Credit Market Equivalents and the Valuation of Private Firms

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Executive Summary

In a leveraged buyout (LBO), a company is taken private with the objective of selling later, after restructuring. Private equity (PE) firms use substantial amounts of borrowed funds, notably from the leveraged loan market, to execute such transactions and create investable funds in exchange for significant, often performance-based fees. Such LBO funds have been an increasingly popular investment opportunity for long-term investors such as endowments and pension funds. Since the financial crisis, the number of buyout deals has grown almost fourfold. Plausibly, this growth has been fueled by attractive credit conditions in the low interest rate environment in the aftermath of the Great Recession. However, with rates rising after the pandemic, LBO funds have come under pressure due to the floating rate exposure in their debt structures.

In view of the flows into LBOs, evaluating the performance of these investments remains an important question in asset management. It is challenging, however, as their market valuations are known only at investment and exit times, so that actual return data for these assets are necessarily sporadic. In practice, therefore, interim performance assessments are typically based on self-reported valuations only. A recent academic literature, in contrast, proposes heuristic performance metrics such as the popular Public Market Equivalent (PME) measure of Kaplan and Schoar that asks how much investing in LBOs would improve the risk-return profile of an investor invested in public indices. They thereby provide a benchmark for PE valuation by discounting their cash flows with CAPM-type stochastic discount factors (SDF). The consensus that emerges from these metrics is that buyout investments outperform by exhibiting positive alpha, even after fees.

We propose a credit market equivalent (CME) valuation of levered LBO deals. The CME valuation is based on two relevant tenets. First, it accounts for LBO activity's sensitivity to credit conditions. Second, it accounts for the novel fact we document that major investors in LBOs, such as endowments and pension funds, have significant exposure to credit-linked instruments, especially CLOs, private debt, and high-yield bonds. Indeed, the CME benchmark asks how much investing in LBOs improves the risk-return profile of an investor invested in public indices and, critically, a set of credit-linked instruments.

Our starting point is simply that for many companies held by PE funds we observe transaction prices and dealer quotes on bonds and loans in secondary markets. In the spirit of Merton's seminal insight that equity and debt can be viewed as claims on the same underlying asset, debt prices provide real-time market signals about private equity valuations as credit risk makes them sensitive to the same future asset values. We empirically implement this insight by estimating a stochastic discount factor that prices

portfolios of loans issued by portfolio companies of private equity funds. We use this stochastic discount factor to value private equity cash flows and thereby derive their CME valuations. We view this as the realistic benchmark for an investment manager at a pension fund or an endowment.

Intriguingly, we find no evidence of overperformance of buyout funds using CME valuations. The estimates under the CME valuation point to slight underperformance of buyout funds after accounting for exposure to credit market factors. Practically, we find that the performance of buyout funds is spanned by credit factors, and can be replicated by the investors' existing investments in public equity, and credit-linked assets. Moreover, we find that funds that raise significant leverage when credit conditions are favorable tend to underperform. Specifically, we provide evidence that funds tend to invest in companies with low exit multiples when credit is "cheap". These findings leave a rather bleak outlook for the future performance of buyout funds in the wake of rising rates. Our approach is likely useful for evaluating the performance of alternative credit-linked investments such as CLOs, or the rapidly evolving market for direct lending and private debt.