# The next generation of data for policy-making on resources and the environment
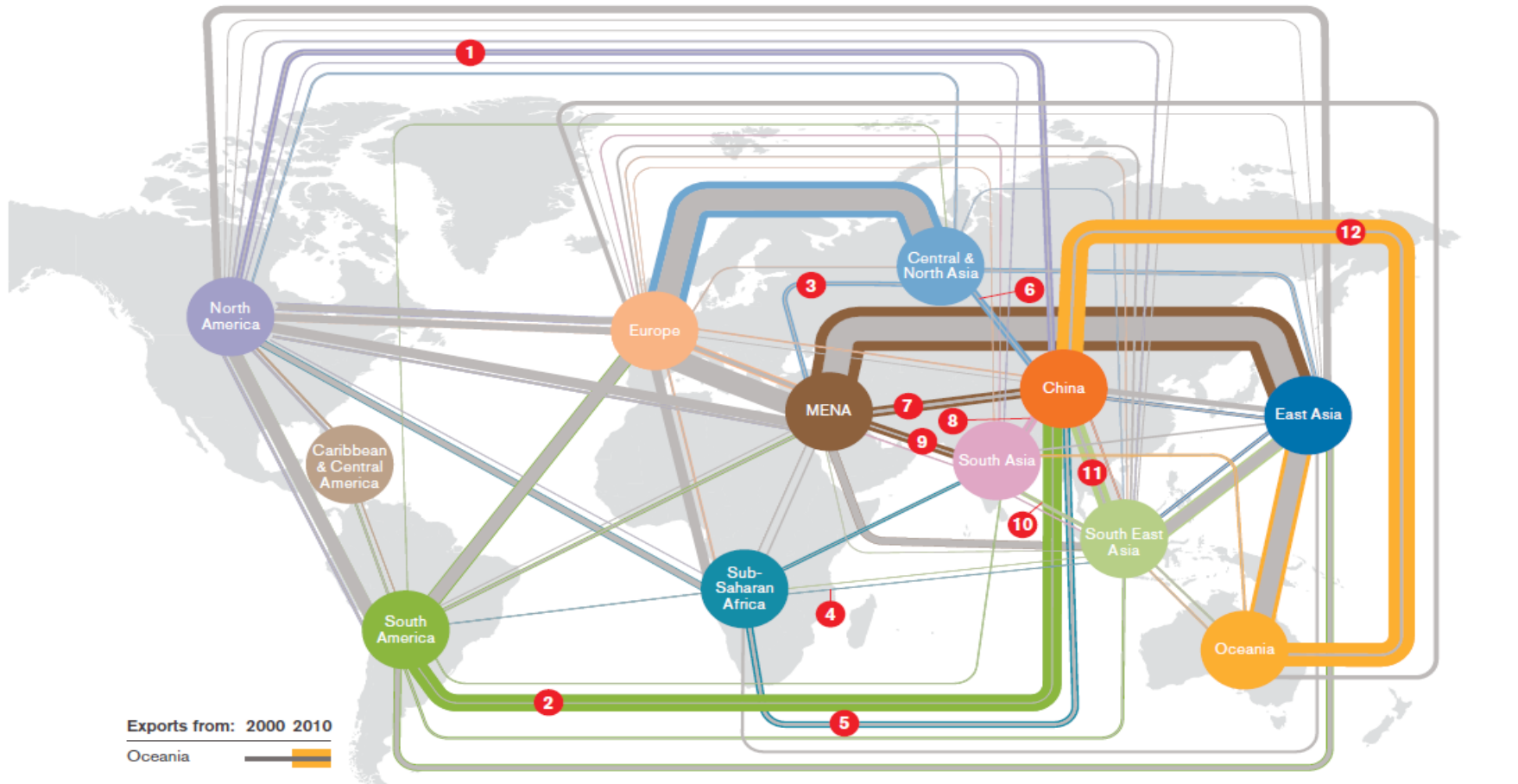
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Energy, Environment, and Resources, Chatham House

UNSD/INEGI Conference on the Measurement of International Trade and Economic Globalization, September 29 – October 1, 2014, Aguascalientes, Mexico.

# New resource interdependencies are emerging – with shifting faultlines for competition and trade frictions.



**Exports from:** 2000 2010

Oceania

**Fastest growing trade flows:**

50 million tonnes      250 million tonnes

**1** North America to China: Soybeans, forestry products, coal, copper, cotton

**2** South America to China: Copper, iron ore, soybeans, crude oil

**3** Central & Northern Asia to MENA: Steel, wheat, sawn wood, coal

**4** Sub-Saharan Africa to South Asia: Crude oil, coal and gold

**5** Sub-Saharan Africa to China: Crude oil, copper, non-ferrous and speciality metals, iron ore, coal

**6** Central & Northern Asia to China: Crude oil, iron ore, coal, logs and sawn wood, non-ferrous metals

**7** MENA to China: Crude oil

**8** South Asia to China: Iron ore, cotton

**9** MENA to South Asia: Crude oil, refined petroleum, gold, LNG

**10** South East Asia to South Asia: Palm oil, coal, refined petroleum

**11** South East Asia to China: Metallurgical and thermal coal, refined petroleum, palm oil

**12** Oceania to China: Iron ore, metallurgical coal, non-ferrous metals

# Why is there a need for better data on global resource trade?

**Deepening resource interdependencies and the reconfiguration of the international political economy of resources remain poorly understood.** The implications of these rapid and complex shifts need to be systematically evaluated and translated into concrete policy recommendations for governments and businesses.

Detailed, reliable, and easily accessible data on global resource trade can, for example, help to better analyse

➢ How shifting patterns of consumption, production and trade create new interdependencies and *supply security concerns* across global supply chains.

➢ How mounting *resource and environmental pressures interact* across different parts of the world and different types of resources.

➢ How *new technologies and policy interventions* shape global resource trade and interdependencies

➢ Help to better track *illegal resource production and trade*

➢ ….

| What policy makers want | What policy makers get |
|---|---|
| They want data that is: | They get data that often is: |
| • Easily accessible | • difficult to find and interpret |
| • Comprehensive coverage | • piecemeal with large gaps |
| • Accurate and reliable | • estimated with uncertain reliability |
| • Up-to-date | • 2010 |
| • Forward looking | • Backward looking |

# In areas which are the most salient for policy makers, robust data is often the hardest to get by... e.g. GVCs, landgrabbing, cartels, and investment
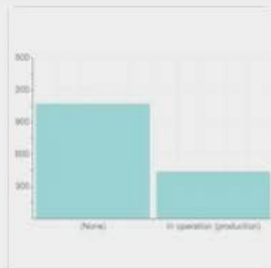
# The absence of reliable, shared data is often a source of tensions and impedes effective policy action

- In the absence of shared data ambiguity rules, making it difficult to:

  - Come to a shared perspective on the scope and scale of the problem

  - Negotiate the sharing of burdens and benefits

  - Mobilize constituencies for policy action

  - Monitor and evaluate policy effectiveness

# These challenges notwithstanding, the importance of data for policy-making is only growing

- Policy-advice is becoming increasingly data-driven

- Vice-versa, data collection efforts today must demonstrate policy relevance.

- However the links between 'policy people' and 'data people' are still in many cases tenuous

- Even where it is available, data can play a limited role in policy debates.

➢ It is up to the statistics community to become more relevant, accessible and engaged with policy-makers and the wider public (media, NGOs, businesses, etc)!

# Clear messages are key to communicating complex data

In 2011, China imported $660 bn worth of natural resources
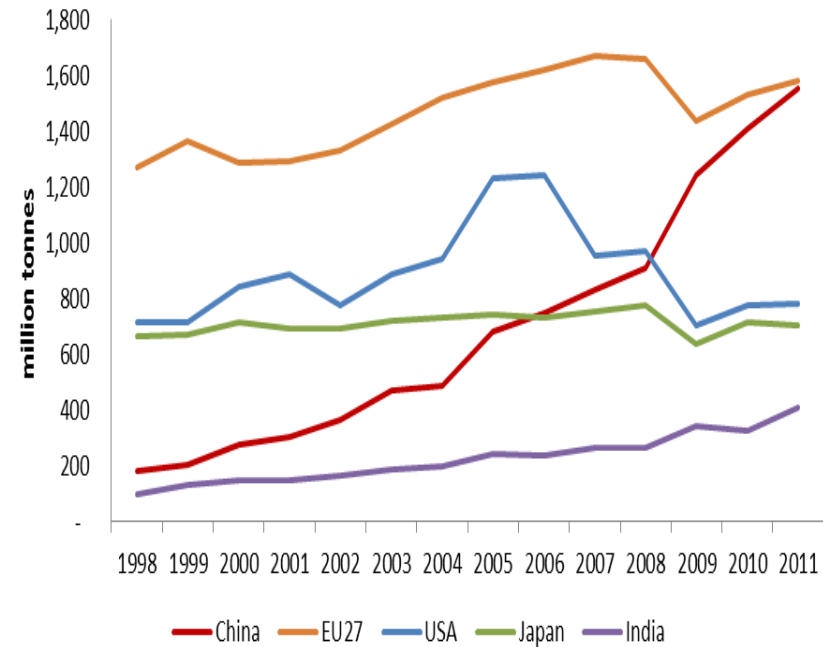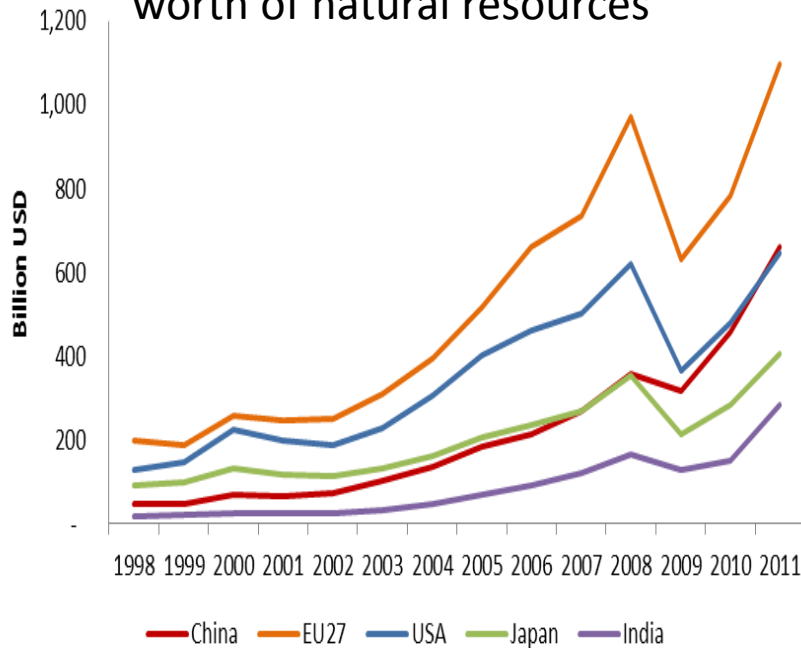


China's share of global resource imports 2000-2011 (by value)



China's share of global resource imports 2000-2011 (by weight)

- Premier Li Keqiang (18/06/2014): "According to our estimates, in the next five years, we will import more than $ 10 trillion worth of goods"
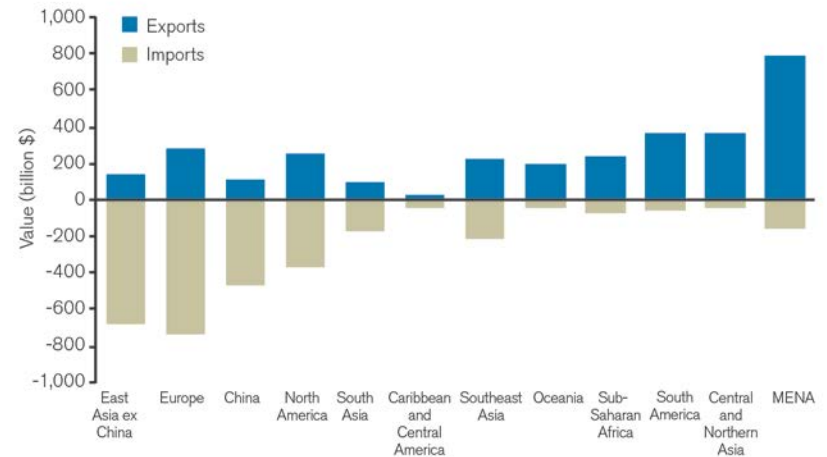- CH analysis indicates up to half of this will be natural resources

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# Clear and engaging visualisations are key to engage broader audiences
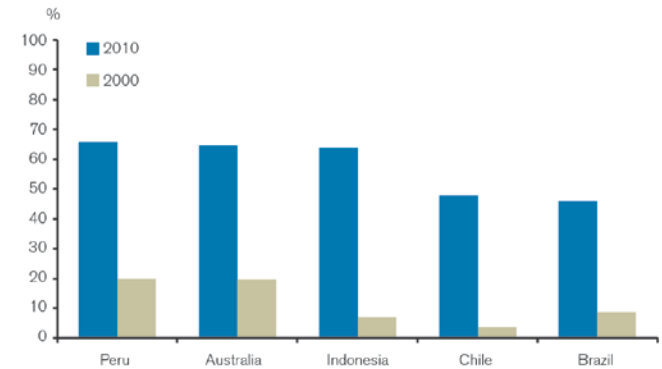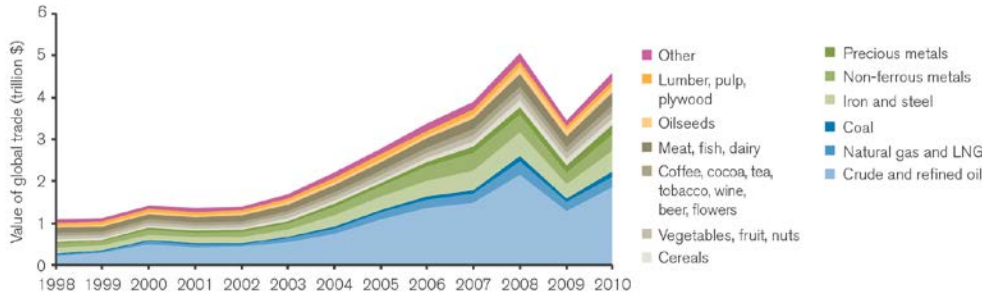


The structure of expanding global resource trade
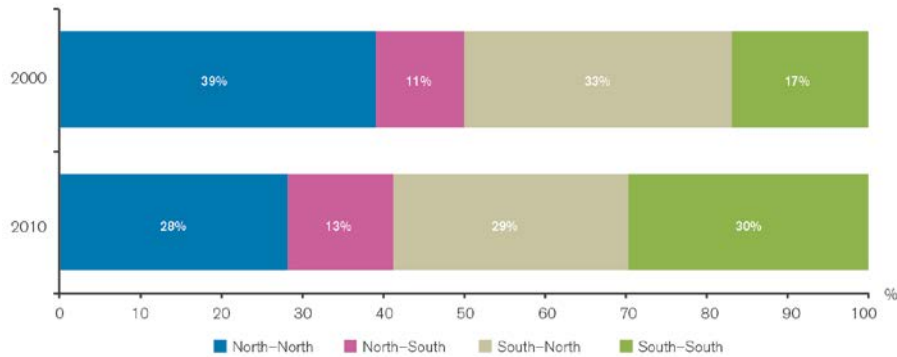


Metal exports to China by selected producers



Growing south-south trade



Fossil fuel trade balance by region

# A major challenge is how to communicate complex policy narratives

We worked with a design agency to built an innovative interactive that takes you through the story of the report and allows to explore details.



2010
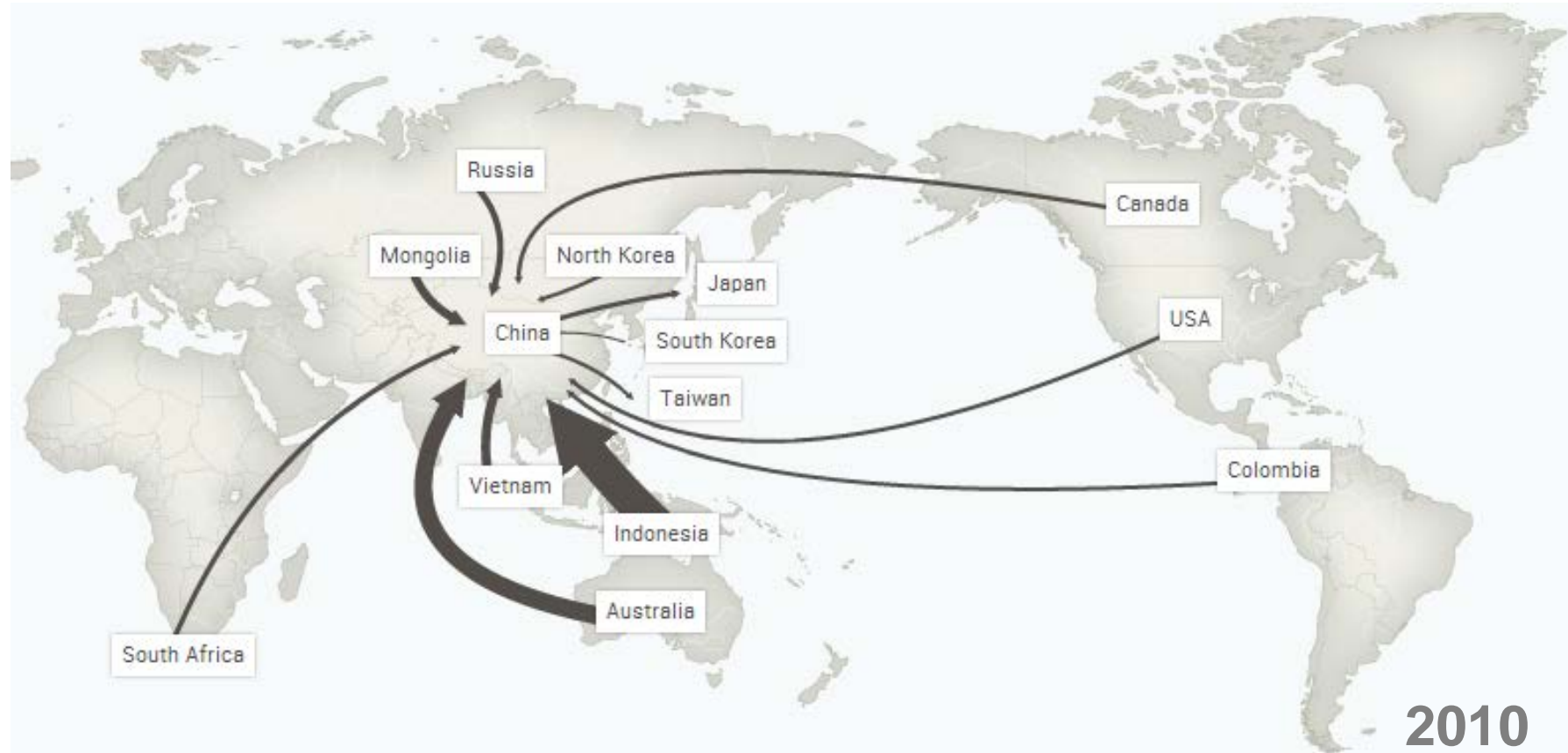
**Top Coal trade flows to/from China**
**www.resourcesfutures.org** and **http://chinafocus.resourcesfutures.org**

# Collaboration is vital for the next phase…



**Media organisations become increasingly sophisticated in their use of data**

# Integrating different types of data sources is another major challenge

This includes challenges to integrating different types of data sources, e.g.:
- geospatial and remote sensing data with conventional country statisticts.
- Community and user led reporting
- Real time monitoring and evaluation
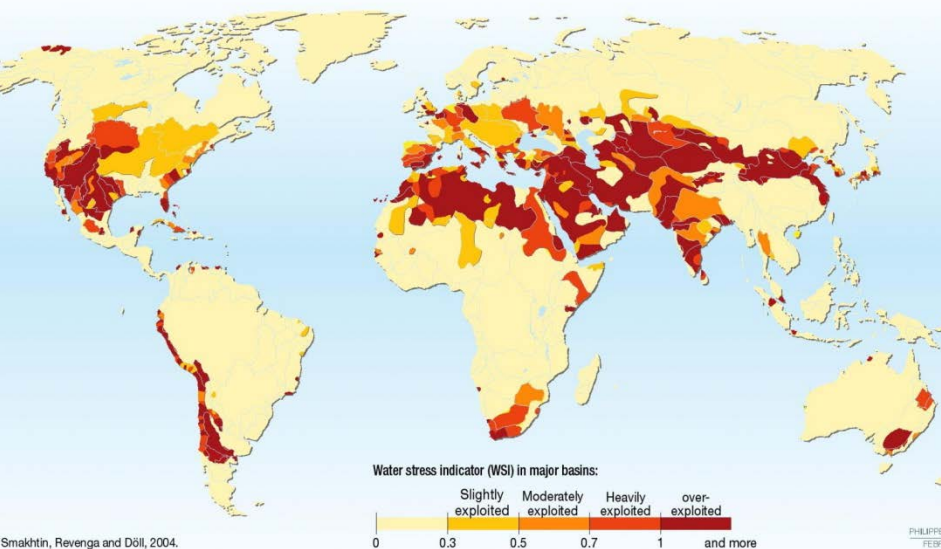
# At the same time however, demands for data transparency, accuracy and reliability are growing

- Simply presenting results is no longer acceptable: Raw data and detailed information about sources and underlying assumptions is today expected to be accessible

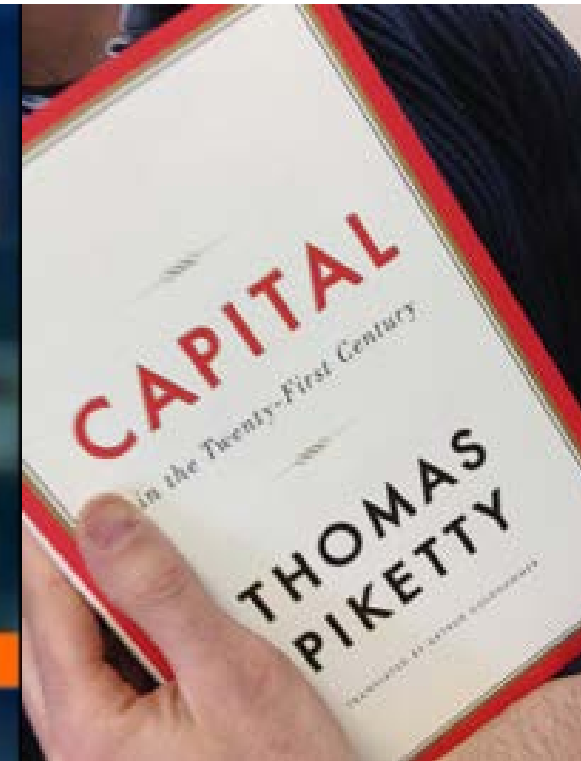- Increasingly, the way to attack policy reports is to go after the data...

# Thank you