helped create more efficient use of resources for any good or service. However, rather than reduce use of resources, it has resulted in additional consumption in other ways. There has been a direct relationship between economic growth and resource consumption. The work achieved by the G20 so far, and particularly amplified in the Indonesian and Indian presidencies of the G20, offers two interesting horizons. The first is the possibility of moving into a world of abundance away from resource scarcity, while the second is the decoupling of economic growth and resource consumption in developed markets.

The intense focus on pure short-term capitalism that began in the 1980s is starting to shift toward more aligned goals with society, such as addressing climate and inequality and what has to date been defined as "compassionate" or "responsible" capitalism. This will intensify as corporate behavior is held to account by stakeholder groups and by escalating government agendas on climate, biodiversity, pollution, inequality and the societal impact of technology. It is also being driven at an accelerating rate by investors and asset managers wanting not just ESG regulation and reporting requirements, but strategies that integrate action on climate and the UN Sustainable Development Goals.

In aligning capital flows with the optimal achievement of Agenda 2030, we must focus on the critical interlinking of economic growth with technological progress. Let's consider some of the alignments.

Continued investment in research and development has driven higher levels of financial wellbeing and overall economic growth. Economic growth and the level of research and development are inextricably linked. Historically, the majority of investment funding in basic research is provided by the government and other non-business sources. In applied research, the spending is more evenly split between business and non-business sources. Development is dominated by the business sector as it has a clear focus on potential economic returns.

Investment in both research and development are needed to continue to drive economic growth. Continuous breakthrough research as well as development spending on new products and services sustains growth over time.

The new social contract taking shape in the Indian G20 enhances the role of technology to drive to a net-zero position in greenhouse gas emissions and address the need for biodiversity regeneration. Net-zero targets and their transition plans are now on the minds of the majority of institutional investors.

It is already clear that technologies can help us shift to a carbon-neutral footprint and a declining ecological footprint on land and in the seas. The development of new technologies is vital to contributing to inclusivity and fairness across the world. We have made great strides in reducing the levels of extreme poverty, which are now below 10% of the world's population from a level above 40% in 1980.

As defined in the Indian G20 vision (one planet, one human family, and one future), inclusivity means universal access to food, shelter, energy, quality health services and education as well as to economic opportunities for all. Technology and innovation focused on creating abundance in key areas are essential ingredients in this quest. Fundamentally, a core role of technology is to render scarce resources abundant – eg. energy, water, food, health, learning, time, money, expertise. The critical components of abundance are dematerialization, demonetization and democratization of technologies. These factors are also drivers of economic growth.

Most of all, there is an urgent need to enable capital to flow as easily as possible to support the Agenda 2030. This must come with changing the way capital is structured and the associated risk management tools.

While regulators around the world have systematically improved risk management mechanisms in recent years, with particularly significant changes following the financial and economic crisis that began unfolding in 2007, the interconnected global financial ecosystem remains vulnerable to various threats. Central banks have deployed measures to stanch the bleeding and avert knock-on effects, but there can be no denying the inherent fragility of the system, despite its safeguards. Why were regulatory bodies blindsided by the recent failure of Silicon Bank? Lack of current data, which prevented proactive actions to be taken to minimize systemic risk.

A further aspect that deserves attention is that the vast majority of global capital is locked in a closed loop controlled by the Global North. The cost of issuance of financial instruments is simply too high for smaller players, a barrier that increases reliance on VCs and angel investors. Particularly startups and incumbents with sustainable business models face prohibitive fees for ESG audits required for entry into sustainability indices. This is unsustainable in every sense of the word, considering the lack of real progress toward goals set by the United Nations Framework Convention on Climate Change (UNFCCC), with updated versions issued at annual COP meetings for years. More must be done to facilitate and encourage investment in protecting the planet. Women entrepreneurs receive approximately 2% of the venture capital, effectively locking out several female founders from opportunities to grow sustainable companies. As primary caregivers who are constantly managing constraints, women solve problems differently, and have been demonstrated to be better in managing risk.

To achieve women-led development outcomes, it is incumbent on the multilaterals backing the UN SDG agenda to set and meet funding targets for women-owned businesses and female fund managers.

We see compelling evidence that these two flaws – exposure to unforeseen shock events and insufficient sustainable investment – are not set in stone. We see them as both interrelated and surmountable, and propose a systematic allocation of capital to investment vehicles aligned with the 17 United Nations Sustainable Development Goals (SDGs). This would not only offer long-term stability and robustness, but also serve the interests of humankind and the planet. At a time when funding is urgently needed for climate protection and mitigation of related threats, financial inclusion, education, food security and healthcare – to name just a few examples – SDG-aligned investment presents vast opportunities. In addition, the SDGs offer unassailable credibility as a clear, globally recognized and accepted roadmap toward a world that will allow our grandchildren to flourish and live healthy, happy lives.

The flow of international capital is today's problem – and tomorrow's solution. Instead of accelerating the SDG transition, the current ecosystem is increasing the complexity, cost and opacity of compliance. As a result, regulators have difficulty performing their supervisory role. Even worse, many entrepreneurs are hindered in accessing the capital market to develop sustainable ventures.

In terms of global financial transactions, this translates into the need for transparency and real-time data – the missing pieces of the otherwise sound system.

Until now, it was not considered possible to fully automate the flow from issuance origination to asset owners. While most of the ecosystem is managed by straight-through processing (STP), the fact that some processes remain manual and in natural language continues to prevent the regulator from accessing real-time data. Bridging this gap is altogether doable via today's technology: we can now move from natural language contract description to fully automated, executable and verifiable contracts. This enables almost 100% STP systems, offering regulators and other stakeholders enhanced transparency and up-to-date knowledge.

Collectively, the global financial community has a moral and social obligation to address these issues. We want to bring together the formidable abilities and leadership of economists and policymakers committed to the common good to help define and implement the missing piece that will enhance the robustness and efficiency of the global economy.

Finding a new way forward needs a focus on the core problems that plague the support systems for banking transactions – and, more specifically, cross-border financial market infrastructures. This global transaction infrastructure represents more than a quarter of the worldwide capital market ecosystem, or approximately US\$ 50 trillion.

The current financial upheaval, like many of those in the last half century, exposes serious shortcomings in cross-border financial regulation. The lack of real-time data reported in a data standard capable of supporting current and forward-looking financial analysis continues to be a crippling factor, thwarting regulators' ability to optimally monitor and intervene when necessary.

The retrospective nature of regulatory oversight and intervention represents an obstacle to effective risk assessment, management and mitigation. Current analytic tools in finance, risk and regulation lack the robustness to strengthen the financial industry.

For these reasons, The Digital Economist calls for a surgical intervention in public-sector finance to drive global infrastructure reform and enhance the efficiency and effectiveness of finance ministries. By transitioning all functions to STP at scale, ministries of finance can foster private-sector implementation while reducing their own cost of borrowing for ESG bond issuance. Regulators, who report to finance ministries, would be empowered through the combination of real-time data and (existing) retrospective data. The public sector would act as a role model and driver of technological advancement while enhancing risk intelligence and benefiting ESG investment and compliance.

What is missing is a system for fully automated issuance that would allow cross-border issuers and finance ministries (representing 60 percent of the US\$ 50 trillion global capital market ecosystem) to issue their securities on a standardized platform. Such a platform could provide efficient and equitable conditions for all players in uploading all pertinent data and information – removing the element of narrative that can lead to opacity and misrepresentation and greatly enhancing transparency and integrity in capital markets.

This would allow the regulators to use granular, structured, fully transparent, real-time, dynamic and forward-looking data throughout the entire lifecycle of an investment instrument, which can be examined with user-friendly analytical tools. A global automated system that ensures a common standard for capital flows, including data models and standard algorithms, would enable clarity and accountability.

This is why we find such promise, as noted earlier, in technological tools such as ACTUS and the ISDA CDM.

Central banks have deployed measures to stanch the bleeding, yet emergency measures are not enough to overcome the inherent fragility of the system. The Digital Economist believes there is a viable path forward, by assuring real-time data-sharing across jurisdictions.

As we have noted, our arguments in this paper are a call to action. Please join us on the journey of summoning Sustainable Capital Goals, and ensuring that we optimally deploy capital for better human and planetary outcomes.

Despite the flux and turbulence of the world as it is, we believe that SCGs for SDGs will shape an inclusive future that works for the many.

We encourage you to reach out within your spheres of influence to meet the fierce urgency of now. Come and join us to empower humanity. And to build a future that works for all of us.

And after all this prose, here is a poetic definition of our Call to Action, by our colleague Oluneye Oluwole:

CAPITAL FOR THE COMMON GOOD

By Oluneye Oluwole

Senior Fellow, Center of Excellence on Human-Centered Global Economy

What is 'Capital For The Common Good'?

Whose Good?

My Good, Your Good, Our Good?

When is capital for the common good?

When is capital for my good?

When is capital for your good?

And, when is capital for our good?

I hear their whispers

I hear their words

I hear them describing capital

I hear, it must be for the good of all

I also hear another saying

Which good, and whose good?

So much noise in the voice

So much noise in the choice

Who do I believe?

Who is right?

What is right?

What is good?

In one bite, it tastes good

In another bite, it tastes bland

But each is right, depending on your choice

So, I ask again

When is capital for the common good

What is capital for the common good

Who is capital for the common good?

Capital! Capital!! Capital!!!

Good for all

All for good

All is good

But, for WHO?

Oluneye Oluwole

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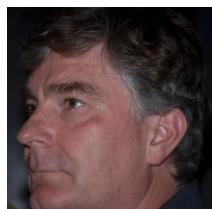


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