Climate Risk, Insurance Costs, and Effects on Mortgage Delinquency and Prepayment [*]

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Full paper under Federal Reserve's disclosure approval; will be shared soon

Abstract

As climate change exacerbates natural disasters, homeowners' insurance premiums are rising dramatically. We examine the impact of premium increases on mortgage delinquencies and prepayments using a novel dataset linking insurance policies with mortgages for 6.7 million borrowers. We find that premium increases significantly raise the probability of mortgage delinquency and prepayment. These results hold using two distinct instrumental variables. The delinquency effect is larger for higher loan-to-value mortgages, while the prepayment effect is smaller for these loans. Both effects are predominantly observed in conforming mortgages, indicating potential risks related to GSEs and agency MBS. Our findings unveil a channel through which climate change can erode household financial health and potentially impact the stability of the broader financial system.

JEL Classification: G21, G22, G5, G52, G53, R21, Q54, D14, R3

Keywords: climate change, insurance, mortgage, delinquency, prepayment risks

[*]We affirm that we have no material financial interests related to this research. The information presented herein (including any applicable table, chart, graph, or the like) is based on data provided by CoreLogic and McDash. Those data are used as a source, but all calculations, findings, and assertions are those of the authors. The views expressed in this paper are solely those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Dallas or the Federal Reserve System.

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