mobilizing private capital? investment barriers meet reality

advait arun march 2024

Why did I choose this title? These three words are everywhere—and I'm asking: "what's up with that?"

bio

- climate and infrastructure finance analyst
- IRA implementation: elective pay, loan programs, green banks
- int'l cli-fi: JETPs, World Bank reform, debt swaps, microfinance
- topics: investment process, derisking turn, development finance
- writing/research:
 - barriers to "mobilizing private capital"
 - climate risk "doom loop"
 - financial system arcana

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outline

- the finance gap
- mobilizing private capital
 - high-level initiatives: JETPs, MDB Reform, Global Shield
 - high-level trends: in terms of money, we have no money
- barriers to mobilizing private investment
- case study: Energy Transition Mechanism
- doom loop & insurance markets
- takeaways

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If you doze off right after this and miss all the content, here's what you should take away from this presentation: the rhetorical frameworks justifying government intervention in climate and development policy are politically and economically *ineffective*, and they don't present the Global South with a coherent climate *or* growth strategy.

3

the wall street consensus

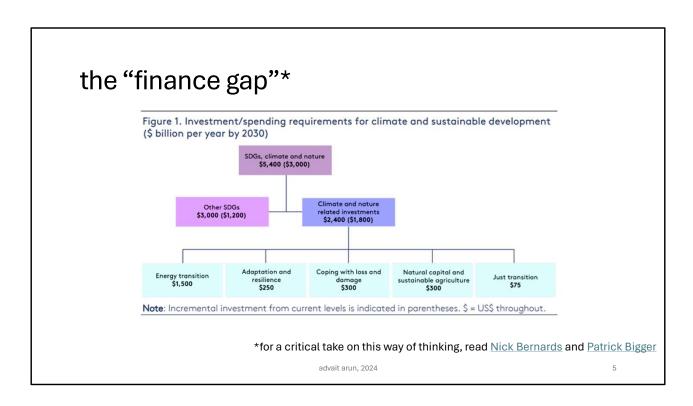
- the "assetization" of development (Gabor)
 - all about "mobilizing private capital" toward social goals
 - focus on rentier assets: housing, energy, transport, healthcare
 - · cities: Nusantara, NEOM, Cairo
 - Ukraine's postwar reconstruction

This is the Wall Street Consensus mantra: the state and development aid, including multilateral development banks, should escort the trillions managed by private finance into climate or the Sustainable Development Goals asset classes. The state derisks or "blends" by using public resources (official aid or local fiscal revenues) to align the risk-return profile of those assets ("bankable projects") with investor preferences or mandates. Transforming climate or nature into asset classes necessitates the commodification and financialization of public goods and social infrastructure, beyond water, electricity and transportation, and including housing, education, healthcare; these have to generate cash flows that pay institutional investors. The consensus understands the state as a derisking agent: its fiscal arm enters public-private partnerships to render them bankable by transferring some of the risks to the balance sheet of the sovereign, while its monetary arm protects investors from liquidity and exchange rate risk.

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The Wall Street Consensus is the place to start—it's Gabor's term and it's extremely apt for global development policy, which is all about making social goals "bankable" to private investors. Bankability is all about making something into a profitable, low-risk, and stable investment for an investor. It's not just in energy, it's really happening across all sorts of public goods-type sectors, maybe rent-seeking-prone sectors. It's happening across whole cities, like Indonesia's new capital Nusantara and Cairo's new downtown district. Even the government of Ukraine is hoping to mobilize private capital to rebuild itself after the war!

(Img source: Gabor, 2021. "Wall Street Consensus at COP26," Phenomenal World. Available at: https://www.phenomenalworld.org/analysis/cop26/.)



The "finance gap" provides the justification for this way of thinking: as the logic goes, there's a quantifiable gap between where we're at and where we need to be, for any particular social or development goal. Policymakers have a responsibility to plug that gap, somehow. How can they find the money?

This logic is not exactly correct—see the sources on the slide—but it's also worth noting that the precision here is pretend! If we don't meet the target for the energy transition shown above, for example, then the adaptation and loss and damage bills go way up. There's no way these numbers are fixed, or precise. They're rhetorical devices.

(Img source: Songwe-Stern IHLEG Report, 2022, LSE Grantham Institute. Available at: https://www.lse.ac.uk/granthaminstitute/publication/finance-for-climate-action-scaling-up-investment-for-climate-and-development/.)

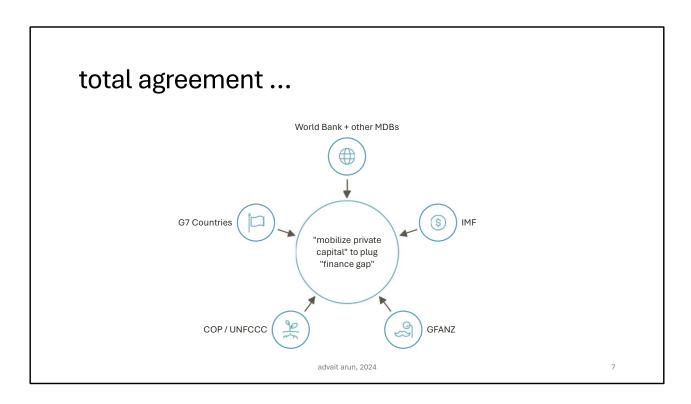
mediating institutions—just in case!

- national governments
 - G20, G7, G24, V20, APEC, OECD, SIDS, etc.
- united nations: UNFCCC, COP
- multilateral development banks: World Bank, ADB, AfDB, IADB, AIIB
- International Monetary Fund
- GFANZ / Glasgow Financial Alliance for Net Zero
 - and other corporate groups
- civil society organizations
 - expert groups, think tanks, advocacy, nonprofits, etc.

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6

In case anyone reading isn't familiar with who's playing the field.



Everyone in that list on the previous slide believes that the world faces a climate finance "gap," and they all believe that the best way to address it is to "mobilize private capital."

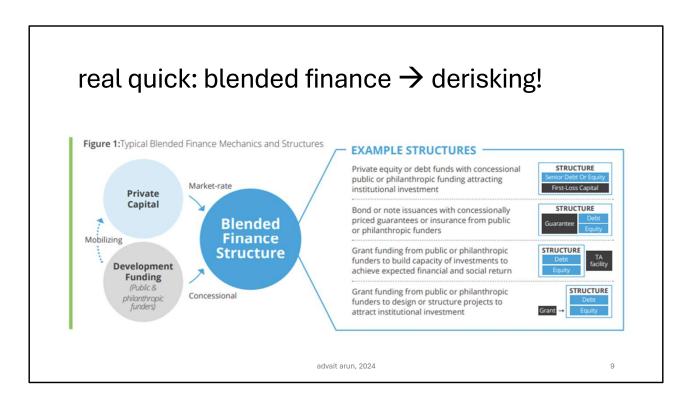
STATEMENTS & REMARKS Remarks by Treasury Assistant Secretary for International Trade and Development Alexia Latortue at the OECD Community of Practice on Private Finance for Sustainable Development Conference The financing gap for the emerging market infrastructure needed to keep the 1.5 degrees Celsius goal January 31, 2023 within reach is measured in the trillions of dollars per year. Public budgets alone won't be able to fill that gap. Success will absolutely require the private sector as an essential player to achieve climate and broader development outcomes. But the amount of private capital investors have mobilized for emerging market infrastructure has been stagnant for over 8 years, never rising above \$175 billion annually. The macroeconomic challenges and interest rates of 2022 have not helped EMs either. We must therefore redouble our efforts to channel finance toward sustainable infrastructure. Business as usual is not delivering. More is required to produce a necessary sea change in investment. What can we do? Well, Governments, including mine the United States, should consider a more strategic use of public resources, including concessional resources, to fund investments that support achievement of the Sustainable Development Goals. To make the most of our limited funds, we must lean into innovative financing mechanisms such as blended finance structures that can increase the deployment of proven mechanisms, such as loan guarantees, credit enhancements, and political risk insurance. advait arun, 2024

How does "mobilizing private capital" work? I'll let the US Treasury handle the explanation—this here, from remarks that the Assistant Secretary made in January 2023 to the OECD, is maybe the most succinct distillation of the program I've ever seen.

There's a financing gap, which public budgets can't fill, necessitating the involvement of the private sector, which just has way more money on its collective balance sheets. To make sure private capital fills the gap, it has to think it's profitable to do so, which means using public resources to develop innovative financing mechanisms like "Blended Financing Structures" to drive private investment into decarbonization projects they wouldn't otherwise be interested in.

That's it!

(Img source: Latortue, 2023. Remarks, U.S. Treasury. Available at: https://home.treasury.gov/news/press-releases/jy1234.)



Real quick: how does blended finance work?

It involves taking a project with expected risks and expected returns and *derisking* it such that the expected returns are boosted and the expected risks are suppressed. Usually, this works by having the project/its developers *offload* the risks to the state through these various structures above. The state could provide a loan guarantee against default risk, or a first-loss guarantee to cover some percentage of expected losses, or provide technical assistance to offset the cost of project development, or grants!

This is all about making projects "bankable." Blended finance is the primary way through which policymakers seek to "derisk" projects.

(Img source: I know this comes from the IFC, but I can't find this exact version anymore. A slightly different version shows up in a 2018 OECD report and a 2021 Convergence Report. Available at: https://www.oecd.org/water/OECD-GIZ-Background-document-State-of-Blended-Finance-2018.pdf.)

total agreement ...

WALL STREET CONSENSUS + WASHINGTON CONSENSUS

- G20 as an institution does not contest this agenda
 - (even if India + Brazil have pushed for greater tech transfer, Global South voice, etc!)
- China did not contest Ajay Banga @ World Bank
 - · despite their state-led energy development push
 - AIIB emphasizes private capital mobilization just as other MDBs do
- external **boosters** do not challenge "finance gap" view
 - Bridgetown, Songwe-Stern, Summers report

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10

Before you ask, nobody whom you think might disagree with this agenda is actually disagreeing.

Recent G20 leaders in the Global South, including India, Indonesia, and Brazil, have pushed for greater tech transfer—but have not said anything against the need to mobilize private capital. China does what it wants domestically, but, importantly, it did not contest the US's nomination of Ajay Banga to head the World Bank (he was nominated particularly due to his agreement in the need to mobilize private capital), and its own multilateral development bank, the AIIB, speaks about mobilizing private capital in the same way that the World Bank does. And, finally, external civil society boosters and even Global South leaders like Avinash Persaud in Barbados have not objected.

high-level initiatives

- just energy transition partnerships (JETPs)
 - South Africa, Indonesia, Vietnam
 - other "country platform" arrangements: Egypt's NFWE
- World Bank / MDB Reform
 - IF-CAP
- Global Shield (mobilizing private capital for insurance)

also:

carbon markets

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11

Mobilizing private capital as rhetoric comes with actual policy. The examples I want to focus on are three Global North initiatives to mobilize private capital in the Global South, particularly through international institutions and fora: the Just Energy Transition Partnerships (JETPs), Multilateral Development Bank (MDB) Reform, and Global Shield, which is about mobilizing private capital for insurance.

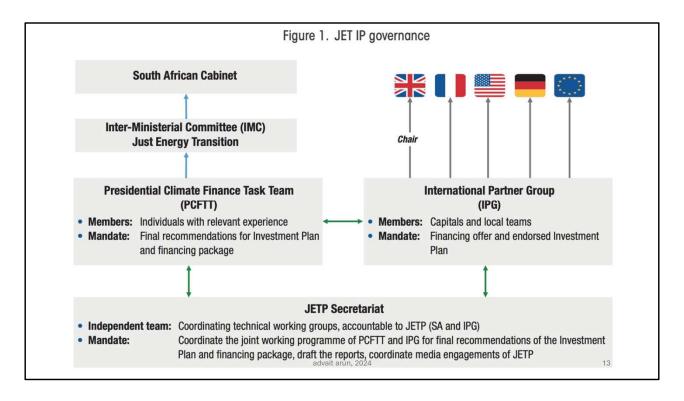
Some people say that carbon offset markets are also mobilizing private capital, insofar as private firms in the Global North would willingly buy offsets to support decarbonization elsewhere. I'm not sure about whether it should count, but I'm not talking about it anyway.

whither the JETPs?

- **PRAISE** where praise is due
 - unprecedented diplomatic effort on part of G7+ to "syndicate" finance
 - host country can direct sectoral allocation of private finance (allegedly)
 - · involvement of global civil society actors
- CRITICISM otherwise:
 - no sign that high-level diplomatic engagement translates to technical progress
 - three years of nothing much
 - · little to no additionality
 - does not necessarily empower democratic/civil society coalitions
 - negotiations are foundering on: loans v grants, domestic peco, emissions accounting
- JETPs encapsulate agreement on goals and fractures in commitment

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- little to no additionality: most of the money in JETP financing plans consists of funds reallocated to projects/initiatives in JETP host countries (Indonesia, South Africa, Vietnam) and relabeled as "JETP" funding. It's not new money!
- In South Africa and Indonesia, government officials are pretty concerned that there are too many loans rather than grants.
- "Peco" = Political Economy



I'm sharing this to show that this is really complicated.

The Secretariat at the bottom runs the "country investment platform" to move investment to where South Africa judges it's needed. But look at how many moving *sovereign* parts are needed to coordinate this structure!!

(Img source: https://www.thedailyvox.co.za/south-africas-just-energy-transition-investment-plan-in-600-words/)

Green | Climate Politics

How 60 Million South Africans Are Being Failed by Global Climate Politics

An \$8.5 billion deal to finance South Africa's transition away from coal is mired in politics and power cuts.

By <u>Antony Sguazzin</u> and <u>Paul Burkhardt</u> April 25, 2023 at 12:00 AM EDT Updated on April 27, 2023 at 2:35 AM EDT

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14

News remains bad: https://www.bloomberg.com/news/features/2023-04-25/load-shedding-today-south-africa-green-energy-plan-fails-first-test.

Money and Politics Put World's Biggest Climate Deal at Risk

A draft blueprint for Indonesia's \$21.5 billion green aid package highlights significant obstacles, including a big loophole for new coal.



The initial promise of peaking Indonesia's power sector emissions by 2030 at no more than 290 million tons of carbon dioxide, about 20% below a baseline for that year, looks out of the

By Harry Suhartono, Faris Mokhtar, and Jennifer A Dlouhy September 3, 2023 at 7:00 PM EDT

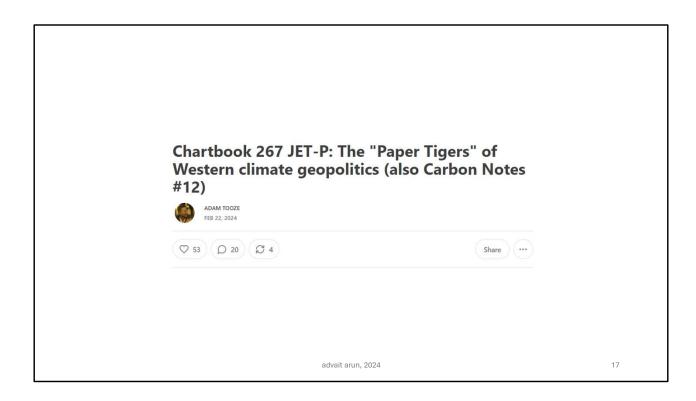
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15

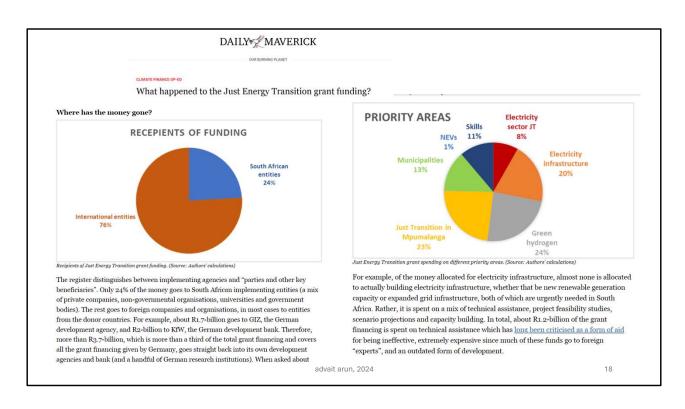
https://www.bloomberg.com/news/articles/2023-09-03/money-and-politics-put-world-s-biggest-climate-deal-worth-21-5-billion-at-risk



Even the Rockefeller Foundation, which supports mobilizing private capital, thinks JETPs are flailing: https://www.ft.com/content/d49f8109-01ea-4ca3-ac0d-15df8cfdfc70.



Adam Tooze, a well-known global economic and financial crisis historian, has remarked (very smartly, in my opinion) on how the JETPs are really illusory attempts at Global North leadership projection. It really jibes with my own experiences at Treasury. https://adamtooze.substack.com/p/chartbook-267-jet-p-the-paper-tigers.



JETP grant flows reinforce the timeless development economics problem of international aid money flowing back to international institutions and consultants doing "capacity building." Some things don't change. https://www.dailymaverick.co.za/article/2024-03-13-what-happened-to-the-just-energy-transition-grant-funding/.

dubious tactics

- · order of operations
 - private sector (GFANZ) will not invest without prepared projects
 - secretariat needs to coordinate preparation/derisking of projects at national level
 - · host country needs to identify projects
 - IPG needs to provide derisking money
- industrial policy as sectoral allocation of finance
 - host country identifies key growth industries: hydrogen, EVs, solar PV modules, etc.
 - · high returns require public derisking
- consequences
 - political centralization to facilitate investment climate?
 - dependency, lack of domestic macrofinancial resilience

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19

Basically, it's not clear how this process is going to work. The private sector won't invest without bankable projects. But the Secretariat needs to coordinate funding sources to make those projects bankable—the host govt needs to identify projects and the foreign partners need to actually put up derisking money. But the money isn't flowing!

To be sure, I think the JETPs showcase an interesting attempt at doing industrial policy by sectorally allocating finance. It's interesting that the key growth industries that JETP recipient countries have identified include hydrogen, EVs, and solar modules—all of which are input industries that can ride the wave of growing Global North demand.

But I think the political consequences include (1) political/economic centralization to facilitate private sector interest in investment and (2) macroeconomic dependency and a lack of financial resilience

Goodbye Washington Confusion, hello Wall Street Consensus:
contemporary state capitalism and the spatialisation of industrial
strategy

Seth Schindler ©*, Ilias Alami ©* and Nicholas Jepson ©*

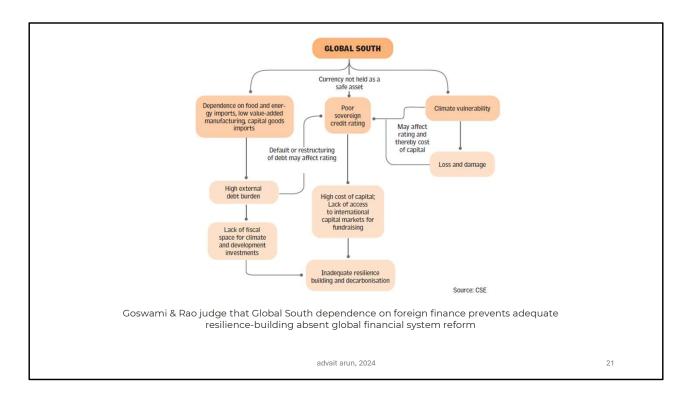
Global Development Institute & Manchester Unian Institute, University of Manchester, Manchester, United Kingdom (Development of Social and Coronic Geography), Uppsala University, Uppsala, Sweden* (Global Development Institute, University of Manchester, Manchester, United Kingdom

***MARTIMET**

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It's worth explaining the mechanism: the authors argue that country leaders' attempts to induce private investment into their economies, in these countries and others, like India, require them to centralize political control over the institutions that can allocate capital and derisking powers across their economies. Maybe we don't think this is so bad—if investment happens because of it, maybe it's good—but I think it's reasonable to argue that making a country "safe for foreign private investment" can have perverse outcomes.

https://www.tandfonline.com/doi/full/10.1080/13563467.2022.2091534



So long as Global South countries are dependent on foreign finance for decarbonization, and insofar as foreign finance does not solve any of their other dependencies shown here, they cannot adequately build resilience. I think this framing really cuts to the heart of the issue.

https://www.cseindia.org/beyond-climate-finance-climate-ambition-in-the-global-south-requires-financial-system-reforms-11753

so if i agree, and if you agree... then who's driving the car???

- JETPs exemplify state of climate finance writ large
 - high-level political agreement on strategy
 - domestic peco becomes key roadblock to meaningful commitments on all sides
 - institutional investors are key partners of govts, but don't move independently (more on this later)
- economic consequences of the grease
 - dependence on global north value chains
 - pol. centralization → unjust transition?
- toy model for global climate finance
 - read Tooze chartbook on this stuff, says all of it better than i could

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22

High level agreement with a snail's pace of movement. Deeply disappointing.

the world bank reform agenda

- JETPs on bigger scale
 - project preparation, blended finance, guarantees, secondary market creation—all to mobilize private finance
 - complex fund structures:
 - MCPP Infra / One Planet
 - Room2Run
 - IF-CAP
 - Alterra
 - key role for private finance: private sector investment lab
- hurdles: project preparation, credit rating and lending headroom, preference for guarantees over loans

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This is like the JETPs but on a bigger scale. It's all about turning the World Bank and its sister Multilateral Development Banks (MDBs) into investment banks, about creating fund structures that can become sites of private co-investment into bankable projects.

The general focus here is on building up space on the MDBs' balance sheets to lend a lot more, within the constraint of their "AAA" credit rating. The problems here include preparing and aggregating projects, dealing with the judgments of credit agencies so as to avoid losing their "AAA" rating, and their preference to guarantee private loans rather than make direct loans themselves—because guarantees look better and less risky on their balance sheet than regular loans do.

ADB's New Climate Program to Offer Up to \$15 Billion in Loans

- The IF-CAP multiplies ADB's lending capacity through leverage
- That will enable climate change action anywhere, Asakawa says

By Hooyeon Kim

May 2, 2023 at 12:35 AM EDT

☐ Save

The Asian Development Bank announced a new program for financing efforts to counter climate change, stepping up its attempt to back one of its main focuses in the region.

The Innovative Finance Facility for Climate Change in Asia and the Pacific (IF-CAP) could create up to \$15 billion in new loans, through a goal of \$3 billion in guarantees, according to Asian Development Bank President Masatsugu Asakawa.

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24

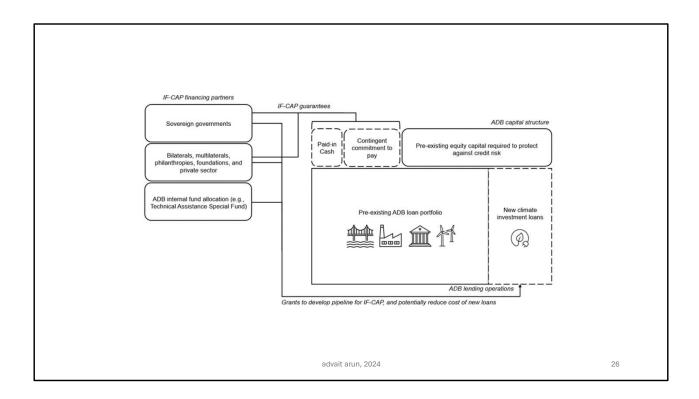
IF-CAP is a great example at the Asian Development Bank. It's designed for guarantor countries and philanthropies, governments like the USA, to assume the default risks on a portfolio of ADB loans. If the ADB can offload its default risks, it can make new loans—as the logic goes.

IF-CAP

- "The Innovative Finance Facility for Climate Change in Asia and the Pacific"
 - (shouldn't it be spelled IFFCCAP?)
 - ADB balance sheet:
 - ADB has a portfolio of loans to sovereign governments
 - · each loan in the portfolio has a certain risk of default (sov gov't not repaying)
 - preserving AAA credit rating requires that ADB keep the default risk on this loan portfolio below a threshold
 - IF-CAP Guarantee:
 - donor governments offer loan guarantee on ADB's portfolio—shifting default risk from ADB to donors
 - less default risk → ADB can make more loans (with new default risks) while preserving AAA rating
 - ADB does not need to pay for these guarantees
 - guarantees do not need to be fully paid for by donors (contingent liability, vs a loan)

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Here's my general judgment of how this works, explaining some of the logic from the previous slide.



This diagram showcases how donor guarantees can take risk off the ADB's balance sheet, allowing it to make new loans.

(Sources for the entire IF-CAP section:

https://www.bloomberg.com/news/articles/2023-05-02/adb-s-new-climate-program-to-offer-up-to-15-billion-in-loans-lh5s0zuy.

https://www.cgdev.org/blog/if-cap-recap-asian-development-banks-big-climate-finance-bet. https://www.adb.org/documents/establishment-innovative-finance-facility-climate-asia-pacific-financing.)

concentration risk

- obvious fact with less obvious implications: ADB portfolio is concentrated in Asian economies
 - · default risk of loan portfolio exhibits "geographic concentration"
 - more loans to fixed set of countries → greater exposure to smaller set of possible sovereign defaults
 - · correlated contagion risks? (Asian Financial Crisis)
 - donor govts' loan portfolios do not have same degree of concentration
 - e.g., USA sovereign loan portfolio is not only for Asian countries
 - loan guarantee shifts default risk in mutually beneficial manner:
 - · ADB attenuates its concentrated default risks
 - USA + other donors take default risks of certain loans, but it is less concentrated
 - TLDR: it is less risky for the USA to hold these loans' default risks than for the ADB

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IF-CAP is about more than just displacing risk. The shift of risk itself from the ADB to, say, the United States, is profitable for both parties: the ADB's balance sheet is less risky to the USA because the USA has a globally diversified balance sheet relative to the ADB's Asia-concentrated balance sheet. The risk is *less risky* to the US!

whose default risk?

IF-CAP is a guarantee program for the ADB's sovereign loan portfolio... so take a guess

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28

There are two ways to reduce the default risks on the ADB's sovereign loan portfolio: offload them like IF-CAP does, or actually address underlying macroeconomic issues across sovereign governments it has made loans to. We should be clear that IF-CAP does not do the latter.

I'll say it again: IF-CAP does *not* address the underlying default risks themselves. The program is not designed to ameliorate conditions across Asian economies, it is designed to prioritize new lending over macroeconomic stabilization. This is, like, fine, I guess, insofar as the ADB has other programs to do the latter. But we should be clear about this!

For what it's worth, I don't think IF-CAP has any money yet. The US's contribution is held up in Congressional budget drama, last I checked.

global shield

- led by Germany & V20, supported by US and other G7 countries
- designed to plug countries' "protection gaps"
 - reinsurance pool for host country insurance programs
 - financing pool for parametric insurance/reimbursements/disasters
 - · technical assistance for "risk market development"
 - "all risk analytics supported by public funds will need to be publicly accessible"
- · mobilize private finance for insurance pools
- Global Risk Modeling Alliance
 - "The Global Risk Modelling Alliance is unique in offering private sector risk analytics capability for the benefit of public sector programmes, for public good. Ministries will gain and use the financial metrics to develop risk strategy – and access risk capital – with confidence."

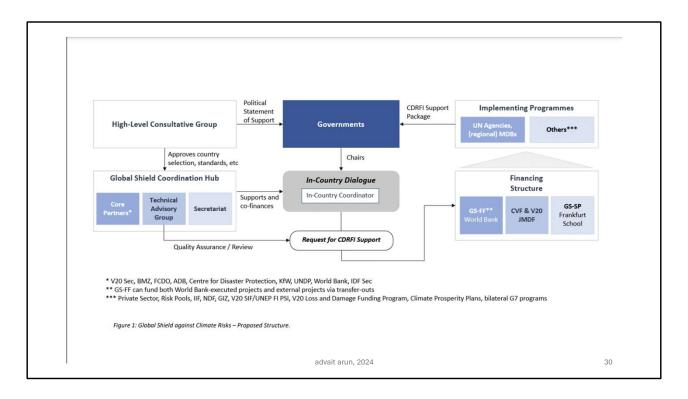
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The global "protection gap" against disasters is like the finance gap. Same rhetorical device. And it requires policymakers to mobilize insurance!

All of the Global Shield is about developing stronger insurance markets in the Global South to respond more quickly to disasters. Some Global South countries don't have a developed insurance market—this is a market development program.

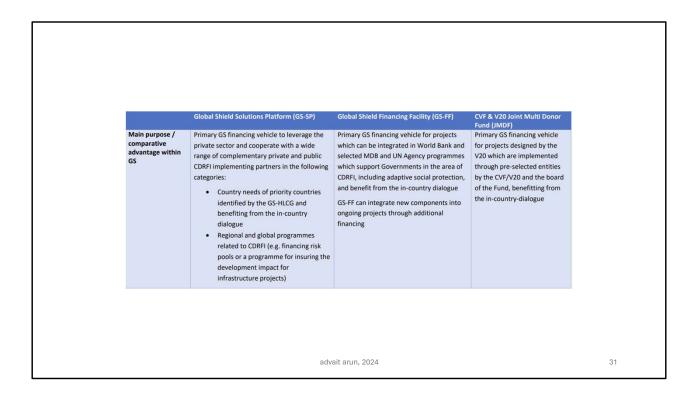
Global Shield relies on the Global Risk Modeling Alliance's data. I'm not sure if this forces governments to pay for private data. But if anyone has read Madison Condon's work, this should raise a huge red flag.

(https://www.globalshield.org/news/cop28-decision-welcomes-global-shield/and https://grma.global/about-the-alliance/)



This is confusing. I don't really claim to understand this.

(Img source: https://www.insuresilience.org/wp-content/uploads/2022/10/2022-Global-Shield-against-Climate-Risks_Concept-_FINAL.pdf.)

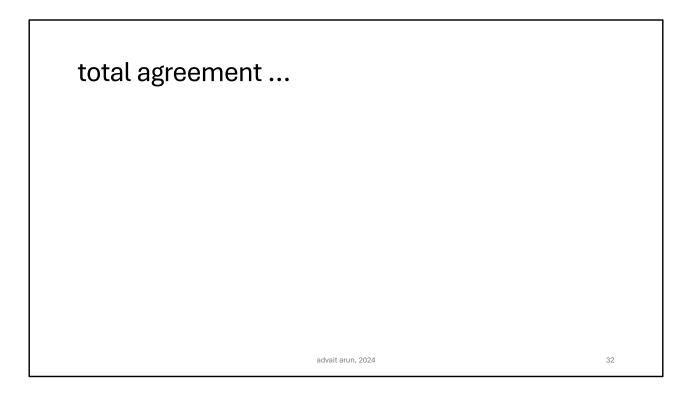


But it's pretty clear that the Solutions Platform in particular is all about leveraging the private sector.

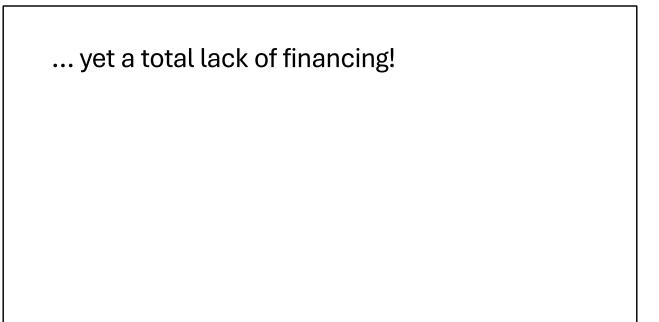
I have no sense of how much money has been put into Global Shield so far but they're farther along than other initiatives.

We'll cover more about insurance and Global Shield later.

(Img source: https://www.insuresilience.org/wp-content/uploads/2022/10/2022-Global-Shield-against-Climate-Risks_Concept-_FINAL.pdf.)

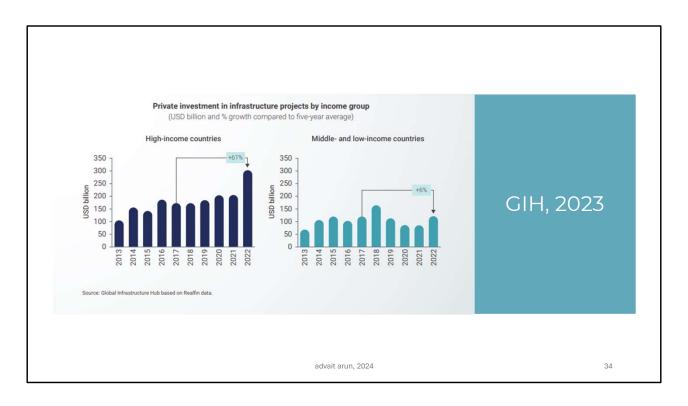


Everyone agrees.



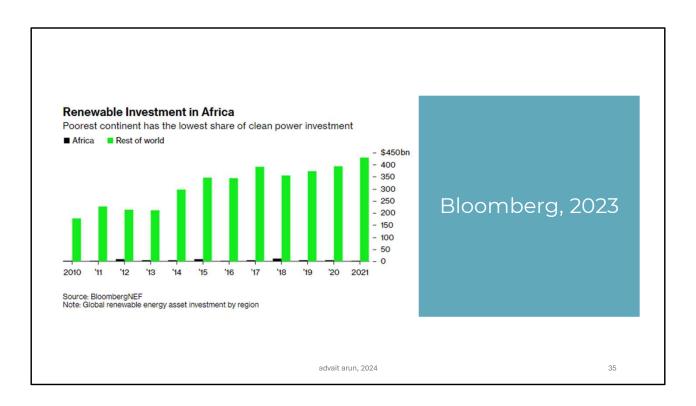
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But there's no cash.



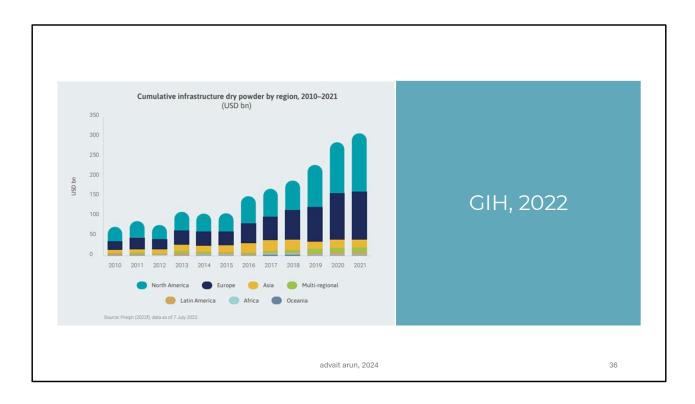
Money isn't going to LMICs at scale.

https://cdn.gihub.org/umbraco/media/5416/infrastructure-monitor-report-2023.pdf



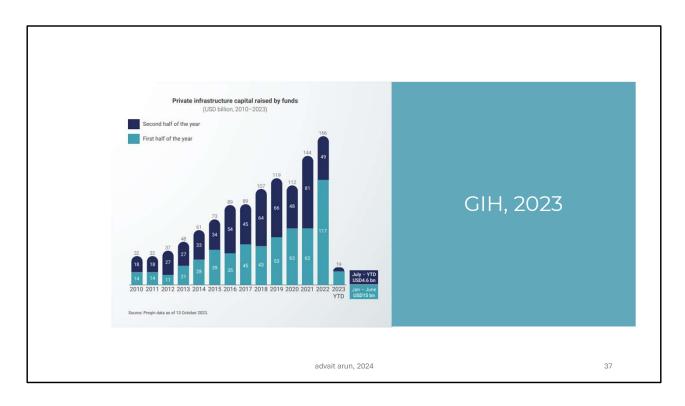
This graph from Spring 2023 represents a gigantic policy failure. Makes me feel crazy, honestly.

I think this is the source: https://www.bloomberg.com/news/articles/2023-02-07/what-africa-needs-to-fight-climate-change-is-money?srnd=green.



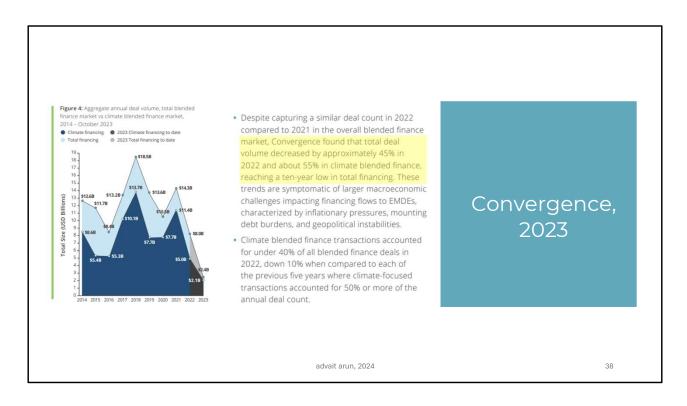
But private infrastructure funds are just sitting on cash they aren't deploying! It's called "Dry Powder," because they're not using it. Projects aren't profitable enough to meet their "hurdle rates," or their required minimum expected returns.

https://cdn.gihub.org/umbraco/media/5114/global-infrastructure-hub_2022-infrastructure-monitor-report_web_updated-15032023.pdf



It's bad enough that private infrastructure funds saw a 95% *DROP* in the amount of capital they raised between 2022 and October 2023. It's not clear that the hype we see in the news reflects actual investor interest.

https://cdn.gihub.org/umbraco/media/5416/infrastructure-monitor-report-2023.pdf



Convergence, a blended finance consultancy, finds that blended finance deals (and climate deals in particular) hit a 10-year low.

https://www.convergence.finance/resource/state-of-blended-finance-2023/view

IBRD has made limited progress in mobilizing public and private capital as defined under the CIP. Its average annual PCM from FY19 to FY22 was 7.4 percent, well below its target of 25 percent. Following the capital increase in FY18, IBRD's PCM ratio of mobilization to own-account financing decreased from 16 percent to 3 percent in FY21 but then rebounded to 9 percent in FY22, resulting in an average annual PCM of 7.4 percent between FY19 and FY22. Only in 2017 did IBRD meet its 25 percent mobilization IFC's core mobilization ratio has been 94 percent averaged over the CIP period, exceeding the illustrative target of 80 percent of own-account commitments. Its mobilization totals increased from \$10.2 billion in FY19 to World Bank, 2023 \$10.6 billion in FY22, and its mobilization ratio dropped over the CIP period (falling to 84 percent in FY22), which was still above the CIP's 2030 target of an 80 percent average. The CIP's market creation objectives were not fully articulated, and implementation was not systematic. Bank Group management took steps toward implementing Maximizing Finance for Development through the Cascade approach, including issuing guidance notes to incorporate the approach in country engagement products, establishing working groups, creating IFC upstream units, strengthening analytical capacity, and providing communication and training materials; however, there is little evidence that this led to operational work to create markets. IFC's upstream operating model was launched in 2020 and envisaged a strong role for global units in supporting the creating markets strategy. In 2022, it moved most staff from these global upstream units to regional upstream units and further merged upstream and advisory teams. Furthermore, the Bank Group's Cascade approach for creating markets was partially at odds with volume and process efficiency targets and related staff incentives. However, in the absence of a monitoring frame work, there was no evidence that these efforts were systematic or successful; the reporting relied on individual examples. advait arun, 2024

The World Bank's own private capital mobilization targets are a bit fuzzy but even they find that they aren't meeting their own targets.

https://ieg.worldbankgroup.org/evaluations/world-bank-groups-2018-capital-increase-package/overview



It's good to have these statistics. But we've reached a point where I think people focus on the ability of various financial program designs to mobilize private capital over maybe any other consideration, like... does it reduce emissions? does it help people? This table has everything about what can mobilize private capital, but not much about emissions impacts. It's funny—I'd argue that the items on the list with the "lowest" ability to mobilize private capital, like public sector sovereign loans, are actually the most necessary for decarbonization, given their low price and long tenor. Isn't this what decarbonization needs?

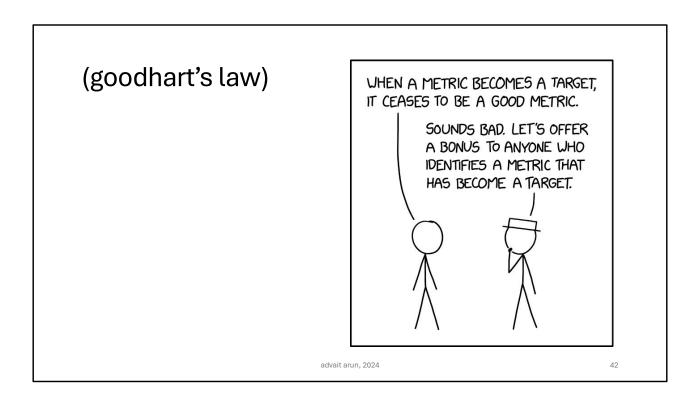
Basically, I worry we're so focused on mobilizing private capital that we lose sight of what really matters.

https://www.gisdalliance.org/sites/default/files/2021-10/GISD%20Position%20Paper%20-%20DC%20Recommendations%20Private%20Finance%20Mobilization_18%20 Oct_0.pdf

There would be milestones for progress in the decade during which the Compact is active, for example after two, five, and eight years. KPIs would be limited in number and as easy as possible to measure and might include, for example: Staff numbers engaged in EMDE investing, including in-country staff. AUM invested/loans made/bonds issued. Atlantic Council, 2023 (Emerging Markets Climate Investment Development of partnerships with local investors Compact - Concept Note) and banks (e.g., coinvestment vehicles with local investors, "club deal" loans, regional funds, etc). Use of blended finance. Sectors and technology types invested in. New financing techniques/products generated. advait arun, 2024

Atlantic Council put out an idea for a "Compact" that investors can sign onto in order to get guarantees for investment in projects across the Global South. It's a big global derisking facility. But their "KPIs," or "key performance indicators," for investor participation say nothing specific about decarbonization or social impact!

https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/guarantees-2-0-meeting-climate-finance-needs-in-the-global-south/



Basically, we're dealing with Goodhart's law. The thing we're trying to measure has become our target. This creates perverse incentives, and has perverse consequences.

... yet a total lack of financing!

Addis Ababa Action Agenda \rightarrow Billions to Trillions \rightarrow Global Public Goods

- institutional investors are seen as partners, but...
 - high hurdle rates keep their funds full of "dry powder"
 - mobilizing their investment in EMs is not happening
- perverse incentives from targeting PCM
- and all the other "investment climate" problems...

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43

We've been talking about mobilizing private capital for nearly a decade, since the 2015 Addis Ababa Action Agenda, but we haven't seen much movement. Nowadays we talk about mobilizing investment into "global public goods." It's the same stuff.

Clearly policymakers treat institutional investors as partners. But the data shows that they're just not investing. And we should be worried about perverse incentives from relying on them.

Now that we've seen the data, let's explore the economics of why private investment won't cut it.

- project-level risks
 - demand, currency, political, regulatory
- portfolio-level barriers
 - fiduciary duty. HURDLE RATES
 - credit rating agencies
 - liability management, speculation, short-termism (pay structures)
 - risk disclosure
- infrastructure as an asset class
 - illiquid, bespoke, hard to aggregate (trading fees)
 - interest rates, global cost of capital
- good immediate returns does not mean good project!
 - energy in particular: requires sequencing and coordination
- is the public sector actually less capable than the private sector??

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44

My Phenomenal World articles were assigned as pre-class readings. Basically, these next few slides summarize my "Investment Climate" arguments. https://www.phenomenalworld.org/analysis/the-investment-climate/

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45

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46

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47

It's stupid to argue that the things we need—decarbonization, social investments, adaptation—are profitable. Most of the things we need aren't profitable! Targeting private profit and targeting social returns are very different tasks. Projects with good private returns are not necessarily projects with good social returns—this is what derisking is meant to address, but at some point policymakers should be asking why we care so much about lining them up when it doesn't make sense.

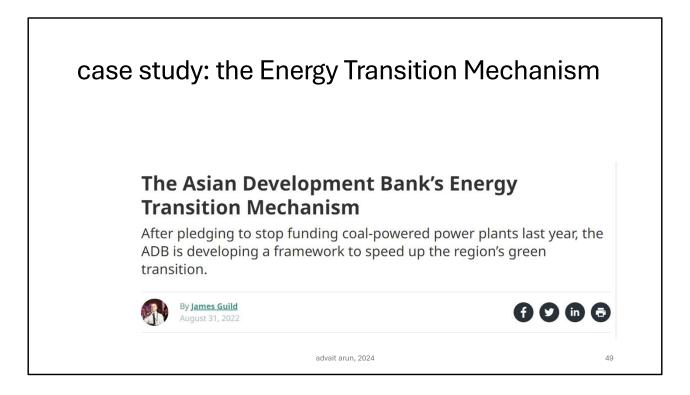
For what it's worth, decarbonization is extremely complex. Getting it done efficiently requires sequencing projects and coordinating investments such that we maximize the emissions reduction bang for our buck. No indication that there are high returns to be found across this process.

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48

We can save the financial system within weeks, why can't we deploy that power elsewhere? In all fairness, we have to build those capacities.



Now our final case study: the Asian Development Bank's Energy Transition Mechanism.

It's a program to phase out coal across countries like Indonesia, the Philippines, elsewhere.

Here are all my ETM sources:

https://www.scmp.com/news/asia/southeast-asia/article/3243672/cop28-indonesia-adb-owners-agree-shut-coal-fired-power-station-early-under-climate-change-plan https://www.reuters.com/sustainability/climate-energy/adbs-coal-shutdown-scheme-launch-first-project-indonesia-soon-envoy-2023-09-20/

https://www.adb.org/sites/default/files/project-documents/55124/55124-001-cp-en.pdf

https://www.weforum.org/agenda/2021/01/how-to-accelerate-theenergy-transition-in-developing-economies/

https://www.eco-business.com/news/adb-spearheads-plans-to-retire-coal-plants-in-philippines-vietnam-and-indonesia/

https://ieefa.org/sites/default/files/2022-06/ADB-Backs-Coal-Power-Retirement-In-Southeast-Asia-September-2021.pdf
https://www.adb.org/news/adb-and-indonesia-partners-sign-landmark-mou-early-retirement-plan-first-coal-power-plant
https://www.adb.org/news/features/update-energy-transition-mechanism-april-2023
https://thediplomat.com/2022/08/the-asian-development-banks-energy-

https://www.adb.org/documents/major-change-trust-fund-etmptf-under-cefpf

transition-mechanism/

Energy Transition Mechanism

- coal assets:
 - (power sales opex fuel cost) = (debt service + free cash flow)
 - debt from lenders plus owner equity (if IPP)
 - long lifetime—how to shorten?
- ADB's goal
 - set up HoldCo ("CRM," Coal Retirement Mechanism), seek co-investors
 - buy ownership equity stake and pay off owners' debt liabilities upfront (?)
 - run asset to generate revenue to repay lenders at a faster rate, wind down asset ahead of schedule
 - mortgage refinancing for quicker amortization, kinda
 - induce original owners to use buyout cash to finance renewable energy, etc.

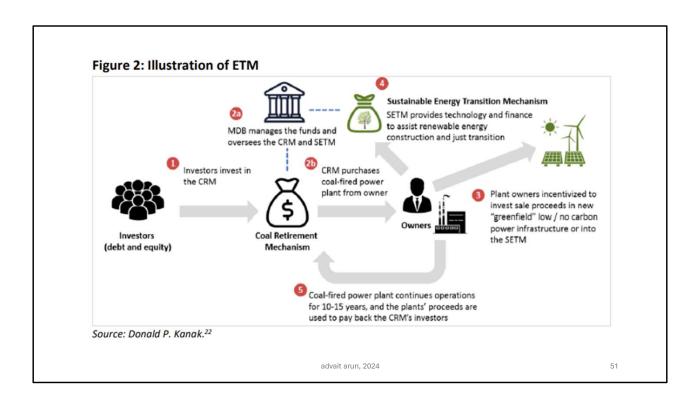
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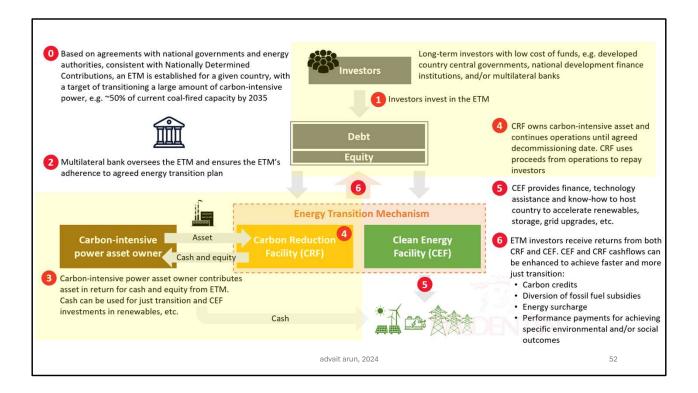
Coal retirement is a very technical problem—but it's also a financial problem. My very vulgar equation (above) relates both. Call it financial engineering, ha ha.

The goal of the ETM is to shorten the lifetime of the coal plant so it closes earlier. How does it work? ADB sets up HoldCo with its equity, which needs to do three things:

- raise debt capital
- buy out the equity ownership of a coal plant
- buy out / pay off the coal plant owner's loans to its existing lenders, upfront

The HoldCo now has to pay back its own lenders but *also* wind down the asset ahead of schedule. This is kind of like a mortgage refinancing but the amortization happens quicker.





Focus on these parts of the diagram!

The ADB's HoldCo, the CRM, is now on the hook to pay back new debt. It has to repay its lenders.

- like a mortgage refinancing
 - new loan on new terms to buy out old loan on old terms
 - assumes that original coal loans are not "portable" or "assumable"
- high interest rate and shorter duration
 - lending to "CRM" fund happens at higher overall interest rate
 - higher rates + shorter duration = safer for co-investors
 - but less safe for borrowers—credit risk, refinancing risk
- kind of like a leveraged buyout?
 - there's leverage (the CRM buyout fund) and a buyout, so...
 - THIS IS NOT NECESSARILY A BAD THING

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53

STRUCTURE

This is like a mortgage refinancing. The ADB's CRM takes out a new loan to buy out old loans on old terms, assuming that original loans cannot be traded over.

But the new loans may need to have a shorter duration—because the ADB wants to phase out the coal plant more quickly—and a higher interest rate, not just because macro conditions are bad but because they need to make sure that coal retirement becomes a safe and profitable investment for co-investors reasonably concerned about stranded asset and reputational risks. Higher interest rates and shorter loan durations are less safe for the ADB, but safer for co-investors.

This is kind of like a leveraged buyout? It sounds a lot like private equity: use a leveraged (indebted) buyout fund to, yeah, *fund* a *buyout* and use the purchased asset (the coal plant) to pay off the new debt.

I'm not saying this is a bad thing—actually I think it's a good strategy for putting coal assets in a transition portfolio—but...

- blended finance as the solution?
 - bad macro conditions raise quantity and concessionality of blended finance required
 - CRM buyout fund is expensive and cost of capital is probably very high
 - sovereign govts and MDBs and philanthropy can invest, lowering cost of capital
- but where is the money?
- perverse incentive
 - if new loan terms have higher cost of capital/return requirements, does CRM face perverse incentive to burn more coal to earn more revenues upfront?

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Remember our equation? If you increase the present value of your debt service, do you have to increase the amount of power you sell? There's a perverse incentive built in: does the ADB have to burn more coal, faster, in order to pay off its new debt?

The solution is blended finance: concessional finance can keep the CRM's cost of debt lower such that nobody is incentivized to ramp up power sales. But... bad macro conditions raise the quantity and concessionality of blended finance needed for the ADB to actually achieve this outcome. And it's not clear the money is really there at scale.

• PLN vs IPP

• IPPs: PPA transparency, take-or-pay contracts

• PLN: valuation transparency

very young assets



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55

Also, these assets are really young, in Indonesia in particular. The ADB is trying to shorten the lifetime of assets that were built very recently.

Moreover, it's not clear how much they're worth. Indonesia's state power company, PLN, might not want to sell their assets for what they're worth. And Independent Power Providers (private generators, financed by South Korean and Japanese and Chinese investors) are locked into take-or-pay contracts where PLN has pledged to buy a certain amount of power from them—and pay them anyway if they don't—providing the IPPs very good revenue security. Assessing the value of those contracts and the legality of breaking them is not easy.

- RE development environment
 - best time to buy is when assets are underperforming... when is that?
 - electricity mkt structure/take-or-pay contracts mean they are always performing well
- under what conditions does RE dvlpmt lower buyout costs of coal assets / displace coal?

The financial logic of ETMs rests on the program's ability to motivate project owners to sell underperforming assets approaching the end of their economic life or at risk of stranding. It is further enhanced if the asset is well located relative to the grid and offtakers, making the site suitable for redevelopment with lower-cost renewables, storage, and sustainable grid management investments. These conditions create a scenario where sellers have a reasonable prospect of realizing better financial returns from a more cost-effective renewable asset than from an old fossil fuel project.

56

Finally, it's not actually clear that anyone thought this out when they cooked it up: it would be great to buy up coal plants if their valuations were low, if they were already struggling. If coal is actually being *stranded* as an asset, where it's being used less and less, then maybe this would all be easier.

But the issue is that coal in countries like Indonesia is actively not being stranded. These assets are *always* performing well. And it seems fairly clear that adding renewables to the grid does not necessarily displace coal use, either—grid structure and power purchase contracts matter! It's really not clear that these assets will ever be "underperforming." Would coal owners want to give up on a great deal?

no money, no execution

Fall 2021 → Dec 2023

Asia / Southeast Asia

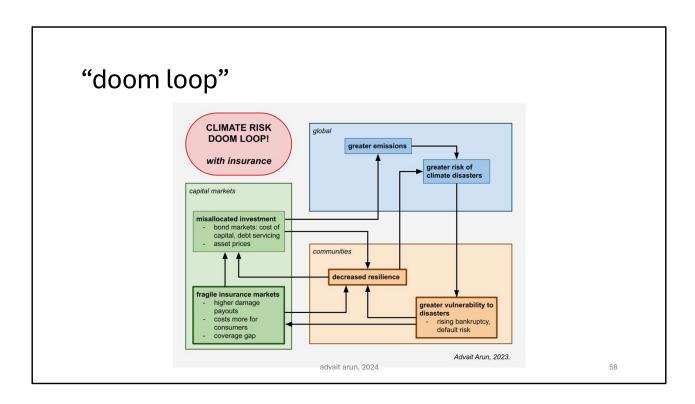
Cop28: Indonesia, ADB, owners agree to shut coal-fired power station early under climate change plan

- The aim is to close the Cirebon-1 coal-fired power plant almost seven years earlier than planned under the ADB's Energy Transition Mechanism program
- The ETM program aims to help countries cut their climate-damaging carbon emissions and is in place in Kazakhstan, Pakistan, the Philippines and Vietnam

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57

Anyway, policymakers have been talking about this for three years. Nothing much has happened beyond like one single 660 MW deal in Indonesia which technically hasn't even reached financial close yet. And they're only closing this plant seven years earlier.



The implication of everything we've just learned above is that there isn't enough private—or public—finance being mobilized to deliver mitigation.

That puts us in the doom loop, a situation in which misallocated investment (relative to, like, our basic need to decarbonize ASAP) exacerbates climate change, worsening our collective vulnerability and decreasing many communities' financial resilience. I wrote about this doom loop dynamic last year: https://www.phenomenalworld.org/analysis/the-doom-loop/.

What I wanted to get at in that piece is that insurance markets and all their well-publicized convulsions are entirely *sideshows* to the effects of climate change on capital markets. Insurance solutions are generally reactive to climate change; they will get harder to implement as climate change gets worse.

whither global shield?

- Global Shield is actually operational, to an extent
 - the coalition is having events at COP
- probably has the same issues as the rest of the examples
 - emphasis on coordinating different existing financial entities is timeconsuming and can fail
 - mobilizing private capital is tough
- political economy problems
 - informal markets and low tax capacity across Global South → states don't build capacity to build adequate adaptation infrastructure/provide public services?
 - lessons of microfinance: does not promote development, creates dependency, can be procyclical, displaces vulnerable populations

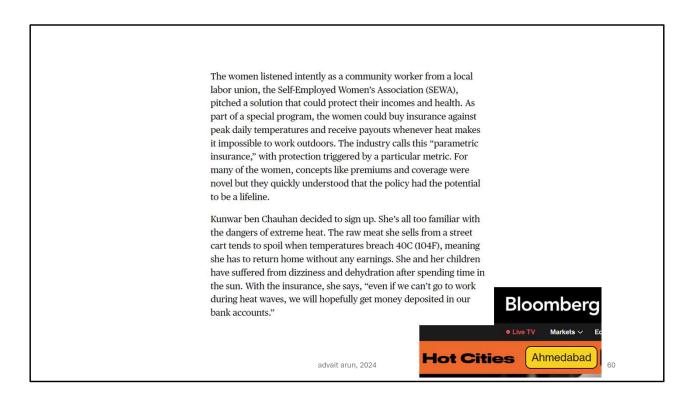
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Global Shield is actually operational, insofar as it seems to have some real money and given that its coalition has events at COP. We can hit it for all the usual problems around how hard it is to coordinate these institutions and to mobilize private capital.

But I want to put on my development economics hat for a second. Global South countries don't have the capacity to build adequate adaptation infrastructure and provide public service in part because of their monetary subordination to global liquidity cycles and due to their own histories of having informal labor markets and lower tax and administrative capacities. This means that insurance solutions will be individualized and micro-scale. Insurance solutions for individual people might be good, but it is inadequate for driving macroeconomic resilience.

Remember microfinance, the promises that financial inclusion through small loans for women entrepreneurs would lead to greater development outcomes? Generally the results are that microfinance has not led to transformational change. Sometimes it's done a lot worse, displacing people and creating new financial dependencies! I think climate insurance products are similar—they're

financial inclusion mechanisms with ambiguous micro-level outcomes and they will not meaningfully transform resilience.



Individual-level solution for women in Ahmedabad. This is good, on balance, I think. But it's *reactive*, not proactive or resilience-building—it does not target the city's built infrastructure and it surely doesn't change the climate.

https://www.bloomberg.com/features/2023-india-ahmedabad-extreme-heat/

Reactive, Individualistic and Disciplinary: The Urban Resilience Project in Dhaka Sarah E. Sharma Queer's University, Kingston, Canada ABSTRACT The World Bank's Urban Resilience Project (URP) champions resilience as the best response to tackle environmental hazards faced by inhabitants in Dhaka. Bangladesh without sacrificing exonomic development development frameworks, the URP supports ongoing forms of urban development frameworks, the URP supports ongoing forms of urban expansion and densification in Dhaka as the key driver of Bangladesh's economic growth, purporting that this strategy will enable the city to address increasing and intensifying forms of thoding, heat waves, fires and earthquake risk. This paper argues that the URP depolitories the analysis of the properties of urban development in Dhaka that benefits certain groups (the state, international organisations, eller classes) while further economically and development organisations, eller classes) while further economically and developing theoretical and empirical contributions to understandings of resilience in global political economy the paper contributes to debates in global political economy and environment, the everyday life of global political economy, and the inter-scalar governance of capitalist societies. Sharma finds that MDB-led resilience programs in Dhaka do not attenuate what actually drives displacement: real estate development ((and speculation)) and the resultant water table displacement, leading to flooding—exacerbated by climate change!

This is not insurance per se, but it's similar. The World Bank runs a community emergency preparedness/resilience program in Dhaka that, while it certainly helps, it does not do anything to change what drives emergencies across the city: real estate speculation and construction that pushes out the water table and exacerbates flooding and, also, climate change. Preparedness here is again reactive.

https://www.tandfonline.com/doi/abs/10.1080/13563467.2021.1899152?journal Code=cnpe20

ABBY SEIFF & SOKUMMONO KHAN

The Danger of Microfinance

Small loans in Cambodia drown the poor and buoy the rich.

MAY 30, 2023

Kimty Seng, an independent economist in Cambodia who studies how borrowers repay debt, has found that such sacrifices are common. Parents with microloans, he determined in a 2020 paper, are more likely to pull their children out of school or put them to work. In a 2018 study, he discovered that families with microdebt—even if they are not particularly poor—eat less, having taken money from their food budget to repay loans. Seng's research drew on 2014 and 2017 nationwide socioeconomic surveys by the Cambodian government, but little appears to have changed since then. Rather, a growing body of analytical research is corroborating what rights groups, academics, and journalists have long documented: microfinance in Cambodia—and elsewhere—is driving many borrowers into deeper poverty. Instead of pushing poor people up the economic chain, it appears for the most part to have become a form of de facto wealth transfer from the poor to the rich.

microfinance is not identical to insurance, but both involve extending financial products to those whom policymakers judge need support. both exacerbate financialization without development

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This report, and research from Vincent Guermond, finds that microfinance in Cambodia drove displacement and land loss among vulnerable groups—definitely not the intended outcomes of the program. Financial inclusion without broader macroeconomic development pathways ends up constraining resilience and increasing inequality!

https://www.thedial.world/issue-5/cambodia-microfinanace-borrower-debt https://onlinelibrary.wiley.com/doi/full/10.1111/anti.12969

'Catastrophe' Bond Market Headed for Major Surge in Issuance

- World Bank targets \$5 billion in outstanding cat bonds
- Issuance comes as insurers increasingly unable to cover losses



Flooded homes and buildings in Karditsa region, Greece, in September. Photographer: Konstantinos Tsakalidis/Bloomberg

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63

Meanwhile, everyone in capital markets, who could actually finance changes to global infrastructure, is enamored by disaster risk. They're buying up catastrophe bonds, which give them payouts when disasters don't happen. This is the best strategy countries now have for purchasing disaster resilience funding.

https://www.bloomberg.com/news/articles/2023-10-24/-catastrophe-bond-market-headed-for-major-surge-in-issuance

Insured Losses Hit \$120 Billion as Extreme Weather Spreads

- Hurricane Ian was costliest event of 2022: Munich Re study
- Before 2005, industry losses never topped \$50 billion a year



A man takes photos of boats damaged by Hurricane Ian in Fort Myers, Florida 29. Photographer: Glorgio Viera/AFP/Getty Images

"Including uninsured losses, the total cost of storms, droughts, earthquakes and fires last year was \$270 billion."

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64

That's too bad, because the disasters keep happening and they keep getting more expensive.

https://www.bloomberg.com/news/articles/2023-01-09/insured-losses-hit-120-billion-as-extreme-weather-upends-norms

doom loop lessons

• insurance programs as currently constituted can't really address the actual drivers of climate change... so what's the point?

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65

Anyway, I don't think we're in a very good place with regard to adaptation finance, if these kinds of flailing ideas about insurance are the kinds of solutions we're driving toward.

takeaways

what we just covered:

- finance gap + mobilizing private capital
- JETPs + MDB Reform + Global Shield
- mobilization data
- investment barriers
- energy transition mechanism case study
- doom loop & adaptation

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66

takeaways

what ties them all together?

- politically / diplomatically: pyrrhic ideological victory
 - · or hollow ideological hegemony?
 - not even cross-border ideological/rhetorical accord among political elites and investors in North and South can break domestic peco roadblocks
 - second image, second image reversed?
- economically / financially: no liquidity, dependency
 - lack of peco commitment → no money
 - either way, reinforces dependency theory implications for climate resilience
- where climate is concerned... perverse adaptation outcomes
 - lack of mitigation programs + lack of economic development = no space for adaptation

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My conclusions are as follows:

- politically, I think the hegemony of "private capital mobilization" is hollow. Not
 even overwhelming cross-border elite agreement about how they need to
 "mobilize private capital" to plug the "finance gap" has been able to break
 their domestic political economy roadblocks to putting their money where
 their mouth is. The United States is certainly a culprit, as so much of this
 money can't get past Congress.
 - there's an Intl Relations concept called the "second image reversed," I
 think from Waltz?, about how international politics can affect domestic
 politics. But where climate is concerned, I think there's very limited
 passthrough.
- economically, the lack of monetary commitment means that Global South countries will remain dependent on Global North aid and financial flows, and that they'll be dependent on Global North liquidity expansions to secure any meaningful amount of foreign capital. Dependency theory is maybe the best political-economic framework with which to assess this dynamic.
- So, the Global South remains underfunded and stuck in a liquidity constraint. The lack of investment they'll receive will lead to perverse adaptation

outcomes—as in, inadequate adaptation.

growth models

- all about "mobilizing private capital" toward social goals
 - focus on rentier assets: housing, energy, transport, healthcare
 - cities: Nusantara, NEOM, Cairo
 - Ukraine
- anyone have any better growth model ideas?
 - integration into global private financial system → debt crises, procyclical policy, liquidity shocks → no obvious large-scale growth success stories / climate resilience success stories in Global South

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Back to the Wall Street Consensus—Global South elites can see this data for themselves, anytime. They must know that this is tough to coordinate and even tougher to make work. Why do they persist? Do they like the crony capitalism benefits of being able to centralize control over their economies and allocate capital as they choose? Do they simply find themselves having no other options? Do they have to speak in the same register as US and Chinese policymakers and investors?

It's not clear the Global South has a good growth model. The normal one, centered on integration into the global private financial system, has clearly not worked.

Is it all of us against all the elites?

derisking, at the end of the day

- swinging for the hedges
 - derisking implies political commitment to backstopping investor demand for risk hedges
 - patchwork derisking = limited ability to backstop investor flight to safety during shocks
- hysteresis: shocks that lower investment/consumption demand are self-perpetuating → lower growth prospects for countries and key decarbonization industries
- perverse conclusion: less derisking now requires way more derisking later?

but none of this fixes underlying financial system volatility

- no global dealer of last resort to preserve liquidity where it's needed
- socialization of investment process = derisking?

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The nature of derisking is currently very patchwork. Only some institutions can really provide it, and not many can provide it at scale, for all sorts of reasons.

But the patchwork nature of derisking means that, during periods of financial shocks, it will miss. Limited derisking means limited ability to backstop investors' flights to safety.

Keynesian understanding of hysteresis suggests that financial shocks that lower investment and consumption demand will be self-perpetuating, resulting in lower longer-term growth prospects for countries and, really, key decarbonization industries.

The perverse conclusion here is that less derisking—and less holistic, more patchwork derisking—now requires way more derisking later.

Nothing about derisking as we currently understand it, however, necessarily fixes the underlying volatility of the financial system! There is no global dealer of last resort to preserve liquidity where it's needed. The real derisking that the world deserves, especially where decarbonization is concerned, is the socialization of

the investment process such that policymakers and financial system actors don't deny liquidity to the firms and governments that urgently need to spend it on mitigation and adaptation, and other social welfare goals.

