



Political economy of energy transitions (POLET) workshop

Response and Discussion

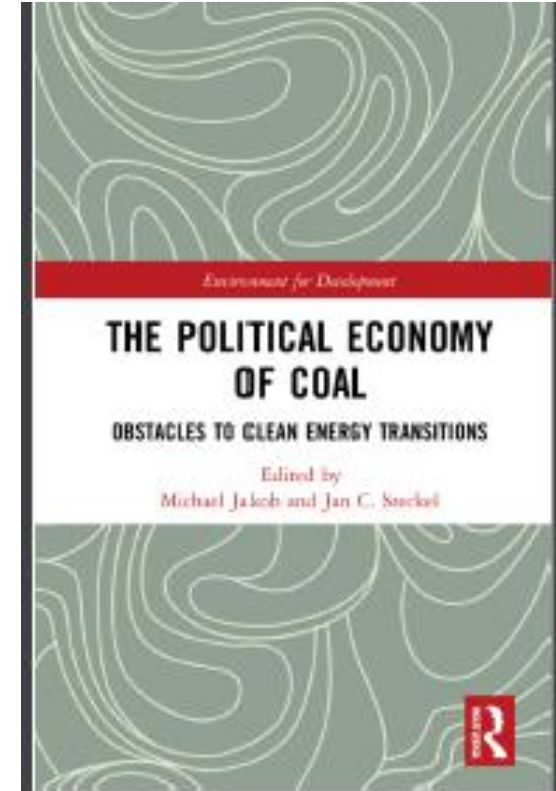
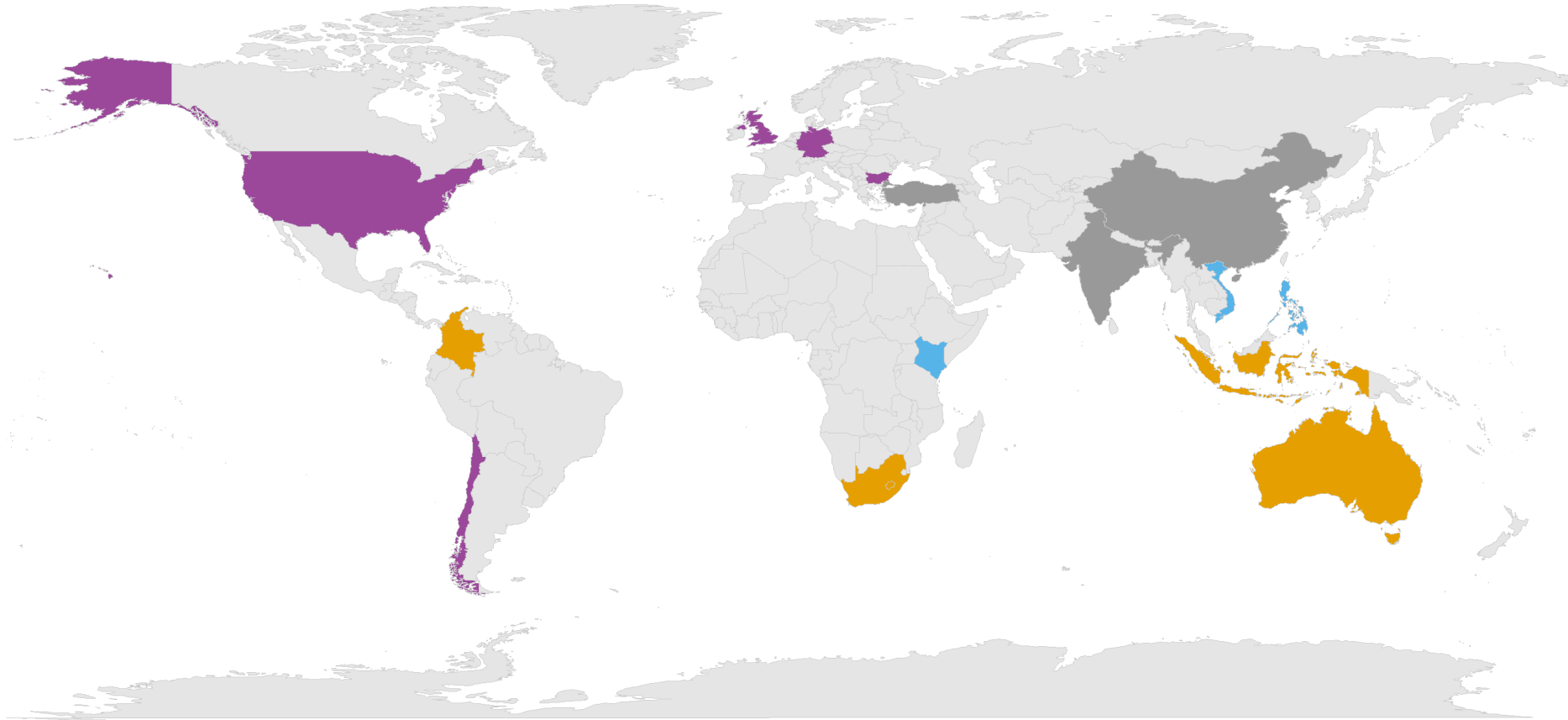
Jan Steckel

01/12/2022

Discussion points

- **How to align transition policies with other societal objectives?**
- How to make the transition just (and politically acceptable) in a broader way?
- What can be appropriate (national and international) policies fostering transitions?

A systematic country-specific approach



Established

- China
- India
- Turkey

Exporting

- Australia
- Indonesia
- South Africa
- Colombia

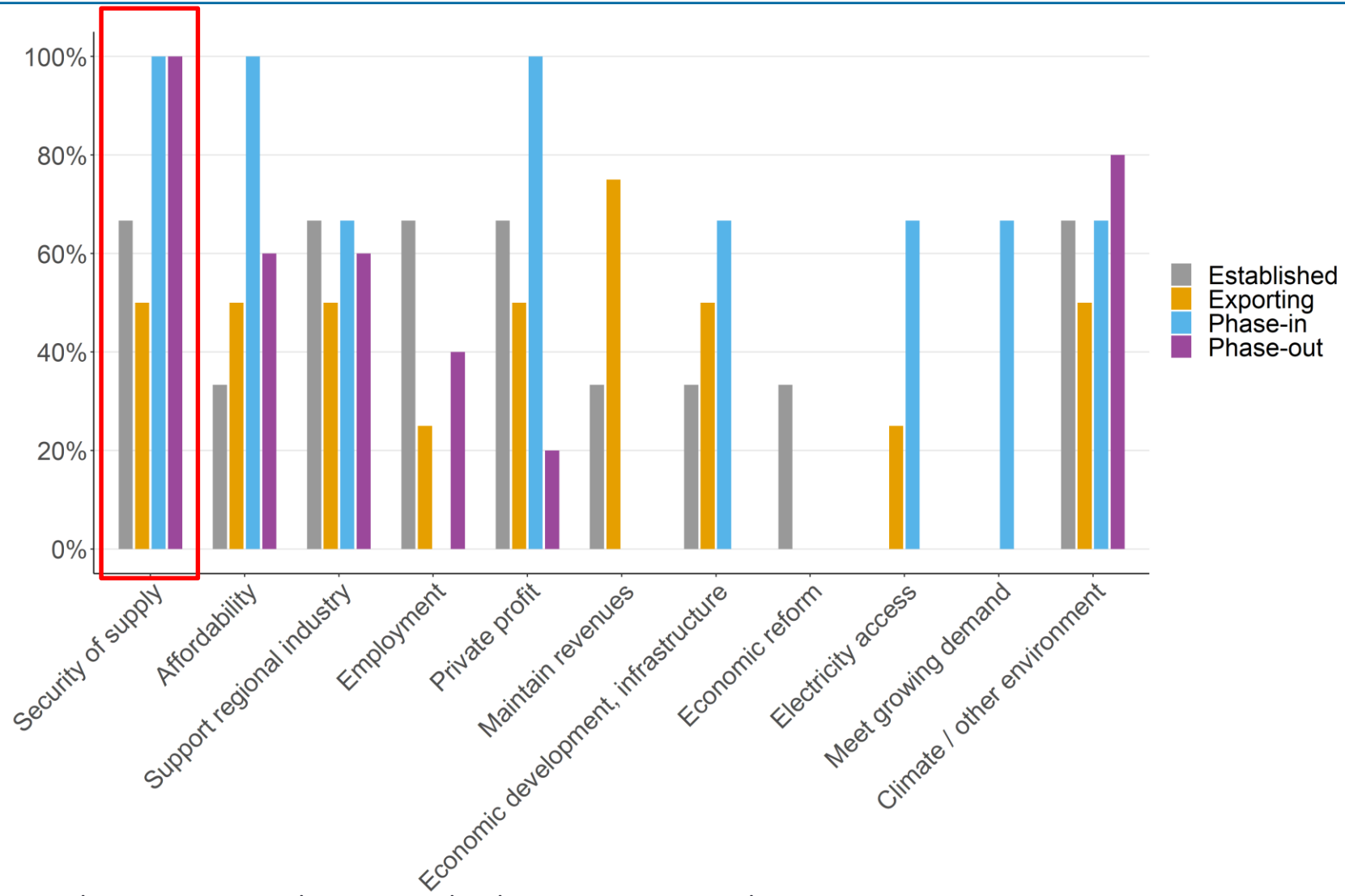
Phase in

- Kenya
- Philippines
- Vietnam

Phase out

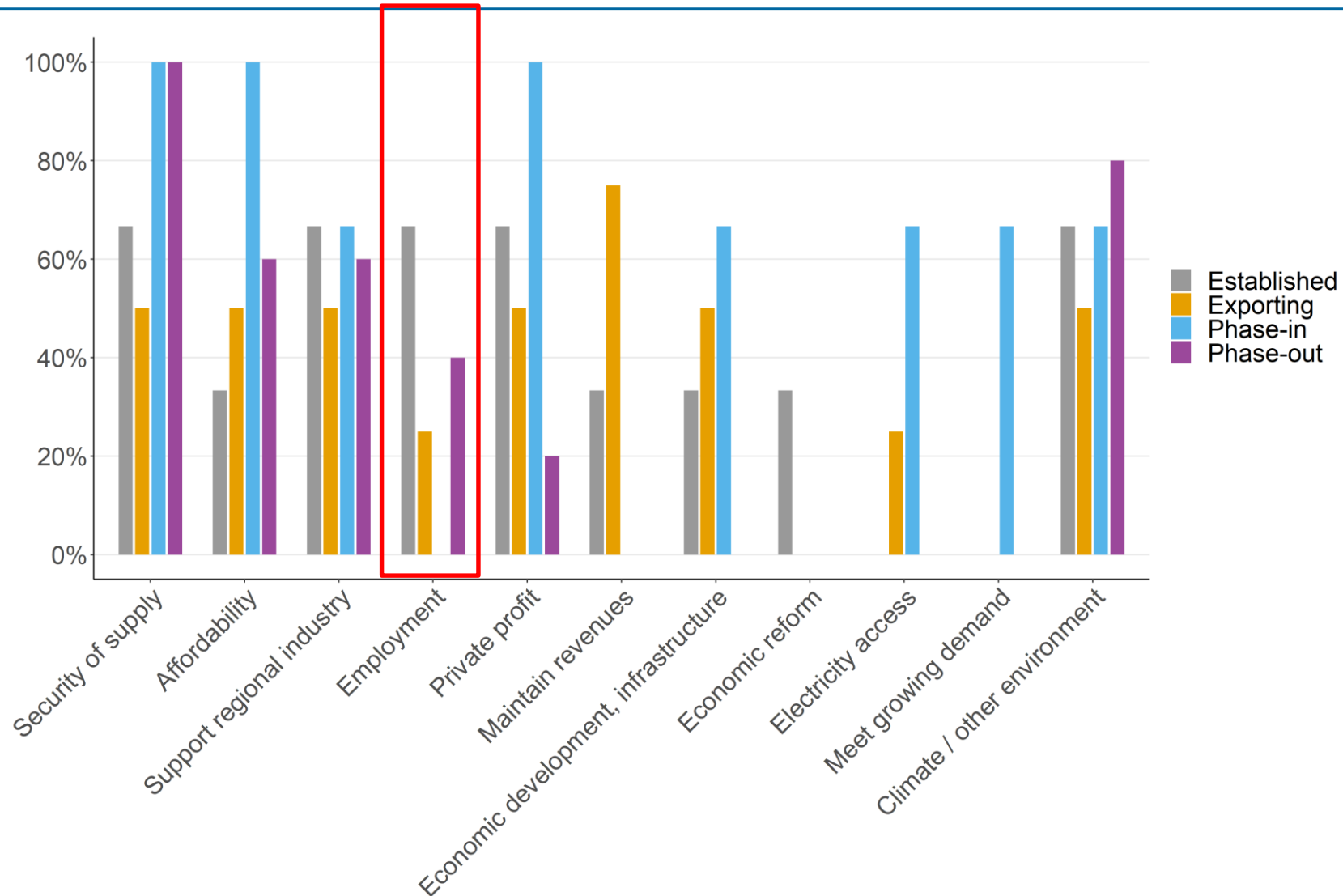
- Chile
- USA
- UK
- Germany
- Bulgaria

Stated objectives



Key objectives as stated in case studies by country groups. Phase out countries comprise Germany, Bulgaria, Chile, US and UK; Established countries comprise China, India, Turkey and Vietnam; Exporting countries comprise Australia, Colombia, Indonesia and South Africa; Phase-in countries comprise Kenya, Pakistan and the Philippines.

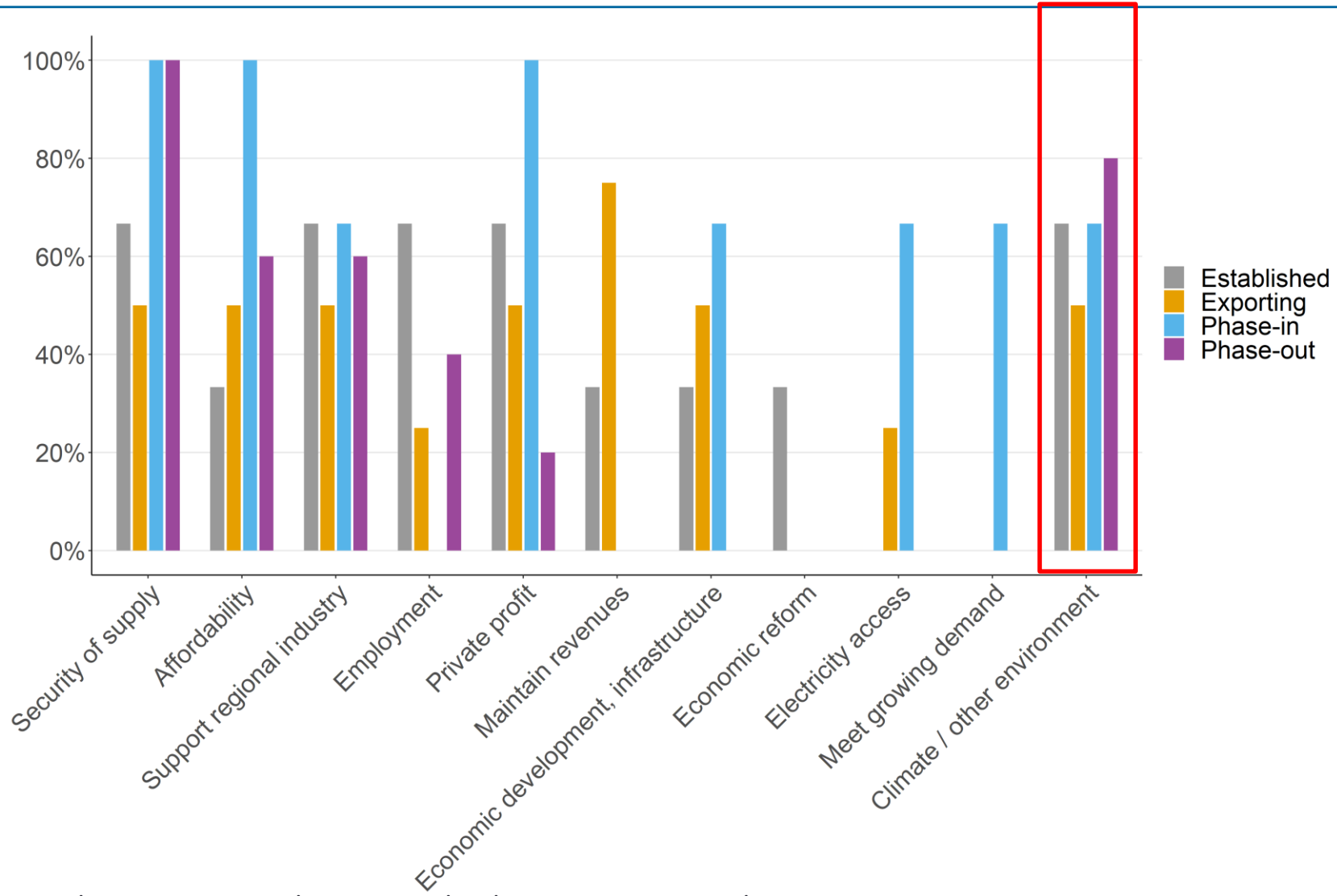
Stated objectives



Steckel and Jakob, forthcoming

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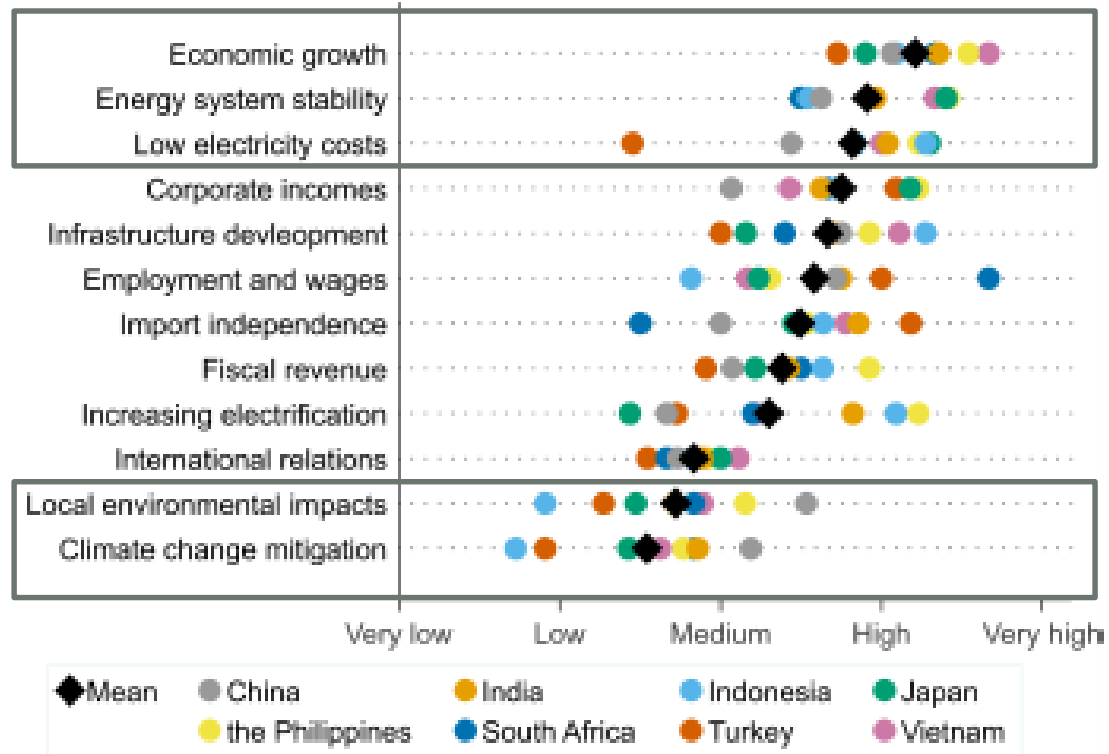
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Key objectives in major coal investing countries

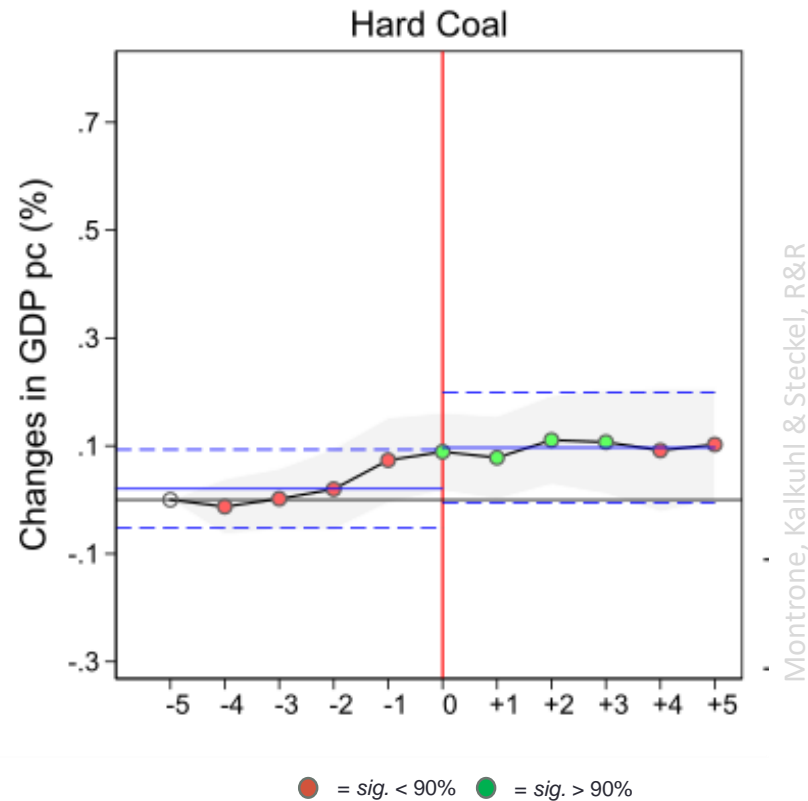


Ohlendorf et al., R&R

(a) Relevance of objectives

Results from a survey covering 123 experts in 8 major coal investing countries, following actor, objective, context framework (Jakob et al., 2020).

Coal entails positive spillovers on regional growth



100MW Coal = \uparrow 0.10% GDP
(after coming online)

- Event study design, based on a global panel ranging from 1960 – 2014, covering 65% of global electricity capacity
- Result: Coal and hydro lead to significant and positive growth effects after coming online. No such effect for other energy carriers.
- Identify channels: Agglomeration? Infrastructure? Electricity availability?

Additional industry policy options needed to facilitate energy transitions?

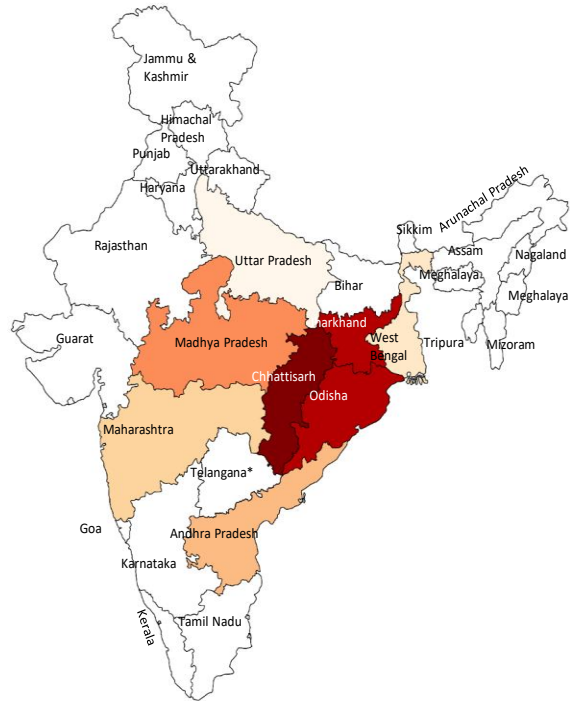
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Aggregating job gains and losses might be insufficient to understand the political economy

Example: Employment in India

Coal employment losses



Solar Employment



Wind Employment



Ordóñez et al., in prep

Understanding the welfare losses of losing a coal job

Coal jobs are (often) better paid!

Not all workers lose equally!

Figure 2: Wages in coal (left) and starting wages in non-coal sector (right) & fitted lognormals

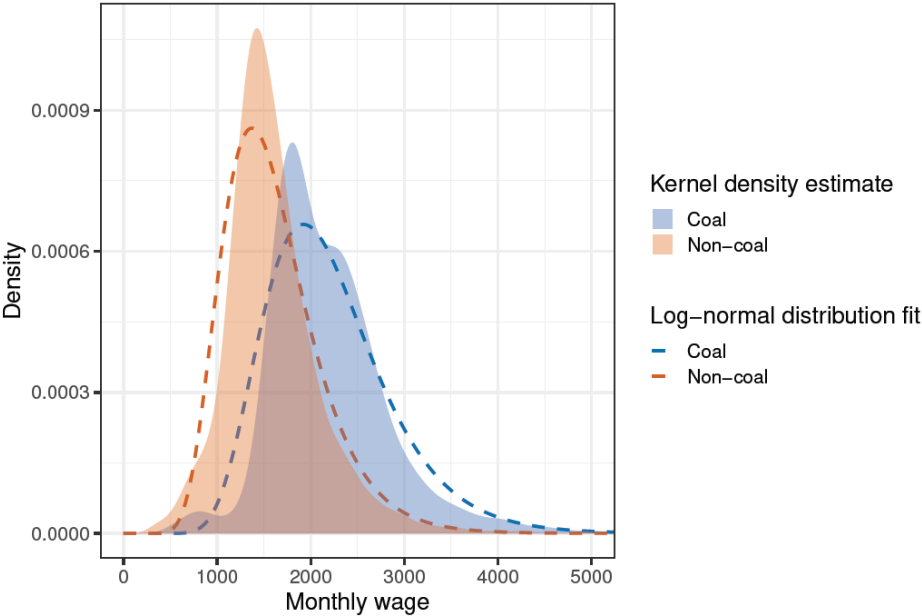
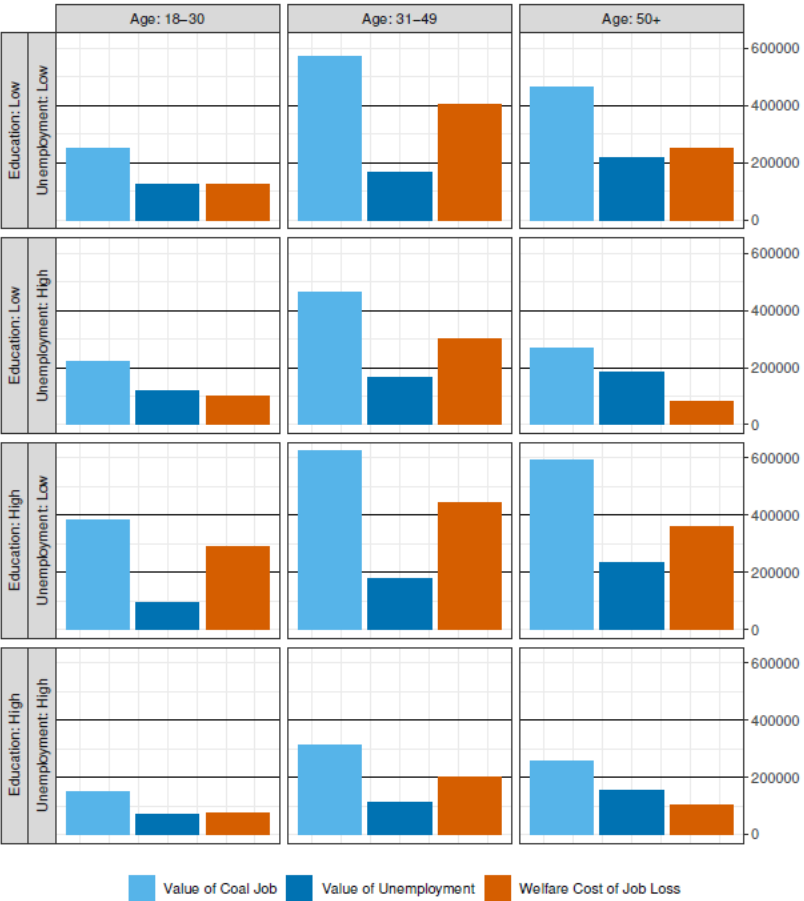


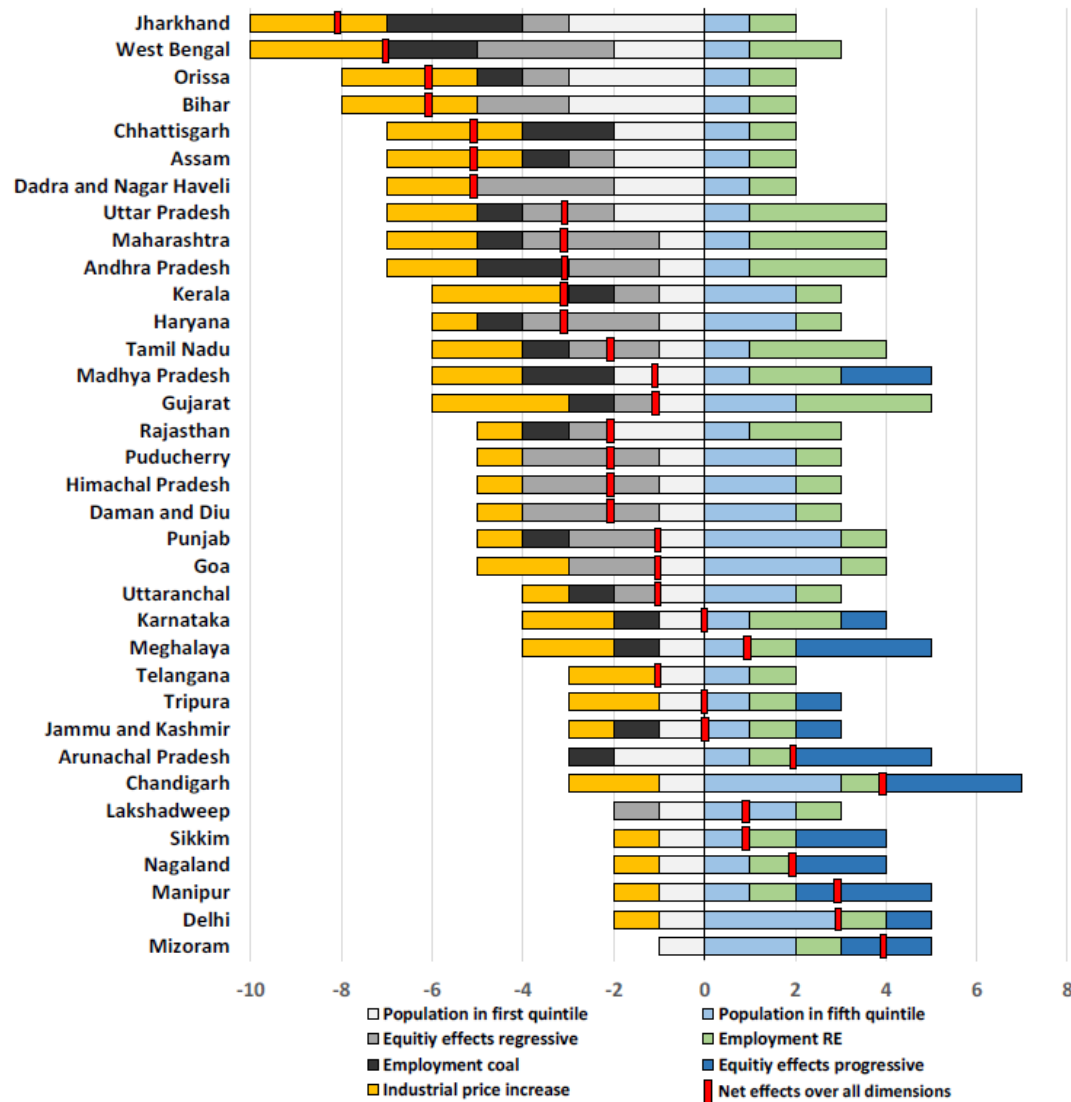
Table 4: Welfare cost of losing a coal job - by groups (€)



Haywood et al., 2021

Haywood et al., 2021

But: A just transition needs to cover more than jobs



Ordonez et al., in prep

Qualitative assessment of disadvantageous (negative scale) and favorable (positive scale) conditions as a result of an energy transition across Indian states. Red markers show net effects over all dimensions. Numeric values 1, 2 and 3 correspond to low, medium or high effects, depending on the tercile of impacts in which the respective state is located.

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Policies for phase out are context specific!

Phase-out	Established	Phase-in	Export-oriented
Carbon pricing RE support Strengthen multi-level governance	Power market reform Institutional reforms Compensation schemes	De-risking RE investments Technical assistance to enable power grids with high RE shares	Institutional reforms Compensation schemes Support for alternative export opportunities

Backup

@jan_c_steckel