How Much Will Global Warming Cool the Planet

Ishan Nath, Valerie Ramey, and Pete Klenow

Sea Level Rise and Urban Adaptation in Jakarta

Allan Hsiao

Comments: Samuel Kortum

Yale Climate, Environment, and Economic Growth Conference 2023

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Big Picture

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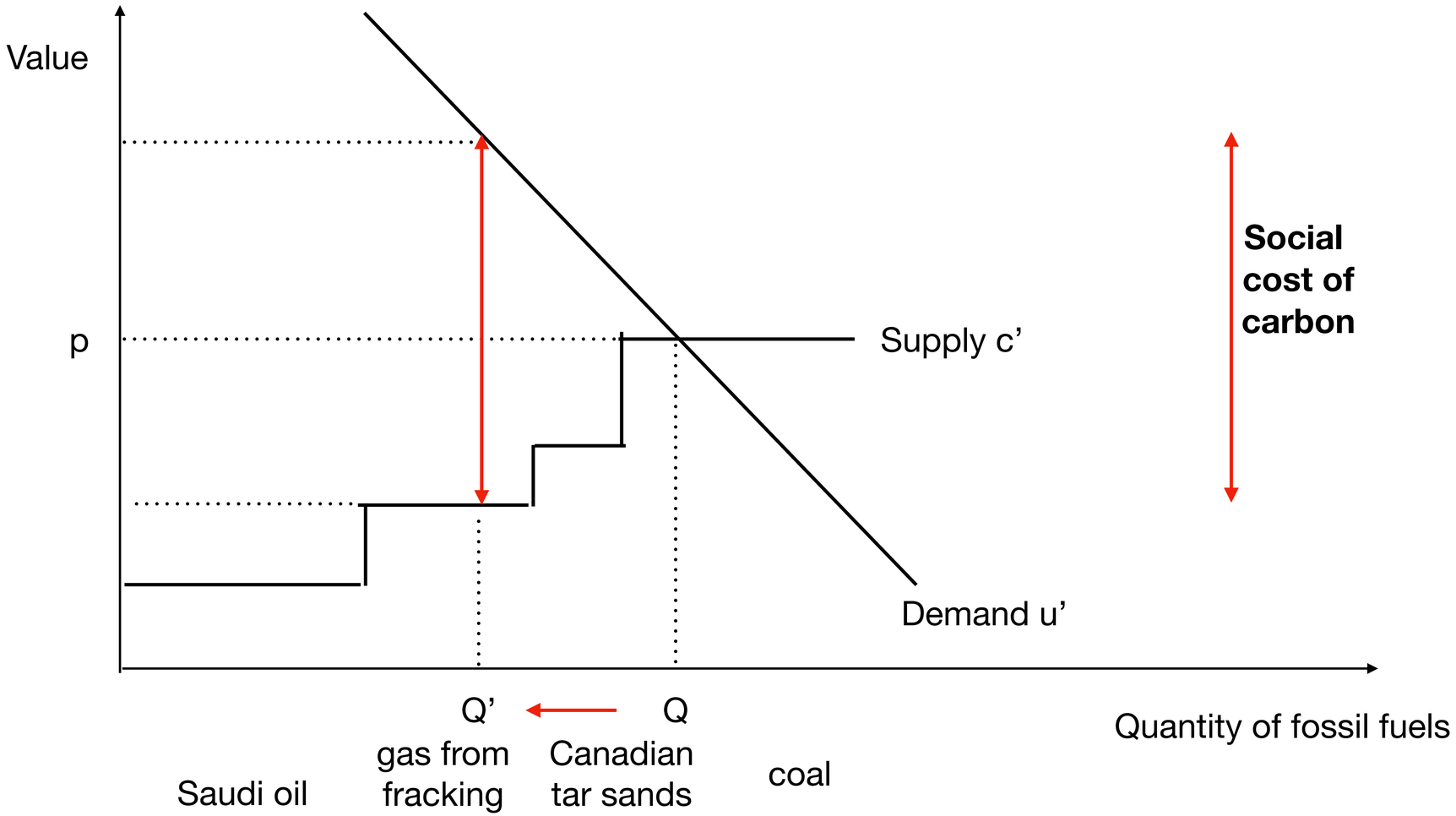
  - GDP per capita is our favorite macro metric
- Why is it so important to get it right? …

Global Carbon Policy



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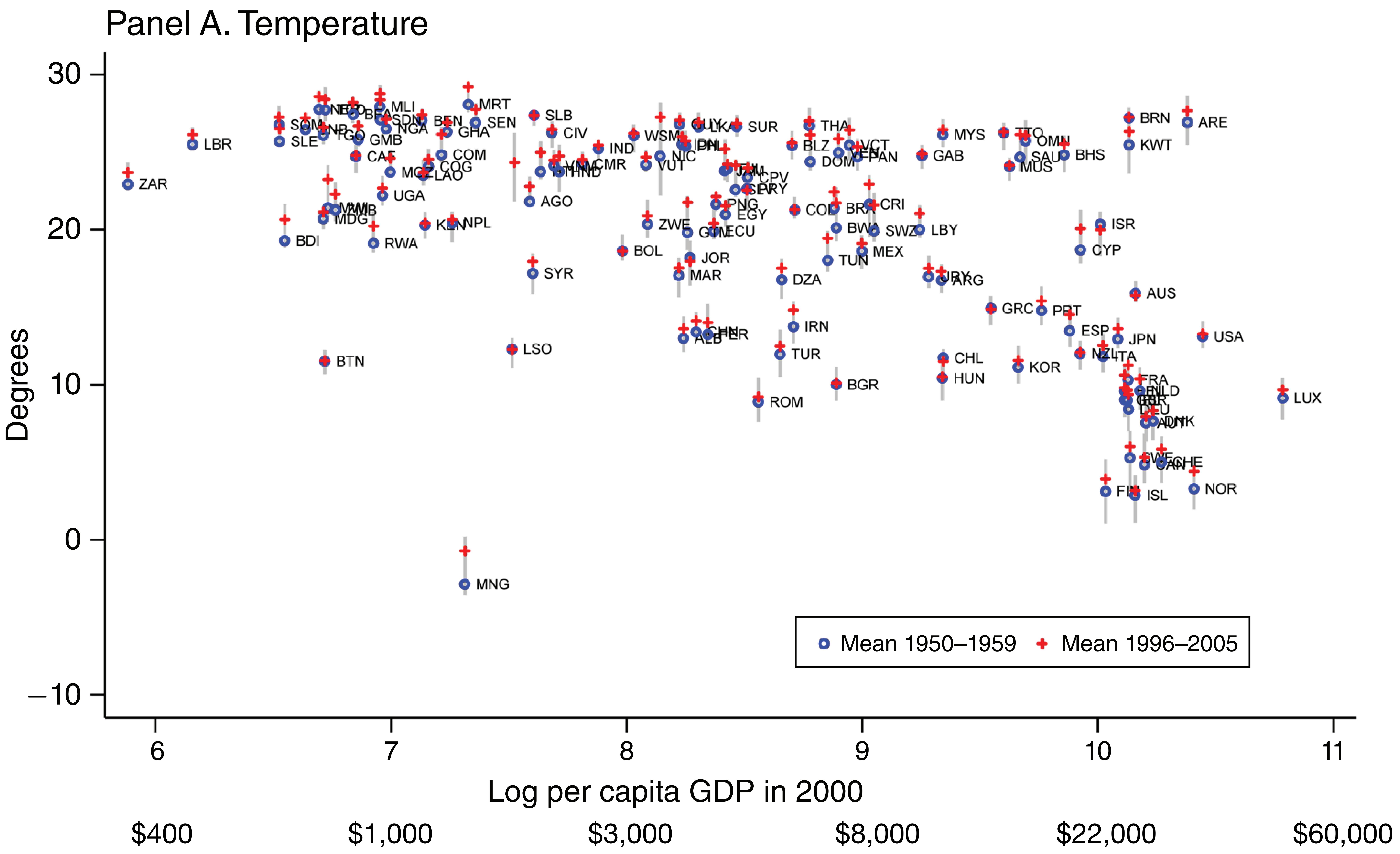
- Challenge is nicely illustrated with a scatter …


Panel A. Temperature
Degrees
30
20
10
0
–10
6
7
8
9
10
11
Log per capita GDP in 2000
$400
$1,000
$3,000
$8,000
$22,000
$60,000
Mean 1950–1959
Mean 1996–2005
ZAR
LBR
SOM
SLE
GMB
MLI
NGA
CAF
BEN
GHA
COM
MRT
SEN
UGA
BDI
RWA
KEN
NPL
BTN
MNG
SLB
CIV
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LSO
IND
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COL
BGR
MEX
TUN
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MYS
GAB
LBY
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CHL
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- How to think about a **temperature shock**
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  - instead, think of it as a shock that interferes with productivity investments **(so persistent)**
  - falling behind creates potential for technological catch up **(so not a growth effect)**

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- Bottom line is a much higher estimate of the GDP cost of a temperature shock
  - So a **higher SCC** (but much lower than one built on permanent growth effects)

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- Preferable to build up from tangible cases as is nicely done in Allan Hsiao's paper
  - that will take much longer, and we need rough answers ASAP
- A promising approach in between is a recent paper by Bilal and Rossi-Hansberg
  - "Anticipating Climate Change …", but I call it "Capital and the Cost of Climate Change"
  - … a dynamic macro/spatial analysis of localized shocks (severe storms) that damage capital