

Climate change and monetary policy: Comments

Jean Pisani-Ferry

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Three different sets of questions

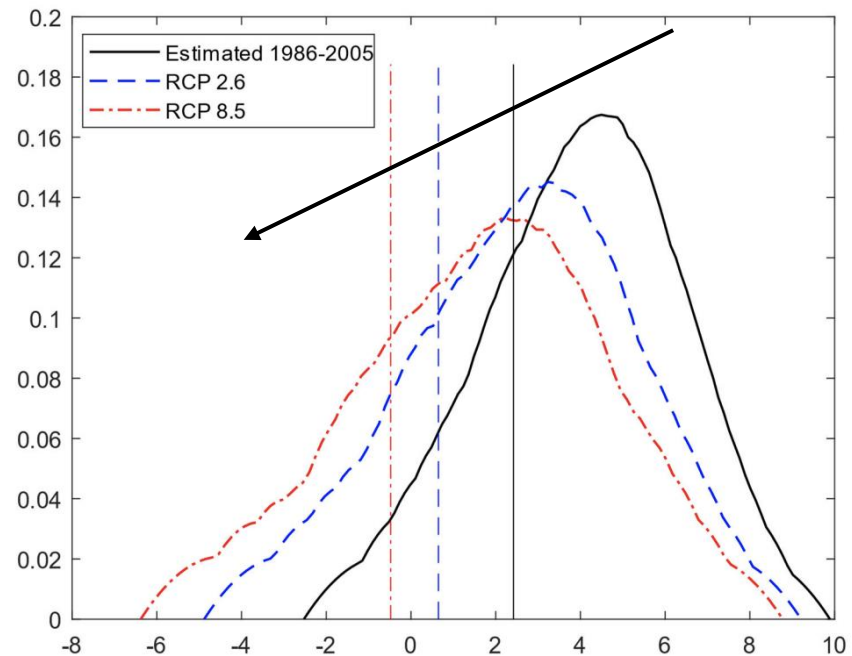
1. How can **climate change** affect the conduct of monetary policy? (“physical risks”)
 - Directly (impact on r^* , aggregate volatility..)
 - Indirectly (impact on asset riskiness and valuation..)
 - Long term issue
 - Not materially different from similar question about technology, aging or geopolitics
2. How can **climate action** affect the conduct of monetary policy? (“transition risks”)
 - Policy-induced shocks (relative prices, aggregate supply, stranded assets, fiscal sustainability..)
 - Credibility issues (climate policies face massive credibility problem)
 - International coordination issues both within the EA and with RoW
 - Immediate concern
 - Involves interactions between MoPo and other (tax, public spending, regulatory...) policies.
 - Not unlike question about MoPo and structural reforms
3. How can the monetary (or financial stability) policy of the ECB **contribute** to climate action?
 - Collateral policy
 - Accommodation of relative price changes
 - Radically new question

How significant (1)?

Climate change > Monetary policy

- Lower growth + potentially more volatile environment ([Kiley, 2021](#)) would have major implications for MoPo

Figure 1: Effects of Alternative Representative Concentration Pathways on the Probability Distribution Function (PDF) of the Percent Change in Real GDP Per Capita in India



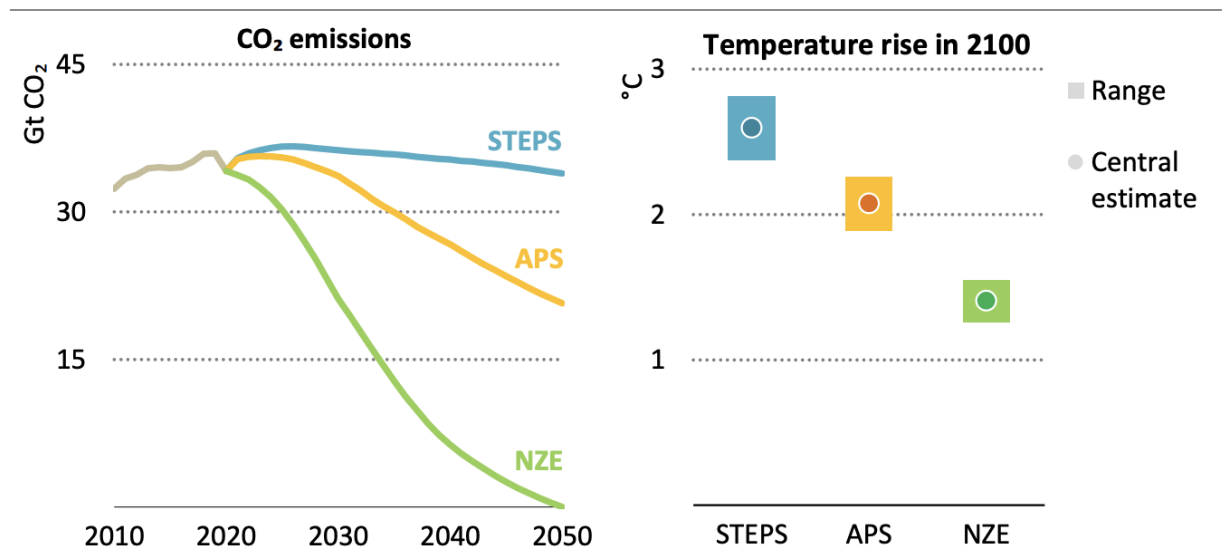
Source: Author's calculations based on results in table 3 using quadratic specification (augmented to include the 19 quantiles spanning from 0.05 to 0.95, in 0.05 increments). Vertical lines indicate medians.

How significant (2)?

Can central banks help solve the credibility problem of climate policies?

- Large gap between stated intention and actual policies a major threat to climate action and a major economic risk
- Central banks are highly credible institutions. Clarification of their stance would help tackle the credibility deficit of governments.

Figure 3.7 ▶ Global energy-related and industrial process CO₂ emissions by scenario and temperature rise above pre-industrial levels in 2100



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Announced pledges would not meet the Paris Agreement temperature goals

Notes: Central estimate = median temperature in 2100. Range = 33rd – 67th percentile.

Source: [IEA](#) 2021