

Second Quarter 2009

Inflation/Deflation – How Does it Affect Leveraged Buyout (LBO) Returns?

Background

In many discussions with our investors and potential investors, a common topic of conversation has emerged - inflation. We have been asked such questions as,

- *“Should I be investing in LBO funds right now, if I think the economy will experience significant inflation in the near/intermediate-term?”*
- *“Since we are currently in a deflationary environment, should I be concerned about my existing LBO fund investments?”*
- *“We have all seen the data suggesting that LBO returns are highest for funds making investments at the tail-end of recessions, but what about the impact from future inflation?”*

As you are aware, drastic measures have been undertaken by the U.S. government in an attempt to counter the credit crisis, entice American consumers to spend again and restart the U.S. economic engine. The Federal Reserve has launched numerous efforts, totaling over \$1 trillion, in an effort to drive down interest rates and revive lending. Hundreds of billions of dollars are earmarked by the Fed to purchase long-term government bonds through the summer of 2009 and increase purchases of mortgage securities throughout 2009 and into 2010. In addition, the Fed remains persistent in its efforts to keep interest rates low by continuing to hold the federal funds rate at virtually 0%. Furthermore, Congress passed the \$787 billion stimulus plan in February (the American Recovery and Reinvestment Act of 2009), which includes federal tax relief, expansion of unemployment benefits and provisions for education, health care, infrastructure and energy.

There have been signs that these efforts are beginning to have an effect. For example, construction activity has increased recently (albeit off of record-low levels), consumer spending appears to have stabilized after massive declines towards the end of 2008, the rate of layoffs is slowing and some credit has seeped back into the system. To date, inflation has remained “in check” as evidenced by a modest rise in the consumer price index (CPI) in May 2009 of 0.1% (less than the 0.3% forecasted by analysts) preceded by an unchanged CPI in April and 0.1% decline in March. Likewise, the producer price index (PPI) rose only 0.2% in May. The May PPI increase was significantly lower than analysts' expectations and was almost solely the result of increased energy prices. In addition, orders placed with factories for costly goods increased 1.8% in May, following a similar 1.8% increase in April.

Despite the low inflationary environment (as measured by year-over-year CPI), however, investors perceive inflation to be a real threat. The rationale for this sentiment, of course, is concern about the rapidly growing money supply and dramatically increasing federal deficits. What will happen when the economy reaches a point of recovery and the abundance of liquidity in the system starts to be utilized?

We will not attempt to answer that question in a broad sense—we are not economists. Unlike economists, our careers are not safe if we are only correct half of the time. What we CAN answer, however, is: how inflation has affected LBO returns (on an IRR basis) in the past. This historical context may provide insight into the probable impact of inflation on LBO returns in the future.

No Correlation

In the graphs below, we have illustrated several statistical analyses utilizing data since 1986 which suggest there is NO CORRELATION between inflation and returns for LBO funds. In the first set of graphs, we have displayed the top quartile and median LBO returns by vintage year plotted against the average inflation rate during that vintage year. As you see, the regression line suggests there is no correlation.

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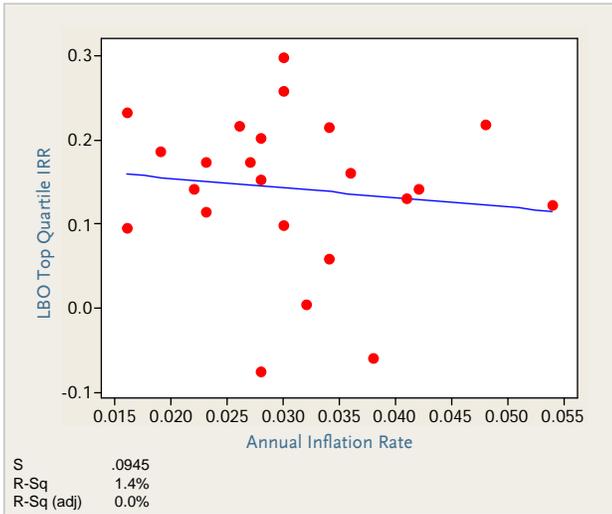
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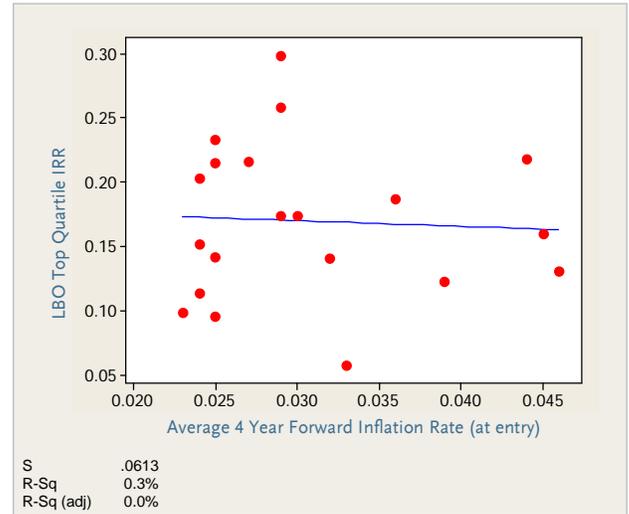
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LBO Top Quartile Vs. Annual Inflation Rate



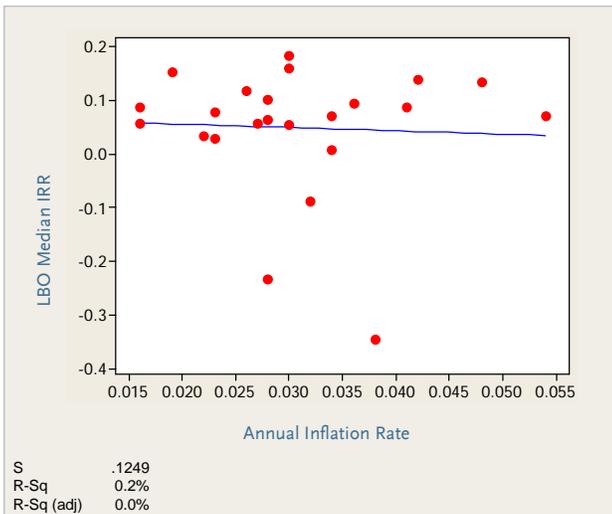
Source: Piper Jaffray Private Capital, LLC

LBO Top Quartile Vs. Average 4 Year Forward Inflation (at entry)



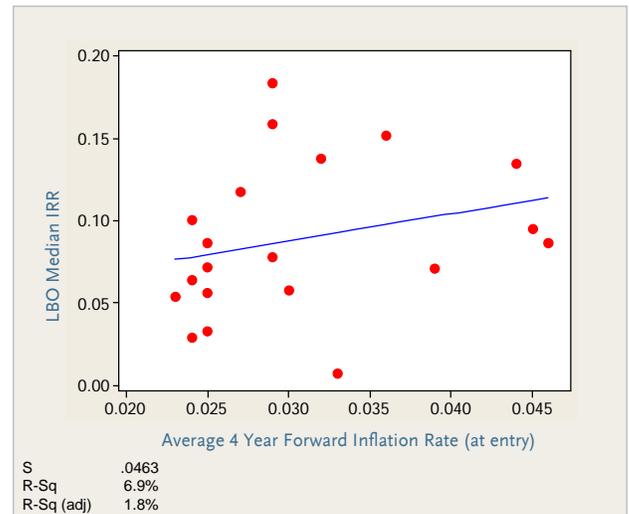
Source: Piper Jaffray Private Capital, LLC

LBO Median IRR Vs. Annual Inflation Rate



Source: Piper Jaffray Private Capital, LLC

LBO Median IRR Vs. Average 4 Year Forward Inflation Rate (at entry)

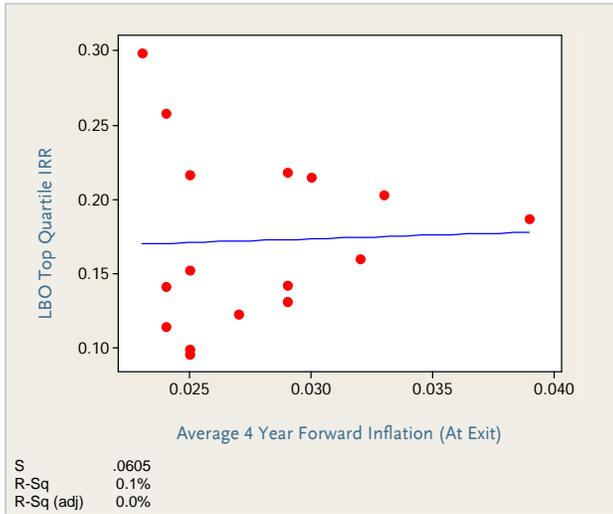


Source: Piper Jaffray Private Capital, LLC

Unfortunately, the charts above may have little meaning because LBO returns in each vintage year represent the accumulation of returns from investments made over a period of a few years (“Investment Period”); therefore, it would be prudent to evaluate the inflationary environment over the course of the entire Investment Period. For purposes of our analysis, we assumed the Investment Period was four years for each vintage (i.e. we assumed that funds of a given vintage made investments over the course of that year and the following three years). As an example, the Investment Period for the 1995 vintage would consist of 1995 through 1998. For simplicity (and due to a lack of rationale to suggest otherwise), we used a simple average of the inflation rates during the Investment Period in our analysis (i.e. equally weighted) to “capture” the inflationary environment during the Investment Period. One can see from the charts below that top quartile and median LBO returns displayed no correlation to the average inflation rate during the Investment Period.

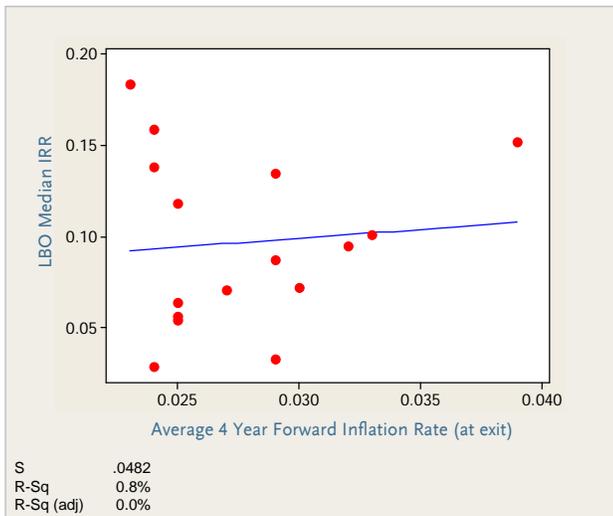
Likewise, we analyzed whether or not LBO returns were correlated with the inflation rate at the time an investment/fund is exited/realized (“Exit Period”). To complete this analysis, we assumed the Exit Period commenced in the year immediately following the Investment Period and concluded after four years. For example, the Investment Period for the 1995 vintage would consist of 1995 through 1998 (as stated in the prior analysis), while the Exit Period would consist of 1999 through 2002. Consistent with the analysis above, we used a simple average of the inflation rates over the Exit Period (i.e. equally weighted) to “capture” the inflationary environment during the Exit Period. Again, we found no correlation between LBO returns and the average rate of inflation during the Exit Period.

LBO Top Quartile Vs. Average 4 Year Forward Inflation (at exit)



Source: Piper Jaffray Private Capital, LLC

LBO Median IRR Vs. Average 4 Year Forward Inflation Rate (at exit)

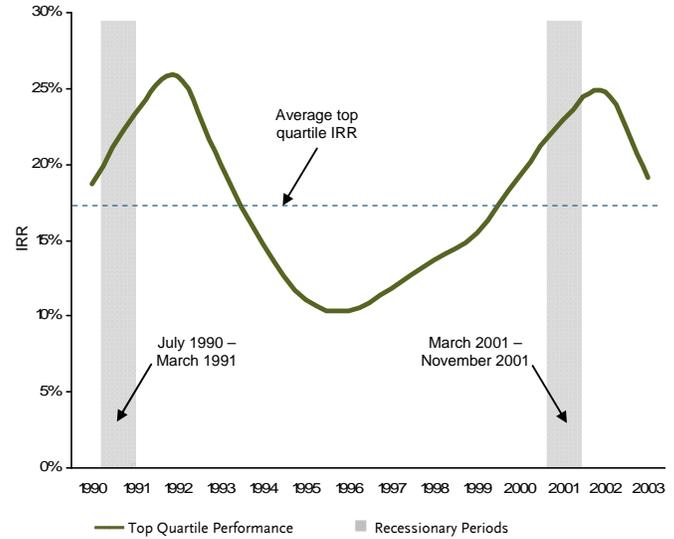


Source: Piper Jaffray Private Capital, LLC

In conclusion, all of us have many issues to be concerned about, including inflation; however, inflation appears to have little, if anything, to do with LBO returns. In our efforts to statistically analyze causal effects on LBO returns, we have analyzed an assortment of variables (in addition to inflation). We will provide further insights gained from these analyses in subsequent correspondences.

To alleviate the suspense, however, our conclusion remains unchanged about the attractiveness of the current environment for making new private equity investments (with the exception of mega buyouts). Today feels remarkably similar to the early 1990s and 2000s when LBO funds started in these years produced outstanding returns (see LBO Performance chart).

LBO Performance (1990 - 2003)



Recessionary Periods: July 1990 to March 1991 and March 2001 to November 2001

Note: Top Quartile Performance represents the three-year moving average of top quartile buyout returns (e.g. the return for 1990 is the average of the top quartile returns for 1990, 1991 and 1992) and is intended to simulate the performance of a fund of LBO funds. We typically target three years of vintage diversification in each of our fund of funds. Benchmark data as measured by Thompson Venture Economics as of 12/31/07.

Private Equity Partners IV Fundraising Update

Our LBO, Venture and CleanTech fund of funds offerings will remain open to investors through the end of 2009, as well as our late-stage CleanTech Co-investment fund. Investors may allocate their commitment to any combination of these four components. Please let us know if you have an interest in considering an investment in any of our funds and how we can help you in your due diligence processes. For additional information about PEP IV, please contact Gretchen Postula at 612 303-6331 or gretchen.s.postula@pjc.com.

Upcoming Events

We are regular speakers and attendees at key industry conferences. We hope to see you at these upcoming conferences:

- **September 15-17:** The Red Herring Limited event, Boston www.redherring.com
- **October 21-22:** Family Office Exchange Fall Forum, Chicago <http://www.foexchange.com/public/fox/calendar/FallForum.asp>

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