## The Impact of Housing Quality on Health and Labor Market Outcomes: The German Reunification

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## Abstract

Environmental hazards such as ambient air pollution and extreme temperatures have a significant impact on individuals' health and generate massive economic costs in industrialized countries. However, individuals spend on average 90% of their time indoors reducing their exposure to outdoor hazards. While economist and policy makers are certain that the provision of decent housing should lead to increased health and well-being, empirical evidence is largely missing or based on small scale experiments on poor households in developing countries. This paper studies the massive renovation wave in East Germany in the aftermath of the German reunification to contribute population-representative evidence on the impact of improved housing conditions on occupants' health and labour market outcomes in industrialized countries. During the 90s, the German government implemented several programs to modernize the East German housing portfolio. The largest program spent a total of €40 billion and renovated 3.6 million dwellings in East Germany. Using the German Socio-Economic Panel (SOEP) and applying a fixed effect approach exploiting the exogenous variation in the exact timing of the renovation, we find that a major renovation of a dwelling significantly improves tenants' subjective and objective health outcomes. Sensitivity analysis with respect to time-varying unobserved factors confirm the robustness of the results.

**Keywords:** Housing quality, renovation program, health, labor market outcomes.

**JEL codes:** H54, I18, R38.

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