Living on the Edge: Infrastructure Investments and the Persistence of Coastal Cities

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Abstract

This paper considers whether large infrastructure investments in hazardous coastal areas continue to be justified by the productivity and amenity advantages these regions confer, and how this assessment may change as the global climate changes. I use a spatial equilibrium framework and detailed georeferenced data from 2000-2010 to investigate the aggregate and distributional effects of road upgrades in Vietnam, home to one of the world’s most vulnerable low elevation coastal zones. The results suggest that alternative allocations of road investments less strongly concentrated in the low elevation coastal zone would have achieved similar or higher aggregate welfare gains while moving sizeable populations out of the most hazardous regions. I present evidence that one factor contributing to inefficient coastal favouritism may be hysteresis in the spatial allocation of investments as patterns of regional advantage change. Simulations of future sea level rise show that the benefits of the counterfactual allocations are magnified as projected climate changes take effect.

**JEL codes**: J61, O18, O53, Q54, R11, R12, R13, R42

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