American Jobs and the Impact of Private Equity Transactions

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INTRODUCTION

Strong job creation has been a hallmark of the American economy for a half century. From 1960 to 2006, American businesses expanded the U.S. private-sector workforce from some 46 million positions to more than 115 million, adding 12.7 million net new jobs in the 1960s, 15.9 million more jobs in the 1970s, another 15 million in 1980s, and an additional 20.6 million in the 1990s.[2] Since 2000, U.S. job creation rates have slowed compared to the 1980s and 1990s, but private companies still created 5.9 million net new jobs from January 2000 to October 2007. Moreover, a study by the International Monetary Fund (IMF) found that from 1980 to 1999, U.S. net job gains of more than 1.5 percent a year were at least three times greater than the net gains of 0.5 percent a year or less in the United Kingdom, Germany, France, Austria, Belgium, Denmark, Finland, Italy, and Sweden. Among OECD countries over this period, only Australia outpaced the United States in job creation.[3]

Many factors contribute to America's strong job-creating performance, most notably robust economic growth. The most important element contributing to that growth is the way America's markets work, especially the relative ease and speed with which they move labor as well as capital and expertise from enterprises using those resources ineffectively to others that put them to better use. Private equity funds can facilitate those shifts by taking over underperforming firms and reforming their operations, and acquiring healthy businesses and then injecting capital and management expertise to enable them to expand further. In theory, therefore, private equity operations should contribute to job creation. To test this proposition, we analyzed the jobs data from 42 large companies acquired by eight large private equity firms in the years 2002 to 2005. We find that this set of companies purchased by private equity funds, after sometimes experiencing initial job losses, generated job gains within two years that exceeded both the initial losses and the rates of job gains by other companies in the same sectors.

- Over this period, the combined worldwide workforce of the 42 large firms acquired in private equity transactions grew 8.4 percent. More than 76 percent of the sample recorded job gains, while less than 24 percent reduced employment.

- Among a subset of 26 firms providing data on their U.S. employment, domestic jobs by private equity-backed firms increased 13.3 percent, compared to 5.5 percent for all U.S. businesses and 2.7 percent for large U.S. businesses. About 73 percent of this subset increased their employment, while 27 percent cut jobs.

- Manufacturing firms purchased by private equity funds achieved the greatest relative gains, increasing their worldwide employment by 8.6 percent. Moreover, domestic employment by private equity-backed

1 This research was conducted with support from the Private Equity Council. McKinsey and Company collated the data provided by the eight private equity firms, which are solely responsible for the data's integrity. The analysis and conclusions are solely those of the authors.

2 Bureau of Labor Statistics, Employment, Hours, and Earnings from the *Current Employment Statistics Survey*, www.bls.gov.

3 Garibaldi, Pietro and Mauro, Paolo, "Job Creation: Why Some Countries Do Better," Economic Issues, No. 20, International Monetary Fund, 2000, http://www.imf.org/external/pubs/ft/issues/issues20/.

manufacturing companies rose by 1.4 percent, compared to job losses in all U.S. manufacturing of 7.7 percent. The job results followed a "J-curve" pattern of initial losses followed by subsequent and usually larger gains.

- Non-manufacturing companies purchased by private equity funds, in areas such as health care, retail trade and food services, expanded their total employment by 8.4 percent. Moreover, domestic employment by private equity-backed non-manufacturing firm rose 14.3 percent, almost double the gains of 7.4 percent by all non-manufacturing U.S. firms.

THE ROLE AND DIMENSIONS OF PRIVATE EQUITY TRANSACTIONS

Public interest and concerns about the economic effects of private equity transactions have increased as these transactions have become more common. Leveraged buyouts (LBOs), in which a group of private investors or fund(s) use a company's assets as collateral to borrow a substantial portion of the capital to purchase the company and take it private, began in the 1970s and increased sharply and steadily with the rapid growth of pubic debt markets and increased investments in private equity funds by pension plans, university endowments and foundations attracted by the funds' strong returns. The total value of private equity transactions rose from $429 million in the 1970s and about nearly $26 billion in the 1980s, to $126 billion in the 1990s and $232 billion for 2000 through 2006.[4] Moreover, eight out of the ten largest private equity deals in history occurred in 2006 and early 2007, intensifying public interest in these deals.[5]

Table 1. Number of U.S. Private Equity Firms, Deals, and Their Total Value, 1970-2006[6]

Period	Number of Private Equity Firms (Average)	Number of Deals	Total Deal Value ($ million)
1970-1979	31	355	$429.2
1980-1989	191	4,768	$25,639.7
1990-1999	270	10,437	$126,111.4
2000-2006	560	11,800	$232,441.6

The usual goal of these transactions is to sell the acquired company several years later for substantial gains, either through "reverse leveraged buyouts" that take the company public or strategic sales to existing public or private companies. This strategy can succeed only if the private-equity owners substantially improve the acquired company's profitability by, for example, reorganizing its operations to reduce inefficiencies and cut costs, expanding or enhancing its product lines or markets, investing in R&D, and/or improving management

4 VentureXpert, Thomson Financial.

5 The ten largest private-equity transactions: TXU ($43.8 billion, 2007), Equity Office Properties ($38.9 billion, 2006), HCA ($32.7 billion, 2006), RJR Nabisco ($31.1 billion, 1988), Harrah's Entertainment ($27.4 billion, 2006), Clear Channel Communications ($25.7 billion, 2006), Kinder Morgan ($21.6 billion, 2006), Freescale Semiconductor ($17.6 billion, 2006), Albertson's ($17.4 billion, 2006), and Hertz ($15 billion, 2005). See "The Top 10 Buyouts," *New York Times*, February 26, 2007.

6 VentureXpert, Thomson Financial.

performance by more closely aligning the incentives of executives with the firm's profitability.

Economic theory suggests that these measures can have both adverse and positive effects on employment by the acquired company. Steps to increase the firm's efficiency by cutting costs and selling off less productive operations can produce layoffs, while other steps to expand sales and increase revenues often will include hiring more employees.[7] There has been some, limited empirical research in this area over the last 15 years, but with no conclusive results. One study from the 1980s found modest job gains following LBOs, another found no statistically significant job losses, while other studies tracked modest declines in employment.[8] A recent study by Ernst & Young of the 100 largest U.S. and European companies owned by private equity funds and sold in 2006, however, found that 80 percent of the U.S. companies in the sample maintained or expanded employment during their period of private-equity ownership.[9]

THE IMPACT OF PRIVATE EQUITY TRANSACTIONS ON EMPLOYMENT, 2002-2007

To expand on these findings for the current period, we analyzed data provided by eight very large private equity firms on employment in 42 domestic companies acquired over the years 2002-2005.[10] To our knowledge, this is the first analysis of the job effects of private equity operations based on comprehensive, empirical data provided by private equity firms themselves. Our sample is comparable in numbers to the samples used in previous academic analyses and provides particular insight into the recent impact on employment of the purchases of relatively large companies by large private equity firms and their subsequent operations. The data set was constructed by asking the eight large U.S. private equity firms to provide as comprehensive data as possible on the 10 largest deals transacted from 2002-2005, with a minimum value of $250 million. The consequent data cover 70 large U.S. companies acquired in this period, including 50 acquisitions which they still held and 20 from which they have subsequently exited. In 42 cases, the private equity funds were able to provide employment data for the time of acquisition and at least one year after the acquisition. This sample of 42 acquired firms includes 38 or 76 percent of all the large acquisitions from which these funds had not exited, plus four which had been exited but for which data were still available. The sample also represents 60 percent of all of the deals exceeding $250 million carried out by the eight private equity firms in this period (42 cases of 70) and 70 percent of their total investment in LBO acquisitions for these years.

This sample includes 12 manufacturing enterprises and 30 non-manufacturing companies; and at the time of the acquisitions, 20 of the 42 were privately-held companies, 10 were publicly-traded firms, and 12 were subsidiaries of publicly-traded companies. In addition, 12 of the 42 operate solely in the United States, while 30 have operations both in the U.S. and overseas. (Table 2, below) The average value of the deals was about $2.3 billion, much greater than the average value of $19.7 million for all private equity acquisitions from 2000-2005.[11] The total value of the 42 buyouts came to $96.8 billion, with the publicly-traded compares accounting for almost 76 percent of that total.

7 Fox, Isaac and Marcus, Alfred, "The Causes and Consequences of Leveraged Management Buyouts," *Academy of Management Review*, 1992.

8 For example, Brown, C. and Medoff, J., "The Impact of Firm Acquisitions on Labor," *Corporate Takeovers*, 1988; Kaplan, S., "Management Buyouts, Efficiency Gains or Value Transfers," Working Paper 244, University of Chicago, 1988; Long, W. and Ravenscraft, D., "The Record of LBO Performance," Paper prepared for the Conference on Corporate Governance, Restructuring and the Market for Corporate Control, 1989.

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

10 To preserve confidentiality, this analysis reports only aggregate data and cannot provide specific information on the acquired companies captured in the sample.

11 See Table 1, above, VentureXpert Thomson Financial.

Table 2. Number and Value of Selected Private Equity (P.E.) Transactions, 2002-2005[12]

	Number of P.E. Deals	Total Deal Value ($ million)	Average Deal Value ($ million)
Total	42	$96,783	$2,304.4
Manufacturing	12	$22,356	$1,863.0
Non-manufacturing	30	$74,427	$2,480.9
Year			
2002	4	$8,128	$2,032.0
2003	7	$11,608	$1,658.2
2004	13	$19,202	$1,477.1
2005	18	$57,846	$3,213.7
Status at Acquisition			
Privately-Owned	20	$23,402	$1,170.1
Publicly-Owned	10	$40,021	$4,002.1
Subsidiary of Publicly Owned	12	$33,361	$2,780.0
Location of Operations			
U.S. Only	14	$21,135	$1,652.5
Global	28	$73,648	$2,630.3

We measure the impact of these transactions on employment, first, by tracking job levels at these companies from the year of their acquisitions to a subsequent high point in the following years, and comparing rates of change in those levels to rates of change in employment by other companies in the same industries. Next, we identified a subset of companies with at least three years of employment data following their acquisition, to investigate longer-term patterns of job creation or destruction in firms acquired by private equity funds. We focus our analysis on acquisitions in the years 2002 to 2005 in order to measure the job-related effects in the current period, while avoiding distortions arising from the late-1990s IT and Internet booms and subsequent busts, and to ensure at least three years of data for each case for our second analysis.

The data for the first analysis show that among our sample of 42 companies, private equity buyouts and subsequent operations produced, overall, direct and positive effects on employment, with the largest relative job gains occurring in manufacturing enterprises. Among the 42 companies, 32 or 76.2 percent expanded their workforces in subsequent years while the remaining 10 acquired companies cut their workforces. Across all 42 companies, including both those that added jobs and those that cut them, 26,214 net new jobs were

12 Data provided by Apollo, Bain, Blackstone, Carlyle, Kohlberg Kravis Roberts, Providence, Silver Lake, and Texas Pacific Group.

created, or an increase of 8.4 percent over their combined employment of 310,420 at the time of acquisition (Table 3). The 12 manufacturing firms in our sample added 6,094 jobs, an increase of 8.6 percent in their total employment. The 30 non-manufacturing companies in our sample added 20,120 jobs for an increase of 8.4 percent in their total employment.

Table 3. Job Creation in 42 Firms Purchased in Private Equity Transactions, Manufacturing and Non-Manufacturing, 2002-2007[13]

	Total	Manufacturing	Non-Manufacturing
Number of companies	42	12	30
Employment at time of acquisition	310,420	70,931	239,489
Employment Changes	+ 26,214	+ 6,094	+ 20,120
Percentage Changes	+ 8.4%	+ 8.6%	+ 8.4%

This analysis covers the worldwide employment of the 42 companies. To further examine the impact of large private equity acquisitions on American jobs, we analyzed a subset of 26 companies, 14 firms which operate only in the United States and 12 global firms that provided data on their U.S. employment. (See Table 4, below) At the time of their acquisitions, these 26 companies (7 in manufacturing and 19 in non-manufacturing) employed 104,221 people. Over the following four years, these companies added a total of 13,861 jobs, an increase of 13.3 percent.[14] This compares to gains of 5.5 percent for all private employment in the United States, producing net adjusted U.S. job gains of 7.8 percent for private equity-acquired companies. Nearly all of the U.S. jobs gains by the acquired companies occurred in non-manufacturing: The 13,861 net new jobs included 13,746 jobs added by the 19 non-manufacturing companies, an increase of 14.3 percent, and 115 jobs added by the 7 manufacturing companies, an increase of 1.4 percent. However, during the same period, employment in U.S. manufacturing dropped by 7.7 percent, while employment in non-manufacturing rose by 7.4 percent. Therefore, the U.S. domestic employment gains by these large private equity-backed companies, adjusted for economy-wide changes, were 9.1 percent for manufacturing and 6.9 percent for non-manufacturing. Moreover, all of the acquired companies are large enterprises; and domestic employment by U.S. companies with 500 or more employees grew just 2.7 percent over this period, or barely one-fifth of the 13.3 percent gains achieved by our sample of private equity-backed companies.

13 Data provided by eight PEC members.

14 These data do not distinguish between job gains arising from changes and growth within the acquired company itself and job gains arising from acquisitions by the acquired company. These data also do not include detail on the occupations or wages of the jobs gained and lost. These are important issues that warrant additional research.

Table 4. Domestic Job Creation in Selected Private Equity Transactions, Manufacturing and Non-Manufacturing, 2002-2007[15]

	Total	Manufacturing	Non-Manufacturing
Firms Purchased in Private Equity Deals			
Number of companies	26	7	19
Employment at time of acquisition	104,221	8,067	96,154
Employment Increases	13,861	115	13,746
Percentage Changes	+ 13.3%	+ 1.4%	+ 14.3%
Gains adjusted for economy-wide changes	+ 7.8%	+ 9.1%	+ 6.9%
All U.S. Firms			
Employment in 2002	122,388,000	15,273,000	107,115,000
Changes in employment in 2002-07	+ 6,699,000	- 1,183,000	+ 7,882,000
Percentage Change	+ 5.5%	-7.7%	+ 7.4%

Our sample of 42 companies also includes 20 companies (9 in manufacturing and 11 in non-manufacturing) that provided at least three years of employment data following their acquisitions. Our analysis of these data found a “J-curve” effect in manufacturing employment in private equity-backed companies: The nine manufacturing firms shed 1.2 percent of their jobs in the first year following their acquisitions, reduced jobs by another 3.8 percent in the second year, and then expanded their total employment by 9.8 percent in the third year (Table 5). The data for the 11 non-manufacturing companies in this sub-sample showed strengthening, positive job effects without an initial decline in jobs, followed by a small decline in jobs in the third year: Their total employment grew 1.9 percent in the first year following the transaction, followed by job gains of 5.2 percent in the second year but a decline of 2.3 percent in year three. For all 20 companies in the sub-sample, total employment rose by 0.7 percent in the first year following the acquisition, by another 1.6 percent in the second year, and by 2.2 percent in the third year. These patterns suggest an adjustment phase that involves initial job reductions or an initial slowdown in job growth, following by job gains reflecting increases in production and sales.

15 U.S. Bureau of Labor Statistics and data collected by the Private Equity Council.

Table 5. J-Curve Effects: Pattern of Employment Levels and Employment Changes in Selected Firms Purchased in Private Equity Transactions, 2002-2007[16]

	Acquisition	First Year	Second Year	Third Year
Total Employment	162,090	163,215	165,830	169,497
Manufacturing	65,443	64,688	62,209	68,278
Non-Manufacturing	96,647	98,572	103,621	101,219
Employment Changes		1,125	2,612	3,667
Manufacturing	--	-755	-2,479	6,069
Non-Manufacturing	--	1,880	5,094	-2,402
Percentage Change in Jobs		+ 0.7%	+ 1.6%	+ 2.2%
Manufacturing	--	- 1.2%	- 3.8%	+ 9.8%
Non-Manufacturing	--	+ 1.9%	+ 5.2%	- 2.3%

The subset of 26 companies with data on their U.S. employment included 12 companies providing continuous jobs data for at least three years following their acquisitions. These 12 companies include 5 companies in manufacturing and 7 in non-manufacturing. Their combined, domestic employment was 57,484 at the time of their acquisition — 6,683 workers in manufacturing companies, and 50,801 workers in non-manufacturing firms (Table 6). The data on domestic employment in manufacturing firms acquired in private equity transactions also exhibits a J-curve effect: Domestic jobs dropped by 5.5 percent in the first year and by 2.2 percent in the second year, followed by job gains of 3.0 percent in the third year. Domestic employment in the non-manufacturing companies showed consistent job gains without J-curve adjustments: Those jobs increased 3.1 percent in the first year following their acquisitions, increased another 0.4 percent in the second year, and rose another 0.7 percent in the third year.

16 Data collected by McKinsey and Company.

Table 6. Domestic Employment Levels and Employment Changes in Selected Firms Purchased in Private Equity Transactions, 2002-2007[17]

	Acquisition	First Year	Second Year	Third Year
Employment	57,484	58,690	58,773	59,318
Manufacturing	6,683	6,314	6,176	6,362
Non-Manufacturing	50,801	52,376	52,597	52,956
Employment Changes		1,206	83	545
Manufacturing		-369	-138	186
Non-Manufacturing		1,575	221	359
Percentage Change in Jobs		+ 2.1%	+ 0.1%	+ 0.9%
Manufacturing		- 5.5%	- 2.2%	+ 3.0%
Non-Manufacturing		+ 3.1%	+ 0.4%	+ 0.7%

17 *Ibid.*

CONCLUSION

The data strongly suggest that private equity operations have solid, positive effects on U.S. employment, a finding consistent with the general role that private equity transactions play in the American economy. Private equity funds identify inefficient companies or subsidiaries, leverage those companies' assets to borrow much of the financing to purchase them outright or to purchase a controlling interest, reorganize their operations and management, and run the enterprises as privately-owned entities. In cases in which a purchased company's inefficiencies are tied to low labor productivity and over-employment, the reorganization may include initial job reductions — although in many other instances, reorganizations under privately-held ownership do not lead to job reductions. The data show that large private equity transactions produce significantly greater job gains than observed in other companies in the same sectors, especially other large companies. These conclusions are based on a substantial and robust sample of the large companies acquired by the major U.S. private equity funds in 2002-2005.

Many important questions regarding the employment effects of private equity operations remain unanswered and warrant additional research. More detailed data and analysis of the characteristics of the jobs lost and gained would be very helpful, including the occupation, wages, benefits, industry, region, and longevity of the jobs involved. Additional research also is required to track the dimensions and characteristics of the employment effects arising from subsequent acquisitions by companies acquired through private equity transactions, as distinguished from job gains and losses arising from changes in the internal organization and operations of companies acquired by private equity funds.

REFERENCES

Brown, Charles, and Medoff, James, "The Impact of Firm Acquisitions on Labor," *Corporate Takeovers*, 1988.

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

Fox, Isaac and Marcus, Alfred, "The Causes and Consequences of Leveraged Management Buyouts," *Academy of Management Review*, 1992.

Garibaldi, Pietro, and Mauro, Paolo, "Job Creation: Why Some Countries Do Better," *Economic Issues*, No. 20, International Monetary Fund, 2000.

Kaplan, Steven, "Management Buyouts, Efficiency Gains or Value Transfers," Working Paper 244, University of Chicago, 1988.

Long, W. and Ravenscraft, David, "The Record of LBO Performance," Paper prepared for the Conference on Corporate Governance, Restructuring and the Market for Corporate Control, 1989.

Private Equity Council, data on large acquisitions by large private equity funds, provided by eight PEC members.

"The Top 10 Buyouts," *New York Times*, February 26, 2007.

Thomson Financial, VentureXpert database

U.S. Bureau of Labor Statistics, "Employment, Hours, and Earnings," from the *Current Employment Statistics Survey*, www.bls.gov.

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