

Public-Private Partnerships for Agricultural Risk Management through Risk Layering: The Case of Ecuador

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Parallel Efforts for Low-Cost Risk Management

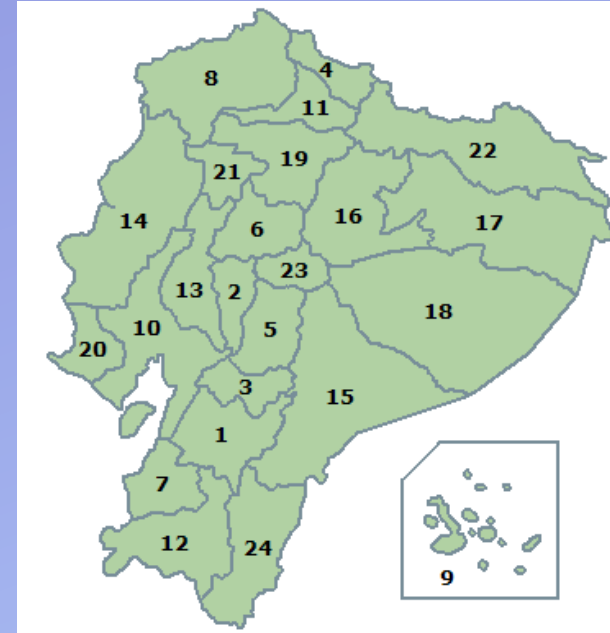
- Governments are increasingly turning to index insurance for catastrophic risk management
- Private sector index initiatives
- Goal to explore gains of unifying efforts and identify specific division of labor between private and public sector, challenges, etc.

Structure of Presentation

- Characteristics of coastal Ecuador
- Data for Ecuador
- Define Risk Layers
- Contract design
- Challenges moving forward

Coastal Ecuador

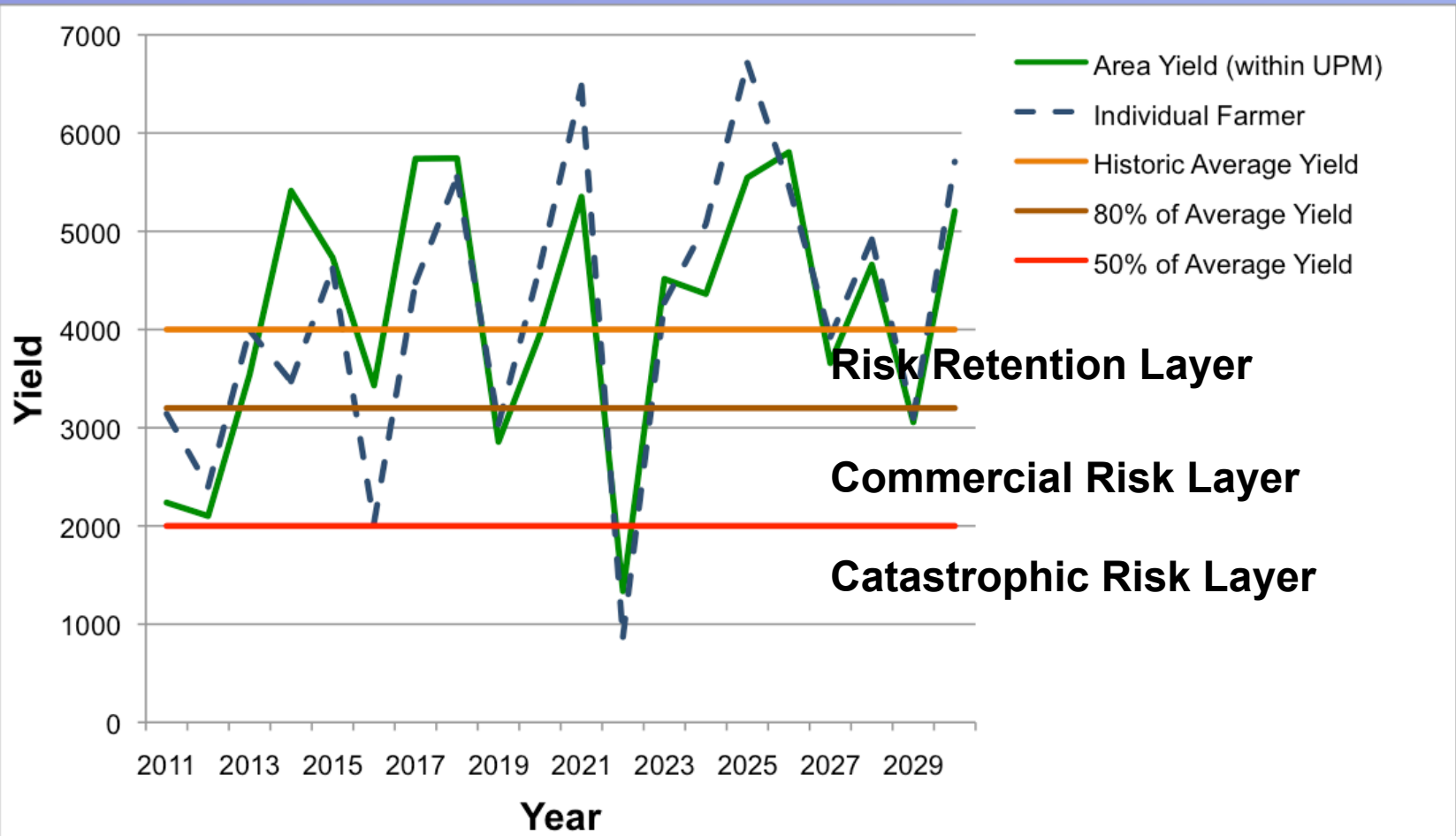
- Palenque is canton in Los Ríos (13)
- Lowland and tropical
- Two rainy seasons
- Irrigated rice is primary crop for smallholders



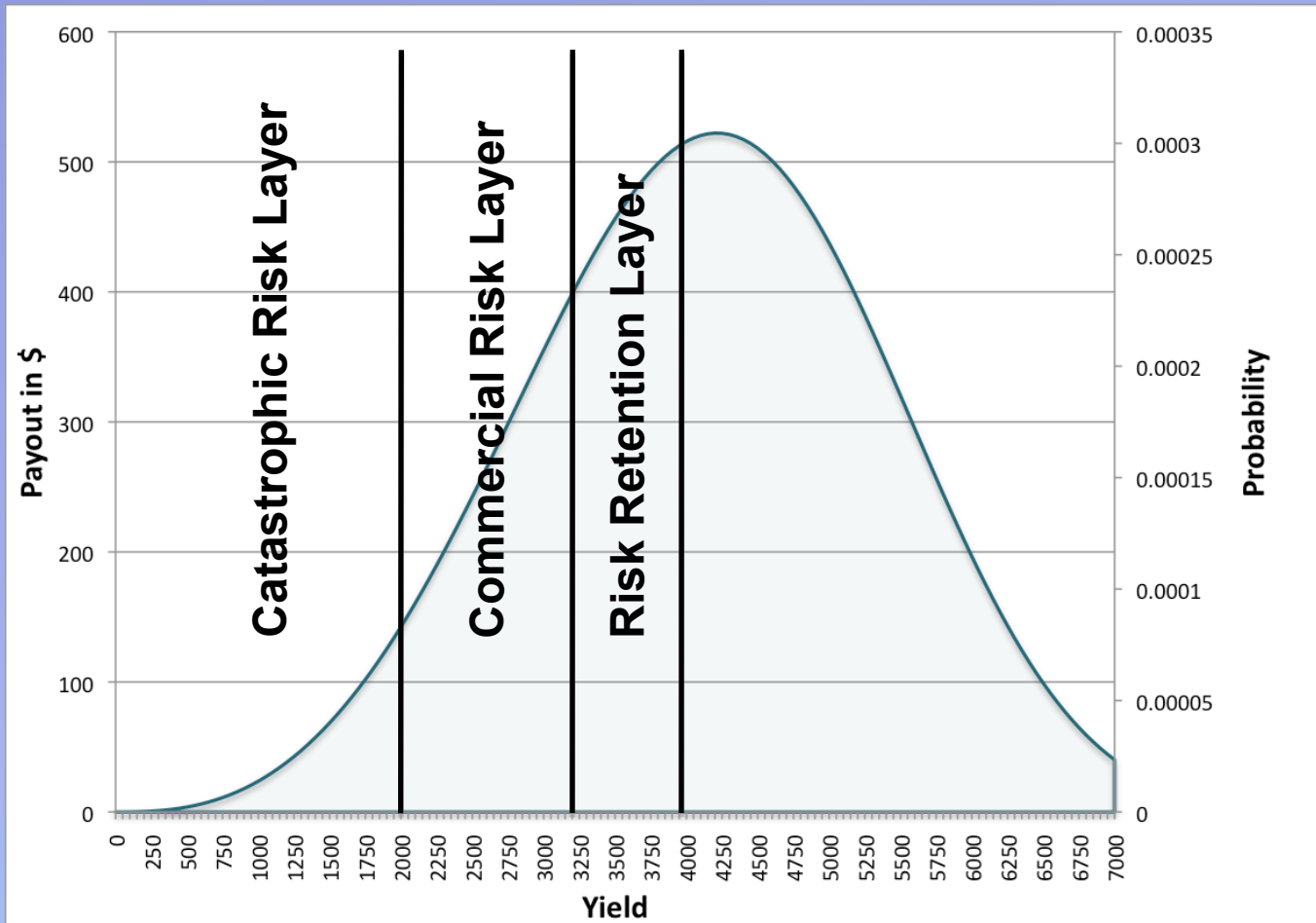
Data for Ecuador

- ESPAC
 - government annual yield survey
 - 2000-2010
 - Sample structure: randomly select *segmentos* (agricultural census tract 200-500 ha) and interview all farmers
 - Same *segmentos* revisited every year
 - Select *segmentos* to be representative of province
 - *Unidad Primaria de Muestreo (UPM)* next higher level, contract “written” at *UPM* level

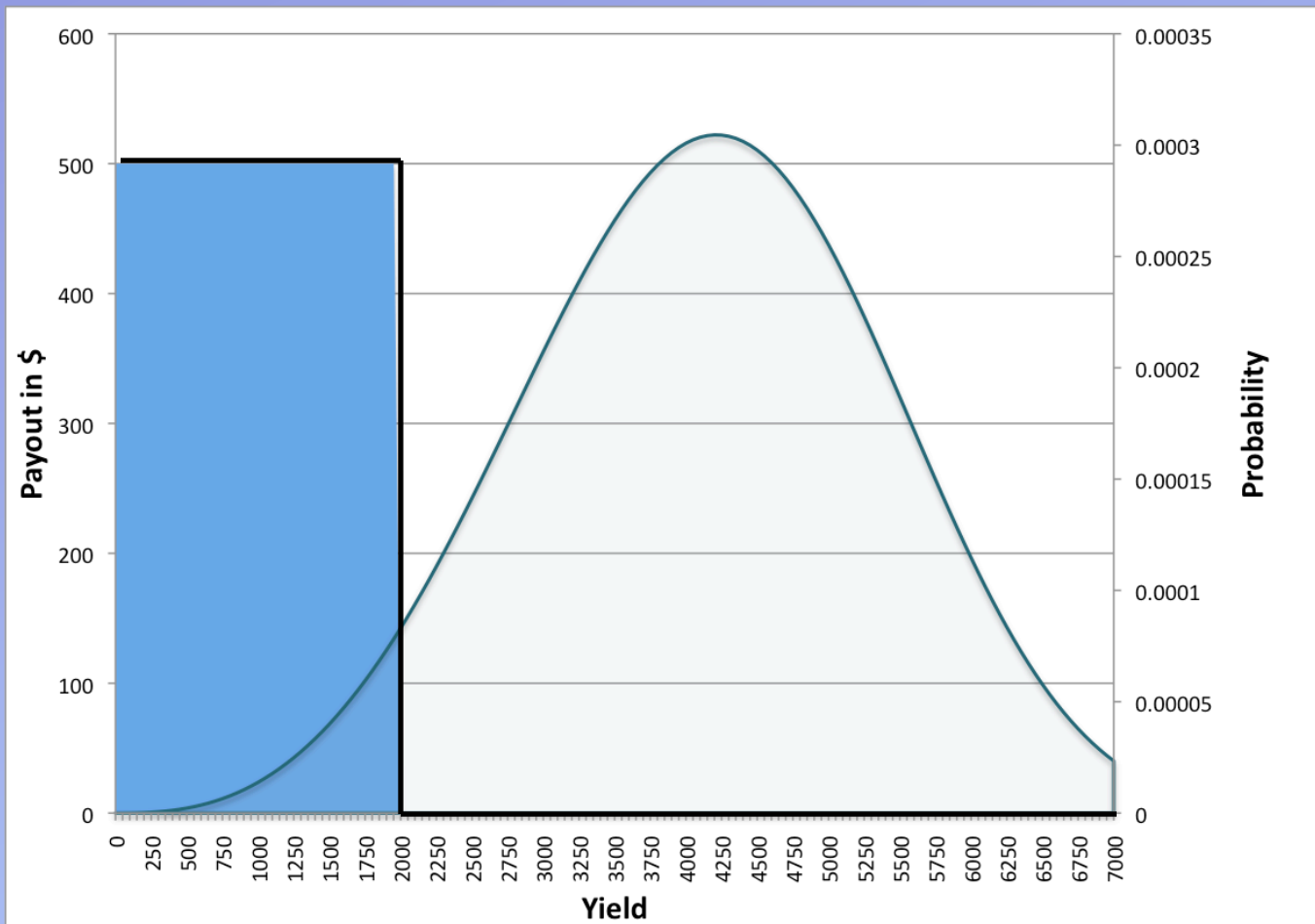
Risk Layers



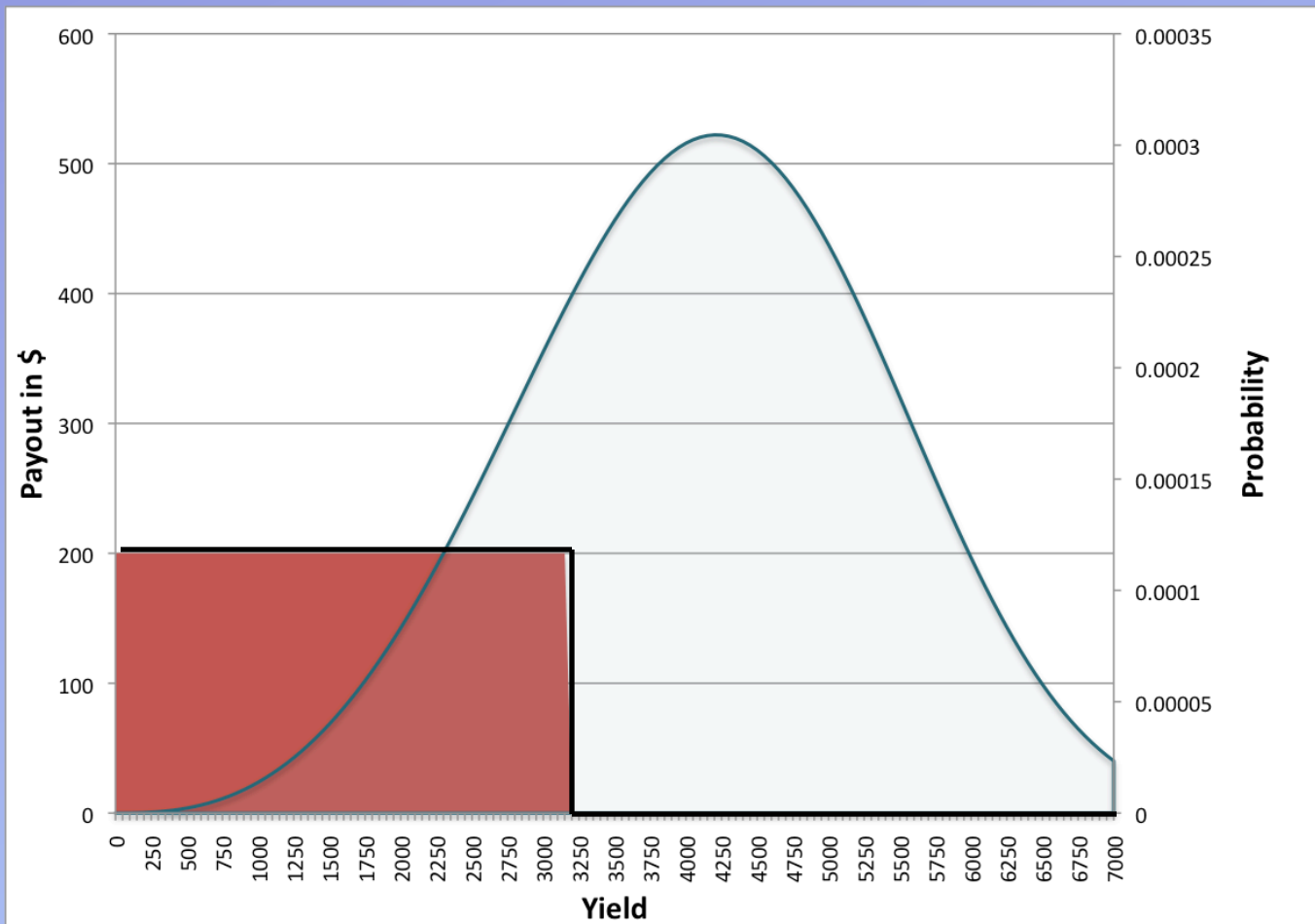
Risk Transfer Contract



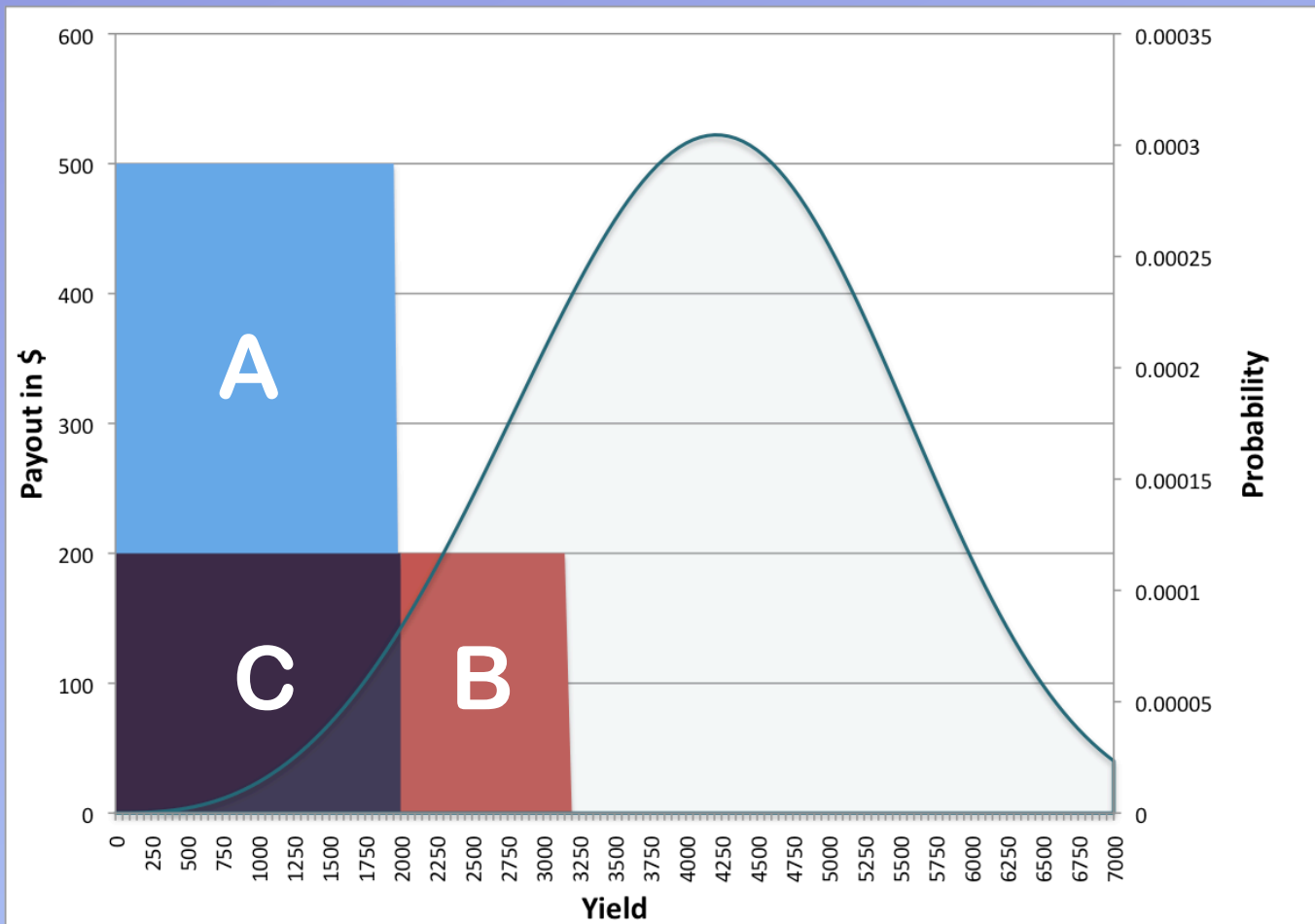
Risk Transfer Contract: Catastrophic Risk Layer



Risk Transfer Contract: Commercial Risk Layer



Risk Transfer Contract: Unified



Institutional Challenges: Information Augmentation

- Challenge of increasing data quantity and quality (good start in Ecuador)
- Short-run challenge in Ecuador of writing contracts based on area yield data from small areas (optimal balance: coverage vs. basis risk)
- General challenge: The case for increased public investment?

Institutional Challenges: Delivery Mechanisms for Public Insurance

- Targeting
 - Conceptually, who do you want to insure? (crops, max farm size, ...)
 - Practically, how do you identify this population?
- Outreach
 - How do you make them aware they are insured -- and thus change behavior?
 - This is a concern if catastrophic insurance is publicly provided (not purchased)
 - In Peru many farmers didn't know they were insured
- Delivery
 - How do you design delivery mechanism of indemnities to insured population?

- Questions?

Thank you

Institutional Challenges:

Coordination between sectors

- Ecuadorean case
 - Govt. provides premium subsidy for commercial insurance;
 - MAYBE DROP THIS SLIDE AND FOCUS ON PREVIOUS 2 CHALLENGES...