

NB: some good news from Brazil, Brazil's Bolsonaro will not leave the Paris Accord... Climate change leads to violence and Malnutrition (ask Colombia's Earth Institute...) and what Pope Francis calls Climate Refugees (and now see the new refugees compact...) Crime, Poverty and Climate Change in Central America (and in the Sahel...) rain fed Since the 1980s, the New Economics of Immigration has stressed diversification

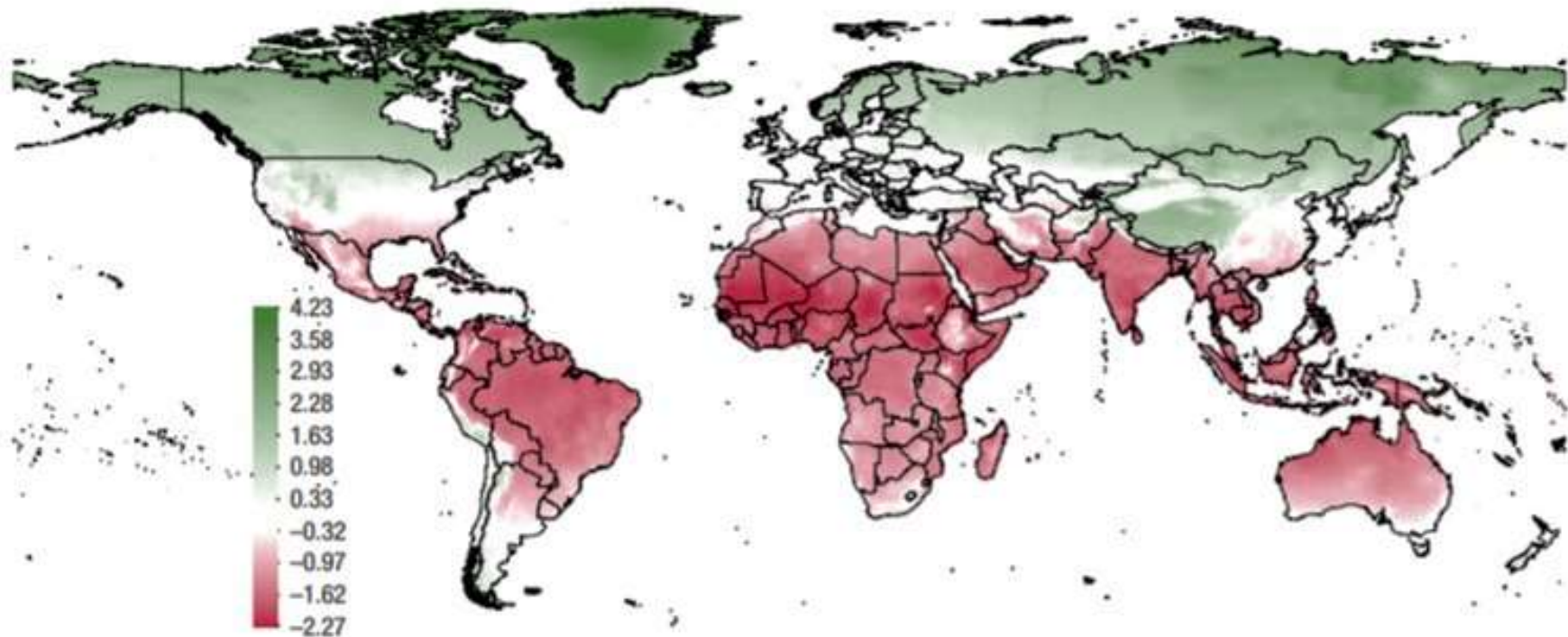
Sources: IMF WEO 2017: [download the pdf of Chapt 3](#): The Effects of Weather Shocks on Economic Activity: How Can Low-Income Countries Cope? See also Figure 3.8 below.

CHAPTER 3 THE EFFECTS OF WEATHER SHOCKS ON ECONOMIC ACTIVITY: HOW CAN LOW-INCOME COUNTRIES COPE?

Figure 3.8. Effect of Temperature Increase on Real per Capita Output across the Globe
(Percent)

An increase in temperature has a highly uneven effect across the globe, with adverse consequences concentrated in the parts of the world where the majority of the world's population lives.

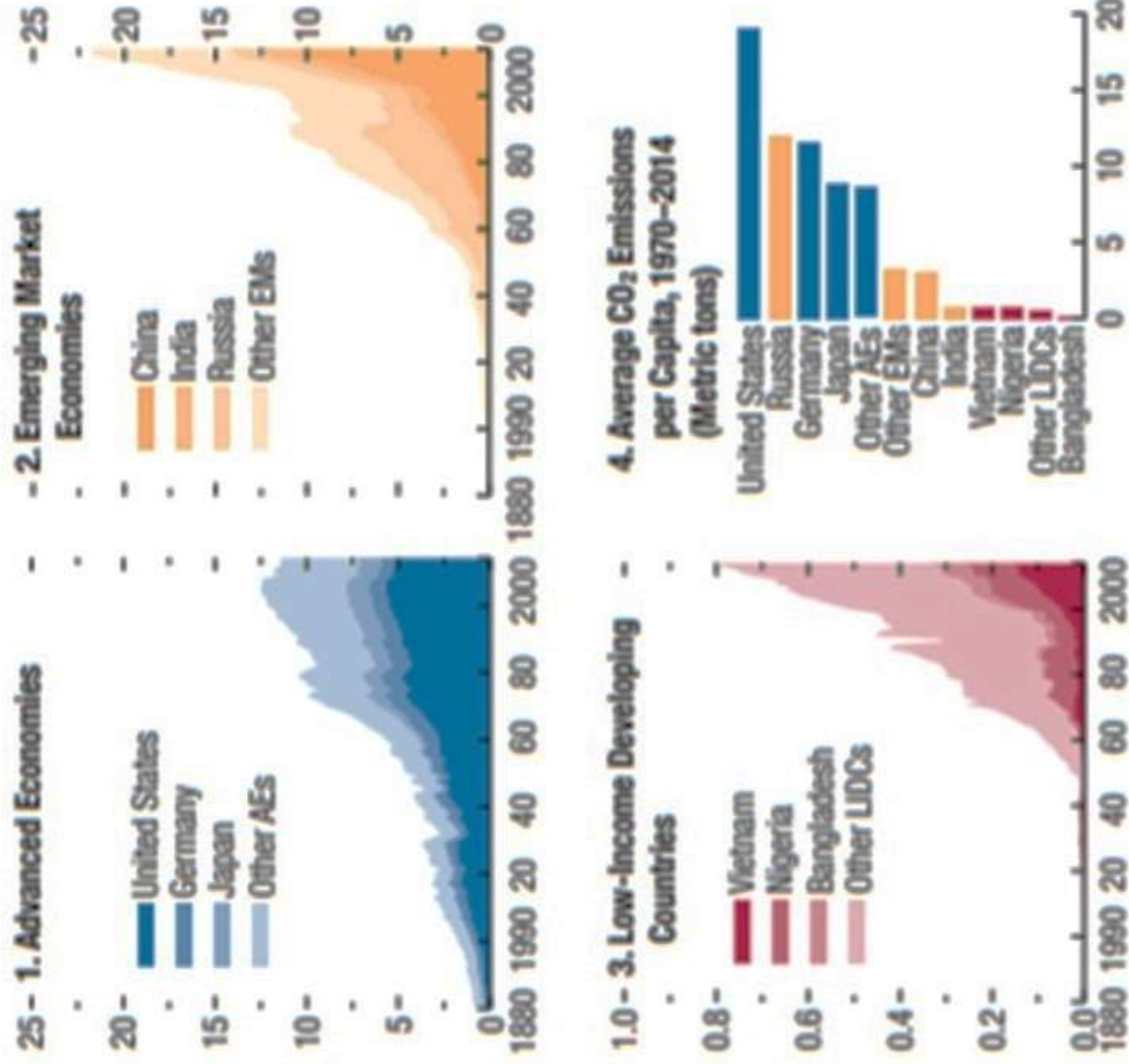
1. Effect of a 1°C Increase in Temperature on Real per Capita Output at the Grid Level



Why are female headed HH most resilient?

Figure 3.4. Annual CO₂ Emissions across Broad Country Groups
(Billion metric tons, unless noted otherwise)

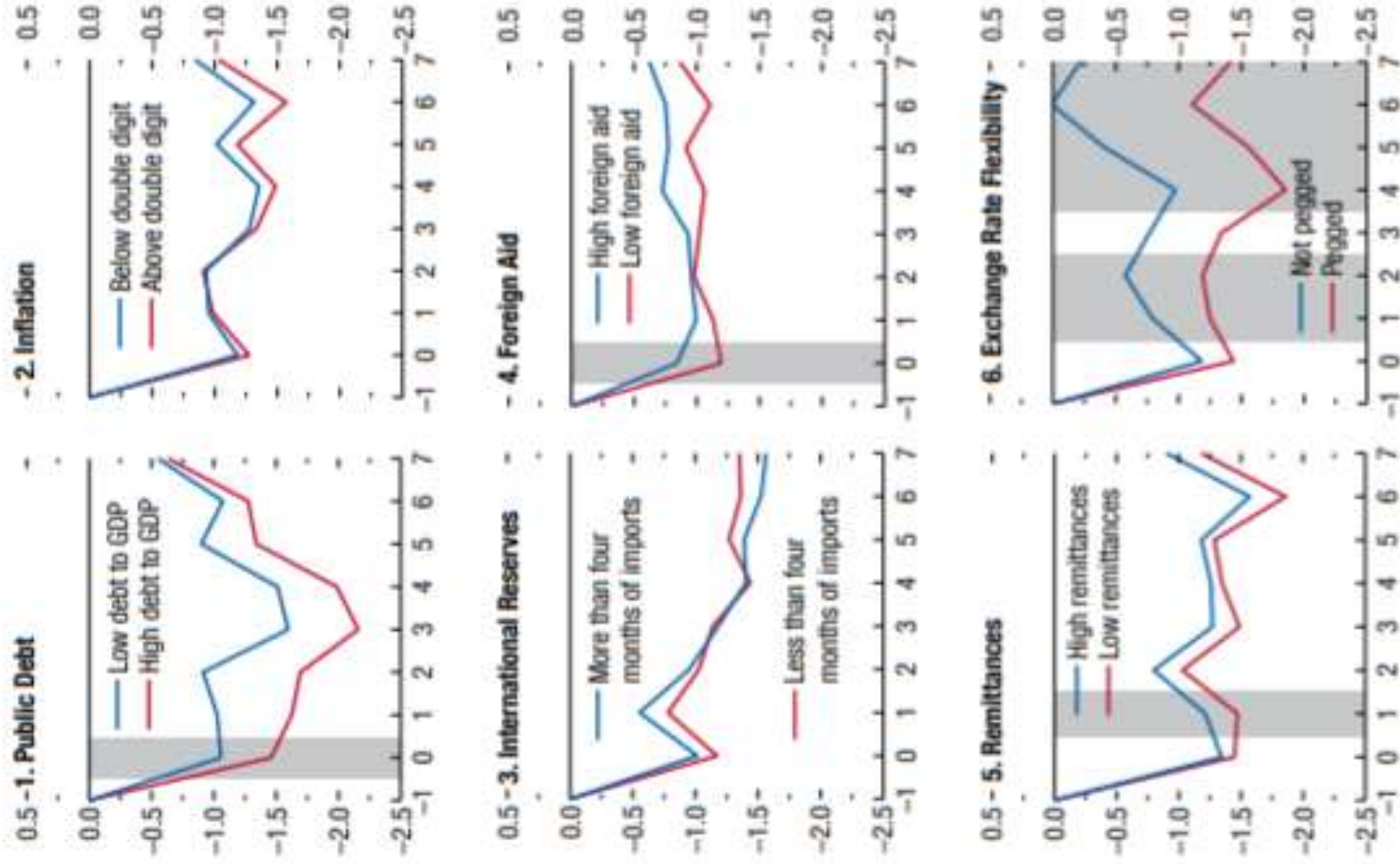
CO₂ emissions have grown rapidly since the 1950s across all income groups, but emissions by low-income developing countries are negligible in both absolute and per capita terms.



Sources: Carbon Dioxide Information Analysis Center, and IMF staff calculations.
 Note: AEs= advanced economies; CO₂ = carbon dioxide; EMs = emerging markets; LDCs = low-income developing countries.

Figure 3.13. Role of Policy Buffers
(Percent; years on x-axis)

There is some suggestive evidence that the contemporaneous effect of temperature on per capita output is marginally lower in countries with lower public debt, greater foreign aid inflows, and flexible exchange rates.



Source: IMF staff calculations.

Note: The panels depict how the effect of a 1°C increase in temperature on per capita output in the sample of countries with average temperature exceeding 15°C varies with the empirical proxy of a policy buffer. Horizon 0 is the year of the shock. Gray areas indicate that the blue and red lines are significantly different from each other at the 15 percent level. See Annex 3.3 for the exact definition of policy variables.