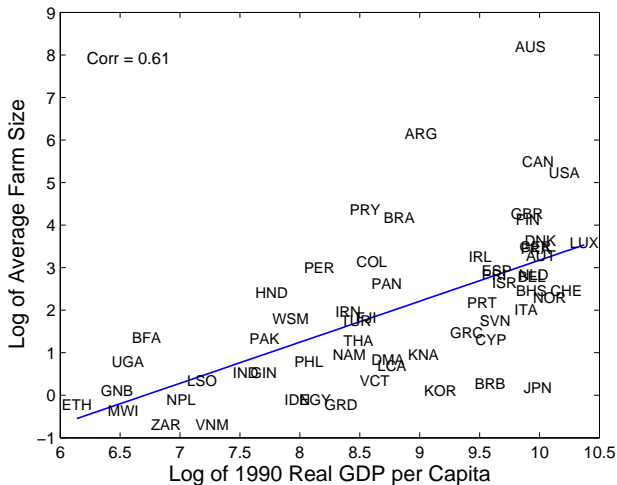


# Resource Allocation and Productivity in Agriculture

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CSAE Conference  
University of Oxford – March 2015

# Average Farm Size across Countries



- ▶ Adamopoulos and Restuccia (AER, 2014) “The Size Distribution of Farms...”

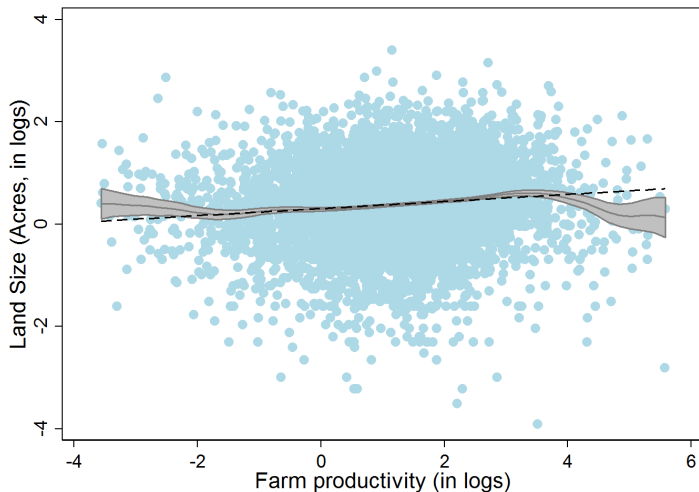
# Land Quality across Countries

Table: Production by Potential Yield (Counterfactual GAEZ Data)

	All Crops ( <i>country obs.</i> = 162)		
	Actual Yield	Potential Yield	Yield Gap
Rich 10%	739.5	1,220.0	1.65
Poor 10%	235.5	1,160.6	4.93
Ratio	3.14	1.05	1/2.99

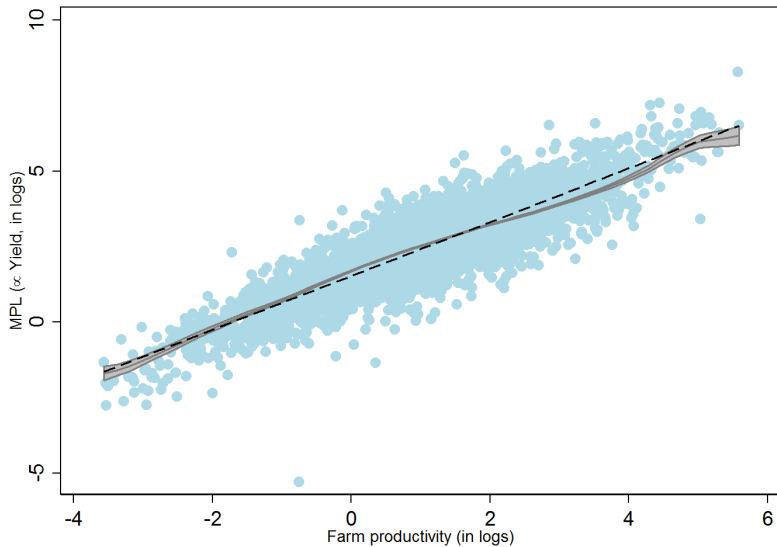
- ▶ Adamopoulos and Restuccia (2015) “Geography and Agricultural Productivity...”

## Land Size by Farm TFP: Malawi

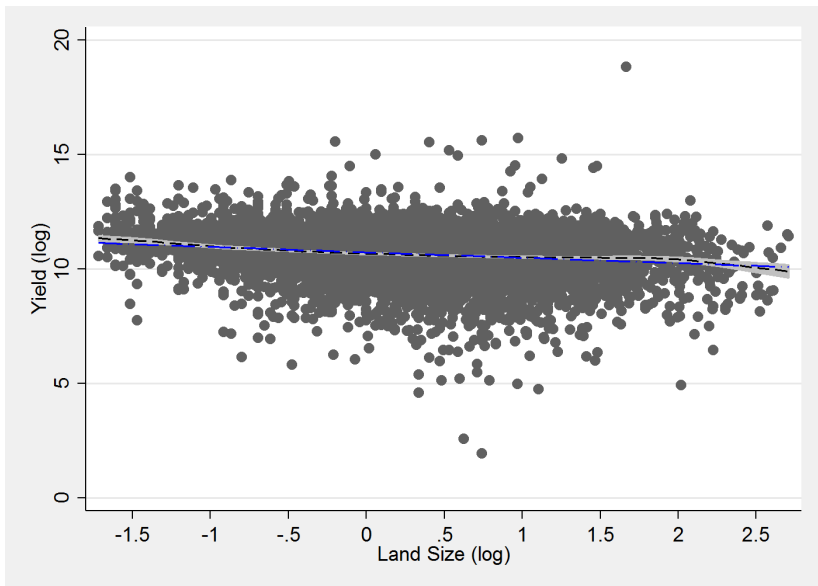


- ▶ Restuccia and Santaaulalia-Llopis (2015) “Land Misallocation and Productivity”

# Land Productivity (Yield) by Farm TFP: Malawi



## Yield by Farm Size: Malawi



## Implications of Resource Misallocation

- ▶ Increase in agricultural TFP: **3.6-fold** (output loss .28)
- ▶ Reduce inequality and poverty

Farm Income	Q1	Q5	Ratio
Actual	.14	4.8	34.1
Efficient	4.3	14.7	3.4
Ratio	30.6	3.1	–

- ▶ Structural change

	Actual	Reallocation
$TFP_a$	1.0	3.6
$N_a$	0.65	0.04
Yield	1.0	1.0
$Y_a/N_a$	1.0	16.2
AFS	1.0	16.6

- ▶ Broader impacts with endogenous investments by farmers, mechanization, selection in ability across sectors