## Climate-Just Debt Swaps



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## Aims

- Climate Mitigation \& Adaptation - In the Global South


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- In the Global South
- Funded by the Global North


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- Climate Justice
- True development


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- High-value jobs, skills \& education


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- Mechanism for Loss \& Damage


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- Mechanism for Loss \& Damage
- Incentive compatibility
- Advanced economies


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- Multinationals


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Multinationals

- Advanced economies
- Multinationals
- Banks


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- Advanced economies
- Multinationals
- Banks
- Developing countries

Multinationals


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- Multinationals
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## Climate-Just Debt Swaps

1

- Contributors make funding commitments


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## Climate-Just Debt Swaps

$$
1 \rightarrow 2
$$



- Conirlbutiors melhe furneling oommitmenis
- Countries order green infrastructure projects
- Half the price is paid by the fund
- Conditions apply:
- Net zero and biodiversity
- Operational profits $\rightarrow$ developing country
- Local labour and supply chains
- Education provision


## Climate-Just Debt Swaps

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1 \rightarrow 2 \rightarrow 3
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- Restructure existing debt:
- The old debt is cancelled
- A cheaper (local currency) loan is made


## Cross-currency Loans

- Assumptions:
- The bank uses US dollars
- The borrower uses shillings (for example)
- The dollar:shilling exchange rate may fluctuate (currency risk)
- The bank's country has lower inflation than the borrower's
- The borrower needs the equivalent of \$US 50m
- The bank can either lend in US dollars or shillings
$>$ If dollars, annual interest is $3 \%$ of the outstanding balance
$>$ If pesos, annual interest is $9 \%$ of the outstanding balance


## Currency Makes a Difference



Amount outstanding in blue, values on left hand axis Interest payments in red, values on right hand axis

Assume for simplicity:

- Ioan value: $\$ 50 \mathrm{~m}$ USD
- repayment schedule:
fixed interest rate payable on outstanding balance annual payments
- borrow dollars
- repay dollars
- $3 \%$ interest rate


## Currency Makes a Difference



View from the Bank
Amount outstanding, expressed in USD(2021)

Amount outstanding in blue, values on left hand axis Interest payments in red, values on right hand axis

## View from the Developing Country

Amount outstanding, expressed in real terms


## Banks can make loans in any currency

|  | Loan in hard <br> currency ( $\$ \neq € \mathrm{f})$ | Loan in local <br> currency |
| :--- | :---: | :---: |
| Loan capital | $\$ 50 \mathrm{~m}$ USD | the equivalent |
| Default risk | x | x |
| Foreign exchange | - | y |
| Currency risk | - | z |
| Bank profit | w | w |
| Required Interest <br> Payments | $3 \%$ | $9 \%$ |

Assumptions (changes in blue)

- Ioan value: $\$ 50 \mathrm{~m}$ USD
- repayment schedule:
fixed interest rate
payable on outstanding balance
annual payments
- borrow in local currency
- repay in local currency
- $9 \%$ interest rate


## Loans in Local Currency

## With Local Currency Repayments

Amount outstanding, if $9 \%$ loan in local currency


Amount outstanding in blue, values on left hand axis Interest payments in red, values on right hand axis

- Initial payments higher
- equivalent to $\$ 4.5 \mathrm{~m}$ USD instead of $\$ 1.5 \mathrm{~m}$ USD
- Amount outstanding decreases sharply:
- repayment rates ARE higher
- but also values decrease in real terms (because of local inflation)
- Eventually, the debt evaporates
- Bank still happy


## Loans in Local Currency

## With Local Currency Repayments

Amount outstanding, if 9\% loan in local currency


Amount outstanding in blue, values on left hand axis Interest payments in red, values on right hand axis

## Side-by-side Comparison

USD loan (red) versus local currency loan (dots)


## Loans in Local Currency

## With Local Currency Repayments

Amount outstanding, if $9 \%$ loan in local currency


Amount outstanding in blue, values on left hand axis Interest payments in red, values on right hand axis

## Side-by-side Comparison

Alternative payment schedules in green and teal


## Results - Developing Countries

- Acquire leading edge green infrastructure at half price
- Equivalent amount of hard currency debt written off
- In return, they take out a new, cheaper loan in local currency

Free infrastructure, reduced interest payments


- New profit centre
- High value job creation
- Training and education
- Supply chain knock-ons
- Tax revenues can fund improved institutions
- Reduced reliance on external currencies, skills and resources
- Can take a lead in fighting climate change and biodiversity loss



## Results - Multinationals

## Pros:

- Have a hugely increased market for their products
- Are paid upfront in hard currency
- no currency or default risk


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Cons:

- Projects must be net-zero \& no net loss to nature
- Can only provide construction, not operation
- Must use local labour and supply chains
- Training and education provisions



## Results - Banks

- Improve balance sheet by removing bad and doubtful debt
- Are able to make additional loans with lower default risk



## Results - Advanced Economies

- Fund deposits are callable reserves, so they only need to pay out as each project is launched


## All finds contributed remain in-country direct subsidy of strategic industries

- Funding counts as Foreign Aid, but without the loss

- Funding provides a huge lever for changing company behaviour - for example, by making funding conditional on companies moving from dirty to clean industries
- Can grow their own economy at the same time as reducing global inequality and addressing climate change and biodiversity loss
- The more they contribute, the more their economy (and that of the developing countries) benefits



## Summary

Loans can be made in local currencies
$\rightarrow$ debt burden will reduce over time
Bad and doubtful debt can be bought cheap
$\rightarrow$ can be used to fund debt restructuring
Deals between unequal parties will naturally favour the powerful
$\rightarrow$ so give an MDB the job of setting the terms


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If developing countries are exploited their economies will not develop
$\rightarrow$ the surplus will create new markets and address inequality
Returning all of the funds to a country's companies keeps money within the economy
$\rightarrow$ allowing countries to directly subsidise industries which address climate change

## Questions

"And then, one Thursday, nearly two thousand years after one man had been nailed to a tree for saying how great it would be to be nice to people for a change, a girl sitting on her own in a small café in Rickmansworth suddenly realized what it was that had been going wrong all this time, and she finally knew how the world could be made a good and happy place. This time it was right, it would work, and no one would have to get nailed to anything."

Douglas Adams, Hitchhiker's Guide to the Galaxy

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