FIXED INCOME

The Value Of Duration as a Risk Measure for Corporate Debt

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Duration is the primary risk measure for fixed-income portfolio managers. It is well-known that duration is an exact measure of an asset's interest-rate sensitivity only if all term structure shifts are parallel and infinitesimally small. While large yield shifts and yield curve reshapings are often observed, empirical evidence suggests that duration works reasonably well for government bonds. Specifically, research shows that during the 1980s duration explains 80%–90% of the cross-sectional variation in government bond returns.

This article analyzes duration's ability to measure the risk in non-callable corporate bonds. Non-callable bond issuance has risen dramatically recently, primarily because of investors' negative perceptions of call features in the face of high call activity in today's low interest rate environment.

The adequacy of duration as a risk measure for corporate bonds is topical because of the current "reach for yield" phenomenon. Historically low yield levels have caused many bond fund managers to shift their portfolios toward higher-yielding sectors, at the same time that their risk measurement tools lag behind.

That is, while duration is a convenient overall measure of a portfolio's interest rate risk, no such simple measure is available for quantifying a portfolio's default risk. This leaves duration as the only quantified risk measure for many bond fund managers. How well does it do in a "reach for yield" environment?

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