

CLIMATE ACTION, REALLOCATION, AND STRANDED ASSETS

DISCUSSION BY

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LAWRENCE (2023): SUMMARY

- Review of the evidence on the impact of the green transition on jobs and workers.
- Evidence and policy actions of the US and Europe.
- Big takeaways:
 - Employment effects small in the aggregate
 - **But** significant adjustment costs, especially for lower skill workers, and the communities where they live
 - EU has much more funding for a just transition than the US

LAWRENCE (2023): GREEN JOBS, LOW SKILL WORKERS, AND THEIR COMMUNITIES

- Hopeful elements in the US (Curtis and Marinescu, 2022):
 - Wind & solar jobs defined by the specific skills required by employers in their job ads
 - Wind & solar jobs have same education requirements as other jobs
 - Approaches based on ONet occupations more likely to find green jobs require higher education.
 - Wind & solar jobs are created in higher-paying occupations (+21%), and the occupational premium is highest for jobs requiring high school education or less.
 - Wind & solar jobs more likely to be located in counties with fossil fuel production.
- Lower skill workers and their communities: lower resilience, higher risk.

LAWRENCE (2023): LEARNING FROM POLICIES TO SUPPORT AFFECTED WORKERS

- Trade Adjustment Assistance in the US: Hyman (2018), \$50k for TAA approved workers, driven mostly by training (Card, Klube, Weber, 2015) rather than unemployment insurance.
- Additional policy tools:
 - Wage insurance
 - Early retirement subsidies
- Small number of directly affected workers => low cost of targeted support.
- Flexibility: workers don't have to go into green jobs.
- What do we know about the effectiveness of EU's funds?

HALLEGATTE, MCISAAC, DUDU, JOOSTE, KNUDSEN, BECK (2023): SUMMARY

- Macro model suite to project the trajectory of Turkey's economy during the green transition under different scenarios.
- Part of a multi-country initiative.
- Model blocks:
 - Step 1: technical model at the sectoral level
 - Step 2: general equilibrium economic model CGE MANAGE
 - Step 3: fiscal adjustment model
- Key results on green transition in Turkey (relative to business as usual):
 - Increase growth
 - Increase aggregate employment, but reallocation frictions reduce growth
 - Progressive welfare impact: increase consumption for poor, decrease for rich

HALLEGATTE, MCISAAC, DUDU, JOOSTE, KNUDSEN, BECK (2023): SOME QUESTIONS

- Positive effects of green transition on growth depend on:
 - Current market inefficiencies => opportunity for efficiency improvements with the transition. Which market inefficiencies are most important?
 - No crowd out effects: investment in the green transition will not significantly crowd out other investment. Requires increase in saving vs. consumption. Welfare effects? How does policy design affect this?
- Growth effect of green transition is more negative for low income countries:
 - Why? What are the policy implications?

HALLEGATTE, MCISAAC, DUDU, JOOSTE, KNUDSEN, BECK (2023): ROLE OF A CARBON TAX

- The modeling relies on a carbon tax.
- In Turkey, there's currently no carbon tax but a high tax on liquid fuels.
- Carbon tax can be politically challenging:
 - Anderson, Marinescu, Shor (2023): in the US, carbon tax is thwarted by partisan polarization, whether it finances a dividend or green investments
 - Gilets jaunes in France illustrated popular opposition to a carbon tax even when gas taxes are already high. Opposition driven by anticipated adverse impacts (Douenne and Fabre 2022).
 - See Fabre and co-authors on international attitudes toward policies.
- If carbon tax dividend used for dividends: design policy to automatically provide household support even as decarbonization occurs. Use model to simulate scenarios.

HALLEGATTE, MCISAAC, DUDU, JOOSTE, KNUDSEN, BECK (2023): WELFARE EFFECTS AND ADJUSTMENT POLICIES

- Would be interested in seeing more scenarios and outcomes using the models:
 - Welfare effects: what are the effects of different policies on different worker types?
 - Consider country-specific policy proposals. Web widget may be useful to allow a broader public to do scenario planning.

CONCLUSION: FACILITATING REALLOCATION

- Micro evidence on policies that support workers during green transition:
 - Labor reallocation
 - Income support
 - Political economy
- Incorporate these policies into macro models: menu of policies.