Debt Financing and Financial Stability

in Norwegian Private Equity

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In the midst of the global financial crisis, many large international private equity houses have reported significant write-downs for 2008. As global demand for both manufactured products and services drops, earnings have fallen in many companies, also those owned by private equity (PE) funds. Many late stage private equity investments are financed partially by debt (so-called leveraged buyouts or LBOs). Hence it is possible to understand the worries of politicians and investors regarding the future for some PE portfolio companies.

Debt financing in Norwegian PE is moderate

In the US and UK particularly, many LBOs have been financed by raising the firm's debt ratio to levels of more than 80 percent. If the cash flow is sufficiently strong, this form of deal financing is highly profitable. Yet, when earnings are reduced, the downside to LBOs becomes clear as firms become unable to service the high debt ratio. Is there reason to be equally worried about the future of Norwegian PE? We claim that there is less reason for concern. In this article, we show that the leverage rate in Norwegian PE is relatively low. As expected, it is slightly higher than in comparable companies that are not PE-owned. However, when considering the fact that many late stage funds in Norway still have capital available to support their investments, we believe there is limited reason to worry more about PE-owned companies than other companies.

Why debt financing is a good idea after all

Before looking into the debt figures, there is a need to highlight the overall importance of debt financing in the economy. Firms with a potential for growth most often need access to credit in order to invest and expand. One would consequently expect that firms in the expansion phase that are granted additional loans tend to grow faster than others. Similarly, mature firms with a potential for restructuring also often need debt financing in order to improve efficiency and revitalize. Also here, one would expect stronger growth among those who receive additional loans.

Debt financing and growth go hand in hand

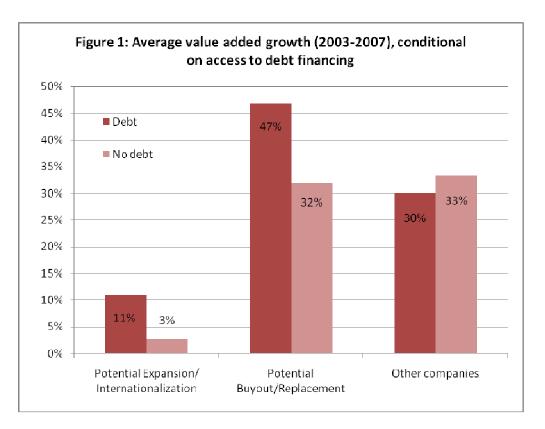
In Figure 1 we present value added growth in Norwegian companies over the period 2003-2007. We compare firms with and without additional debt financing over the period 2003-2005. Based on specific selection criteria, companies are divided into three groups: potential expansion cases¹, potential buyout cases² and other companies. The selection criteria mirror the selection behavior of Norwegian expansion and buyout funds over the last decade (we identify 8000 potential expansion and buyout cases).³ Figure 1 shows that both potential expansion and buyout companies that

³ This discussion does not focus on potential venture companies. Below, however, we study this segment. Criteria for **potential venture**: 3-10 year-old companies with EUR 0.2- 4 mill in turnover. Minimum 20% CAGR for turnover the last 3 years. Deteriorating operating results over the last 3 years (still climbing down the J-curve).

¹ Criteria for p**otential expansion**: 5-20 years of age, have EUR 1.25-25 mill. in turnover per year, annual turnover growth of minimum 20% during the period 1998-2003, and a positive trend in earnings.

² Criteria for **potential buyout**: more than eight years old, more than EUR 0.6 mill. in value added per year (earnings plus wage costs), less than EUR 250 mill. in turnover, positive earnings and an EBITDA-margin lower than the industry median.

received debt financing during 2003-2005 did better in terms of value added growth than those without. For the rest of the companies in the economy, average performance is almost the same regardless of debt financing or not.⁴ This is an indication that debt financing has a positive effect on growth among firms that share the characteristics of expansion and buyout portfolio companies in private equity funds.



Leverage in Norwegian PE-backed companies

We have conducted a study of the long-term debt structure among 236 Norwegian portfolio companies owned by private equity funds in Norway. We cover the buyout, expansion and venture segments. Companies in seed fund portfolios are excluded from the survey, since debt financing has marginal relevance for these companies.

⁴ We find the qualitative similar results for growth in turnover; however. for turnover additional debt also has a clear positive effect for "other companies"

Searching high and low for debt in PE portfolios

Mapping debt in private equity portfolio companies is a complex task. Some funds place their leverage directly in the portfolio company. Some place debt in a holding company. Finally, some establish an investment company where they place all liabilities. So where should we look for debt? Moreover, they way accounting figures are collected makes the task even more complicated. For instance, there are two accounting formats: normal accounts and consolidated accounts for a multi-firm organization (corporation). We have applied the following strategy:

The MENON firm and ownership database allows us to identify the owner of portfolio companies:

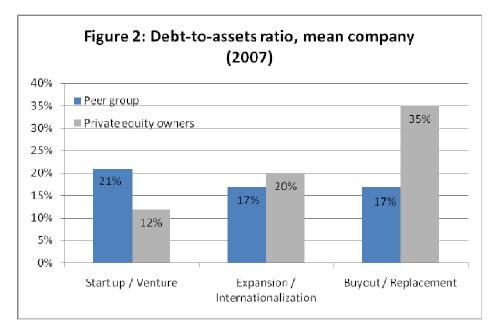
- If the majority owner is a corporation (not a PE fund or a large corporate venture player), we look at debt in the consolidated accounts of the majority owner.
- If it is majority owned by a PE fund or a large corporate venture player, we look at the portfolio company accounts
 - If the portfolio company is a multi-firm organization itself, we look at its consolidated accounts
 - If not, we look at its normal accounts

Several funds chose to organize investments as low priority loans rather than equity. This is a tendency we have seen during the last few years, yet we expect that the strategy has limited impact on our estimated average and median figures.

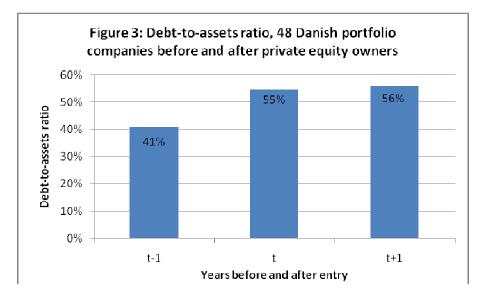
Notice that one cannot compare leverage among PE portfolio companies with any other company in the economy. It is like comparing apples and oranges. As we already have established control groups of potential venture, expansion and buyout firms outside PE, it is natural to compare debt levels to these firms (see footnote 3 for definition).

Buyout debt-to-assets ratio in Norway below international levels

Figure 2 contains mean debt-to-assets ratio in the segments start-up/venture, expansion/internationalization and buyout/replacement. The light bar to the right represents private equity-owned companies, while the darker bar to the left represents figures for the control group firms. As expected, portfolio companies in buyout funds apply more debt than comparable companies outside PE-funds. However, a debt-to-assets ratio of 35 percent is low in an international context, where less than 50 percent is considered to be conservative in LBOs. If we look at the median company instead of the average figures, we find the same pattern. In fact, two thirds of all Norwegian buyout portfolio companies have a debt-to-assets ratio of less than 50 percent.



In a recent Danish study (Private equity in Denmark, CEBR 2008), the debt-to-assets ratio in Danish buyout companies was found to be significantly higher than what we find in this study. The Danish study also supports the notion that private equity funds use leverage as an instrument to increase returns, as the debt-to-assets ratio increased from 41 to 55 percent the year that the fund entered as an owner (see figure 3).



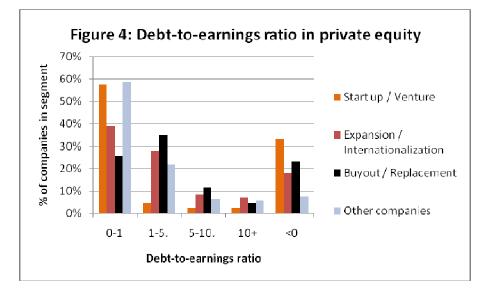
Debt is less important in start-up/venture and expansion

In the expansion segment the debt ratio is also higher than in other similar companies (see figure 2). Yet, here the degree of leverage is below the rates observed in buyout. As argued above, the tendency to apply a higher degree of leverage among PE-owned firms may just as well be a result of a stronger focus on financing faster growth. In the start-up/venture segment, the debt ratio is actually lower among PE-backed firms than among others. The result tells us that debt is not at all an

important tool when it comes to financing early stage ventures. The reason why the figures are lower among the PE-backed firms probably relates to the fact that the control group includes firms operating in industries where venture funds are not present and where debt financing is more common (e.g. highly capital- intensive as well as low-skill industries).

Some worries when it comes to coping with debt over time

The debt-to-assets ratio may not say much about the firm's ability to cope with interests and principal payments. A closer look at the debt-to-earnings ratio says more about this issue. In Figure 4 we present long-term debt relative to earnings (EBITDA). If the ratio is high or negative, the ability to handle debt is weak and the risk of default rises. Once again, we have looked at the segments buyout/replacement, expansion/internationalization and start-up/venture in addition to all other firms.



In the expansion/internationalization and start-up/venture segments, the largest group of companies is found to have a debt-to-earnings ratio of 0-1. This is similar to the majority of companies in the rest of the economy. In fact for most of the start-up/venture companies the ratio is zero as more than half of them do not use debt financing. One third of the start-up/venture portfolio companies have a negative debt-to-earnings ratio. This is not surprising, nor a reason for concern as they mostly represent smaller companies in an early commercialization stage with limited debt obligations.

One fourth of the buyout/replacement companies have a debt-to-earnings ratio between 0-1. Most of these companies operated with a debt-to-earnings ratio between 1 and 5. Mature companies with a debt to earnings ratio above 10, or negative earnings, are in the risk zone. Few buyout portfolio companies report a debt-to-earnings ratio above 10, but more than 20 percent of them report a negative debt-to-earnings ratio. As EBITDA deteriorates further in 2008 and 2009, this may represent a reason for concern among PE funds and investors.

Facing the crisis: Future leverage expectations

Earlier this spring, MENON Business Economics conducted a mini-survey focusing on leverage strategy in different fund management companies. In total, 24 Norwegian management companies responded, representing a total of 361 portfolio companies, more than half of all portfolio companies in the industry.

Close to all management companies report that one or more of their portfolio companies recently have received debt financing, indicating that the credit squeeze is not affecting all companies equally hard. Yet these management companies also report that they have companies in their portfolio which are seriously struggling with credit financing.

The survey clearly identifies that management companies in Norway have reduced their future expectations regarding the level of debts and leveraging as a strategy. Ten of the management companies, including all the companies in the expansion/buyout segment, report that they have reduced their expectations on leverage rate for new investments. Companies focusing on the expansion and buyout segments expect the leverage rate to be reduced by somewhere between 20-30 percentage points. This varies, however, from case to case, depending on the company's industry affiliation and historical performance. Nevertheless, considering the already moderate debt ratios in the Norwegian PE industry, these expectations signal that highly exposed leveraging strategies will be toned down for quite some time.

To sum up: Leverage rates are moderate in the Norwegian private equity industry, but the financial distress ahead of us is challenging in light of weak earnings, as a significant number of buyout portfolio companies are running operational deficits.