

International Asset Allocations and Capital Flows: The Benchmark Effect

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Summary

Theories and empirical work abound about how capital is invested internationally, studying the behavior of both country portfolios and capital flows. In this paper, we focus on a factor that, so far, has been mostly absent from the academic literature on international investments and that we call “the benchmark effect.”

The benchmark effect refers to various channels through which prominent international equity and bond market indexes affect asset allocations, capital flows, and asset prices across countries. This effect has received recent attention in the financial press following the upgrades of Portugal (1997), Greece (2001), Israel (2010), Qatar (2014), and the U.A.E. (2014) to the emerging and developed market categories and the downgrades of Venezuela (2006), Argentina (2009), and Greece (2013) to the frontier and emerging market categories.

We compile a novel dataset of detailed portfolio allocations across countries by a large number of international mutual funds that we match with the allocations of the benchmarks they follow. The dataset covers the period from January 1996 to September 2014 and contains international mutual funds based in major financial centers around the world investing in at least two countries (i.e., it excludes country funds).

We analyze how these indexes affect decisions by mutual funds. First, we discuss how the cross-sectional and time-series variation in the country composition of benchmark indexes (“benchmark weights”) helps in the identification of shocks to mutual fund portfolios and might explain systemic effects. Second, we study how movements in benchmark weights affect movements in the actual country weights (“weights”) of the funds that declare that benchmark, depending on their degree of activism (the degree to which their country allocations deviate on average from those of their respective benchmarks). Third, we explain the various channels through which the benchmark effect impacts capital flows. Fourth, we use upgrades and downgrades of countries to study how and when the prices of the securities being affected respond to benchmark changes.

We find that benchmarks have important effects on asset allocations, capital flows, and prices not only because funds explicitly declare a benchmark to compare their performance, but also because funds with different degrees of activism tend to follow their benchmark asset allocation rather closely, though to different extents. Benchmark weights also receive frequent, exogenous revisions by the companies that construct them. These benchmark changes affect the mutual fund portfolios, their reallocations, and their sensitivity to injections or redemptions. The effects of benchmarks on mutual fund allocations are significant even after controlling for industry effects, country-time effects, and macroeconomic fundamentals, and after addressing potential omitted variables and reverse causality problems. The decisions about allocations impact capital flows through different channels, and the upgrades and downgrades of countries are associated with significant changes in asset prices.

Our results can explain some of the findings documented in the literature, as well as counterintuitive and unexpected movements in cross-country investments and asset prices. For example, because advanced emerging countries tend to have larger weights in emerging market indexes than in developed market ones, the benchmark effect can help explain why countries might face capital outflows when upgraded and capital inflows when downgraded. Moreover, countries sharing the benchmark are faced with capital inflows and asset price increases when a large country is removed from the index, regardless of their fundamentals.