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Ratings-adjusted Implicit default probability: the case of emerging sovereign eurobonds

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Abstract

A bond's market price may be interpreted as the combination of an implicit default probability and a recovery value. Our paper describes the construction of an actuarial equation with both unknowns. We observe that our gauge-which is sensitive to the security's intrinsic characteristics-produces a different risk ranking than the one indicated by spreads.

The model enables us to illustrate two typical preoccupations of investors: In normal times, what are the odds that a borrower will default? In times of crisis, what is the recovery value? We apply the model to Russia and Argentina.

In addition, by cumulating the implicit probabilities, we can measure the longer-term risk inherent in a buy-and-hold strategy.

It should be emphasized that our aim here is not to compute actual probabilities of default occurrence, but to obtain a clearer picture of the risks assessed by the markets.

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