

Green Tilts

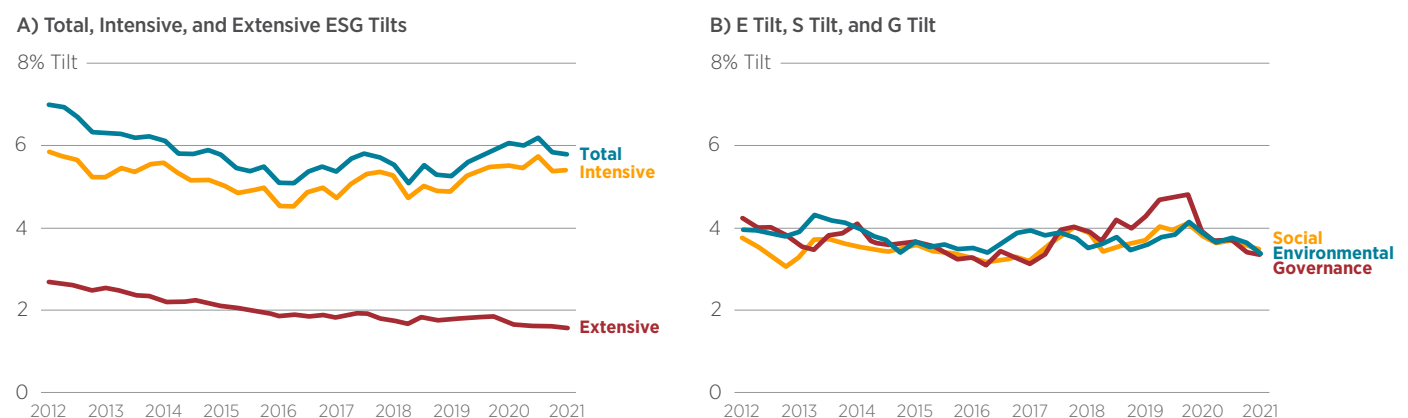
Based on BFI Working Paper 2023-74, “Green Tilts,” by Lubos Pastor, Chicago Booth; Robert F. Stambaugh, University of Pennsylvania; and Lucian A. Taylor, University of Pennsylvania

The total amount of ESG-related tilts in institutional equity portfolios is about 6% of the institutions’ assets under management, a fraction fairly steady from 2012 to 2021; the industry tilts increasingly toward green stocks, due to only the largest institutions, while other institutions and households tilt increasingly toward brown stocks.

What is the best way to measure the relatively recent phenomenon of ESG (environmental, social, and governance) investing? What does it mean to say that ESG investing reached \$35 trillion global assets under management (AUM) in 2020? How much do institutions’ portfolio choices relate to companies’ ESG characteristics? Do they really “care” about ESG investments or are they making calculated investment decisions? How have these ESG-related portfolio tilts changed over time? Which investors tilt green, and which ones make the offsetting brown tilts?

This working paper takes a novel approach to answering these and related questions. Rather than summing AUM or screening investment policies, the authors estimate ESG-related portions of institutions’ portfolio weights, or the percentage of an investment portfolio comprised by a particular type of holding. Portfolio weight is calculated by dividing the stock value by the total portfolio value and multiplying by 100 to get a percentage. For example, the portfolio weight of an asset worth \$10,000 in a \$100,000 portfolio is 10%.

Figure 1 • ESG-Related Tilts



Note: Panel A plots the aggregate ESG-related tilt and its decomposition into intensive and extensive tilts. Panel B plots tilts for each ESG component: E, S, and G. Tilts are expressed as a fraction of institutions’ aggregate AUM and years are measured at the fourth quarter. As you can see, both figures contradict the popular notion that ESG investing is on the rise.

The authors focus on equity portfolios, using holdings from 13F filings, which are quarterly reports required by the Securities and Exchange Commission. For each institution, the authors begin by estimating how every stock's ESG characteristics relate to the stock's weight in the institution's portfolio, controlling for the stock's other characteristics. Combining these estimates across stocks gives an institution-level measure of ESG-related tilt. The authors then aggregate those tilts across institutions to estimate the total ESG-related portfolio tilt in the investment industry, to find the following:

- The total dollar ESG-related tilt is about 6% of the industry's AUM in equity investments in 2021. By this measure, there is much less ESG investing than commonly reported.
- Allowing E, S, and G characteristics to enter separately is a key virtue of the authors' approach. For example, one institution might care about G but not S, while another institution cares about S but not G. Current composite measures mask these distinctions in portfolio tilts. The authors' methodology reveals that over 40% of ESG-related tilts are missed.
- Since 2012, the industry has become increasingly green, exhibiting a consistently positive and rising GMB (green minus brown) tilt. In contrast, the aggregate portfolio of non-13F investors has become browner, exhibiting a negative and decreasing GMB tilt.
- The rise in GMB tilt of 13F institutions occurred primarily via the intensive margin, i.e., increasingly overweighting green stocks and underweighting brown stocks. For example, divestment from brown stocks, a long-standing theme, occurred largely at the intensive margin, meaning that most of this divestment involved reducing positions rather than eliminating them.
- The industry's increasing greenness is driven by the largest institutions; when the authors rank institutions by AUM and separate them at the 33rd and 66th percentiles, only the top third exhibits a positive and rising GMB tilt. The GMB tilts of both the middle and bottom thirds resemble those of the non-13F investors: negative and decreasing over time, meaning brown and increasingly so.
- Institutions that signed the United Nations' Principles for Responsible Investment (UNPRI) are significantly greener, exhibiting larger GMB tilts.
- On average, ESG tilts are one quarter as large as total portfolio tilts; institutions less likely to tilt for all reasons are less likely to tilt due to ESG.
- GMB tilt also differs significantly across institution types. Banks' GMB tilts are lower than those of insurance companies. Banks are also significantly browner than both investment advisors and pensions/endowments, and insurance companies are the greenest institution type.

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