Discussion of **"Climate Policy and International Capital Reallocation"** by Fourné and Li

Galina Hale, UCSC, NBER, CEPR BIS, December 15, 20203

Climate policy effects on investments: my intuition

Climate policy

- is either a constraint or a tax => higher cost of production, immediate capital costs of compliance
- is signal of government's commitment to sustainability => may indicate future climate policies => future higher cost of production
- is a resolution of uncertainty (transition risk) => may encourage investment
- is a wedge between domestic and foreign regulatory environment => may be a barrier to capital flows
- May include incentives for green transition => may increase demand for investment

Climate policy effects on investments: my intuition

Investment

- increases with higher future profitability
- declines with higher uncertainty or risk
- responds to incentives (such as "green" incentives)
- transition risks can be diversified through green investment
- is subject to diversification motives

Climate policy in source country

- may increase outflows if investors expect reduction in domestic future profits
- may reduce outflows due to
 - resolved uncertainty
 - increased domestic demand for investment needed in the short run for compliance
 - domestic "green" incentives
 - increased regulatory differences (Dijkstra et al., 2011; Ni et al., 2022; Sasidaran et al., 2023)

Climate policy in target country

- may reduce inflows if investors expect reduction in future profits
- may increase inflows due to
 - resolved uncertainty
 - increased demand for investment needed in the short run for compliance
 - "green" investment incentives
- may reduce inflows due to higher regulator differences (Dijkstra et al., 2011)

What this means

- Need a framework for climate policy effect as it can be ambiguous
- Long run and short run effects might be different
- Type of climate policy matters (applied to financials or non-financials?), taxes/constraints vs. subsidies/incentives
- Future path of climate policy matters
- Sectoral composition of investments might be affected (total flows might be unchanged but there might be sectoral shifts)

Not expecting one paper to answer all these questions

This paper: focus on international investment

- FDI
- Portfolio: equity and fixed income
- Bank loans

In response to both source and target countries' climate policies

The measure of interest is change in bilateral flow share

I think adding exports is quite confusing because mechanism is quite different. Perhaps, controlling for exports instead? Since trade can affect financial flows.

Findings: differences across asset classes

- Increase in equity and bank loan shares in response to target countries' policies
 - Interpreted as a diversification (no test of the mechanism)
- No effect on FDI and bond flows

Results are driven entirely by AE -> AE flows (Table 4)

<u>Also evidence of:</u> negative response of FDI with longer delay (Fig. 3), negative response of equity flows from AE to EME (Fig. 4)

Unanswered questions

- Do climate policies affect total flows in each asset class?
 - Cannot answer this by looking at shares and all the FEs
 - Robustness test (Fig. 5) suggests maybe (but still fixed effects)
 - Try a specification that allows for differences *across countries* to affect the results (even if no causal interpretation)
- Is there substitution between asset classes?
 - Especially FDI vs. portfolio equity and bank vs. portfolio debt
 - Paper claims *joint* analysis of all types of flows as a contribution, but there is no joint analysis
- What drives the effects? Some tests of mechanisms that may differ across asset classes and may explain the results

Main suggestions

- A number of papers predict that difference in policies is the main driver of flows, try to use that in the RHS (CP_target CP_source)
 - This is similar to using interest rate differential
- Alternatively/In addition: since main results are about target, estimate non-bilateral results, which will allow to test for true nationality using BIS IBS Consolidated data and BOP data for target countries (can cover more countries for bank flows)
- Given that local projections show dynamics, include L2 and L3 of climate policies in regressions (or total change over 3 years)

Local projections

- Common to use 1 s.d. : Different finding re FDI
- Use the same scale



Figure 3: Local Projections

Potential remaining specification issues

- Short panel with a lot of fixed effects => concern about spurious results
 - Placebo test: reshuffle climate policy variable
- FDI (and other flows ?) may affect climate policy : direct endogeneity that can bias results towards finding a positive correlation
 - Cole et al. (2017) survey shows endogeneity materially affects results
- Policy interest rate is included, but ZLB most of the sample try 2-year rate?
- Literature shows many changes after Paris (After 2016) in response of asset markets to climate risks. D(after 2017) may capture this as well as US withdrawal from the agreement hard to interpret (*how to explain negative effects on equity?*)

Other questions/concerns

- In the Germanwatch calculation of CCPI are emissions scaled by country size? Size matters for capital flow shares. Probably not an issue with FEs, but might be worth checking
- Is there high correlation between climate policy measures and CO2 intensity? Would be interesting to see results with CO2 intensity only
- I would not include Table 5.
- Tables 8, 12 are hard to interpret given that many policies can come in packages (e.g. carbon tax + technology subsidy) and policies and performance are likely to be highly correlated (hence opposite signs of the effects)

Conclusion:

- Great ambitious paper
- Extremely carefully executed and well written
- Could be more focused
- Could add depth (substitution, mechanism) by reducing breadth (drop exports)