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

![Map showing the effect of a 1°C increase in temperature on real per capita output at the grid level. The map includes different color shades to represent varying impact percentages.]

2. Effect of a 1°C Increase in Temperature on Real per Capita Output at the Country Level, with Countries Rescaled in Proportion to Their Population

![Map showing the effect of a 1°C increase in temperature on real per capita output at the country level, with each country rescaled in proportion to its 2015 population.]

Sources: Natural Earth; ScapeToad; United Nations World Population Prospects Database: the 2015 Revision; World Bank Group Cartography Unit; and IMF staff calculations.

Note: The maps depict the contemporaneous effect of a 1°C increase in temperature on per capita output computed as per equation (3.3). Panel 1 uses 2005 grid-level temperature, while panel 2 uses the recent 10-year average country-level temperature together with estimated coefficients in Annex Table 3.3.1, column (5). In the cartogram in panel 2, each country is rescaled in proportion to its 2015 population. Gray areas indicate the estimated impact is not statistically significant.