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FUNDING ADAPTATION

Adaptation to …….

- Sea level rise
- Extreme weather events (storms, droughts, floods,..)
- Heat
- Crop failure

What is required?

- **Public goods** (infrastructure: hardening against storms, sea level rise, etc)
- **Private goods** (A/C, building improvements, etc)
  - A/C requires electricity – public good element
- **Intellectual property** (crop varieties, agricultural know-how, etc)

Examples

- Protecting airports, docks, roads etc against sea level rise, storms
  - NYC after Sandy
- Moving communities away from coast/building sea walls
- Improving electric grid – prerequisite for A/C, refrigerators, ..
- Crop varieties adapted to heat/salinity

Costs

- Estimated costs are huge – at least $100bn/year (IPCC, low confidence!)
- Some will come from the Green Climate Fund, but not enough.
- What fraction of adaptation investments can be profitable and privately funded?

Public/Private Funding

- Some adaptation can earn a commercial return – fund this via the private sector
  - May need de-risking, monetizing some external/public good benefits, for private funding to be possible
- Think of $500bn green bond fund, $50-100bn from MFIs and balance from private investors
- MFI money acts as shock absorber – private is senior

Suggestion

- A framework for combining private commercial, private social impact, and public money into adaptation funds
- Structure so that risk goes disproportionately to non-commercial investors
- Conduct preliminary ratings of projects according to commercial potential to provide a menu to private investors

Open Issues

- **Principal-Agent** and **Holdup** problems associated with foreign investment
  - Structuring contracts
- Role for **insurance** – e.g. Caribbean Cat Risk Facility