

Path Dependence in Fixed Income Index Construction

What every Bond Index fund investor should know before they drop their next buy ticket.

Matthew J. Patterson
Managing Director

I've written in the past about how minimum maturity rules in fixed income indices drive needless portfolio turnover in funds that seek to track these indices. By adopting a rule of index construction that excludes bonds of a certain minimum maturity (one year in the case of the Barclays Capital Aggregate Bond Index), many fixed income indices essentially force funds to sell bonds and incur transaction costs rather than simply wait for the bonds to mature and return principal at no cost.

That minimum maturity rules in fixed income indices lead to increased portfolio turnover for index-based bond portfolios is not surprising. What is surprising is that developers of fixed income indices would adopt such a rule of index construction in the first place. Why would an index developer seeking to create a fixed income index to serve as the basis for an investment product adopt a rule of index construction that creates needless portfolio turnover?

There really isn't an answer to this question because traditional fixed income indices were not designed to serve as the basis for investment products.

Take, for example, the granddaddy of all fixed income indices: the Barclays Capital Aggregate Bond Index. When it was created in 1973, the country's first index-based mutual fund--what would come to be known as the Vanguard 500 Index Fund--was still just a twinkle in Jack Bogle's eye. The investment bank that created the Barclays Capital Aggregate Bond Index did so not with an eye toward licensing it to mutual funds but rather to satisfy demand from institutional clients who sought a benchmark to measure their bond investing prowess.

Reasonable arguments can be made in favor of minimum maturity rules in the context of fixed income indices intended to serve as benchmarks for bond managers. After all, credit risk and yield (and, therefore, opportunities for bond managers to differentiate their performance) decline significantly as a bond approaches maturity. Excluding bonds of a certain minimum maturity from fixed income indices can have the effect of focusing in on the portion of the bond market where alpha is most likely to be generated.

Minimum maturity rules make much less sense, however, for bond indices designed to serve as the basis of investment products. In this context, minimum maturity rules drive unnecessary portfolio turnover. And yet most bond ETFs currently in existence seek to track the performance of fixed income indices that employ a minimum maturity rule.

It is an outcome that nicely illustrates the power of path dependence. Years after fixed income indices became more valuable as investment strategies than benchmarks, they continue to be constructed to serve the objectives of benchmarks rather than investment strategies.

Matthew J. Patterson
matthew.patterson@accretiveasset.com