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# Search-Based Peer Firms: Aggregating Investor Perceptions Through Internet Co-Searches

by Charles M.C. Lee, Paul Ma and Charles C.Y. Wang

# **Abstract**

Applying a "co-search" algorithm to Internet traffic at the SEC's EDGAR web-site, we develop a novel method for identifying economically-related peer firms and for measuring their relative importance. Our results show that firms appearing in chronologically adjacent searches by the same individual (Search-Based Peers or SBPs) are fundamentally similar on multiple dimensions. In direct tests, SBPs dominate GICS6 industry peers in explaining cross-sectional variations in base firms' out-of-sample: (a) stock returns, (b) valuation multiples, (c) growth rates, (d) R&D expenditures, (e) leverage, and (f) profitability ratios. We show that SBPs are not constrained by standard industry classification, and are more dynamic, pliable, and concentrated. We also show that co-search intensity captures the degree of similarity between firms. Our results highlight the potential of the collective wisdom of investors—extracted from co-search patterns—in addressing long-standing benchmarking problems in finance.

**Keywords:** peer firm; EDGAR search traffic; revealed preference; co-search; industry classification; Data and Data Sets; Search Technology; Internet; Mathematical Methods; Corporate Finance;

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