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Is Private Equity Investment Good For Indian Companies?

By Troy Smith

Yes. Private equity investors choose to invest in the better companies in the economy and then they help these companies to grow. While there is not a lot of evidence of efficiency gains within the companies themselves, the reallocation of resources from worse-performing companies to better-performing companies helps the overall economy to become more efficient.

Private equity investment in developing countries is growing rapidly. As **Figure 1** shows, private equity in India has gone from virtually nothing in the early 1990s to more than \$10 billion today. It is also widespread, with investments in many different industries including storage and distribution, media, health care, and software services. However, the effects of private equity investment on the companies that receive the investment and on the larger economy are often disputed. Some believe that sophisticated

private equity investors take advantage of companies by stripping assets, milking cash, and laying off workers. Others believe that private equity helps the companies that receive the investment by providing cash, improving management or governance, or transferring technology. What has been less well explored is whether private equity helps companies primarily through helping them to expand and grow bigger or whether it is more effective at helping firms operate more efficiently.

Previous research on private equity has focused on the U.S. and other developed countries. However, because of constraints to credit, labor, and product markets, a large proportion of family firms, and relatively worse management practices, the effects of private equity may be different in developing countries.

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About The Author

Troy Smith is a PhD student in the Department of Economics at Stanford University. He researches productivity in environments where it is difficult to measure and how the productivity of organizations impacts the markets in which they operate. His current research focuses on business in developing countries by examining the effects of private equity investment on Indian firms and education in the United States by examining the supply of private schooling. Before beginning his PhD at Stanford, Troy worked as an economic consultant at Charles River Associates in Boston, as a research associate at Harvard Business School for the required first year MBA strategy course, and as a researcher at the Small Enterprise Finance Center in the Institute for Financial Management and Research in Chennai, India.



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If private equity harms companies, it might be even more extractive in a developing country context, where the rule of law is weaker and firms face many constraints. Conversely, if private equity is helpful to companies, it might be especially important in helping firms to overcome constraints in emerging markets. My research looks at private equity in India to determine if it is helpful or harmful to the companies that receive the investment and if it helps them by

facilitating expansion or by making them more productive. In addition, I explore implications for macro-level productivity.

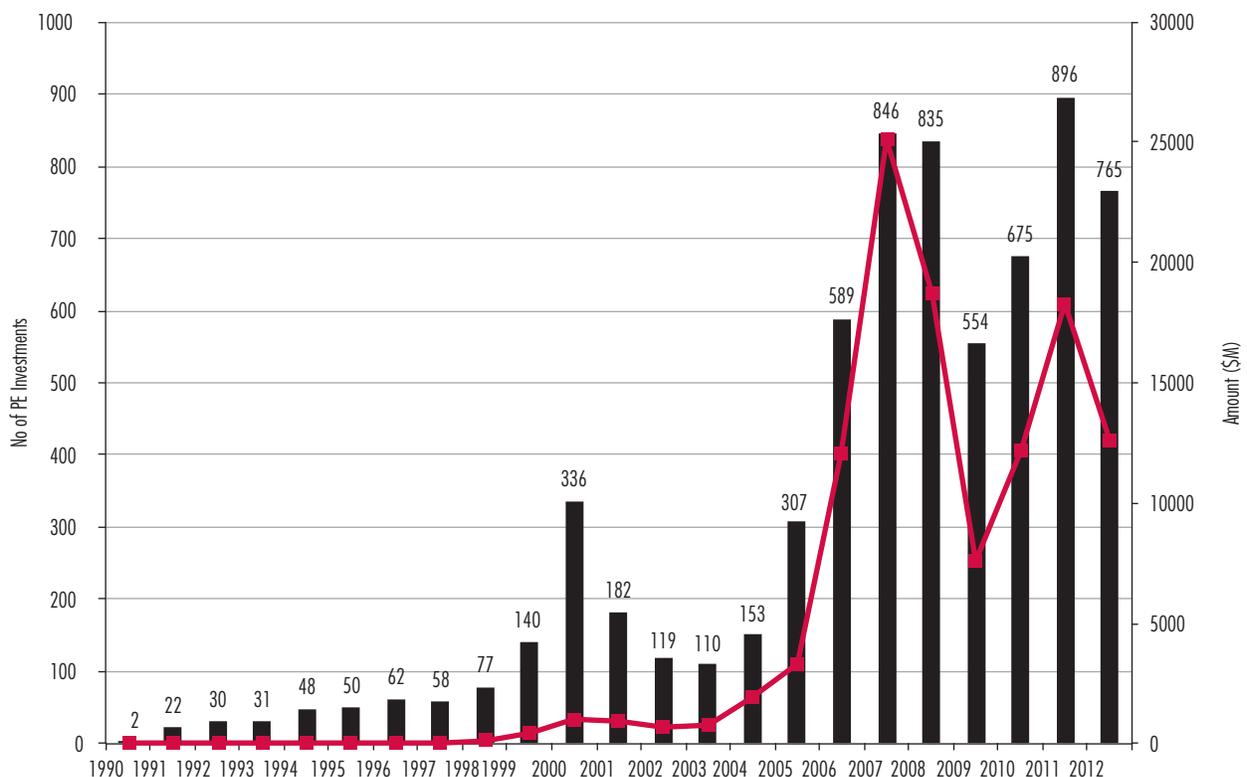
There are three main results of my research. First, private equity companies choose to invest in the better firms in the economy. Second, private equity firms then help these better firms to grow larger. Third, investee firms do not become more productive than non-investee firms. Consequently, although private equity firms in India don't appear to

be improving firm level productivity, they are important in reallocating resources from less efficient to more efficient firms.

Data on private equity in India

To explore the effects of private equity I have combined four datasets covering nearly all private equity deals in India from the early 1990s until 2012. I combined these data with a database of large- and medium-sized Indian firms, called Prowess, which contains financial data on the companies and allows

Figure 1
Private Equity investment has grown substantially in India through time



Notes: Number of deals (bars) and amount invested (line) from 1990 - Oct 2012 from countrywide database of PE deals in India constructed using VCCEdge, Venture Intelligence, Prequin, and Thomson. Amount invested is an underestimate as this variable is only available for about 70% of observations.

me to track their performance through time.

With funding from SIEPR and the Stanford Institute for Innovation in Developing Economies (SEED) I was able to visit India many times and interview several private equity firms, leaders of companies that had received private equity investment, and individuals who invest in private equity funds. One of these private equity firms agreed to give me detailed data, not only on the companies in which it had invested but also on all the companies in which it had ever considered investing.

Data on all of the potential

investments allow me to compare the companies that received private equity investment with the companies that just missed receiving investment. The near misses are a better control set than the typical Indian firm, which would be unlikely to be considered for private equity investment. Combining this information with data on employment and survival outcomes for the firms allows me to identify the effect of private equity investment on many different indicators for Indian firms.

Private equity investors select the best firms in which to invest

Not every firm is in a position to

receive private equity investment. Comparing firms that received private equity or were considered for private equity with the average firm in the economy shows that potential private equity recipients are “better” across a number of different indicators.

Firms that have not yet but will receive private equity pay employees more, have more assets, have higher revenues and profits, are more productive, have lower debt to equity ratios, and have higher returns on assets and equity. The differences can be seen in **Table 1**, which shows the mean for these variables for firms that never receive private equity compared with the mean for firms that have not yet but will receive private equity. As can be seen from the T statistics, the differences between the two groups are statistically significant. In addition, firms that will receive private equity have more people on the board of directors, more board meetings per year, and they are better managed. Because these firms are so different from the typical firm in the economy even before they receive private equity investment, comparing them with an average firm to determine the effects of private equity would be misleading.

Firms that receive private equity investment grow larger

Using econometric techniques I can capture the effect of private equity on the firms that receive the investment. Employee compensation, assets, revenues, and profits all increase after

Table 1
Firms that receive private equity are better firms

	Non PE	PE	Diff	T stat
Number of Companies	32,417	1,040		
Numer of years in data	8.1	12.0	3.9	21.0
Revenue (Rs. Mil)	587	1,393	806	9.5
Employee Comp (Rs. Mil)	45	95	49	7.1
Total Expenses (Rs. Mil)	537	1,300	764	10.0
Total Assets (Rs. Mil)	940	2,504	1,564	9.9
Gross fixed assets (Rs. Mil)	351	762	411	7.5
Profits (Rs. Mil)	19	89	70	13.4
EBITDA (Rs. Mil)	96	312	216	11.9
Debt/Equity	3.03	2.40	-0.63	-2.1
TFP1	0.57	0.95	0.37	10.2
TFP2	0.56	1.35	0.78	14.3
ROE	-2.88	15.02	17.90	11.9
ROA	-1.58	4.20	5.77	11.4

Notes: The first column contains the firms from the Prowess database who never receive private equity, the second column contains firms that will but have not yet received private equity, the third column represents the difference, and the fourth column is that T stat for the difference. TFP1 is a measure of total factor productivity using a Levinsohn Petrin approach to measuring productivity. TFP2 uses factor cost shares to measure total factor productivity. ROE is return on equity and ROA is return on assets.

private equity investment, as can be seen in **Figure 2**, which shows what happens to these variables in the three years before and the three years after private equity investment after controlling for firm and year fixed effects. I also collected data on the current state of the firms that received investment and the firms that were highly considered and didn't end up receiving investment. Firms that receive private equity investment have more employees

after investment and are less likely to go out of business than are the near-miss firms. Since I take into account the selection effects, these results indicate that private equity adds value for investee firms in India.

In the 1980s a lot of the rhetoric about private equity in the U.S. centered on leverage. It was claimed that private equity investors would buy companies and increase their debt levels to take advantage of tax breaks without

necessarily adding any other value to the companies. This is not the case in India today. Regulation prevents Indian private equity firms from using this strategy and it does not show up in the data. In fact, firms that receive private equity investment have lower debt/equity ratios after investment than before.

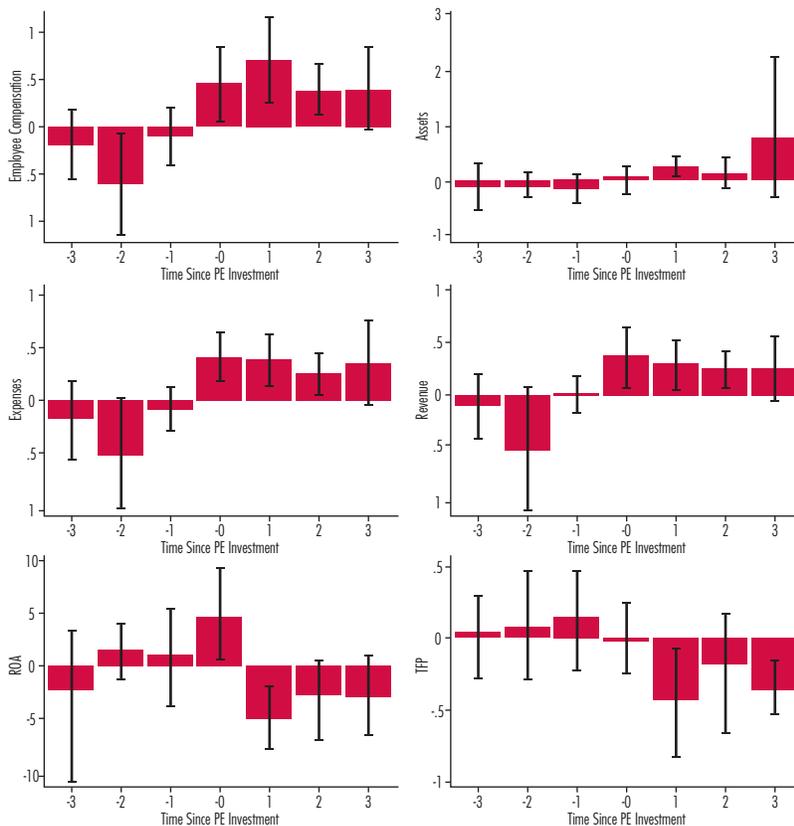
Firms that receive private equity investment don't show large productivity gains

There is not much evidence of firms becoming more efficient after private equity investment. Changes in return on assets and return on equity are more informative — both decrease after private equity investment. The changes are consistent with these firms previously being capital constrained and expanding after private equity investment (see **Figure 2**). Thus, it appears that private equity helps these firms by decreasing barriers to expansion rather than relieving barriers to efficiency.

Management and governance don't appear to change much

Unfortunately, the data do not clearly illuminate the mechanisms through which private equity affects investee companies. There is some indication that management and governance do not appear to change much after private equity investment. Anecdotally, there is evidence that this might be due to the difficulty of finding good managers in India. The private equity firm for which I have detailed data had a lot of trouble finding good CEOs

Figure 2
Changes in financial and performance variables after PE investment



Notes: Average residuals since PE investment of the given variable for investee firms after removing year and company fixed effects from a regression of investee and near miss firms. Standard errors are bootstrapped (500 iterations) at the 10% level. Data on firms provided by the company and matched to Prowess.

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and management teams that it felt confident in. In two separate instances the private equity firm went through two different CEOs before finding a good CEO. In two other cases, one of the partners of the firm ended up running an investee firm, in one case moving from Mumbai to Hyderabad for a year.

The mechanisms through which private equity affects investee firms and the potential difficulty of finding good managers for growing enterprises in India are both great areas for future research.

A life cycle of private equity

It is possible that when private equity companies first enter an area it is easier to help firms overcome credit constraints and to expand than it is to do the complicated work of improving efficiency (for instance by changing operations on the factory floor). As financial markets become more developed, in part because of the efforts of the private equity firms, it is much harder to arbitrage credit constraints and investors then have to move to improving efficiency of the existing firms.

Anecdotally, this pattern is consistent with the history of the U.S. private equity industry. In the 1950s and 1960s private equity investors in the U.S. talked a lot about providing credit and helping firms to grow whereas firms like TPG and Bain Capital today talk mostly about improving efficiency

in their acquisition targets. Private equity may thus be a catalyst to help overcome constraints that an economy is facing given its level of development (first capital constraints and later constraints on efficiency).

Implications for developing countries

What determines differences in firm productivity is one of the most important questions in economics because, at the aggregate level, these differences translate into per capita income differences between countries. To the extent that productivity can be increased in developing countries by knowledgeable private equity investors, the gulf between rich and poor areas of the world may be bridged.

Many recent academic research papers have highlighted the fact that resources are not allocated very well in developing countries. They argue that a more efficient allocation of resources would lead to higher overall production. Private equity firms seem to be helping allocate capital more efficiently — they choose the best-performing companies in the economy and then they help these firms to grow, thus helping with resource reallocation. While they are not yet improving the productivity of individual firms on a large scale, they are improving the productivity of the entire economy by reallocating resources to more efficient firms. This helps

increase per capita GDP, which has important implications for poverty reduction and the well-being of citizens in developing countries.

Policymakers in many countries routinely grapple with the best way to promote investment and entrepreneurship while also protecting workers and firms from the potentially harmful effects of economic churn and creative destruction. The effects of specialized investment like private equity on the individual firms and the economy as a whole are important considerations in these debates. Such discussions are especially important in developing countries where capital markets are less developed and the state has traditionally played a large regulatory role. This is critical for India at this time as many banking and investment laws are still being codified. Currently, large public pension funds, insurance companies, and several other sources of capital in India are prohibited from investing in private equity because it is considered a risky asset class. Consequently, approximately 90 percent of the capital flowing into the industry in India comes from sources outside the country. Indian policymakers should consider the macro economic benefits of having more capital available when weighing the risk of opening up additional sources of funding for private equity firms.

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