

Weather risk and agricultural loan performance

An analysis carried out in collaboration with CRDB Bank

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December 10, 2020

Executive summary

In 2019, a team of researchers supported by Climate KIC collected, in collaboration with CRDB Bank of Tanzania, a dataset of agricultural loans during the period 2016-18. The data contains information on borrower characteristics and historical loan performance. This allows one to study the relationship between loan performance and standard rating variables (e.g., leverage). We paired the latter with weather indices capturing the agricultural output at location. Analysis of loan performance experience reveals that weather indices can be important in explaining loan performance and should therefore be considered in addition to standard rating factors used by loan underwriters. We support our findings with both machine learning tools and traditional statistical analysis. This note is a shortened and anonymized version of the original report produced in September 2019.

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