

Dr. William Charlton, Ph.D., CFA
Managing Director & Head of Global Research & Analytics, Pavilion Alternatives Group, LLC

It has become increasingly common to measure the performance of private equity fund managers against the performance of the public markets using Public Market Equivalents (PME). A PME is calculated by taking the historical cash flows from a fund manager and simulating an investment in a public market equity index. The objective of doing so is to determine a private equity fund manager's "alpha" which is the difference in return earned by the private equity fund manager and the simulated public equity investment. "Alpha" is a public equity performance measurement concept that derives from the Capital Asset Pricing Model (CAPM). In the CAPM, only systematic risk (as measured by "beta") is rewarded. If the CAPM is valid, then investors should not be compensated for taking unsystematic risk, which is the risk of an individual company that can be reduced through diversification. A public equity fund manager that exceeds the expected return predicted by the CAPM and its beta is said to be have earned positive alpha. Alpha could be interpreted as the free return earned by a public equity fund manager for a given amount of risk. In most cases, public equity fund managers are generating positive alpha through superior informational analysis. Rarely will a public equity fund manager become directly involved with the management of a public company, with the primary exception being fund managers that employ activist strategies.

The level of direct involvement in the management of a company is a major differentiation between public and private equity fund manager investment strategies. While significant variation exists as to degree, most private equity fund managers are intimately involved in the direction and operation of their portfolio companies. As a direct result of the high level of involvement, private equity fund managers have a smaller number of companies in their portfolios. For example, a prototypical buyout fund may

would have between 10 and 20 platform investments which are made over a five-year investment period. To generate returns, private equity fund managers are directly involved in changing their portfolio companies in any number of value-generating dimensions (e.g. pricing strategy, product mix, materials sourcing, mergers and acquisitions etc.). A significant proportion of the due diligence the team at Pavilion Alternatives Group performs when evaluating a fund manager is understanding what changes a fund manager has made in its portfolio companies and how those changes affect exit valuation. Thus, we are interested in a private equity fund manager's "delta" -- the Greek symbol used in mathematics to denote change.

Alpha and delta are fundamentally distinct concepts. The difference derives from the generally uninvolved public equity fund manager strategies (alpha) and the very directly involved private equity fund manager strategies (delta). Private equity portfolios are generally smaller and, as a result, a single loss can have a profound impact on the portfolio return. This makes it very important for private equity fund managers to analyze all available information on a company just as it is for public equity managers. However, it is also critical for private equity fund managers to be able to develop a realistic plan for generating value over the investment holding period which usually lasts several years. Consequently, to apply the "alpha" concept to private equity fund managers ignores the key aspect of how private equity fund managers produce returns - by inducing valuegenerating change in their portfolio companies.

The "E" in the PME concept is also problematic. The definition of equivalent is: "a person or thing that is equal to or corresponds with another in value, amount, function, meaning, etc." The PME can be calculated using various public market indices, with the S&P 500 a common choice.

Pavilion Alternatives Group™ 1

However, the companies in the portfolio of a \$400 million U.S. buyout fund are highly unlikely to be "equivalent" to 500 of the largest companies in the world across any number of dimensions. It is likely that the buyout fund portfolio companies have higher levels of customer concentration, fewer product lines, and a smaller share of their respective markets. Thus, in general, small private companies can be significantly riskier than the benchmark companies. Even for very large buyout funds, there are differences since, by definition, companies in the S&P 500 are publicly quoted which can have significant impact on how the companies are run. Perhaps the largest difference between a private equity portfolio and the S&P 500 is in the risk dimension. Private equity portfolios tend to be relatively small in size and private equity fund managers are not attempting to diversify away unsystematic risk, rather they are attempting to generate returns through company specific risk.

The mechanics of the PME calculation and the lack of true market valuations for private equity investments give rise to two additional issues. Firstly, private equity investments are held close to cost for a period of time after the initial investment as it usually takes some time for private equity fund managers to generate the change which leads to increased value. If public equity markets are flat during that initial period, the alpha generated by the PME for a private equity investment will not be negative. However, if public markets are robust, the alpha could be strongly negative. Interestingly, the perception of the performance of two private equity fund managers making similar investments but at different times could vary dramatically solely based on the performance of public markets over the respective time period. While the managers may be generating equivalent value in their portfolio companies, the perception of the

managers' performance will be dependent on public market conditions. A second and related issue on the mechanics of PME's, is that private equity fund managers invest capital over several years. As a result, a fund's overall PME is diluted as additional capital is deployed in new investments and the valuation of those is held close to cost. On a PME basis, a manager who has been aggressive in deploying capital during a quiescent public equity market would be viewed as superior to a manager that executed a more conservative investment program during a public market rally. Which manager is actually superior would ultimately be determined by the manager's ability to create value and sell its companies at a profit.

In summary, PME calculations do provide valuable insight as to the alternative uses of the capital that is allocated to private equity. For the larger buyout funds, the PME may approach the definition of "equivalency." However, when interpreting PME results it is important to be mindful of the issues discussed above. As the investments made by most private equity fund managers are not truly "equivalent" to public market indices, it is probably more appropriate to view the PME as a measure of opportunity cost rather than performance.

Inquiries or comments concerning this article may be addressed to:



Dr. William Charlton, Ph.D., CFA
Managing Director & Head of Global Research &
Analytics
Pavilion Alternatives Group, LLC
wcharlton@pavilioncorp.com

This material is prepared by Pavilion Alternatives Group™ ("Pavilion") for circulation to institutional and sophisticated investors only and without regard to any individual's circumstances. Though every effort has been made to ensure that the information contained in this publication was obtained from reliable sources, Pavilion makes no warranty as to its accuracy, we have not independently verified the content nor do we make any representation or warranty, express or implied, in respect thereof. All opinions presented in this publication are intended for informational purposes and do not constitute investment advice and should not be taken as such. Any returns discussed represent past performance and are not necessarily representative of future returns, which will vary. Past performance is no guarantee of future returns. Investing in securities products involves risk, including possible loss of principal as the value of investments fluctuates. The opinions, information, estimates and projections, and any other material presented in this document are provided as of this date and are subject to change without notice. We accept no liability for any errors or omissions which may be contained herein and accept no liability whatsoever for any loss arising from any use of or reliance on this report or its contents. This publication should not be distributed, published or reproduced, in whole or in part, nor should its contents be disclosed by the recipient to any other person.

Pavilion Alternatives Group is a trademark of Pavilion Financial Corporation used under license by Pavilion Alternatives Group, LLC in the U.S., Pavilion Alternatives Group Limited in the UK, Pavilion Alternatives Group (Singapore) Pte. Ltd. in Singapore, and Pavilion Advisory Group Ltd. in Canada. Pavilion Advisory Group is a registered trademark of Pavilion Financial Corporation used under license by Pavilion Advisory Group Ltd. in Canada and Pavilion Advisory Group Inc. in the United States. © 2017 Pavilion Financial Corporation. All rights reserved.