EQUITIES

Asset Pricing With Liquidity Risk

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This paper presents a simple theoretical model that helps explain how asset prices are affected by liquidity risk — the inability to find buyers or sellers of securities at will — and commonality in liquidity.

This liquidity-adjusted capital asset pricing model (CAPM) provides a unified framework for understanding the various channels through which liquidity risk may affect asset prices. We explore the cross-sectional predictions of the model using NYSE and AMEX stocks from 1963 to 1999.

The model gives an integrated view of the existing empirical evidence related to liquidity and liquidity risk, and it generates new testable predictions. We find that the liquidity-adjusted CAPM explains the data better than the standard CAPM, while still exploiting the same degrees of freedom.

Our empirical results shed light on the total and relative economic significance of these channels and provide evidence of flight to liquidity. In particular, we find that the CAPM applies for returns net of illiquidity costs. This implies that investors should worry about a security's performance and tradability both in market downturns and when liquidity "dries up."

The model also shows that positive illiquidity shocks, if persistent, are associated with low contemporaneous returns and high predicted future returns. Further, we find weak evidence that liquidity risk is important over and above the effects of market risk and the level of liquidity. The model has a reasonably good fit for portfolios sorted by liquidity, liquidity variation, and size, but it fails to explain the book-to-market effect.