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# Effect of Private Equity on Performance of Indian Companies: A Comparative Study of Pre- and Post-Financial Crisis

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The Indian economy was showing gross domestic product growth of around 9.4% in the fiscal year 2006–2007 and was the second-fastest-growing economy at that time. Although the United States had been suffering from the subprime crisis, our economy managed to show consistent growth along with stabilized inflation of 3%; this growth was clearly visible in secondary markets, with Sensex crossing 20,000 points (pts). However, the subprime crisis hit India in the first quarter of 2008, and the market dropped initially by 2,000 pts in a day. This trend continued until the market touched 13,641 pts, showing a drop of 46%. The cause was foreign direct investment pulling out, the effect of which was exacerbated by the Reliance Power initial public offering (IPO) debacle that occurred around the same time, greatly decreasing market liquidity.

With no liquid money available in the market, firms that had submitted their Red Herring Prospectus with the Securities and Exchange Board of India started to consider the market a risky way of raising capital and began looking for other tools. This is evident when we observe various firms such as Akroti International, Wockhardt hospitals, and Emaar MGF backing away at the last moment from issuing their IPOs.

Both market growth and the drop in the market after the subprime crisis have

been win-win situations for private equity investors in India. While India was showing growth, it had been benefitting through a majority of its investments in small cap firms whose net worth was less than Rs 50 crores and, hence, were not eligible to raise capital through public equity. Private equity investments had increased from U.S. \$1.16 billion to more than U.S. \$10 billion in 2007, an increase of 1,000%. With the fall in secondary markets, an increasing number of companies have shown an interest in raising capital through private equity and found it safe and beneficial for their respective businesses.

This article analyzes the performance of companies that used private equity investment and the companies that raised money through other routes. Private equity is a way for companies to raise money, meet their financial deficits and add value. The time period being studied has been divided into two timeframes: before the financial crisis (2001–2006), and post-financial crisis (2009–2014).

## LITERATURE REVIEW

Gemson, Gautami, and Rajan [2012] conducted an analysis of 2,821 infrastructure projects from 1990–2009 and found that private equity investments helped to finance larger infrastructure projects when compared with projects that did not have private

equity investment. Private equity investment is greater in developing countries than in developed countries, which implies that private equity investors share the risks involved in the project.

Traditionally, it has been believed that sponsors who share a product market relationship add more value. Allen and Phillips [1998] found that corporate equity ownership and product market relationships lead to an improvement in the operating performance of firms and positive investor sentiment.

Weisman [1996] discussed investments of private equity in Latin America and how massive investments in the infrastructure sector were made after 2000, which led to improvement in performance for the region. Pradhan et al. [2013] discussed private equity-backed hospitals and whether such backing helps to increase revenues or to decrease costs. By 2009, around 1,900 hospitals were backed by private equity, and the authors found that private equity investment led to higher performance than other types of investment. The only concern was the long-term sustainability of such private equity backing.

Nordstrom [2011] discussed financial engineering and innovations brought about by private equity financing. For the Nordic market, private equity investment has led to a positive response for companies. Wruck [1989] found that there is a negative abnormal rate of return for publically announced securities, whereas the private sale of securities offers 4.5% above the average abnormal rate of return. Change in firm value at the time of a private sale is also correlated with a change in ownership concentration.

Gompers and Lerner [2000] found that the valuation of venture capital funds increases with more inflow of venture capital; in states with more venture capital activity, prices rise with more inflow of venture capital. Buchner, Kaserer, and Wagner [2010] made use of a time approach in order to discover the cash flow dynamics of private equity funds. The model used can be easily used for world time data and fits the historical data.

Clark and Kojima [2003] discussed how investors for private equity funds and in secondary markets want liquidity in investments. Current buyers and new entrants in the private equity market look for investments that provide them with easy cash and no-hassle liquidity. Volatile financial market conditions and political environment instability can prove to be challenges for investing in the secondary market.

Anson [2004] explored the private equity market, comprising leveraged buyouts and corporate restructuring, and differentiated other forms of investments. Growth of the secondary market, an increase in number of auctions, and internationalization of the private equity market have led to greater returns for funds. There has been a focus on business development companies and midmarket deals and comparisons between hedge funds and private equity funds. A competitive environment for private equity firms is forcing them to look for new business and sources of revenues.

Schmidt [2006] discovered the effect of private equity on risk and return characteristics when it is a part of a portfolio: Private equity investment outperformed stock market performance during the 1990s. Earlier private equity investment categories showed higher variations in the return, with a higher number of failures. Private equity investors, if they target well-performing companies, can achieve an above-average rate of return, thus compensating for the losses made on earlier ventures.

Weidig, Kemmerer, and Born [2005] discussed private equity funds of funds, which contribute about 10% of capital to venture capital and buyout deals. Funds of funds carry out a substantial amount of diversification, which leads to their facing a lower degree of risk. Proper understanding of their own risk profile is necessary to help them make more investments with less risk.

Dhankar and Malik [2015] conducted a study on the effects of private equity on the performance of the banking and financial services sector in India. Using a logistic panel data analysis, they found that return on assets and asset turnover profit margin are likely to be affected by private equity inflow, whereas return on capital employed and equity to total assets are not affected.

## VARIABLES SPECIFICATION

### Dependent Variable (Dummy Variable)

This variable measures the effect of private equity investment in the top six sectors before and after getting private equity investment.

The dependent variable is a binary variable that is defined as follows:

$D = 1$ , for private equity-backed companies

$D = 0$ , for non-private equity-backed companies.

## Independent Variables: Determinants of Private Equity Effect

**Return on assets (profitability measure).** This is a measure of profit after tax divided by the total assets of the banks; return on assets measures a company's profitability and revenue generation. It is an indicator of how profitable a company is relative to its total assets. It also gives an idea of the management's efficiency in using its assets to generate earnings. Because it is an important measure of profitability, private equity inflow is expected to increase the return on assets for the company.

**Debt to total assets (leverage measure).** This is a measure of leverage that accounts for the amount of finance provided through the debt route. It includes the long-term and short-term borrowings divided by the total assets of the firm. The degree of financial risk is computed by the amount of leverage of a firm. The higher the debt, the greater the financial risk faced by the firm.

**Equity to total assets (leverage measure).** This measures the amount of total assets of a firm financed by equity and serves as a measure of leverage for a firm. A low equity ratio might be useful for a firm if the rate of return on assets is greater than the interest that is paid to the the firm's creditors.

**Return on capital employed (profitability measure).** This measures the efficiency and profitability with which a company's capital is employed. It is calculated as earnings before interest and tax divided by the employed capital. With the inflow of private equity, it is expected that the return on capital employed would increase and lead to more effective utilization of the capital. Therefore, we expect a positive relationship between inflow of private equity and return on the capital employed by a company.

**Tobin's Q.** This is calculated as the total market value of the firm divided by the total asset value. A low Tobin's Q ratio means that the stock is undervalued, and therefore the cost to replace a firm's assets is greater than the stock price. A high Tobin's Q is preferred by firms.

**Asset turnover.** This is a measure of the efficiency with which a company uses its assets. It is calculated as sales or revenue divided by total assets. A higher ratio is generally preferred, though it varies from industry to industry. A lower ratio might predict that the company is not using its sales properly and might be having some management or production problems. We expect a positive influence of private equity on asset turnover.

**Net income.** This is a measure of the total earnings or profit made by a firm. It is computed after deducting all of the costs involved in operating a business, depreciation, interest, and taxes from revenues of the firm.

**Free cash flow.** This is a measure of the financial performance of the firm and is the extra cash the company has after meeting its expenses and expanding its asset base. Free cash flow is the money that provides future opportunities for investment and increases shareholder value for the firm. Earnings can be manipulated by the firm, but free cash flow gives a clear picture of the firm's ability to generate cash. Negative free cash can be a sign of large investments made by the firm, while positive free cash flow depicts high amount of cash to meet unforeseen circumstances and making more investments.

**Asset growth.** This is a measure of the growth in the asset base of the firm. Positive asset growth gives greater opportunities to the firm and is a measure of the firm's growth.

Exhibit 1 describes the actual and expected effect of the various variables used in the study.

Deal data have been taken from Venture Intelligence, and company financials have been extracted from Bloomberg data. Our study sample includes 267 companies that received private equity investment as reported by Venture Intelligence. The timeframe has been divided into two periods: precrisis (2001–2006) and postcrisis (2009–2014).

Positive mean values of return on assets, return on capital employed, net income, and free cash flow show that relatively more profitable than unprofitable companies have been included in our analysis (Exhibit 2).

All of the variables in the model are stationary at the same level. There is no autocorrelation of errors and no multicollinearity (Exhibit 3).

## METHODOLOGY

This article seeks to learn the effect of private equity on various performance and profitability variables pre- and post-financial crisis. For this purpose, private equity has been taken as the dependent variable with a value equal to 1 for private equity-backed companies and a value of 0 for non-private equity-backed companies.

Because the dependent variable is qualitative, our interest lies in predicting the probability of occurrence of that event. The simple logistic equation has the form:

## EXHIBIT 1

### Actual vs. Expected Effects

Variable	Description	Expected Effect
<b>Dependent</b>		
Dummy variable	= 1, for private equity-backed firms = 0, for non-private equity-backed firms	
<b>Independent</b>		
Return on assets	Measured as profit after tax divided by total assets	Increase
Debt to total assets	Measure of the leverage of the firm	Moderate
Equity to total assets	Measure of the leverage of the firm	Moderate
Return on capital employed	Measure of the performance of the firm	Increase
Tobin's Q	A positive value indicates profits and more investments	Increase
Asset turnover	Measures the efficiency of using the assets	Increase
Net income	Measures the profits made by the firm	Increase
Free cash flow	Financial performance measure after meeting all the expenses	Positive
Asset growth	Growth in the asset base of the firm	Increase

## EXHIBIT 2

### Descriptive Statistics of Explanatory Variables

Variable	Mean	Median	Maximum	Minimum
ROA	8.17884	6.45	149.5	-50.68
ROCE	21.43687	16.93	279.99	-710.39
D_TA	28.53957	26.81	119.54	0
EQU_ASSET	44.27345	44.74527	99.89361	-337.2329
NI	2,283.192	420.198	14,4307.8	-32,297.81
FCF	7,429.11	45.83301	9,862,164	-61,094.14
AT	0.901653	0.74	8.9	0
TOBIN	2.058122	1.45	21.12	0
PE	0.21335	0	1	0

$$\begin{aligned} \text{Logit}(Y) &= \text{Natural log(odds)} \\ &= \ln(\pi/1 - \pi) = \alpha + \beta X \end{aligned} \quad (1)$$

where  $\pi$  is the outcome of interest or an event such as private equity's effect on the total assets of the firm,  $\alpha$  is the Y intercept, and  $\beta$  is the regression coefficient.

Taking the antilog on both sides ( $\Pi$  = probability; Y = outcome of interest; and given  $X = x$ , a specific value of X), the odds ratio can be given by

$$\frac{e^{\alpha + \beta x}}{1 + e^{\alpha + \beta x}} \quad (2)$$

In Equation (1), the relation between logit of Y and X is linear, but in the second equation, the relation between the probability of X and Y is nonlinear.

Therefore, it is necessary to take natural log transformation of odds in Equation (1) to make the relation between the categorical outcome variable and its predictors linear.

The value of the coefficient  $\beta$  determines the relationship between variable X and the logit of Y. When  $\beta$  is greater than zero, larger or smaller X values are associated with larger or smaller logits of Y. Conversely, if  $\beta$  is smaller than zero, then smaller or larger values of X are associated with smaller or larger values of logit of Y.

### Econometric Specification

Our equation for the model is as follows:

$$\begin{aligned} PE_{i,t} &= \alpha_0 + \alpha_1 ROA_{i,t} + \alpha_2 ROCE_{i,t} + \alpha_3 \left( \frac{D}{TA} \right)_{i,t} \\ &+ \alpha_4 \left( \frac{E}{TA} \right)_{i,t} + \alpha_5 TQ_{i,t} + \alpha_6 AT_{i,t} \\ &+ \alpha_7 NI_{i,t} + \alpha_8 FCF_{i,t} + \alpha_9 AG_{i,t} + \epsilon_{it} \end{aligned} \quad (3)$$

where  $PE_{i,t}$  is a time-varying dummy having a value of 1 for private equity-backed companies and a value of 0 for non-private equity-backed companies. Our explanatory variables are as follows for firm  $i$  at time  $t$ :  $ROA_{i,t}$  is the return on assets;  $ROCE_{i,t}$  is the return on capital employed;  $\left( \frac{D}{TA} \right)_{i,t}$  is the debt to total assets;  $\left( \frac{E}{TA} \right)_{i,t}$  is the equity total assets;  $TQ_{i,t}$  is the Tobin's Q;  $AT_{i,t}$  is the asset turnover;  $NI_{i,t}$  is the net income;  $FCF_{i,t}$  is the free cash flow;  $AG_{i,t}$  is the asset growth; and  $\epsilon_{i,t}$

## EXHIBIT 3

### Cross-Correlation Matrix: Explanatory Variables

Variable	ROA	ROCE	D_TA	EQU_ASSET	NI	FCF	AT	AG	TOBIN	PE
ROA	1									
ROCE	0.47	1.00								
D_TA	−0.43	−0.32	1.00							
EQU_ASSET	0.43	0.11	−0.48	1.00						
NI	0.20	0.15	−0.19	0.13	1.00					
FCF	−0.01	0.04	−0.02	0.00	0.03	1.00				
AT	0.27	0.24	−0.18	−0.09	−0.03	0.10	1.00			
AG	0.06	0.03	−0.04	0.01	0.27	−0.05	0.06	1.00		
TOBIN	0.21	0.30	−0.33	−0.25	0.13	0.04	0.13	0.05	1.00	
PE	−0.01	−0.03	0.01	0.08	−0.09	−0.02	−0.06	−0.02	0.01	1

## EXHIBIT 4

### Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	103.647	10	0.000
	Block	103.647	10	0.000
	Model	103.647	10	0.000

is the disturbance term with unobserved bank effects  $v_{it}$  and  $u_{it}$ , the idiosyncratic error where  $v_i \sim \text{IIN}(0, \sigma^2)$  and  $u_{it} \sim \text{IIN}(0, \sigma^2)$ .

### Empirical Results

To test our hypothesis and to see the effect of private equity investment on company performance, we have taken private equity as a categorical variable with a value of 1 for private equity-backed companies and a value of 0 for non-private equity-backed companies. Matching has been done by comparing a private equity-backed company with approximately four non-private equity-backed companies on the basis of total assets. The various explanatory variables used to explain the effect of private equity investment are return on assets, debt to total assets, equity to total assets, return on capital employed, Tobin's Q, asset turnover, net income, free cash flow, and asset growth. The covariates would provide insight into the effect of private equity on company performance. The timeframe has been divided into two parts: precrisis (2001–2006) and postcrisis (2009–2014). Deal data have been collected from Venture Intelligence, and the financials of the companies have been taken from Bloomberg.

Panel data logistic regression has been used to analyze our sample in the two time periods. Since the dependent variable is categorical in nature, we use a logit model (logistic regression) to analyze the impact of private equity investment.

### Precrisis Period (2001–2006)

Our total sample consists of 1,602 observations arranged in a panel form. We used SPSS software to conduct a detailed analysis of our hypothesis. Our logit analysis starts with a null model, which is a model without predictors; overall predictability in the model without predictors is 78%—that is, without the predictors the model would have only 78% accuracy.

An omnibus test of model coefficients compares the model to the null model and produces chi-square values. As the  $P$ -value is  $<0.05$ , all values are significant, and the model is a good predictor (Exhibit 4).

With input including all of the explanatory variables, the predictability of the model increases by 78.5%. Therefore, including free cash flow, return on assets, return on capital employed, asset growth, asset turnover, debt to total assets, equity to total assets, and net income improves the predictability of the model (Exhibit 5).

As we can see from Exhibit 6, debt to total assets, Tobin's Q, free cash flow, and equity to total assets are statistically significant at a 5% level, while net income is significant at a 10% level. The values in the first column are known as unstandardized beta coefficients, and the statistical significance of the regression coefficients is measured with the use of the Wald statistic. As we can see, debt to total assets, equity to total assets, free cash

flow, Tobin's Q, and net income are significant predictors of private equity investment in India. As we use coefficients in the linear regression models, unstandardized beta coefficients are used in logistic regression to help explain the predictability in the equation. The sign of the unstandardized beta coefficients shows whether an increase or decrease has been caused by private equity inflow. The odds ratio has been computed for each of the variables by taking the exponent of the unstandardized beta coefficients. The higher the odds ratio (more than one), the greater the chances of the variables being affected by private equity inflow.

The odds ratio for debt to total assets is 1.018. This implies that, with the inflow of private equity during 2001–2006, the debt to total assets increases by 1.018 times its original value. This is a positive sign as

debt is a cheaper source of finance and provides a tax advantage for investors. The amount of debt a company employs should, however, be balanced, as more debt can lead to bankruptcy. Here, the debt increase is balanced with the inflow of private equity.

Tobin's Q gives an idea of whether a stock is undervalued or overvalued and an idea of the firm's performance in the stock market; it is computed as total market value divided by total assets. A higher Tobin's Q is preferable. With the inflow of private equity, Tobin's Q increases by 1.121 times. Therefore, a positive picture of the company's stock valuation is created by the private equity investment.

Equity to total assets is a measure of leverage for a firm, or how the capital structure of the firm is divided between equity and debt. The odds ratio for equity to total assets is 1.023, which implies that equity to total assets increases by 1.023 times with the inflow of private equity investment. As there is a greater increase in equity compared to debt, inflow of private equity has a positive effect on the firms' capital structure.

Net income is the profit made by the firm after covering all expenses. The odds ratio for net income is 1, which implies that private equity investment has had no effect on net income.

Free cash flow is a financial performance measure; it is the excess cash after meeting all the expenses and allows the company to make use of further opportunities for investment. The odds ratio for free cash flow is 1,

## EXHIBIT 5

### Classification Table

			Predicted		Percentage Correct
			PE		
			0	1	
Step 1	Observed				
	PE = 0	1,253	7		99.4
	PE = 1	338	4		1.2
Overall Percentage					78.5

Note: The cut value is 0.500.

## EXHIBIT 6

### Variables in the Equation

		B	Standard Error	Wald	df	Sig.	Exp(B)	95.0% CI for EXP(B)	
								Lower	Upper
Step 1 <sup>a</sup>	ROA	−0.005	0.007	0.477	1	0.490	0.995	0.981	1.009
	D_TA	0.018	0.005	12.198	1	0.000	1.018	1.008	1.029
	TOBIN	0.114	0.039	8.672	1	0.003	1.121	1.039	1.210
	ASSET_TURN	−0.060	0.093	0.419	1	0.518	0.942	0.786	1.129
	ROCE	0.000	0.003	0.011	1	0.916	1.000	0.995	1.006
	SIZE	−0.156	0.045	12.257	1	0.000	0.855	0.784	0.933
	FCF	0.000	0.000	15.851	1	0.000	1.000	1.000	1.000
	ASSET_GROWTH	0.000	0.000	0.901	1	0.343	1.000	1.000	1.000
	EQ_ASSET	0.022	0.005	22.028	1	0.000	1.023	1.013	1.032
	NI	0.000	0.000	7.603	1	0.006	1.000	1.000	1.000
CONSTANT		−1.549	0.570	7.395	1	0.007	0.213		

<sup>a</sup>Variable(s) entered on step 1: ROA, D\_TA, TOBIN, ASSET\_TURN, ROCE, SIZE, FCF, ASSET\_GROWTH, EQ\_ASSET, NI.

which implies there is no effect on free cash flow after private equity investment. The amount of cash that can be generated with private equity has not increased much, so it has a neutral effect on PE inflow.

### Postcrisis (2009–2014)

After the financial crisis of 2007–2008, many companies opted for the private equity route instead of going the public route, as the Sensex had crashed from 20,000 pts to around 13,000 pts. Therefore, we analyze the effect of private equity after the crisis period.

An omnibus model of coefficients compares our model with predictors to a null model and produces chi-square values. As the *P*-values are significant and  $<0.05$ , our model is a good predictor of the dependent variable. Logistic regression has been used because the dependent variable is categorical in nature (Exhibit 7).

The null model has a predictability of 78%, but with the addition of all input variables (free cash flow, asset turnover, asset growth, return on assets, return on capital employed, size, net income) the predictability of the model becomes 78.8%. Therefore, the addition of the input variables improves the overall predictability of the model (Exhibit 8).

## EXHIBIT 7

### Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	85.963	10	0.000
	Block	85.963	10	0.000
	Model	85.963	10	0.000

## EXHIBIT 8

### Classification Table

			Predicted		
			PE		Percentage Correct
			0	1	
Step 1	Observed				
	PE	0	1,259	3	99.8
		1	340	0	0.0
Overall Percentage					78.6

Note: The cut value is 0.500.

The main result of interest is given in Exhibit 9, in which we show the significance level and odds ratio for the individual variables. As discussed previously, the first column provides unstandardized beta coefficients, and odds ratios are computed as the exponential of the unstandardized beta coefficients. The significant variables are debt to total assets, asset turnover, and net income, which have a *P*-value  $<0.05$  and are affected by private equity investment.

The odds ratio for debt to total assets is 1.014, which implies that with inflow of private equity, the ratio of debt to total assets increases by 1.014 times its original value. According to the free cash flow hypothesis, a higher level of debt leads to a disciplinary effect on the managers, and they tend to invest in fewer negative net present value projects. Increase in debt is thus a positive sign for the firm.

The odds ratio of asset turnover is 0.557. The value is less than 1, which implies that with inflow of private equity, the turnover of assets has decreased by 0.557 times. This suggests that the efficiency of deploying assets to generate revenue has decreased by 0.557 times.

Net income has an odds ratio of 1, which implies that with the inflow of private equity, there is no significant impact on the amount of net income or profit made by the firm.

Free cash flow is an important variable with which to judge the financial performance of a company. After the crisis of 2007–2008, free cash flow has become an insignificant variable: It is not affected by the inflow of private equity.

### Comparative Analysis of Pre- and Post-Financial Crisis Period

Exhibit 10 compares the performance of different explanatory variables before and after the crisis period with the inflow of private equity investment.

Precrisis and postcrisis return on assets were not affected by private equity inflow, implying that the ROA of a company does not increase or decrease relative to the amount of private equity investment.

Debt to total assets is a measure of the amount of leverage or the division of debt and equity in the capital structure of a firm. It is a significant variable in both the precrisis and postcrisis period, but the amount of debt to total assets decreases in the postcrisis period with the inflow of private equity. This decrease could be due to

## EXHIBIT 9

### Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	ROA	-0.007	0.009	0.572	1	0.450	0.993
	D_TA	0.013	0.005	7.630	1	0.006	1.014
	TOBIN	0.014	0.027	0.272	1	0.602	1.014
	ASSET_TURN	-0.585	0.146	16.083	1	0.000	0.557
	ROCE	0.003	0.002	1.299	1	0.254	1.003
	SIZE	-0.188	0.057	10.731	1	0.001	0.829
	FCF	0.000	0.000	0.057	1	0.811	1.000
	ASSET_GROWTH	0.000	0.000	2.372	1	0.124	1.000
	EQ_ASSET	0.005	0.004	1.130	1	0.288	1.005
	NI	0.000	0.000	4.673	1	0.031	1.000
	CONSTANT	0.434	0.728	0.355	1	0.551	1.543

<sup>a</sup>Variable(s) entered on step 1: ROA, D\_TA, TOBIN, ASSET\_TURN, ROCE, SIZE, FCF, ASSET\_GROWTH, EQ\_ASSET, NI.

## EXHIBIT 10

### Pre- and Post-Financial Crisis Period

Variables	Precrisis (2001–2006)		Postcrisis (2009–2014)	
	P-Value	Odds Ratio	P-Value	Odds Ratio
ROA	0.49	0.995	0.45	0.993
D_TA	0.00	1.018	0.006*	1.014
TOBIN Q	0.003*	1.121	0.602	1.014
ASSET_TURN	0.518	0.942	0.00*	0.557
ROCE	0.916	1.00	0.253	1.003
FCF	<b>0.00*</b>	<b>1.00</b>	<b>0.811</b>	<b>1</b>
ASSET_GROWTH	0.343	1.00	0.124	1
EQUITY_ASSET	0.00*	1.023	0.288	1.005
NET INCOME	0.006*	1.00	0.031*	1
SIZE	0.00	0.855	0.001	0.829
CONSTANT	0.007	0.213	0.551	1.543

\*Denotes significance at 5% level.

the additional infusion of capital through the private equity route.

Asset turnover is unaffected by private equity inflow in the precrisis period, but in the postcrisis period, the efficiency or the turnover of the assets decreases by 0.557 times, or by around 50%. This change implies a negative impact of private equity investment; high turnover of assets implies the ability to use assets to generate revenue.

Free cash flow helps a company evaluate new business opportunities of investing; therefore, free

cash flow gives a firm the confidence to look for new avenues to increase its profits and add more value for shareholders. It gives an indication of whether the firm would be a good investment for investors. The earnings of a firm may be manipulated by accountants, but to get a clearer picture of the functioning of a firm, free cash flow should be evaluated. Free cash flow can also be negative due to large investments being made by the firm, and therefore, its benefits might be reaped in the future. During the precrisis period, free cash flow was a significant variable but did not increase or decrease due to private equity inflow. In the postcrisis period, however, there was no effect on free cash flow with the inflow of private equity. Therefore, the amount of free cash flow was much lower during this time period and was unaffected by the amount of investment made by the private equity route.

## CONCLUSION

Private equity investment is a way to provide funds in order to generate revenue and bridge the gap between the supply and demand of financing. During the postcrisis period and with the fall of Sensex and big firms like Lehman Brothers, the availability of capital to meet basic requirements had become an issue. During that time period, many companies requiring capital approached private equity companies, and there were huge investments, of around \$19.03 billion, in 2007, compared with \$1.1 billion in 2004. The number of

deals increased from 60 in 2004 to 450 in 2007. The value of total announced private equity deals increased by 150% in 2007 from 2006. Companies that took private equity as an investment had better leverage and net income (profits) compared to firms without private equity. Overall, though, private equity investment does not have any major impact on various performance, profitability, and leverage measures.

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