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## Investment Publications Highlights



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**"Liquidity as an Investment Style"**

Robert G. Ibbotson, Zhiwu Chen, Daniel Y.-J. Kim, and Wendy Y. Hu, *Financial Analysts Journal* vol 69, no. 3 (May/June 2013)

**Liquidity should be given equal standing with size, value, and momentum as an investment style, argue Robert Ibbotson and his coauthors. Stocks with low liquidity, as measured by stock turnover, outperform stocks with high liquidity over time. The returns of stocks with lower liquidity are sufficiently different from those of the other styles to make liquidity a unique way of picking stocks, not just a substitute for another style.**

In 1992, William Sharpe outlined four basic criteria for a benchmark investment style: it should be “easily identifiable before the fact,” “not easily beaten,” “a viable alternative,” and “low in cost.” Extensive studies have been conducted on investment styles such as size, value, and momentum—all of which are considered viable investment strategies. Based on the four criteria that Sharpe originally suggested, stock liquidity (as measured by turnover) should receive equal standing as a benchmark style.

Prior analyses have used different measures of liquidity, including the bid-ask spread and the average price impact relative to the daily trading volume of a security. While a single “perfect” measure of liquidity does not exist, the authors focus on annual share turnover (each month’s trading volume divided by shares outstanding, summed for 12 months). By focusing on historical share turnover as a concrete measure of liquidity, the study is able to satisfy Sharpe’s first condition: that a style be “easily identifiable before the fact.”

To compare liquidity against other viable investment styles, the authors examine the top 3,500 U.S. stocks by market cap through

four different lenses: share turnover (liquidity), trailing price-earnings ratio (value), market cap (size), and annual return of the previous year (momentum). For each variable, the study separates the entire universe of stocks into quartiles and examines the subsequent year’s returns.

From 1972 to 2011, the lowest liquidity quartile outperformed the highest liquidity quartile by 7.3% per year. The lowest liquidity quartile also outperformed the smallest stocks by 1.5% per year and the highest-momentum stocks by 1.7% per year, suggesting that this investment style is also “not easily beaten.”

To demonstrate that liquidity is “a viable alternative” to other well-established styles, the authors focus on distinguishing turnover from size by showing that across all market caps, a liquidity premium still exists. Among small-cap stocks, for example—the second-smallest quartile as sorted by market cap—the lowest liquidity stocks outperformed the highest liquidity stocks by 9.8% per year. Conversely, the size effect does not hold across all liquidity quartiles, suggesting that the two styles are not necessarily intertwined. Similar comparisons between liquidity and value, and liquidity and momentum, suggest that liquidity is a unique way of picking stocks and not just a substitute for another style.

Investors clearly want more liquidity and are willing to pay for it in all asset classes, including stocks. Less liquidity comes with costs. It can take longer to trade less liquid stocks, and the transaction costs are typically higher. However, a portfolio of less liquid stocks can be managed with reasonable turnover; from year to year, stocks tend to trade within the same quartile of liquidity. In fact, liquidity is significantly more stable than 12-month momentum as a basis for portfolio formation and is similar in stability to size and value. In satisfying all four criteria that

Sharpe outlined in his framework for investment styles, liquidity should be considered with value, size, and momentum as a legitimate investment alternative.

### **“Where Do We Stand in the Credit Cycle?”**

Dominic Wilson et al., Goldman Sachs,  
November 6, 2013

**Corporate bond spreads are continuing to compress after the spike in 2008. To assess where we are in the current credit cycle, Goldman Sachs' economics research team assesses three relevant dimensions: macroeconomic conditions, bottom-up fundamental risk, and valuations.**

Over the last five years, falling interest rates and tightening credit spreads have helped investment-grade and high-yield bonds deliver strong performance. Although spreads have not reached the extremes of the mid-2000s credit boom, they are at or near six-year lows. Goldman Sachs' sanguine forecasts for macroeconomic conditions and corporate balance sheets, combined with reasonable credit risk premiums, translate into a benign outlook for corporate debt overall. Nonetheless, the bank envisages a gradual increase in defaults for the next five years from current rock-bottom levels.

Default risks at the economy-wide level have been low and should remain so. The current “carry-friendly” environment of improving economic growth, low inflation, and accommodative monetary policy continues to make spread-related investments attractive. Substantial labor market slack and a benign inflation outlook imply little risk that U.S. monetary policy will soon become tighter. A regression model that links cumulative loss rates to Goldman's forecasts for key macroeconomic variables suggests a cumulative five-year

default rate of 0.4% for debt rated A and above (compared to 0.6% on average), and a cumulative rate of 6.2% for BB issues (compared to 9.9% on average). These default forecasts translate to cumulative five-year loss estimates of just 0.3% for the high-rated category and 3.4% for BB.

At the company level, leverage ratios (net debt/EBITDA) are below their long-term averages despite an uptick in leverage over the past two years. Moreover, much of the recent increase is attributable to the lack of growth in EBITDA (the denominator) rather than an active decision to take on more debt. Sales growth for U.S. corporates stalled in 2011, and median year-over-year growth actually turned negative at one point in 2012. If not for the relative weakness of EBITDA growth over the past few years, leverage would have increased roughly half as much as it has since the 2011 low for investment-grade non-financials. Concerns that “active” re-leveraging may increase seem likely to be offset by the prospect of accelerating growth as fiscal drags fade and private demand increases.

The final piece of the benign credit outlook is valuation. As spreads have tightened, credit risk premiums—the compensation investors demand for the exposure to default risk, after expected losses—have fallen, but only to levels in line with historical averages. For high-yield bonds rated BB, for example, the spread over five-year Treasuries of 3.4% can be decomposed into 0.7% of annualized expected losses and a reasonable 2.7% risk premium. With yields as low as they are, however, credit is best described as having relative, not absolute, value. While the era of outsized return for credit is over, low defaults and good corporate health continue to bode well for the asset class. ■