

# Climate Finance: Blessing or Curse?

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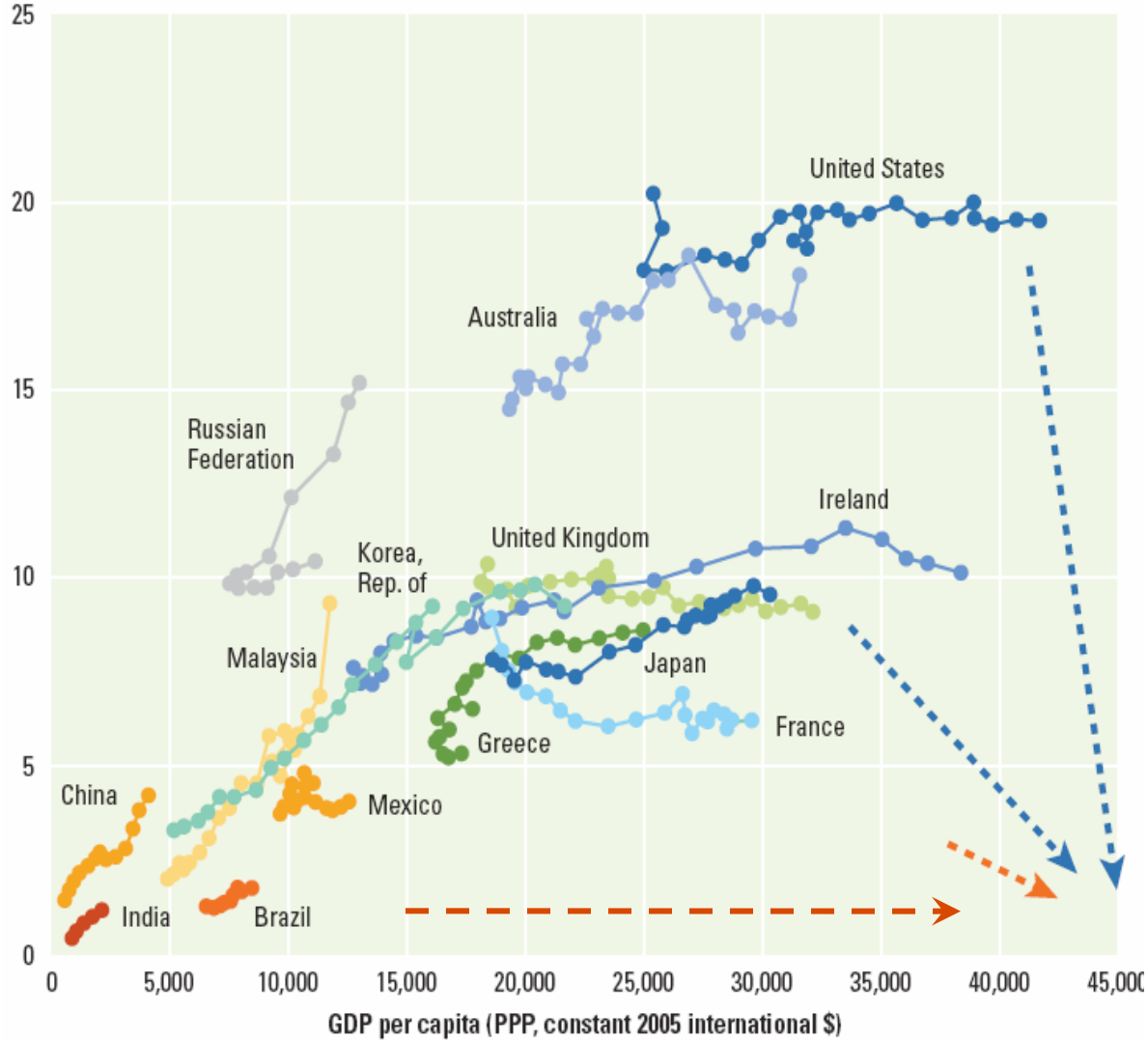
Potsdam Institute for Climate Impact Research

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Economics, A Toxa, Spain*

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# Motivation

CO<sub>2</sub> emissions per capita (metric tons)



(WDR 2010)

# Motivation

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Mitigation of CO<sub>2</sub>-emissions in DCs essential to achieve ambitious climate targets

Financing from industrialized countries required

For instance, Copenhagen Accord calls for US\$ bn 30 in 2010-2012, US\$ bn 100 per year by 2020

Financial inflows are often considered harmful for development

⇒ Possibility of a ‘climate finance curse’ ?

# Common themes

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## Volatility:

Decreases incentives for investments (Aizenman & Marion 1999)

Can trigger distributional conflicts (Rodrik 1998)

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## Dutch-disease

Appreciation of RER crowds out manufacturing (Corden & Neary 1982)

This slows down endogenous growth (e.g. LbD) (Van Wijnbergen 1984)

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## Rent-seeking

Dissipate resources in a zero-sum game (Krueger 1974)

Can slow growth by undermining the business environment (e.g. Tornell & Lane 1999)

# How to allocate mitigation burden?

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## **Non-market based mechanisms to disburse climate finance:**

Coverage of incremental investment costs

Coverage of total mitigation costs

## **Market-based mechanisms (International Emissions Trading):**

Grandfathering, or allocation proportional to GDP

Equal per capita allocation of permits

Contraction and Convergence

# Possible scenarios for climate finance (ReMIND-R)



Stabilization targets (CO<sub>2</sub>-only):

450ppm

550ppm

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Mechanisms to disburse climate finance:

Coverage of incremental investment costs

Coverage of total mitigation costs

International emission trading

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Allocation schemes (for IET):

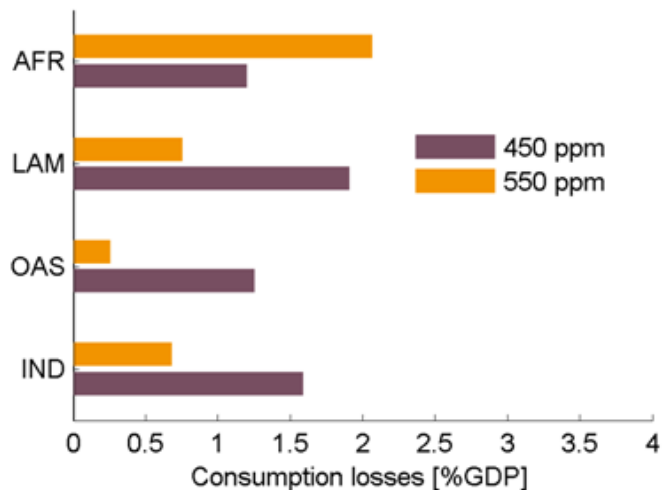
Grandfathering, or allocation proportional to GDP

Equal per capita allocation of permits

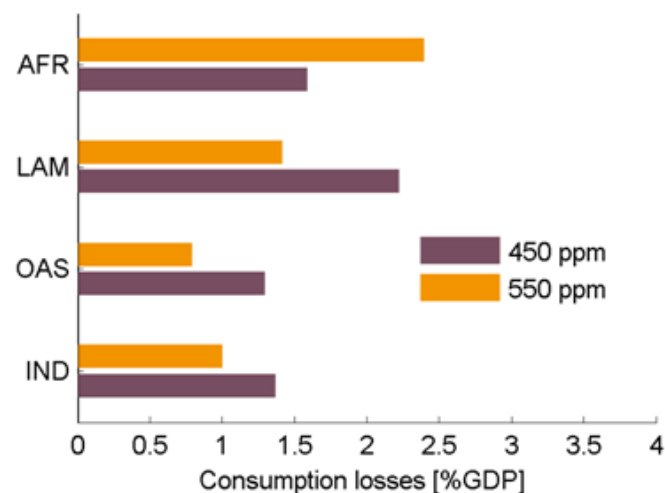
Contraction and Convergence

# Non-Market Transfers

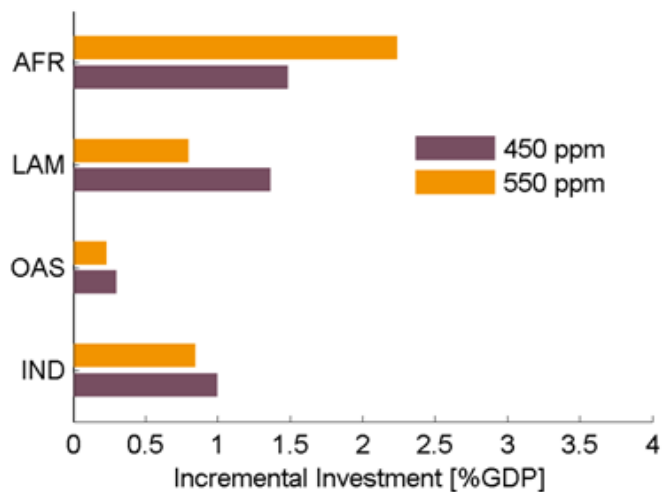
a) Mitigation costs 2020



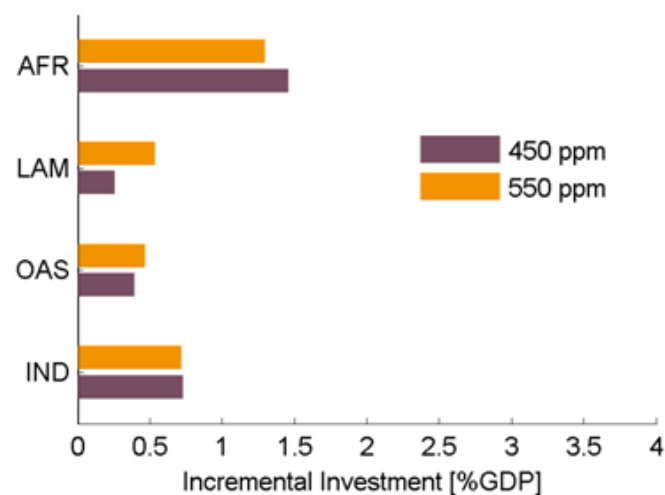
b) Mitigation costs 2050



c) Incremental investments 2020



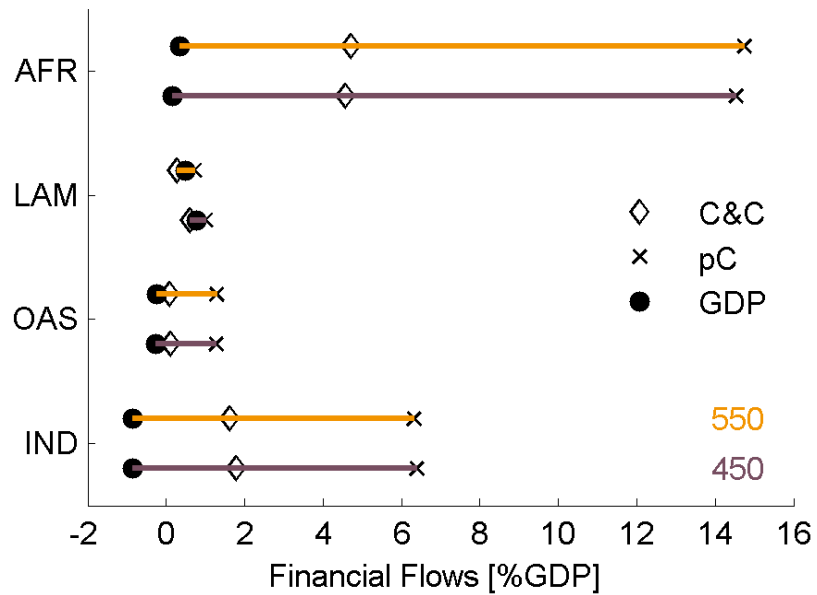
d) Incremental investments 2050



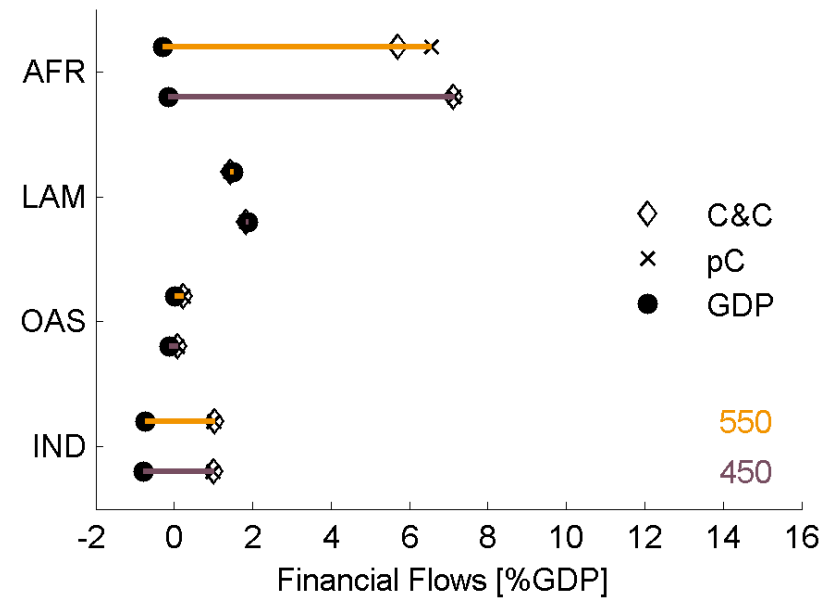
# Emission Trading



## Financial Flows 2020

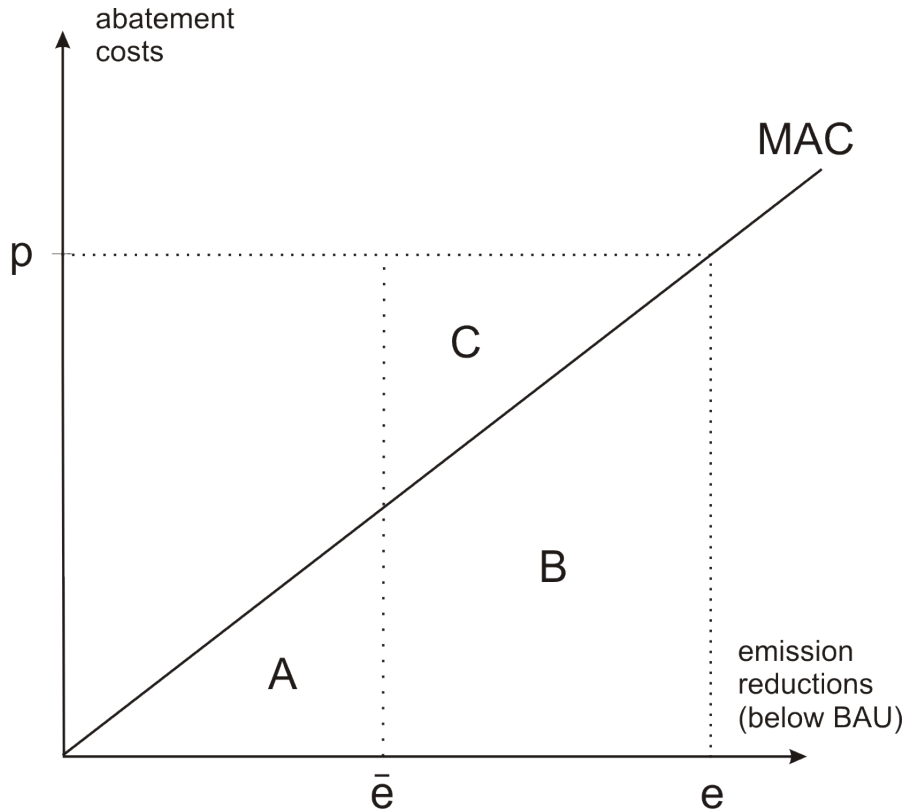


## Financial Flows 2050

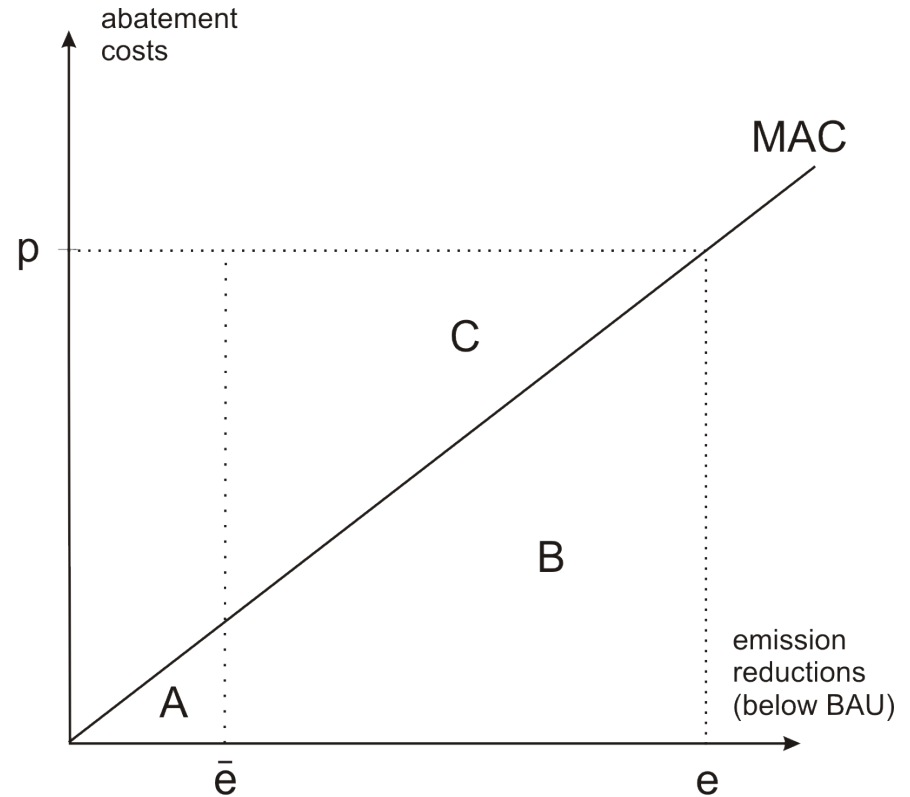




# Financial Transfers and Rents

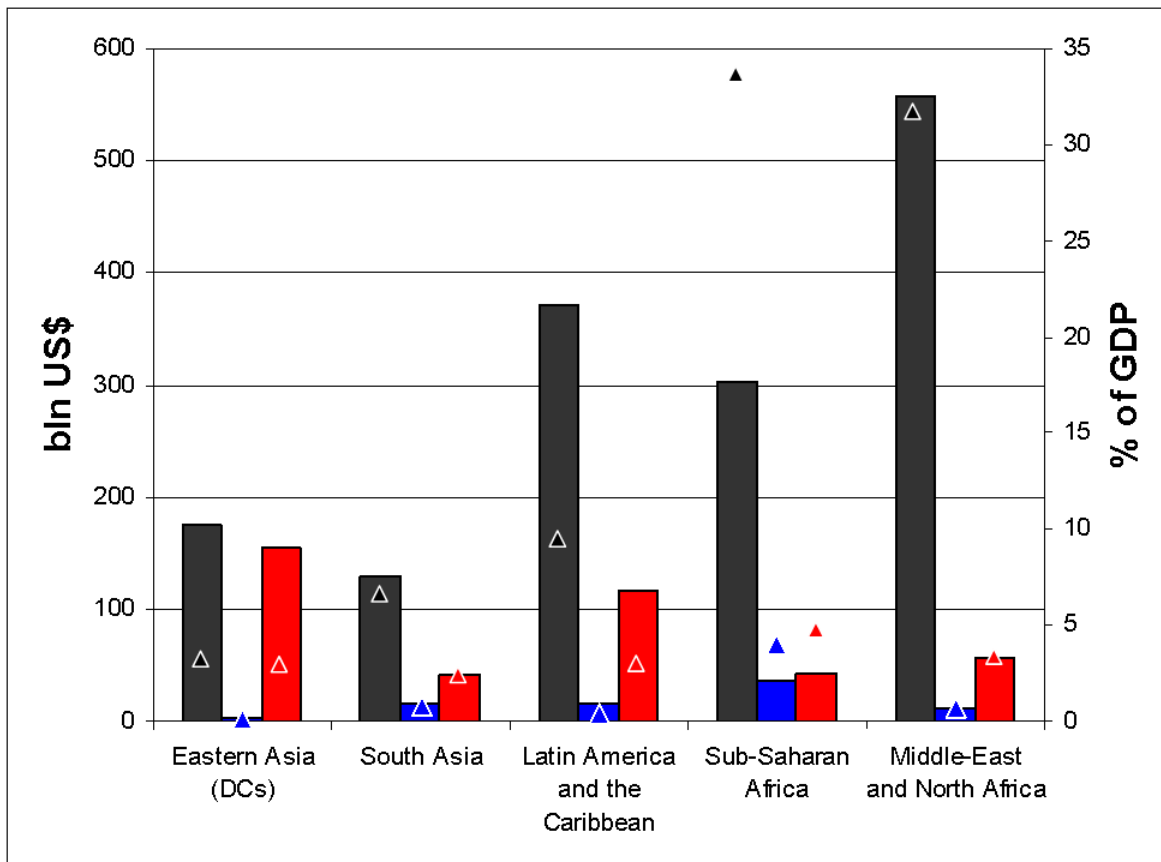


Low transfer of rents



High transfer of rents

# Comparing Financial Flows



- Resource Exports
- Foreign Aid
- FDI

Data  
 Resource Exports, FDI: Year 2009  
 Aid: Year 2008  
 ETS: ReMIND scenario Year 2020

# How to Avoid a Climate Finance Curse?



- Volatility: price corridors, sovereign wealth funds, donor-receiver contracts (for non-market transfers)
- Dutch disease: increase productivity of non-traded sector, fiscal and monetary policies, sovereign wealth funds
- Rent-seeking: auctioning permits (with emission trading), transparency and civil society (à la EITI), conditionality (& ownership), carbon-contracting market (Helm and Hepburn 2007; Victor 2011)
- Appropriate response will very likely depend on specific country characteristics -> need to share experiences and best-practices

# Conclusions

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- Possible problems with financial inflows: volatility, Dutch disease, rent-seeking
- Higher risk of climate finance curse with emissions trading; but problem to efficiently deliver non-market transfers
- Transfer of rents can be limited by appropriate choice of allocation; but might conflict with notions of equity
- Properly designed institutions can reduce risk of climate finance curse (e.g. price corridors, sovereign wealth funds, civil society involvement)