The Role of the Private Equity Sector Promoting Economic Recovery

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March 2009

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I. INTRODUCTION

In the current financial market crisis and precipitous economic decline, the question arises of what role the private equity sector can play in addressing the attendant economic meltdown. The private equity sector has played no role in the profound problems and dysfunctions that produced the current capital markets crisis: The leverage of the companies in which it invests has averaged 2.2 to 1, compared to up to 30 to 1 in the institutions whose failures triggered the crisis; the sector's dimensions are too modest to trigger systemic effects, with the total value of all private equity holdings equivalent to less than 5 percent of corporate stocks.[2] Further, its investments involve individual companies across every sector of the economy rather than volatile financial instruments, and its terms of investment limit its exposure to the unanticipated developments now gripping financial markets.[3] For thirty years preceding this crisis, the private equity sector has achieved notable success in attracting investment and securing strong returns. Moreover, this success generally reflects a strong record of providing services highly-valued by the market, and many of the services could prove very useful in promoting an eventual economic recovery, including its success in identifying firms that, with changes, could achieve higher profits and providing those firms with new capital, advice and expertise, new management, internal reorganization, and strategic acquisitions or sales that increase these firms' sales and employment.

While this record has unfolded over a period of generally strong growth for the American economy, including the recent period of 2003 to 2007, the companies held by private equity firms have generally outperformed averages for their industries. The recent period provided particularly favorable conditions for private equity, including the availability of low-cost financing and rising profitability in most industries. These conditions are now decisively different. The financial crisis and deep recession have sharply reduced the availability of financing and most sectors face losses or sharply lower profits. One result is that the value of new global private equity investments fell precipitously last year, from $765 billion in 2007 to $234 billion in 2008.[4]

Despite these diminished dimensions and prospects, our analysis suggests that private equity can play a valuable role during recessions and early recoveries. This role arises from the core activities which produced strong returns during the recent period of low-cost financing and healthy overall growth: As the recession increases strains on many firms and reveals areas of weakness and under-performance, private equity expertise in focusing investments and organizational and strategic changes where they can produce the most positive results can prevent some firms from falling into bankruptcy and help turn around other companies which otherwise might languish through these perilous times.

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1 This study was supported in part by the Private Equity Council. The analysis and views are solely those of the author. The author notes with appreciation the assistance of John Barrett and Dr. Nam D Pham.

2 Shapiro, Robert J., and Nam D. Pham. "The Role of Private Equity in U.S. Capital Markets." Sonecon, October 2008, www.sonecon.com/docs/studies/RoleofPEinUSCapitalMarkets-FINAL.pdf. .

3 The diversification of these portfolios across sectors also insulates private equity funds, and their investors and lenders, from "correlated defaults" when serious problems affect an entire industry or region.

4 Arnold, Martin, "Buy-out bosses see halcyon days fade away," *Financial Times*, January 2, 2009; http://www.ft.com/cms/s/0/eb460fc2-d8f8-11dd-ab5f-000077b07658,dwp_uuid=e8477cc4-c820-11db-b0dc-000b5df10621.html.

- In previous business cycles, the number of private equity acquisitions increased during both the recession and the first year of recovery, although the average size of these acquisitions contracted.
- While total private equity investment declines during recessions, these investments have grown very strongly during the first year of recovery, compared to continued declines or only very modest gains in total business investment across the economy.
- While data on job creation by private equity-held firms are not available for most recessions, employment by those firms has grown faster than overall employment across business cycles; and following the last recession, job creation by private equity-held companies appears to have grown nearly 3 percent, while employment across the economy continued to shrink by nearly 1 percent.

These findings suggest that the private equity sector can play a clear and positive role in promoting a stronger recovery following the current severe downturn.

II. PRIVATE EQUITY AND THE IMPACT OF THE ONGOING FINANCIAL CRISIS

Private equity funds provide investment opportunities that otherwise would be unavailable to most institutions and most high net worth individuals to achieve higher returns than traditional investments by investing in non-public companies with particular prospects for increasing their productivity and value through operational improvements, usually including new capital spending. As a result, private buyout-related investments grew from 12 transactions valued at $13 million in 1970 to 2,474 transactions involving total equity investment of $70 billion in 2007.[5] Market conditions during the most recent expansion were particularly favorable for private equity, especially the extensive financial market liquidity, access to that liquidity at low interest rates, and rising asset values. The current financial crisis and deep recession have suspended or ended these conditions. While private equity transactions generally use considerably less leverage than the operations of hedge funds, investment banks and other financial institutions,[6] and private equity funds generally invest for longer terms, the sector nevertheless faces many of the same challenging conditions as other firms and funds. Financing is less available and higher bond yields have increased the cost of buy-outs, forcing delays or cancellations in some acquisitions and generally reducing new private equity activity. Moreover, opportunities for profits have narrowed precipitously. For example, from 2003 through 2006, one measure of firms' earning power, the EBITDA growth by the S&P 500 (Earnings Before Interest, Taxes, Depreciation and Amortization) averaged about 16 percent per-year.[7] Today, many industries face negative EBITDA growth with little prospect for significant improvement in the near-term.

These financial market challenges coupled with our current, broader economic problems have discouraged new transactions. From 2003 to 2007, debt issues related to private equity transactions in the United States rose from $17 billion to $379 billion (Figure 1, below). With the onset of the financial crisis, new debt for private equity acquisition fell 75 percent in the third quarter of 2008, compared to the third quarter of 2007; and this debt in October and November of 2008 totaled only $3 billion.[8]

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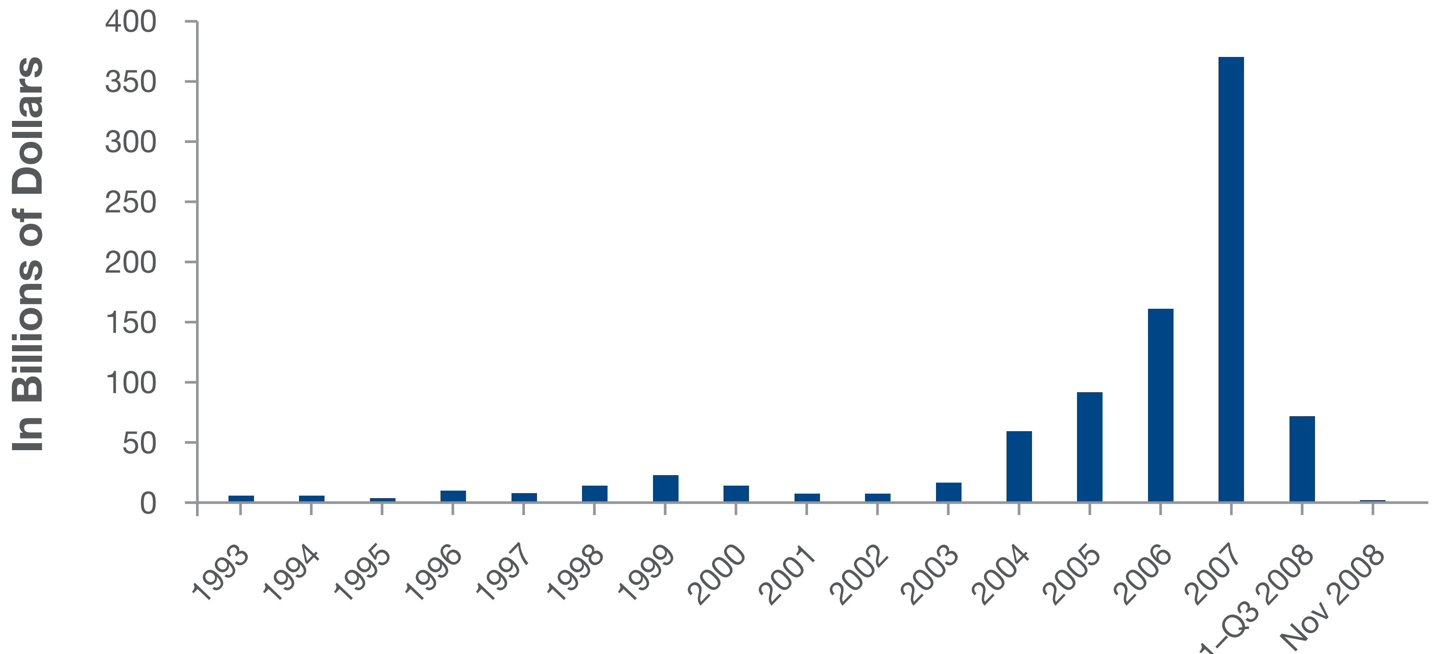
5 VentureXpert Thomson Financial Database.

6 Shapiro, Robert J., and Nam D. Pham. "The Role of Private Equity in U.S. Capital Markets," *op cit.*

7 Meerkatt, Heino, and Heinrich Liechtenstein. "Get Ready for the Private Equity Shakeout." Boston Consulting Group and IESE Business School, December 2008.

8 Dealogic. December 9, 2008

Figure 1: New Leverage for U.S. Private Equity Transactions, 1993-2008, $ billions[9]



Despite the sharp declines in financings across the economy in the current crisis, including private equity activity, the financing structure of private equity funds may provide greater access to capital for their sponsored companies than is available to many public counterparts. This capacity arises from the time commitments and the types of organizations currently invested in private equity. As of 2007, the latest data available, pension plans and endowments provided 42 percent of private equity capital; and these entities have investment strategies that increase their tolerance for long-term commitments to private equity funds. In the current crisis, while most financial institutions have seen significant withdrawals, the long term commitments of the institutional investors in private equity and accompanying restrictions on early redemptions have protected those funds from withdrawals and should enable them to continue to support their acquired companies when outside capital is difficult to secure or very expensive.

In addition to this enhanced access to capital in an illiquid market, the firms held by private equity funds may have lower distress and bankruptcy costs than comparable publicly-held firms, since they have fewer stakeholders and often can act more quickly in a crisis. The academic literature also suggests that the restructurings which many firms face during severe recessions can be undertaken more efficiently in private equity-held companies, often through debt-equity swaps that reduce the risk of destructive public bankruptcy filings.[10] A fund's ability to reduce the risk of a disorderly liquidation of its portfolio companies raises the credit quality of those companies, improving their prospects in a serious downturn like the current one; and Moody's for one, expects that private equity-held companies "may have lower distress and bankruptcy costs in the current downturn than public firms." [11]

9 *Ibid.*
10 Moody's Corporate Finance, Special Comment. "The Private Equity Advantage," December 2008.
11 *Ibid.*

III. THE RECORD OF PRIVATE EQUITY IN GOOD TIMES AND BAD TIMES

While scientific analysis of the performance of private equity funds and their portfolio companies is difficult, because private equity datasets are proprietary and generally unavailable to the public, a growing number of researchers have focused on this task. Their studies generally rely on less than comprehensive datasets, aggregate levels, and proxies to measure this performance. Despite these limitations, these studies have generally shown that private equity funds have outperformed market benchmarks across different time periods, countries and industries. Since a fund's performance depends on the performance of its portfolio companies, this record reflects the superior performance of the funds' companies.

A recent 2009 report from the World Economic Forum reviewed large-sample studies to analyze the impact of private equity over the past several decades on a global basis.[12] The report found that in the first two years after private-equity acquisitions, productivity at the acquired company grew on average by about two percentage points more than at comparable, non-private-equity held firms. In another key finding, the studies showed that PE-invested companies are better managed across a range of management measures, compared to other privately-held, family-owned, or government-controlled firms. All of the findings also controlled for a range of pertinent characteristics, including as country, industry, firm size, and employee skills.

Focusing on the American case, one recent study examined the returns of private equity funds over a 15-year period spanning two recessions and two expansions in the United States, and found that the average return for three private equity indexes outperformed the S&P 500, the Lehman Aggregate Index and the Lehman High-Yield Bond Index. [13]

Table 1: Private Equity and Public Company Indexes, 1990–2005

Index	Average Annual Returns
Private Equity Index	14.48%
Venture Capital Index	21.14%
Private Equity Portfolio Index	17.81%
S&P 500	11.33%
Lehman Aggregate Index	7.25%
Lehman High Yield Bond Index	9.1%

Another current study of 70 large companies acquired from 2002 to 2005 by major U.S. private equity firms, including 21 manufacturing and 49 services and other non-manufacturing companies, found that their combined sales increased at an average annual rate of 10.8 percent, or 77 percent faster than the rate of annual sales for

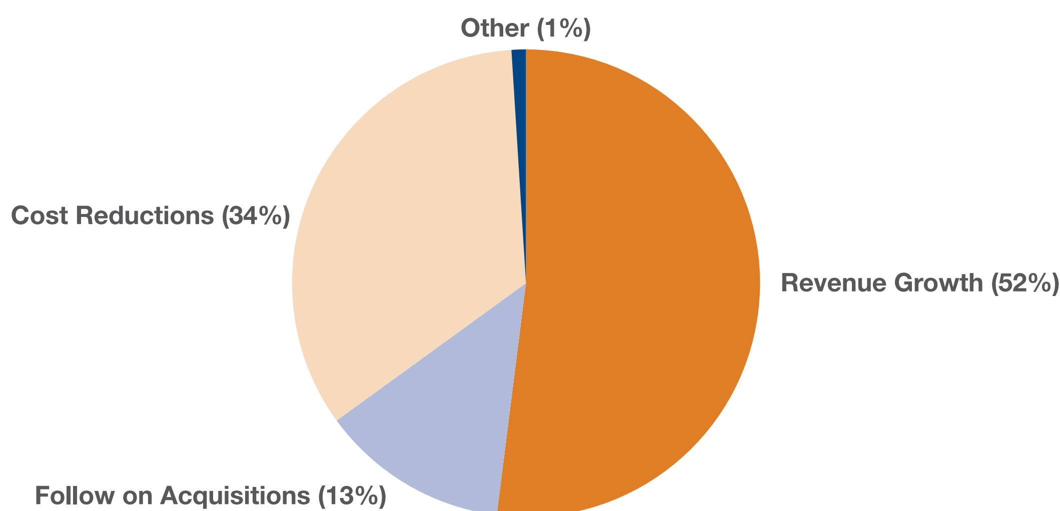
12 World Economic Forum. "Globalization of Alternative Investments," Working Papers, Volume 2, *The Global Economic Impact of Private Equity Report 2009*, 2009.

13 Center for International Securities and Derivates Markets. "The Benefits of Private Equity: 2006 Update." CISDM Research Department, Isenberg School of Management University of Massachusetts, Amherst, May 2006.

all U.S. companies over the same period.[14] Among manufacturing companies, the private equity-backed companies expanded their sales at an average rate of 13.9 percent per-year, or nearly three times the rate for all U.S. manufacturers. The non-manufacturing firms in this group expanded their sales by an average of 9.5 percent per-year or nearly 50 percent faster than the rate for all U.S. non-manufacturing companies. These findings are broadly comparable to the findings of other researchers using data from previous decades.[15]

The basis for these returns is particularly relevant in a period of severe economic decline, given the view that the generally strong earnings growth of private equity-held firms reflects asset stripping and employment cutbacks. The evidence shows otherwise. For example, a recent study by Ernst & Young using 2007 data from Thomson Financial found that 65 percent of the growth in the EBITDA of private-equity owned companies globally came from business expansion, with organic revenue growth the most significant factor followed by follow-on acquisitions (Figure 2, below).[16]

Figure 2: Source of EBITDA Growth in Private-Equity Held Firms



Further, in a previous study, Ernst and & Young disaggregated private-equity-invested companies by country: They found that in 2006, the average enterprise value (EV) of U.S. private-equity held firms in the study increased 83 percent, growing from an average of $1.2 billion when acquired to $2.2 billion at the time of exit, over an average of three years. Similarly, the yearly gains in enterprise value of U.S. private-equity-held companies increased 33 percent, compared to 11 percent for public firms in the same sectors and over the same time periods (Figure 3, below). Gains in enterprise value by private equity-held European firms were comparable, increasing 81 percent from an average of $800 million at acquisition to $1.5 billion at exit (typically, three and one-half years later). On an annual basis, this measure of value for European private equity-held rose 23 percent, compared to 15 percent for public firms in the same sectors.[17]

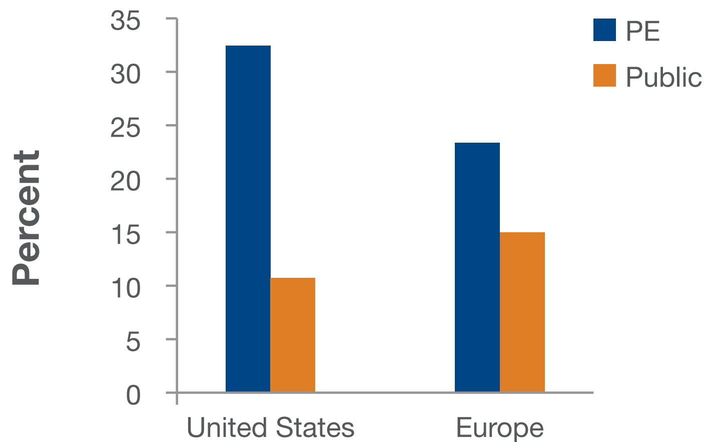
14 Shapiro, Robert J., and Nam D. Pham. "The Impact of Large Private Equity Acquisitions and Operations on Capital Spending, Sales, Productivity, and Employment." Sonecon, January 2009, http://www.sonecon.com/docs/studies/Private_Equity_Capital_Spending_Sales_Jobs-January2009.pdf.

15 Kaplan, Steven, and Antoinette Schoar. "Private Equity Performance: Returns Persistence and Capital." NBER Working Paper 9807, 2003, http://www.nber.org/papers/w9807.

16 Ernest & Young. "How Do Private Equity Investors Create Value? A global study of the 2007 exits — Beyond the credit crunch," 2008

17 Ernst & Young. "How Do Private Equity Investors Create Value? A study of the 2006 Exits in the US and Western Europe," 2007.

Figure 3: Gains in the Business Value of Private Equity-Held Firms And Public Companies, for the United States and Europe[18]



These results appear to arise from capacities which are particularly useful during recessions and early recoveries. Successful private equity funds raise capital, insert themselves into the management teams of acquired companies to evaluate their business plan and the impact of changing conditions, help management identify challenges and problems arising from new conditions, introduce new technologies and reorganize tasks to make more effective use of existing technologies, and help maintain company morale by offering a strategy for survival.[19]

The ability of private equity to manage companies under adverse conditions also is suggested by their success in avoiding bankruptcies. A recent study for the World Economic Forum analyzing 21,397 private equity acquisitions and operations from 1970 to 2007 found that 6 percent of those firms experienced bankruptcy or financial restructuring, for a 1.2 percent annual rate of bankruptcy or major financial distress. This rate is 25 percent lower than the default rate for U.S. corporate bond issuers over this period, which averaged 1.6 percent per-year over this period.[20]

In the current period of record-high U.S. job losses, the private equity sector's record on job creation is also particularly pertinent. There is clear evidence that private equity acquired firms expand employment in normal times. One recent study of private-equity acquired firms in the United States found that 80 percent expanded or at least maintained their jobs levels from the time of acquisition to ultimate resale.[21] Further, another analysis of a sample of large companies acquired by major private equity firms from 2002 to 2007 found that their U.S. workforces grew at average annual rates of 5.7 percent, compared to 1.1 percent for all U.S. companies.[22]

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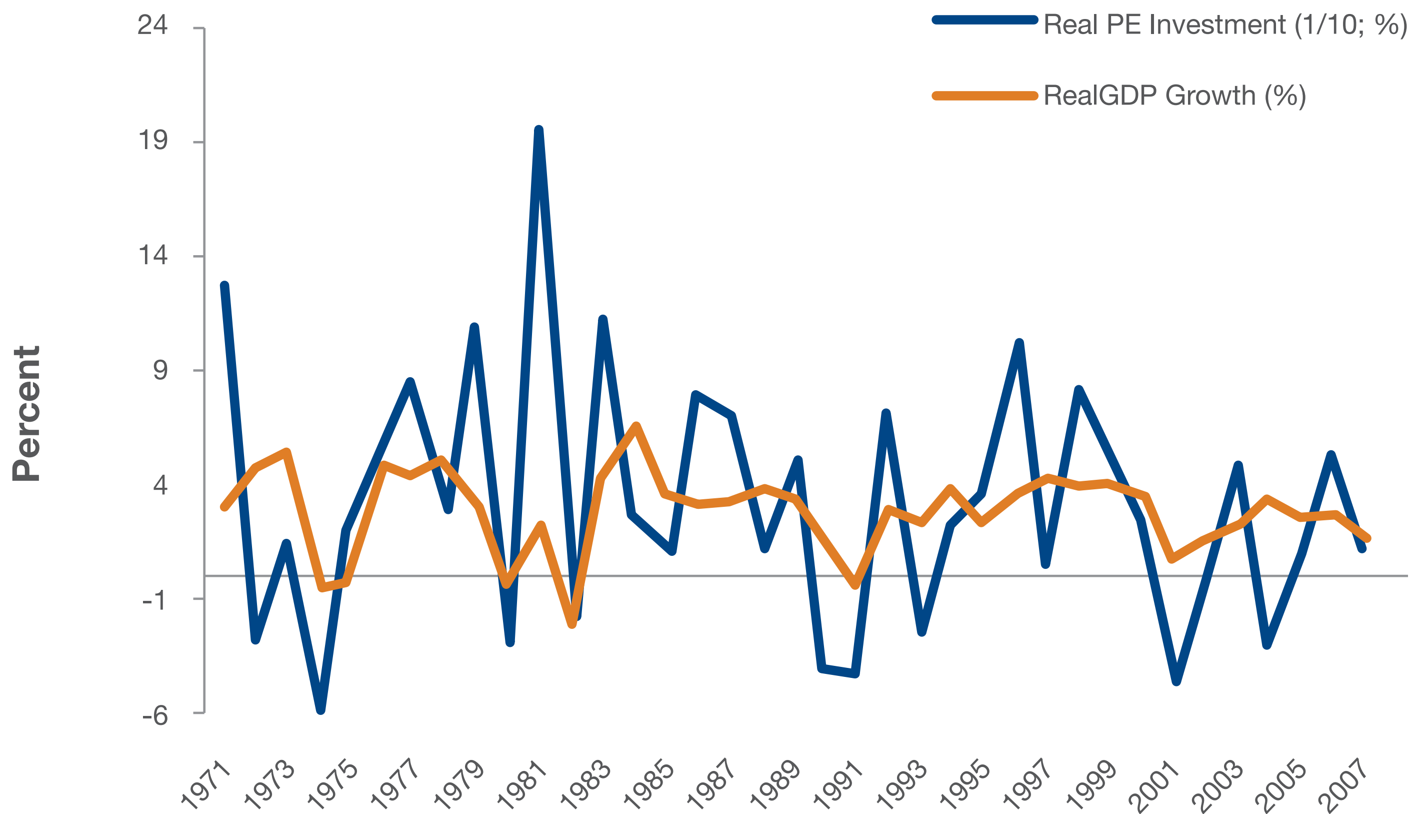
18 Thompson Financial and Ernst & Young.
19 Kaplan, Steven, and Antoinette Schoar. "Private Equity Performance: Returns Persistence and Capital." NBER Working Paper 9807, 2003.
20 World Economic Forum. "Globalization of Alternative Investments." Working Papers Volume 1 of the *Global Economic Impact of Private Equity Report 2008*, http://www.weforum.org/pdf/cgi/pe/Full_Report.pdf.
21 Ernest & Young. "How Do Private Equity Investors Create Value? A Study of the 2006 Exits in the U.S. and Western Europe," 2007.
22 Shapiro, Robert J., and Nam D. Pham. "American Jobs and the Impact of Private Equity Transactions." Sonecon, January 2008, http://www.sonecon.com/docs/studies/0108_JobsPrivateEquityTransactions.pdf;
Data Provided by the Private Equity Council.

IV. PRIVATE EQUITY'S STRENGTHS DURING RECESSIONS AND INITIAL RECOVERIES

As the United States suffers through the worst recession and financial crisis in more than 75 years, additional data on top of the preceding evidence suggest that the private equity sector can play a meaningful role in promoting economic recovery.

Annual private equity investments are generally pro-cyclical, increasing during expansions and contacting during downturns; and, like overall private investment, they often grow or contracting at many times the rates of the overall economy. Figure 4, below, tracks the growth rates of private equity investments and GDP from 1971 to 2007, scaling private equity investment growth to one-tenth to depict the general pattern. (For example, private equity investment grew 133 percent in 1971, depicted in the figure at 13.3 percent.)

Figure 4: Growth in Private Equity Investment and GDP, 1971-2007[23]



Annual economic growth in the United States has been negative five times during the period from 1970 to 2007 — in 1974, 1975, 1980, 1982 and 1991 — and during each of those years, private equity and overall private investment both fell sharply.[24] Generally, investment in private equity acquisitions is more volatile than overall investment, growing or contracting at much faster rates. In part, these apparently sharp swings in investment reflect the much smaller dimensions of private equity investment, which magnifies the changes. However, the data show that private equity investment often continues during recessions and consistently surges during initial recoveries.

23 VentureXpert Thomson Financial Database; Bureau of Economic Analysis; Bureau of Labor Statistics.

24 An exception was 1975, when non-residential private investment expanded.

Table 2, below, shows that in three of the five years of recession since 1970, the total number of private equity acquisitions continued to grow even as the average size, per-acquisition, contracted. Stated another way, private equity activity during recessions generally continues at substantial rates while focusing on smaller companies. This pattern continues in the initial year of recovery: The number of private equity acquisitions grew rapidly in each of the five, initial years of recovery, on average increasing 55.1 percent, while the average size per-acquisition continued to contract. The increasing numbers of private equity acquisitions during three of the five years of recession and every year of initial recovery suggest that private equity both retains access to capital during downturn and initial recoveries, and continues to seek out companies that can be turned around. It also may suggest that more companies actively seek private funding during tough times.

Table 2: Growth in the Numbers of Private Equity Acquisitions, Their Size Per-Acquisition, and Business Failures and Bankruptcies, During Years of Recession and Initial Recovery [25]

Recession Year	Changes in Number of Private Equity Acquisitions		Changes in the Size of Private Equity Investments, Per-Acquisition	
	Recession Year	Following Year	Recession Year	Following Year
1974	-55.6%	37.5%	-20.4%	-12.5%
1975	37.5%	68.0%	-12.5%	-8.8%
1980	16.3%	60.0%	-38.8%	-91.5%
1982	45.6%	63.0%	-43.8%	-33.7%
1991	-33.8%	47.0%	-15.8%	-19.2%

Furthermore, while total real investment in private equity, all business and manufacturing all declined during four of the five years of recession, during the initial year of recovery, total investment in private equity acquisitions was substantially stronger than either overall private investment or private investment in manufacturing (Table 3, below). In fact, real private equity investment grew in all five years of initial recovery, while total real business investment continued to decline in two of those five years and real investment in manufacturing continued to fall in four of those five years.

Table 3: Growth in Private Equity Investment, Total Private Investment, and Investment in Manufacturing, During Years of Recession and Initial Recovery [26]

Recession Year	Real Growth in Private Equity Investment		Real Growth in Total Private Investment (Non-residential)		Real Growth in Investment in Manufacturing	
	Recession Year	Following Year	Recession Year	Following Year	Recession Year	Following Year
1974	-64.6%	20.4%	0.8%	-9.9%	14.0%	-4.1%
1975	20.4%	53.4%	-9.9%	4.9%	-4.1%	-7.6%
1980	-28.8%	206.0%	-0.3%	5.7%	-16.4%	13.6%
1982	-18.1%	118.5%	-3.8%	-1.3%	-3.5%	-27.7%
1991	-44.3%	75.6%	-5.4%	3.2%	-7.9%	-8.2%

25 VentureXpert Thomson Financial Database; Bureau of Economic Analysis; Bureau of Labor Statistics; Dun & Bradstreet and American Business Bankruptcy Institute.

26 VentureXpert Thomson Financial Database; Bureau of Economic Analysis; Bureau of Labor Statistics.

Researchers also have found evidence that the returns on private equity funds raised during downturns may actually outperform the returns on funds raised during expansions.[27] Two leading scholars in this field, Steven Kaplan and Antoinette Schoar, use the ability to raise follow-on funds as a proxy for private equity fund performance over the period 1980 to 1997. They show that private equity funds raised in years when market returns are high are less likely to lead to follow-on funding than private equity funds raised when market returns are low. Since highly-performing funds have greater opportunities to raise follow-on funds, these findings suggest that funds raised during economic downturns may perform better than funds raised during expansions, compared to other investments. These results further support the analysis that private equity acquisitions and resources can create particular value during downturns.

Annual data on employment by private equity-held firms are not publicly available for a comparable analysis of job creation records during recessions and initial recoveries, compared to the overall economy. As noted earlier, there is considerable evidence, however, that private equity-acquired firms expand employment across entire business cycles. For example, a study of private equity-acquired firms in the United States found that 80 percent expanded or at least maintained their jobs levels from the time of acquisition to ultimate resale;[28] and the sample of large companies acquired by major private equity firms cited earlier found that during the most expansion, their U.S. workforces grew at average annual rates of 5.7 percent, compared to 1.1 percent for all U.S. companies.[29]

V. CONCLUSION

In the current, dismal economic environment, private equity funds and their portfolio companies confront many of the same challenges to remain productive, competitive and profitable as other financial entities and companies. To the degree that easy credit and strong growth during the last expansion supported the entry and activities of private equity funds that were relatively less skilled at governance and reorganization, current conditions may expose their limitations and force many to retrench or exit.

Our previous research found that the private equity sector played no role in the current crisis confronting U.S. capital markets, in part because its portfolios are highly diversified, the average levels of leverage involved in private equity acquisitions are relatively low, and its investments in individual companies with real and intangible assets are unlikely to trigger the cascading losses recently seen with speculative financial instruments. Nevertheless, the application of this leverage in these acquisitions supports the concentrated equity ownership structure that is fundamental to the incentives and effective governance associated with private equity operations.[30]

The current tight credit markets and declining economy should not prevent private equity firms from effectively reorganizing the portfolio firms they do acquire; in fact, these conditions should make the reorganizing capabilities of private equity operations more important, since there are fewer alternative sources of value to exploit. However, tight credit markets also may mean that private equity transactions will have to involve even less leverage than normal, and consequently produce fewer tax benefits and lower equity returns.

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27 Kaplan, Steven, and Antoinette Schoar. "Private Equity Performance: Returns Persistence and Capital." NBER Working Paper 9807, 2003.

28 Ernest & Young. "How Do Private Equity Investors Create Value?," *op. cit.*

29 Shapiro, Robert J., and Nam D. Pham. "American Jobs and the Impact of Private Equity Transactions," *op. cit.*

30 Wruck, Karen H. "Private Equity, Corporate Governance and the Reinvention of the Market for Corporate Control." Journal of Applied Corporate Finance Volume 20, Issue 3.

In conclusion, the evidence and data suggest that the private equity sector can play a constructive and positive role during the current recession and its initial recovery. The numbers of private investments typically rise during recessions and continue to rise during the initial years of recovery. Moreover, total private equity investments grow much faster during the initial year of recovery than overall business investment. There is also some evidence which may suggest that private equity-held firms create jobs during the initial stages of recoveries while employment across the economy continues to contract.

These benefits reflect the basic activities of the private equity sector and their general success in carrying them out: In good and bad times, the core business of private equity funds is to identify firms with long-term potential for higher productivity, sales and profits; secure the capital to purchase these firms; and inject additional capital, improve their strategies and reorganize their operations, to achieve higher returns. Public policy should support these activities, especially during the current crisis, and refrain from imposing additional burdens that could hamper these activities or redirect them to other economies.

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Robert J. Shapiro is the chairman of Sonecon, LLC, a private firm that advises U.S. and foreign businesses, governments and non-profit organizations. Dr. Shapiro has advised, among others, U.S. President Bill Clinton and British Prime Ministers Tony Blair and Gordon Brown; private firms including Amgen, AT&T, Gilead Sciences, Google, MCI, Inc., SLM Corporation, Nordstjernan of Sweden, and Fujitsu of Japan; and non-profit organizations including the American Public Transportation Association, BIO, the Philanthropic Collaborative, and the U.S. Chamber of Commerce. He is also a senior fellow of the Georgetown University Business School, chairman of the Globalization Initiative of NDN, co-chair of the Climate Task Force and American Task Force Argentina, and a director of the Ax:son-Johnson Foundation in Sweden. From 1997 to 2001, he was Under Secretary of Commerce for Economic Affairs, where he directed economic policy for the U.S. Commerce Department and oversaw the nation's major statistical agencies. Prior to that, he was co-founder and Vice President of the Progressive Policy Institute. Dr. Shapiro also served as principal economic advisor in William Clinton's 1991–1992 presidential campaign, senior economic advisor to Albert Gore, Jr. in 2000, Legislative Director for Senator Daniel P. Moynihan, and Associate Editor of *U.S. News & World Report*. In 2008, he advised the campaign and transition of Barack Obama. He also has been a Fellow of Harvard University, the Brookings Institution, and the National Bureau of Economic Research. He holds a Ph.D. and M.A. from Harvard, as well as an A.B. from the University of Chicago and a M.Sc. from the London School of Economics and Political Science.