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Get Ready for the Private-Equity Shakeout

Will This Be the Next Shock to the Global Economy?

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1. Introduction

Private-equity firms have enjoyed extraordinary growth and returns over the last five years, but the collapse of the world's debt markets and the deepening economic crisis have brought this boom to an abrupt end, with potentially severe consequences for private-equity firms, the companies they own (so-called portfolio companies), and the real economy.

In fact, new research from The Boston Consulting Group and the IESE Business School indicates that at least 20 percent of the 100 largest leveraged-buyout (LBO) private-equity firms—and possibly as many as 40 percent—could go out of business within two to three years.[1] More disturbingly, most private-equity firms' portfolio companies are expected to default on their debts, which are estimated at about $1 trillion.[2]

This paper addresses four questions:

- What is the root of the problem?
- How will the shakeout affect different players within the private-equity industry?
- What impact will the collapse of private-equity portfolio companies have on the wider economy?
- What can private-equity firms do now to deal with the threat of a shakeout or to capitalize on any opportunities?

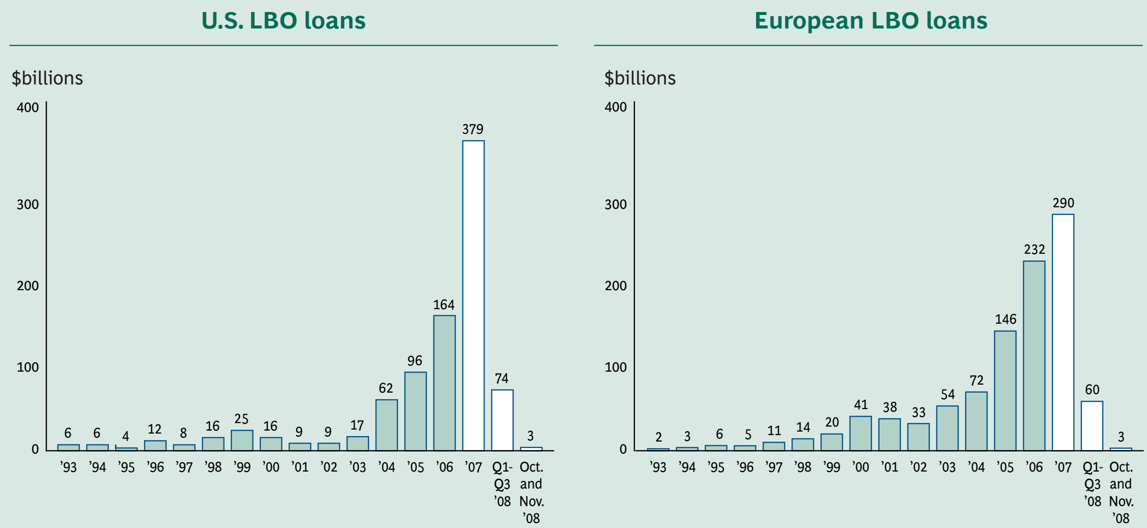
Our research is based on publicly available data for private-equity firms, portfolio companies, banks, and credit default swap (CDS) rates, as well as our own analysis of loan trading levels, spreads, and default probabilities.[3]

2. Private Equity Is in the Middle of the Perfect Storm

For decades, the world's top private-equity firms have sustained above-average returns in the long run by focusing on fundamental value creation and, in particular, operational improvements, as we demonstrated in our February 2008 report.[4] However, from 2003 through 2007, nearly all private-equity firms were able to grow exponentially thanks to an unusually favorable financial and economic climate and, in particular, four major drivers of growth: massive amounts of cheap debt, rising profitability across all industries, escalating asset prices, and the allocation of significant assets from institutional investors to private-equity funds. The recent financial and economic crisis has sent all these drivers racing rapidly in the opposite direction.

1. Throughout this paper, the phrase "private-equity firm(s)" refers exclusively to LBO private-equity firm(s).
2. Based on U.S. and European direct LBO loan-issuance data from Dealogic and based only on LBO debt raised from 2006 through 2007.
3. The publicly available sources of data are Dealogic, the Federal Reserve, mergermarket, Preqin, Standard & Poor's, Standard & Poor's Leveraged Commentary & Data (LCD), and Thomson Reuters.
4. See *The Advantage of Persistence: How the Best Private-Equity Firms "Beat the Fade,"* BCG and IESE report, February 2008.

Exhibit 1. Global LBO Debt Markets Have Contracted Sharply



Source: Dealogic, December 9, 2008.
Note: LBO = leveraged buyout.

A. The Debt Bubble Has Burst

From 2003 through 2007, annual LBO debt issuance rocketed from $71 billion to $669 billion.[5] Today the world's debt markets have virtually ground to a halt. Debt volumes in the third quarter of 2008, for example, were roughly 75 percent lower than they were in the third quarter of 2007.[6] In October and November 2008, only $6 billion was raised in LBO transactions in the United States and Europe.[7] (See Exhibit 1.) Given that the financial sector is under pressure to deleverage, this situation is unlikely to improve in the near term.

B. Company Earnings Have Dropped

Until the third quarter of 2007, most industries enjoyed strong earnings growth. For example, from 2003 through 2006, EBITDA for the S&P 500 rose 16 percent per annum on average—and many companies' business plans for the next five years were built on expectations of further earnings growth. Yet today, most industries have negative EBITDA growth. And the situation is likely to get worse. BCG concluded in its first Collateral Damage White Paper that in a worst-case scenario, sales volumes could drop by up to 20 percent and sales prices could fall by up to 10 percent in 2009.[8] This scenario would produce negative earnings for many companies unless they introduced drastic measures.

C. Multiples Have Collapsed

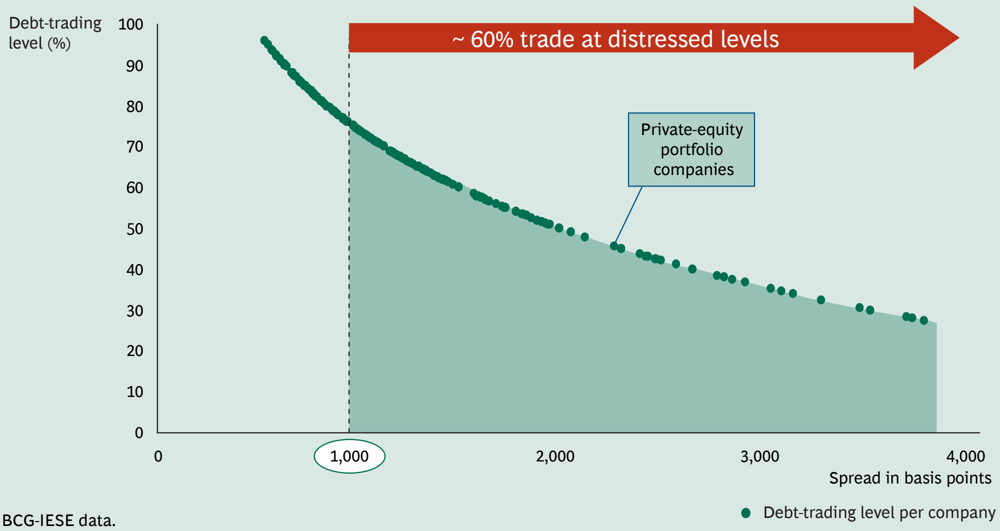
From 2003 through 2007, EBITDA multiples grew by 41 percent in the United States and 43 percent in Europe.[9] Private-equity firms were able to earn a good return from this appreciation without having to improve their portfolio companies' performance. In 2008, the 45 percent drop in stock prices has changed this situation dramatically, pushing multiples below the level of the previous three to four years.[10] Any potential sale of a portfolio company with reduced earnings expectations and lower multiples will lead to a loss.

5. Dealogic.
6. Dealogic.
7. Dealogic.
8. See *Collateral Damage, Part 1: What the Crisis in the Credit Markets Means for Everyone Else,* BCG White Paper, October 7, 2008.
9. *EBITDA multiples* are defined as enterprise value divided by EBITDA. Source: Standard & Poor's LCD.
10. MSCI Global Standard Indices.

D. Institutional Investors Are Reducing Their Private-Equity Asset Allocation

The high returns generated by private-equity firms from 2003 through 2007 attracted an increasing number of institutional investors—such as pension funds, endowments, and hedge funds—and encouraged existing investors to increase the proportion of assets they allocated to private-equity funds, providing the industry with additional fuel for growth. The California State Teachers' Retirement System (CalSTRS), for example, more than tripled its private-equity asset allocation from 2.3 percent to 7.4 percent from 1998 through 2007. Through the recent depreciation of other assets, such as bonds, equities, and real estate, many institutional investors now have higher private-equity commitments than they targeted or even approved internally. As a result, some investors are trying to get out of their commitments, sometimes at heavy discounts or by threatening defaults. These stakes have been trading at up to a 55 percent discount in the secondary market.[11] Other investors are trying to delay additional investments. The largest U.S. pension fund, California Public Employees' Retirement System (CalPERS), for example, has asked private-equity firms to reduce requests for additional capital that it had previously committed.[12]

Exhibit 2. Roughly 60 Percent of Loans Are Trading at Distressed Levels



Source: BCG-IESE data.
Note: Trading levels and spreads for 328 portfolio companies.

3. Most Private-Equity Firms' Portfolio Companies Are Expected to Default

Any debt with a credit spread in excess of 1,000 basis points is considered "distressed," with a high expectation that the company will default within the next three years.[13] Reuters Loan Pricing Corporation revealed that in 2006 less than 1 percent of LBO debt was distressed. When we analyzed the credit spreads of 328 private-equity portfolio companies in November 2008, we found that roughly 60 percent of their debt was trading at distressed levels. (See Exhibit 2.) At current trading levels, this suggests that almost 50 percent of these companies could default during the next three years.[14] (See Exhibit 3.) And with profits further deteriorating, that number could grow.

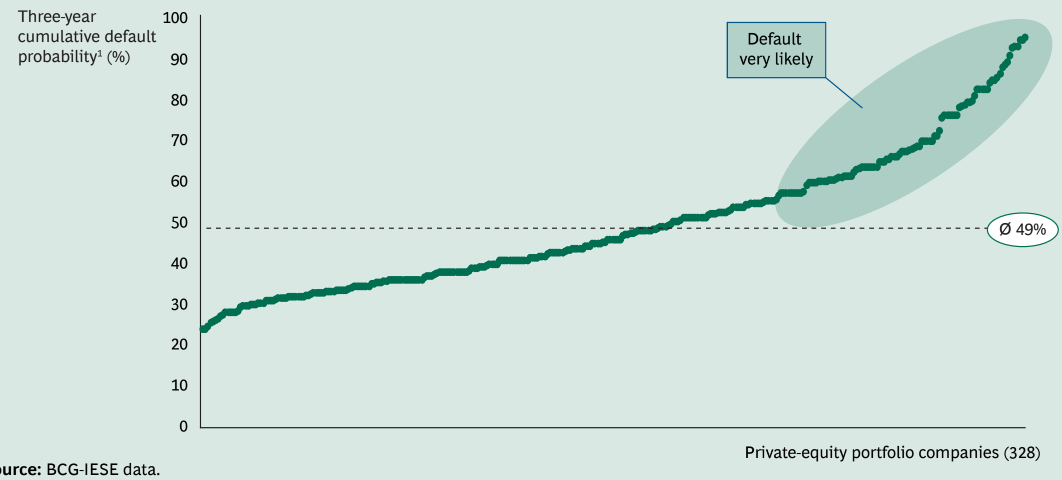
11. *Financial Times*, November 23, 2008.

12. *Wall Street Journal Europe*, November 5, 2008.

13. According to Standard & Poor's, a company with "distressed debt" is likely to default or, more specifically, breach its covenants (agreements to meet repayment and milestone performance criteria). However, a default does not necessarily lead to bankruptcy—a legal arrangement that protects debtors from their creditors. This will depend on how creditors react to the default.

14. Current trading levels of distressed debt are potentially distorted by technical effects such as low liquidity and disposal pressure.

Exhibit 3. Almost 50 Percent of Portfolio Companies Will Probably Default



Source: BCG-IESE data.
Note: Cumulative default probability for 328 portfolio companies.
[1]Defined as 1 – the product of the survival rates of the next three years, wherein the survival rate equals (1 – default probability) for the corresponding year. Default probability for each year is calculated as credit spread / (1 – recovery rate) / 10,000; the assumed recovery rate is 40 percent.

Obviously, companies that are achieving their planned earnings growth or were not financed during the debt bubble will not default and will fulfill all their covenants, which are built into deals to secure the lenders' money. Surprisingly, there are also some companies that were financed at the peak of the bubble that will not default in the next few years because their deals involve so-called covenant-lite contracts. These types of covenants have few or no performance and default conditions built into them. According to Standard & Poor's, 17.9 percent of the loan market in the United States in 2007 was covenant-lite—up from 5.7 percent at the end of 2006 and 1 percent at the end of 2005. In Europe, only 7 percent of deals were covenant-lite in 2007. Although covenant-lite deals can give businesses welcome breathing space in difficult times, they can present substantial long-term risks.

But what about the large number of portfolio companies that will default? What will be the impact of the massive debt write-offs? And what will happen to the portfolio companies that default? Will there be a tidal wave of breakups, triggering another shock wave in the real economy?

4. How Will the Defaults Affect the Global Economy?

We calculate that the potential book loss from the defaults is about $300 billion—on the basis of an estimated LBO debt of around $1 trillion for the entire market and assuming a current value of this debt for a sample of 328 private-equity portfolio companies.[15] In comparison, the losses that sparked the crisis in the U.S. housing market are now up to $700 billion at banks alone. But who will take the hit from the LBO debt write-offs?

A. Another Shock to the Banking System?

The overhang of LBO debt on banks' balance sheets might be as small as $50 billion to $80 billion because banks have already offloaded or written off most of their LBO debts.[16] These numbers are also less worrisome than they might appear, because the discounted value of the debt is transparent for any bank and there is a market for this type of debt. Indeed, the market for distressed debt is growing strongly. A large

15. Based on U.S. and European direct LBO loan-issuance data from Dealogic and based only on LBO debt raised in 2006 and 2007.

16. The S&P estimate is $50 billion, and BCG-IESE's estimate, based on banks' Q10 reports, is $80 billion.

buyer of distressed debt, for example, recently closed a substantial distressed-debt fund significantly above the fund's original target value. As a result, banks can further offload their debt—although with a strong discount—and improve their liquidity. So we don't believe that the defaults will send shock waves into the banking sector.

B. A Hidden Time Bomb?

The more disturbing question is, Who holds the remaining debt that is not sitting in the balance sheets of banks and buyers of distressed debt? It's very difficult to answer this question because this debt is not transparent. During the debt bubble, the banks that initially signed this debt syndicated the largest part of it to collateralized debt obligation (CDO) managers, hedge funds, and other institutional investors. Although the linkages of CDO managers and hedge funds themselves to the real economy are debatable, the pure size of the write-offs and the lack of transparency of the investors behind those institutions could be a source of a shock wave.

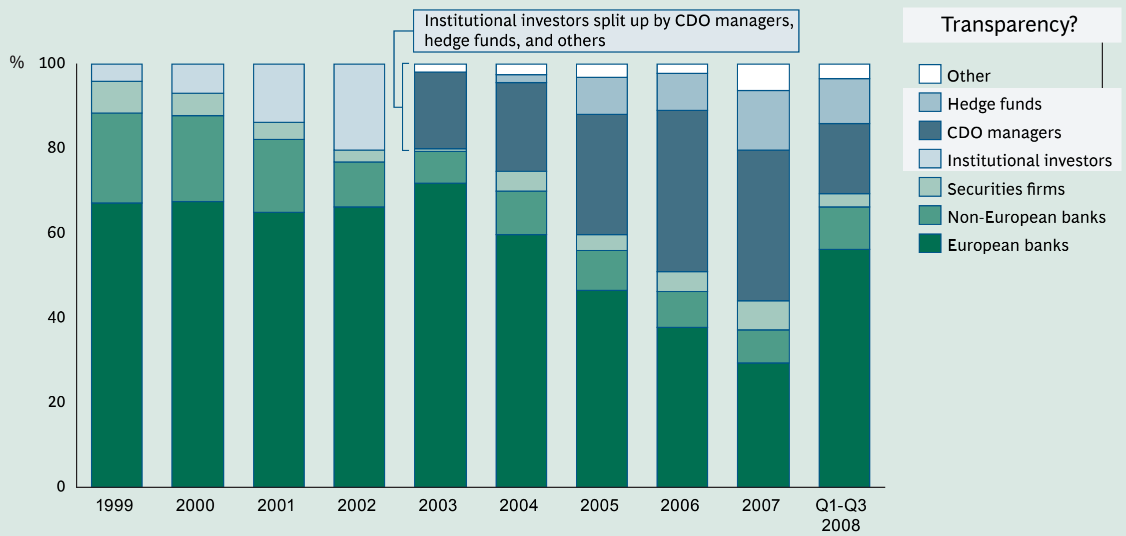
C. Massive Breakups and Layoffs?

As mentioned earlier, one in two portfolio companies are expected to default on their debt obligations (covenants) within the next three years. What will the owners of the equity and debt do when there are defaults? Again, the answer is not obvious, because there are no precedents for the current situation, given the potential number of defaults, the structure of the debt, and the difficulties faced by today's equity owners.

As we learned from the subprime crisis, the transparency of the assets, market values, and ownership structures plays an important role in determining probable outcomes. On the plus side, the equity ownership of portfolio companies is transparent. In most cases, there is only one private-equity firm investing in each company. Only 21 percent of European LBO deals in 2007 involved two or more private-equity funds. This figure rose to 30 percent in the first three quarters of 2008.

The debt structure, however, is more complicated. From 2005 through 2007, the banks' share of European private-equity debt fell to less than 50 percent as hedge funds, CDO managers, and security firms entered the market. (See Exhibit 4.) Also, the banks have syndicated most of their debt to other institutions, as mentioned earlier. As a result, it is not clear, in most cases, who owns the debt.

Exhibit 4. More Institutional Investors Have Entered the European LBO Debt Market, Adding Complexity



Sources: Standard & Poor's data on European leverage loan market; BCG-IESE analysis.
Note: CDO = collateralized debt obligation.

Why is this complexity relevant? Because different stakeholders in multiparty arrangements might not be able to agree on how to deal with a healthy yet overleveraged company when it defaults, leading to the breakup of the business. Although this wouldn't benefit the equity and debt holders, it could be in the short-term interests of some parties.

In most other cases, there will be two broad scenarios. First, the equity holder—the private-equity firm or, more accurately, the fund that the private-equity firm is advising—will continue to run the portfolio company, either by injecting additional equity or by being mandated to act as the owner by the debt holders' committee. Alternatively, the owner of the debt will take over and run the company. Whether the equity holder or the debt holder operates the business, neither party has any interest in breaking up the company, unless the business has a higher liquidation value than a going-concern value. Significant restructuring is already evident at most portfolio companies. We believe this is a necessary reaction to the economic crisis but one that will lead to massive cost cutting and many difficult layoffs.

In short, we do not think that the large number of defaults at portfolio companies will trigger a real-economy shock wave. Moreover, we are confident that these companies—even though they are defaulting—have the same chances of survival as companies not owned by private-equity firms.

5. A Shakeout of Private-Equity Firms Is Inevitable

The biggest impact of the perfect storm will be on the private-equity firms themselves. We estimate that around 20 to 40 percent of these firms will disappear; on the other hand, at least 30 percent will survive. The fate of the remaining firms will hang in the balance.[17]

The timing of the next fundraising round and the private-equity firms' historical performance will drive this shakeout. On the basis of an analysis of 87 private-equity firms, including 79 percent of all private-equity LBO funds raised over the last ten years,[18] we found that the shakeout will affect individual firms in very different ways, depending on the interplay of four main factors: the timing of the firm's fundraising needs, its long-term performance, the timing of its recent divestitures and acquisitions, and its exposure to default-prone industries.

- **Timing of Fundraising Needs.** Any firm requiring additional funding in the near term is likely to face difficulties. As Exhibit 5 illustrates, the industry as a whole appears to have sufficient surplus funds, or *dry powder*. The median of dry powder as a proportion of total funds raised over the last five years is 56 percent. With significantly reduced investment levels, this dry powder could last for more than five years on average. However, there are big differences in the proportion of dry powder that individual private-equity firms have, ranging from 100 percent to 0 percent. Firms at the bottom end of the spectrum will need to raise funds in the next two to three years, but they will get additional funding only if they have a very strong historical performance (see below) and investors that are liquid and loyal.

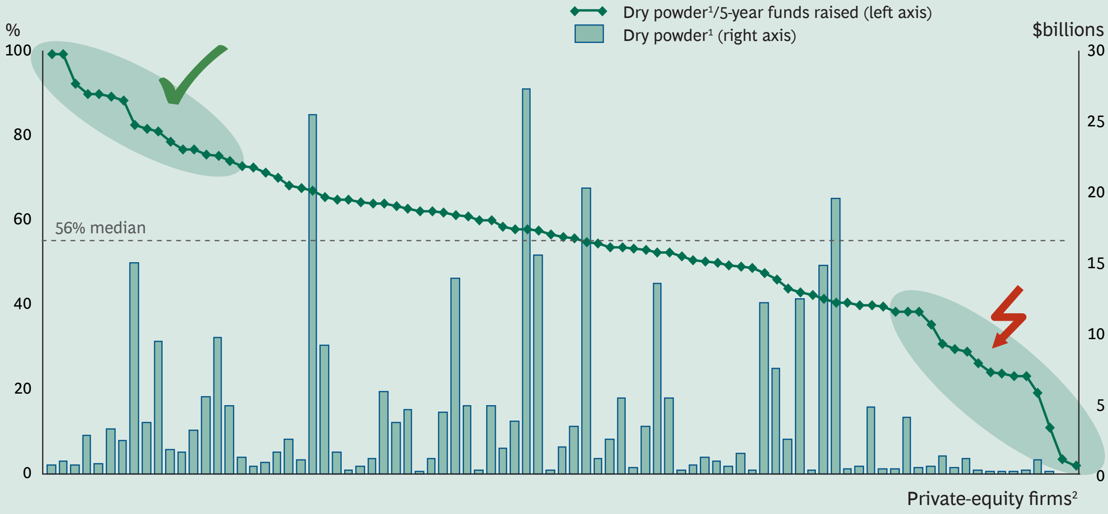
- **Long-Term Performance.** Investors are likely to favor firms that have produced top-quartile, long-term performance. As previous research has suggested, top-quartile private-equity firms not only generate twice the returns of mutual funds and publicly listed companies, they also sustain above-average returns in the long run.[19] More remarkably, their returns barely fade at all, unlike other asset classes. Third- and fourth-quartile performers produce much weaker results. In the recent past, when nearly all funds did well, investors were willing to give lower-quartile players a chance, but they are unlikely to do so in the future.

17. Some private-equity firms are diversified, with infrastructure funds, real estate funds, distressed-debt funds, and financial advisory services. These firms will be less exposed to the shakeout.

18. Based on data from Preqin.

19. See *The Advantage of Persistence: How the Best Private-Equity Firms "Beat the Fade,"* BCG and IESE report, February 2008.

Exhibit 5. Fundraising Needs Vary Strongly Among Private-Equity Players



Sources: Preqin; BCG-IESE analysis.
[1]*Dry powder* is the capital committed by investors into a private-equity fund minus the capital invested by the firm managing the fund.
[2]Sample of 87 private-equity firms.

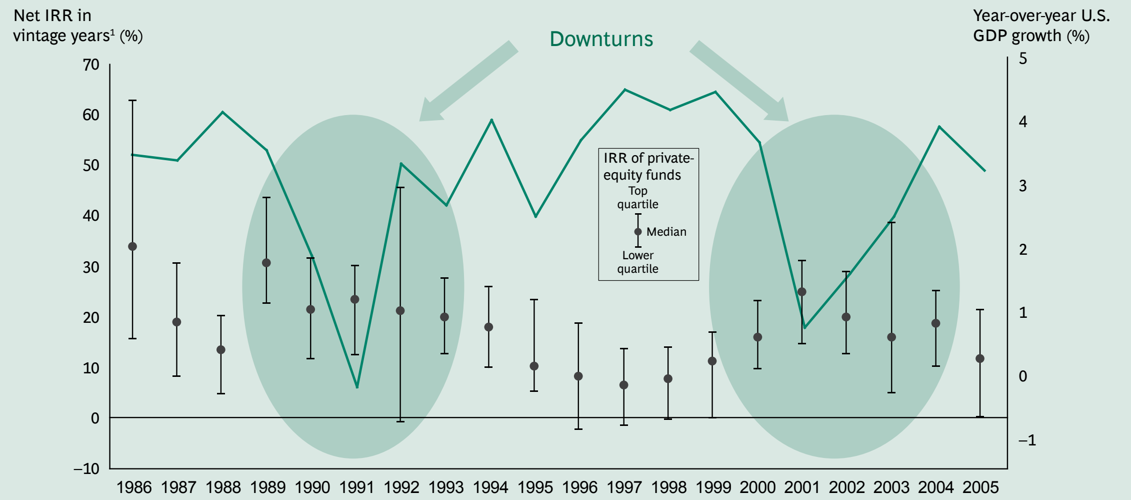
- **Timing of Recent Divestitures and Acquisitions.** The run-up to the financial and economic crisis, when multiples were high, was a good time to sell and a poor time to buy, given the subsequent collapse in multiples. Firms that cashed in before the crisis, selling more than they bought, will deliver positive returns, which is rare in any asset class today. Again, the differences among all private-equity firms are very big. Some of the firms we analyzed divested five times more than they invested during the debt bubble. Others invested two to three times more than they divested. Regardless of the portfolio companies' performance, the impact from the change in multiples—positive as well as negative—will dominate the effect on the overall return of the private-equity firm.

- **Exposure to Default-Prone Industries.** Private-equity firms' performance will be heavily influenced by whether their portfolio companies are in relatively recession-proof industries such as the European utilities sector, which has one of the lowest default insurance premiums (measured by industry credit default swaps), or in recession-hit sectors such as the U.S. automotive industry. We found a difference by a factor of 7 when we applied industry CDS values to all the respective portfolio companies of the private-equity firms analyzed.

Approximately 20 percent of private-equity firms score low on all four dimensions, and this proportion could rise as high as 40 percent if institutional investors significantly reduce their private-equity asset allocations. These private-equity firms will sell their remaining portfolio companies and dissolve their teams. We do not expect this to have any effect on the larger economy.

At the opposite end of the shakeout spectrum, 30 percent of private-equity firms score high on all four dimensions. These "winners" do not need funds in the next few years, they divested more than they bought before the crisis, they have historically produced first- or second-quartile returns, and their portfolios are relatively unexposed to cyclical industries. We forecast that these firms will be the first to receive additional equity from institutional investors. They will also be in a strong position to capitalize on today's low asset prices.

Exhibit 6. The Best Deals Are Done in Downturns



Sources: Preqin; the Economist Intelligence Unit.
Note: IRR = internal rate of return.
[1]Buyout funds with a focus on the U.S. market.

6. What Can Private-Equity Firms Do Now?

There are three main steps that private-equity firms should take:

First, they should prepare all their portfolio companies for a long and deep recession, focusing on operational improvements. As the top-performing private-equity firms have shown, operational value creation holds the key to success. This will be the most critical differentiator in today's recession, especially for the 50 percent of private-equity firms that are hovering between survival and extinction.

Second, private-equity firms should look for opportunities to take stakes in the troubled portfolio companies of other private-equity firms as they come onto the market at a significant discount. Since the debt holders will be in the driver's seat, this could be done either by buying the debt or by teaming up with distressed-debt funds and offering the capabilities to run the company.

Finally, the clear winners in the shakeout—the players with substantial dry powder—should consider offering equity in the wider corporate arena. With $450 billion of dry powder in total, the private-equity industry is one of the few groups with the resources to help here, along with governments and sovereign wealth funds.[20]

The private-equity model is here to stay, but the shakeout will significantly change the shape of the industry. Pure debt and multiple players, for example, will disappear. It is also likely that the winners will consolidate the market, lay the foundations for superior long-term returns by investing in cheap assets during the downturn, and emerge with an even greater focus on operational value creation. Although there will be defaults, they will not lead to a massive wave of portfolio company breakups or send another shock wave through the banking sector. The losses from the LBO debt at other institutions, however, are a cause for concern.

More immediately, the winners of the shakeout should focus on seizing opportunities. The private-equity industry might be in the middle of a perfect storm, but, as Exhibit 6 illustrates, downturns are perfect moments to do deals.

20. Preqin.

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