Guest Commentary: Implications for Job Creation and Achieving Good Financial Returns in Emerging Markets: An Analysis of Private Equity Funds Backed by IFC (Vintage 2000–2011)

David Wilton, Chief Investment Officer for IFC's Private Equity and Investment Funds Department, and Wilmot Allen, Investment Consultant in IFC's Global Private Equity Funds Department, share findings from IFC's recent analysis of development outcomes achieved by their funds' portfolio companies.

Introduction

IFC has invested in emerging market private equity funds since the 1980s, and has had a group dedicated to investments in funds since 2000. Our Funds Department now has a private equity portfolio of over US$3 billion invested in about 180 funds in Africa, East and South Asia, Eastern Europe, Latin America and the Caribbean, and the Middle East.

We back private equity funds in emerging markets because funds, with their provision of both equity capital and expertise, can have a significant impact on company growth and job creation. Since 2007, over half the funds receiving commitments from IFC have invested in International Development Association (IDA) countries,[1] and 45% of the portfolio companies of these funds have been small- and medium-sized enterprises (SMEs).[2] We estimate that these investments have created about 300,000 new jobs between 2000–2011 through investments in fast-growing, mid-sized companies.

Given our desire to maximize our development impact, we recently undertook an analysis of our private equity fund investments both to find out which investments generate the most impact in terms of job creation, and to demonstrate to other investors the broader benefits of investing in emerging markets private equity. Our analysis set out to answer the following questions:

1) What is the relative contribution of SMEs and larger companies to job creation?
2) What is the relationship between job creation and fund-level IRRs?
3) What appears to be most closely connected with job creation: company size, growth rate or industry?
4) Are some types of private equity funds (e.g., growth equity) better at driving job creation than other types?
5) Do these characteristics vary across different economic geographies?

[1] IDA countries are those that had a 2011 per capita income of less than US$1,195 and lack the financial ability to borrow from the International Bank for Reconstruction and Development (IBRD). "IDA-blend" countries are those that are in the same per capita income range but are sufficiently creditworthy to borrow from IBRD. Source: World Bank.

[2] For the purposes of this article, companies are sorted into SMEs and non-SMEs by the number of employees at the time of the private equity fund's investments. Companies with fewer than 300 employees at the time of investment and up to US$15 million in revenue are classified as SMEs.

Data Summary

The data we analyzed came from 82 funds in IFC's portfolio from vintage years 2000 to 2011. Of these funds, 51 were growth equity, 23 were SME and 8 were venture capital (VC). These funds invested in 519 companies, of which 235 were SMEs at the time of initial investment, and 284 were larger companies. The companies were located in 62 countries across the emerging markets, and had average revenue growth of 21.5% from 2000–2011.

The companies in the data set are not a random cross-section of companies in emerging markets. They are companies that have been selected by private equity funds with the objective of making an acceptable financial return to investors. In emerging markets, this selection process will skew the sample heavily toward faster growing companies. Given that there is little leverage in emerging markets, and multiple arbitrage is erratic and mostly unavailable, funds have to select fast-growing companies so as to achieve the returns LPs require.

Additionally, the article's conclusions are in the context of equity investment, and do not refer to the impact of access to debt finance on companies or job creation. These findings are specific to a data set of high-growth companies in fast-growing economies that have little access to debt; any change in these factors in a different set of countries may change the results.

IFC's Findings

At the company level (see Exhibits 1–3):

1. The companies in the sample created over 300,000 jobs and experienced an average rate of job growth of 15.3% between 2000–2011.
2. There is a positive correlation between job creation and returns to investors. Creating more jobs is consistent with achieving higher returns.
3. Larger companies created more jobs per company (974) at a lower equity investment per job (US$12,000) than smaller companies (114 and US$35,459, respectively). The incremental increase in revenue per job created is similar for both SMEs and non-SMEs.
4. Smaller companies had higher rates of job growth than larger companies (18.3% vs. 12.9%).

5. The number of jobs created is most closely tied to total growth in revenue while the rate of job growth is more closely related to the rate of growth in revenue. This connection to revenue growth appears to dominate the role of a company's industry sector in driving job growth.
6. Larger companies create significantly more jobs per company at a lower fund investment per job in IDA-blend and non-IDA countries. In IDA countries, SMEs and larger companies create a similar number of jobs per company. The stronger relative performance of SMEs in IDA countries appears to be linked to more limited growth opportunities. In countries with better growth opportunities, larger companies contribute more to job creation.

At the fund level (see Exhibits 4–5):

7. Growth equity funds create more jobs per company (886) than either venture capital funds (263) or SME funds (83). SME funds required the most investment per job created (US$26,627), while growth equity and VC funds required less investment (US$13,838 and US$17,312, respectively).
8. Geographically, growth equity funds create more jobs per company than either venture capital funds or SME funds in both IDA-blend and non-IDA countries, by quite a wide margin. In pure IDA countries, very few VC funds were active, and growth equity and SME funds create similar numbers of jobs per company.
9. SME funds have greater reach into IDA countries than growth equity or VC funds, representing owners of around 70% of the IDA-based companies in the sample. SME funds also expanded the range of countries covered, with almost 45% of the IDA countries in the sample being reached only through SME fund investments.
10. Finally, the findings suggest that investors seeking to create jobs should have a general preference for growth equity funds, and use SME funds selectively to target frontier regions in which growth equity funds will tend not to operate.

Exhibit 1: Overview of Companies in Data Set

	SME	Larger Company	Total/Average
Number of companies	235	284	519
Total jobs created	26,679	276,656	303,335
Average jobs created per company	114	974	584
Average revenue growth per company	US$14.1m	US$140.9m	US$81.6m
Average revenue growth per job	US$120,694	US$132,294	US$131,208
Investment by funds	US$946m	US$3,320m	US$4,266m
Fund investment per job created	US$35,459	US$12,000	US$14,064
Jobs growth rate	18.3%	12.9%	15.3%
Revenue growth rate	29.8%	14.9%	21.5%
Average number of jobs at investment	79	1,628	927
Average revenue at investment	US$4.1m	US$231.4m	US$125.6m

Company Level Analysis

Private Equity Portfolio Company Contributions to Job Creation

There were 519 companies in the data, roughly evenly divided between SMEs and larger companies, located in 62 countries across emerging market regions. At the time of investment, the larger companies had on average 20 times the number of employees and over 56 times the revenues of the SMEs. Exhibit 1 summarizes the company-level data set.

Following investment, the average revenue growth per new job was similar between SMEs and larger companies. The number of jobs created appears to be closely related to total revenue growth, while the rate of job growth appears closely related to the rate of revenue growth. Thus, larger companies growing at relatively slower rates tend to create more jobs than SMEs with high rates of growth.

The Relationship Between Investment Returns and Job Creation

IFC's analysis found a positive relationship between returns to investors and job creation. This finding underscores that private equity investments in emerging markets can be both developmental and achieve attractive returns.

Exhibit 2 shows a strong, positive correlation between fund IRR and job creation. The regression line can be interpreted as the expected percentage increase in jobs created associated with a certain increase in IRR. The IRR explains about 27% of the variation in the data. For example, a 1% increase in IRR is associated with a 6.3% increase in job growth. While a positive relationship does not necessarily imply a causal relationship between IRR and job creation, it at least suggests that IRR and job creation seem to move in the same direction.

Exhibit 3 confirms the positive relationship between returns and job creation seen in Exhibit 2. A comparison of the top 10 and bottom 10 performing funds in the sample indicates that the top funds have very strong IRRs, revenue growth

Exhibit 2: Log of Jobs Created vs. Fund IRR (2000–2011)

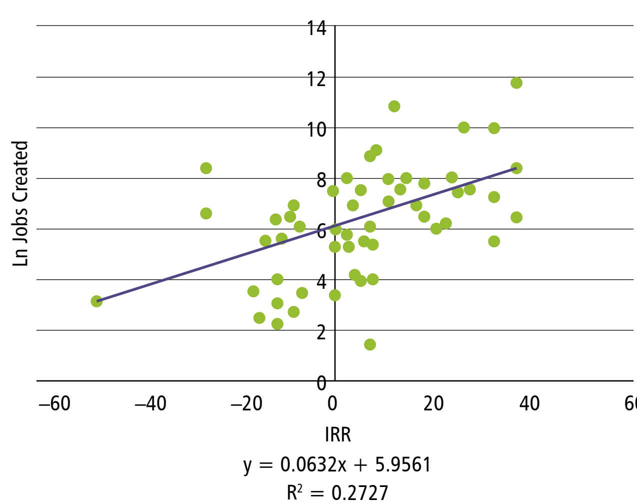

Exhibit 3: Comparison of Best- and Worst-Performing Funds

Out of 82 Funds	Vintage 2000–2011 Top 10 Funds	Bottom 10 Funds
Average IRR	33.7%	–22.7%
Average number of jobs created	17,404	598
Average rate of job growth	13.9%	10.4%
Average investment per job	US$5,108	US$41,472
Average revenue growth	US$2,060m	US$11.1m
Average rate of revenue growth	9.7%	4.5%

*Average rate of job growth for the bottom 10 funds includes an outlier that would reduce this percentage to 6% if excluded.

and job creation, while the bottom 10 have negative returns, paltry revenue growth and create few jobs.

Variables Most Closely Connected with Job Creation

We found that job creation and revenue growth are positively correlated at the company level. From a developmental perspective, it is important for IFC that high rates of job creation are associated with successful companies that are increasing their revenues.

Our research suggests that we would see one new job for an increase in annual revenues of approximately US$71,615. Additionally, we expect that every 0.63 percentage point increase in annual revenue growth would translate to a one percentage point increase in job creation.

IFC also analyzed industry groups to see if the type of industry was a significant factor in terms of number of jobs created and rate of job growth. However, we found that revenue growth and the rate of revenue growth are more likely to be associated with job creation than industry sector. Ultimately, it was a combination of scale and a healthy growth rate that drove the highest levels of new job creation.

Fund Level Analysis

Which Types of Funds Create the Most Jobs?

One of the main reasons that IFC invests in private equity funds is that they are such a good vehicle for driving growth in small- and medium-sized companies all over the world. We are therefore interested to know which type of funds are most effective in creating jobs.

IFC groups the types of funds in which it invests into different segments. These segments are defined by the business models of the funds which operate within them, not by the size of the companies in which they invest. In this article, our growth equity, venture capital and SME funds are highlighted.

- Growth equity funds invest in companies that are both large enough and/or growing fast enough to be reasonably certain of achieving an exit through a trade sale or IPO. As companies are not expected to achieve dramatic hockey-stick like rates of growth, growth equity funds require a steady batting average to achieve their target return on the overall fund.

- Venture capital funds typically invest in early-stage companies based around either new intellectual property or new 'disruptive' models of business. These are much higher risk proposals than those backed by growth equity funds. It is expected that there will be a small number of winners with hockey-stick growth profiles and a larger number of weak or failed investments.

- SME funds, as we define them here, are a group of funds with a business model that supports companies that are much less likely to achieve an exit through a trade sale or IPO. These companies are either very small, or slower growing, or have constrained scalability such that their initial rapid growth trails off.

It is easy to get confused by this terminology, as growth equity and venture capital funds can and do invest in SMEs, and SME funds can and do invest in mid- or large-cap companies. In fact, about one-third of companies receiving investment by growth equity funds were classified as SMEs, while that figure was about two-thirds for venture capital funds, and 59% for SME funds.

As indicated in Exhibit 4, growth equity funds create many times the number of jobs of VC and SME funds. However, the SME funds create jobs in countries not reached by other types of funds; our analysis reveals that SME funds extend the number of countries in the sample by 30%.

How Does Income Level of Countries Factor into Job Creation and Revenue Growth?

Given IFC's development mandate, it is important for us to understand the impact that the level of economic development of a given country has on the results observed at the company level. For if it turns out there are differences at the country level, we need to ensure that we are selecting the best vehicle for each type of market, and thus use our capital in the best way we can. Toward this end, we segmented the sample of investee companies based upon their economic geography: IDA, IDA-blend or non-IDA countries.

Looked at from this perspective, the results alter slightly from the general case. Larger companies still dominate SMEs in IDA-blend and non-IDA countries, creating significantly more

Exhibit 4: Job Creation by Fund Type

Vintage 2000–2011	Growth Equity Fund	Venture Capital Fund	SME Fund*
Number of funds	51	8	23
Number of companies within the funds	295	68	155
Jobs created by fund type	261,225	17,864	12,892
Jobs created per company by fund type	886	263	83
Investment per job by fund type	US$13,838	US$17,312	US$26,627

*Excludes one company that is an extreme outlier for job creation.

jobs per company at a much lower fund investment per job. However, in IDA countries, while job creation numbers per company are noticeably lower overall, SMEs created nearly twice the number of jobs per company as larger companies at a similar fund investment per job. It is also interesting that the average revenue growth per job created is lower for SMEs in both IDA and IDA-blend countries.

The noticeable difference among the three types of countries is that, in aggregate, revenue growth per company, job creation per company, the rate of revenue growth and the rate of job growth are all much lower in companies located in IDA countries than those located in IDA-blend and non-IDA countries; moreover, the fund investment per new job is higher. This suggests that, in countries with more constrained growth opportunities, SMEs' contribution to job creation is relatively stronger than it is in countries offering more robust growth opportunities, where larger companies will tend to dominate job creation.

Regarding fund type, our analysis shows that companies in SME funds create a consistent and modest number of jobs across all geographies, as can be seen in Exhibit 5. In IDA-blend and non-IDA countries, both growth equity funds and venture capital funds create a significantly larger number of jobs per company than SME funds. In IDA countries, SME funds create slightly more jobs per company than growth equity funds.

As one might expect, given their economic sustainability, companies in non-IDA countries have the highest revenue growth per company and are backed by the largest number of funds regardless of fund type. Whereas in IDA countries, SME funds invest in the largest base of companies and these firms achieve the highest rate of revenue growth per company. Venture funds comprise the smallest number of funds by fund type but invest in companies with the highest revenue growth rates overall in both IDA-blend and non-IDA countries. Finally, growth equity-backed companies in IDA-blend countries achieve the highest revenue growth rates among all growth equity fund investees.

Conclusions

So what important conclusions can we draw from this analysis that will impact the way IFC invests in private equity funds in the future?

First, and perhaps most importantly, this report shows that there is a positive correlation between job creation and return on investment. Simply put, companies that create jobs can generate good returns. Second, we found that, while small companies had the highest rates of job growth, it was actually larger companies that create the highest number of total jobs.

Finally, in terms of vehicles to reach the world's poorest citizens, our results indicate that growth equity created many times the number of jobs as SME funds. However, SME funds were effective as a vehicle for accessing IDA countries, and broadening the range of countries reached by IFC investment.

As we had been observing the portfolio for some time, these findings were not unanticipated. We knew growth equity funds and larger companies were having a greater impact on jobs overall—this analysis simply quantified it. Likewise, we were aware of the additional geographic reach provided by SME funds—and this confirmed it. In light of these conclusions, we plan to continue emphasizing growth equity funds in our investment strategy, while retaining a smaller allocation to SME funds specifically targeting the frontier of IDA countries.

Exhibit 5: Job Creation Across Fund Type and Geography

		Growth Equity Fund	Venture Capital Fund	SME Fund*
Number of funds**:	IDA	9	1	8
	IDA Blend	13	3	4
	non-IDA	39	5	19
Number of companies:	IDA	30	3	79
	IDA Blend	48	34	5
	non-IDA	217	31	71
Jobs created per company:	IDA	76	7	81
	IDA Blend	427	274	62
	non-IDA	1,099	275	87
Revenue growth per company:	IDA	US$57.6m	US$483,000	US$14m
	IDA Blend	US$73.1m	US$11.1m	(US$4.3m)
	non-IDA	US$148m	US$70.7m	US$10.4m
Jobs growth rate:	IDA	3.7%	18.4%	8.5%
	IDA Blend	33.3%	31.9%	4.7%
	non-IDA	12.0%	23.8%	10.9%
Revenue growth rate:	IDA	11.0%	17.2%	17.8%
	IDA Blend	28.6%	40.2%	–5.7%
	non-IDA	20.3%	49.1%	13.6%

*SME Fund figures related to IDA blend exclude one company that is an extreme outlier for job creation.
**Number of funds adds to more than 82 because some funds invest across geographies.

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