

Some Reflections on Private Equity: Trends, Valuation, and Challenges

N. R. Parasuraman

Shri Dharmasthala Manjunatheshwara Institute for Management Development (SDMIMD) Mysore, India

Ullas Rao

Heriot-Watt University, Dubai Campus Dubai, United Arab Emirates

Received December 2016; Revised May 2017; Accepted June 2017

Abstract

Private Equity (PE) has been hailed as one of the most significant sources of capital for enterprises (private in particular) in order to expand business activities both in terms of scale of operations and scope of activities. Unlike Venture Capital (VC) funds, PE funds focus more predominantly on middle-sized businesses that demonstrate enormous potential for growth and expansion. As the major shareholders of PE funds seek to earn attractive rates of return on their investment, it becomes imperative for these funds to be very selective in picking most suitable candidates for investment. The business model of a typical PE fund revolves around taking a strategic stake in the target firm, which is complemented with a representation in the board in the form of a directorial position. PE funds envisage bringing about operational and structural changes in the target firm with an ultimate eye on enhancing the value of the firm. Typical investment horizons for PE funds vary between 5 to 10 years with popular modes of exit being: Public floatation of stock (as in IPOs), Management buyouts, and Acquisitions. In this paper, we seek to delineate on the three significant aspects pertinent to PE funds with specific reference to their operational strategies in emerging market economies like India. Most significantly, the novelty of contribution lies in the fact that the paper makes a seminal attempt towards capturing the underlying financial rationale behind the operation of some of the most successful PE firms. This has been underscored by laying out a practical demonstration of the two of the most popular computational mechanics adopted by a majority of the PE firms – IRR and CAPM IRR approaches. The same have been analysed critically from a practitioner's perspective in order to further invigorate a debate among academics and practitioners about the suitability of valuation approaches as seen from the prism of PE firms.

Keywords: Private equity, valuation, investment.

Reference to this paper should be made as follows: Parasuraman, N. R. and Rao, U. (2017). Some Reflections on Private Equity: Trends, Valuation, and Challenges. ICPE Public Enterprise Half-Yearly Journal, 23(1), 1-15.

Introduction

Private Equity (PE) funds have played a major role in fuelling the global economic growth. By their ability to pick strategic stakes across enterprises operating in different life-cycles, PE funds continue to drive the growth of enterprises and industries. The traction gained by virtue of infusion of capital across the enterprises represented by diverse industries ultimately contributes in aiding overall economic growth. This is evident from the fact that the total capital invested by PE funds in India increased from a modest \$US 2 billion in 2005 to robust \$US 12.4 billion in 2014, registering a CAGR of 22.47% (see Figure 1). The fact that during this period the Indian economy witnessed a stable economic growth rate meant that PE funds have found enormous opportunities across diversified sectors in their quest towards generating attractive rates of return.

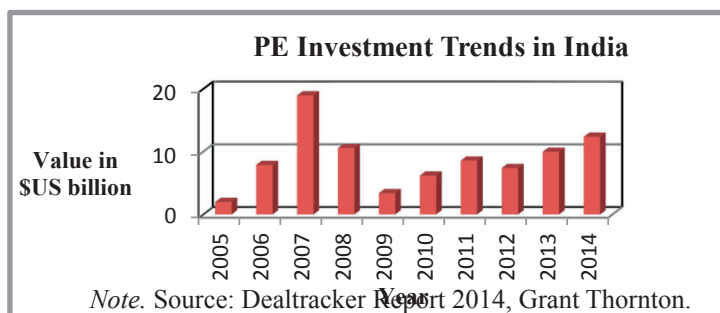


Figure 1. Growth in PE funds over 2005–2014.

Interestingly, the number of PE deals over 2013-2014 witnessed a growth rate of 34%, while in terms of value it was 23% for the same period (Grant Thornton, 2014). A significant contributor to the growing expanse of the PE funds in India has been the ubiquitous “E-commerce sector”. With the likes of Flipkart, Snapdeal, and Yepme dominating the Indian consumer psyche, PE funds have taken big bets on some of the most promising e-ventures. Considering the fact that E-commerce market has witnessed a steady growth rate of 34% since 2005 with an estimated 38 million active online shoppers generating some estimated sales of \$US 2 billion in 2015, it is only reasonable to expect the PE funds to continue to take aggressive positions in

India's resurgent E-commerce ventures (McKinsey & Company, 2012).

Notwithstanding the allure of E-commerce ventures, PE funds in recent times have come under intense pressure to seek viable exit routes. Given that a typical investment horizon for a PE fund does not normally exceed 10 years, the majority of the PE funds have already reached their terminal investment horizon with an exit option looking imminent. The subdued investors' sentiments in the capital markets led by cautious global economic outlook has meant either postponement or a change in strategy in the efforts towards taking the privately held e-commerce ventures public. Concerns ranging from negative bottom-line (in spite of healthy growth in sales revenues) coupled with the uncertainty arising on the front of tax promulgations as applicable for online retail ventures have made investments by PE funds look riskier.

In keeping with the above arguments, the present paper seeks to explore the operations of PE firms by primarily focusing upon the divergent approaches to valuation adopted by PE firms. This assumes significance as financial commentators believe that the complexity of valuation models only goes on to expose the gullibility of general investors in respect of their understanding with the models being perceived as some kind of a "Black-Box". Consequently, a major thrust of the paper rests upon enlightening the investors on the financial rationale behind the employment of some these complex models.

In order to achieve the above overarching objective, we construct two simplistic models with a hypothesized scenario, which is as well applicable for PE firms in a realistic setting. Another highlight of the paper is that while retaining the simplistic presentation of a complex model, the underlying rigour has not been compromised.

PE Funds in India: Sector-Wise Representation

Apart from concentration in the IT/ITES/Online Retail sectors, in recent times, PE funds in India have also invested in diverse set of industries represented by the following: Pharma, Healthcare & Biotech; Retail & Consumer; Banking & Financial Services; Real Estate; Education; Media & Entertainment; and Manufacturing. Major PE funds, as part of their investment strategy seek to identify promising ventures across diversified industries; the selection of which to a very large extent is influenced by the ominous cash-flow pattern. For instance, PE funds have traditionally invested in promising health-care ventures including diagnostic services that have employed technology as their major partner towards delivering quality health services¹. Funds infused by the PE players have traditionally been utilized towards expansion of the units both horizontally (additional services) and vertically (geographical expansion). The stability of cash-flows in the health-care sector has meant that PE funds are lesser exposed to a lesser degree to the vagaries of fluctuating cash-flows reminiscent in cyclical industries, such as Real Estate and Manufacturing.

Table 1 (see below) presents some interesting statistics. The growing clout of the traditional industries in attracting PE investments is clearly evident. Even though a distant second, Energy & Natural Resources over the period from 2005–2014 witnessed 175 deals totalling a deal value of \$US 9.1 billion. With all the talk by the present government towards giving impetus to renewable energy predominantly represented by Solar and Wind energy, the sector with its promising opportunities is expected to witness bolstered investments going forward.

Real Estate and Telecom sectors in general have traditionally been impacted by the cyclical movements of the economy. The heightened competition reflected in the Telecom sector particularly in the Indian context (with extremely competitive AR-PU²) renders the selection process of suitable investment candidates by PE funds extremely complicated. Nevertheless, the two sectors have witnessed robust PE activity over the last ten years both in terms of number and value of deals completed.

Banking & Financial Services sectors has been the 5th most active sector among the PE funds in India witnessing a total of 311 deals clocking a deal value of \$US 6.4 billion over 2005–2014 period. With the Reserve Bank of India (RBI) granting two Universal Banking licences and Small Finance Bank licences to 11 Microfinance Institutions, the sector looks extremely promising in terms of attracting fresh investments from PE funds (Business Line, 2015). The fact that almost all the new entities that have secured licenses have an extremely healthy financial position as measured by highly efficient NPA levels and robust CARs (capital adequacy ratio) augurs well for PE funds.

Lastly, the Manufacturing sector in India is expected to witness exciting times ahead with the fructification of policies pertaining to “Make in India” initiative. With the central government opening FDI in several strategic sectors across the Manufacturing landscape, PE funds in India are literally staring at a vast untapped potential offering humungous opportunities to derive highly attractive rates of return from their strategic investments.

¹ For instance, Vasan Healthcare Pvt. Ltd. in 2012 received a PE infusion of S\$100 million from Government of Singapore Investment Corp. Pte. Ltd (GIC) (Livemint, 2012).

² ARPU – Average Revenue Per Unit.

Table 1
Top Sectors for PE Investment over 2005–2014

Rank	Sector	Number of deals	Value in \$US billion
			13.0
I	IT & ITES	905	13.0
II	Energy & Natural Resources	175	9.1
IV	Real Estate	225	8.6
III	Telecom	55	7.1
V	Banking & Financial Services	311	6.4
VI	Manufacturing	231	4.5
VII	Pharma & Healthcare	298	4.4
VIII	Retail & Consumer	263	4.1

Note. Source: Dealtracker Report 2014, Grant Thornton.

PE Exit Routes

The investment horizon by PE funds in investee corporations typically does not exceed 10 years. By this time, the PE fund is expected to have initiated significant improvements in the operations of the investee firm. Improvements could typically encompass both operational and financial aspects of the firm. At the end of the investment horizon, the PE fund would have ideally achieved an enhancement in the corporate value offering an attractive exit proposition. Theoretically, while several forms of exit are possible, most of the exit routes broadly conform to the three popular routes presented here.

1. **IPOs (Initial Public Offering)** – This remains one of the most popular and frequently adopted exit routes by the PE funds. Here, the PE fund would take the investee corporation public by meeting all the legal and regulatory frameworks in vogue. The strategic stake held by the PE fund usually along with the promoter stake is offered for sale to the public shareholders. The process is implemented in the form of a typical book-building process facilitated by merchant bankers. Like any other IPO, valuation as reflected in the offer-price holds the real key towards making the public issue successful among the investing community. The offer price seeks to compensate the PE investor profitably by generating an attractive rate of return measured as the Internal Rate of Return (IRR).
2. **Acquisitions** – This is also a popular mode of exit adopted by PE funds. Here, the strategic stake held in the investee firm is sold out to a potential bidder (usually specialized investor, corporation or institutional investor) at a negotiated price. Here again, the PE investor envisages to earn an attractive IRR on the investment committed in the target enterprise.

3. **Management Buyout** – This exit route has also been gaining considerable popularity among the PE funds in recent times. This route is also particularly suited for family-run enterprises. In the wake of intense competition posed by their professional peers, family-run businesses seek PE investments both with an objective to hasten the capital expenditure process as also to entrust the management of enterprise with a professional team in order to realize operational and financial efficiencies. Once the PE succeeds in realizing these objectives, the family-run management seeks to repurchase the stake held by the PE in return for a negotiated price that seeks to compensate the PE investors by offering them an attractive IRR on their investment.
4. **Liquidation Preference and Secondary Offerings** – PE firms may also have an arrangement, wherein the investors are in a position to retrieve their initial investments primarily in such scenarios where the investee company is sold below the investible amount. In such circumstances, the most senior investors get preferential liquidation rights. Also, another route that PE funds could contemplate relates to secondary offering of the shares in the investee company, should the investee company be already listed in a stock exchange.

Table 2 below reflects significant exits made by PE funds in India in 2014.

Table 2
Significant PE Exits in 2014

Investor Exited	Investee	Sector
IDFC Alternatives	Galaxy Mercantiles Limited & Blueridge SEZ	Real Estate
Essar Global Fund Limited	Aegis Limited USA Inc - Aegis Group	IT & ITES
Chrys Capital	HCL Technologies	IT & ITES
Bain Capital Partners	Hero MotoCorp Ltd	Automotive Pharma, Healthcare &
Temasek	Medreich Ltd	Biotech
The Carlyle Group	Tirumala Milk Products Private Limited	Retail & Consumer
Providence	Idea Cellular	
SAIF Partners	Just Dial Pvt Ltd	
The Carlyle Group	Cyberoam Technologies	IT & ITES

Note. Source: Dealtracker Report 2014, Grant Thornton.

Literature Review

In this section, we seek to present a concise review of some of the most significant literature in vogue in respect of PE industry. The objective of this section is to mainly educate and enlighten the readers about some of the most influential writings on PE. Berger and Udell (1998) in their thought-provoking paper contend that small businesses often require varying degrees of capital at different stages of their development. It is in this context that PE firms come handy by picking up strategic stakes as a result of equity infusion and then seek to make a profitable exit after staying invested and working with management over a restricted number of years. The paper, unfortunately, does not offer any evidence in respect of working models adopted by PE firms. Kaplan and Schoar (2005) in their influential contribution opine that PE firms generate returns similar to S&P 500 even though performance differed owing to heterogeneity of PE funds. The study also points out that established PE funds tended to outperform their relatively newer counterparts. As this study mainly focused on PE funds' performance assessment, there wasn't much scope left to discuss the 'modus operandi' involving PE funds. In a somewhat departure from earlier findings, Phalippou and Gottschalg (2008) find that after making adjustments for fee and risk, PE funds underperformed S&P 500 by as much as 6%. The authors contend that a major reason for a flawed observance of similar performance between markets and PE funds arises out of the influence rendered by inflated accounting leading to biased investment measures. Kaplan and Per (2009) in their paper argue that it is also typical of PE firms to raise leverage along with equity in order to make investment in target firms. In such a scenario, PE firms typically operate as LBO (leveraged-buyouts) with the prevailing interest rate scenario and market conditions playing particularly a significant role in influencing decisions of PE firms. As an evidence, the study points out that PE firm activity peaked during boom periods ranging from 2005-2007 while declining subsequently in the aftermath of global financial crisis. King and Jill (2002) similarly observe that returns generated on investments in privately held enterprises do not outperform their public counterparts, while raising the spectre of motivation behind such investments even in the face of large risk premiums and poor risk-return trade-offs.

It is worthwhile to infer from the above significant studies that PE firms have been a cynosure in the eye of gleaming researchers with a great degree of focus laid towards the assessment of their performance vis-à-vis representative markets like S&P 500. While most of these studies do seek to address important gaps arising in the literature surrounding PE firms, however, it becomes apparent that the entire subject surrounding valuation dynamics continues to be given a short shrift. The present study seeks to close this gap by resorting to the presentation of two of the most plausible models likely to be adopted by PE firms.

Valuation Conundrums

Valuation of target enterprises plays a very significant role in determining the suitability of investment in target enterprises by PE funds. It is noteworthy to mention here that the typical valuation process surrounding the target firms is somewhat different from the valuation techniques applied in a typical investment setting guided by the all-encompassing fundamental analysis.

PE funds are primarily driven by their desire to earn superior rates of return on their investment, which is usually represented as IRR. Investments are considered worthwhile and feasible so long as the PE funds are able to derive IRR, which is greater than the cost of capital. For discussion purposes, we shall represent IRR and cost of capital as Target IRR and CAPM IRR, respectively. Before dwelling into the pros and cons surrounding the above approach, it will be useful to carefully understand the above technique by considering an illustrative example, as represented below.

ABC PE fund is considering investment in PQR target firm, which is operating in the health-care services sector. For our purposes, let us say that the PE fund is considering picking up 100% stake in the target firm over an investment horizon of five years. The cash-out would therefore take place at the end of the five years. Subsequent to the projections of the income statement for PQR, the following three scenarios emerge (Table 3), depicting the forecasted net income at the end of the five years³.

Table 3
Terminal Equity Values for PQR under Different Scenarios

Parameters	Pessimistic	Most Likely 9	Optimistic
Projected Net Income at end of year 5	8	9	10
P/E Multiple	16.8747	16.8747	16.8747
Terminal equity value (P/E x Net Income)	134.997		16.8747

Note. Source: Hypothesized data.

Given that the initial book value of PQR at the beginning of the investment period (year 0) is 10, it is possible to compute the IRR earned by the PE fund – ABC.

IRR will be computed as shown in Eq. (1) below:

$$Book\ value\ at\ start = \left[\frac{Ter\ min\ al\ value\ at\ end}{(1 + IRR)^{investment\ horizon}} \right] \quad (\text{Baldwin, 2001}) \quad (1)$$

³ In keeping up with the objective of the illustration to drive the concept of valuation process as applied to a PE fund, the need to depict the detailed break-up of the projected income statement is obviated. Readers requiring further elaboration on the same are encouraged to contact the author over email.

Here, the book value at start is 10, while the investment horizon is five years. Terminal values are as reflected in Table 3, depicting different scenarios. Resolution of the above equation (IRR being the unknown variable) leads to the following values of IRR, in each of the scenarios (Table 4).

Table 4
Estimated Values of IRR Under Different Scenarios

IRR Values	Pessimistic	Most Likely	Optimistic
	68.293%	72.304%	75.973%

Note. Source: Computed data.

It is obvious from the above that the PE fund would be most desirous to obtain 75.973% return reflected in the Optimistic scenario. However, overlooking the extremes of pessimistic and optimistic scenarios, it is reasonable to believe that the PE fund would encounter the Most Likely scenario at IRR of 72.304%. Readers will observe that even in the Most Likely scenario, an IRR at 72.304% looks excruciatingly high, which is almost reflective of an utopian scenario with virtually negligible bargaining power in the hands of the target firm. Reality would dictate otherwise.

A well acknowledged fact within the investment field of PE and M&A (mergers and acquisitions) is that the target firm has the discretion of accepting or rejecting the deal proposed by the acquirer. In the wake of fierce competition, shareholders of the target firm end up as the ultimate beneficiaries as competing PE funds in their inexorable need to pick up a stake in the target firm end up sweetening the offer often to the detriment of the shareholders of the investing firm. It is thus logical to presume that the most significant motivation behind the shareholders' willingness to sell their stake in the target entity is most predominantly influenced by the degree of the premium offered.

From the above discussion, it becomes clear than unless the PE fund is willing to taper its expectation on generating the desired IRR, it becomes impossible for the shareholders of the target firm to exit at a premium⁴. It is for this reason that PE funds abandon the 'theoretical' IRR in favour of a more realistic target IRR. Target IRR may be defined as the most competitive rate of return that must be earned by the PE fund in order to justify investment in the target enterprise. Empirical research provides that the typical target IRR earned by PE funds range from 25% to 40%.

⁴ This also stems from the simple logic of time value of money, which dictates an inverse relationship between the discount rate and present value (PV), implying that the higher the discount rate, the lower the PV will be and vice-versa.

As we can observe from Table 5, the leverage ratios depict variation over the investment horizon of the PE fund, cost of equity (Ke), therefore, it needs to be estimated for all the projected years. Since Ke values are changing, we also need to compute (1+Ke) in order to discount the terminal value from year 5 through year 0. This approach within valuation is also more popularly known as the "backward approach".

An important part of the discourse at this stage pertains to deriving a benchmark rate of return against which the target IRR could be compared in order to make investment in the target enterprise an economically sustainable proposition. This benchmark would lend the role of a cost of capital. Like any other capital project proposal, a comparison of the cost of capital in place may be facilitated with the project's IRR in order to determine the feasibility of the project. From a PE perspective, the benchmark rate is more appropriately known as the Marketing IRR or CAPM IRR. Given the very wide practical application of the CAPM model, this rate derives its formulation from the underlying logic as enunciated in the original model. The CAPM model is expressed as shown below.

$$[K_e = R_f + (R_m - R_f)(\beta_i)] \quad (\text{Sharpe, 1970}) \quad (2)$$

Continuing with our above example, let us also incorporate the element of leverage into the investee firm – PQR. Typically, it is observed that at the beginning of the investment phase, investee firm tends to depict higher degree of leverage represented by higher (Debt/Equity) ratios. However, with the gradual progress of time, PE fund seeks to turnaround the business by gradually embedding operational and financial efficiencies. The management of PE fund works closely with the existing management of the investee firm in order to implement structural changes within the firm. In our illustration, let us say the investee PQR reflected the following pattern of leverage over the 5-year investment horizon.

Table 5
Estimated Pattern of Leverage for PQR Over a 5-Year Investment Horizon

	0	1	2	3	4	5
Debt %	0.9000	0.8041	0.7006	0.5895	0.4707	0.3442
Equity %	0.1000	0.1959	0.2993	0.4105	0.5293	0.6558

Note. Source: Hypothesized data.

Table 6 below provides the estimated values of $(1+K_e)$ over the investment horizon from year 0 through 5.

Table 6
Estimated Values of $(1+K_e)$ over the PE Fund Investment Horizon

Parameters	0	1	2	3	4	5
Beta-unlevered ^a	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Beta-levered ^b	3.8740	2.6385	2.0053	1.6225	1.3674	1.3674
K_e^5	0.2537	0.1919	0.1603	0.1411	0.1284	0.1284
$(1+K_e)$	1.2537	1.1919	1.1603	1.1411	1.1284	1.1284
Equity value ^c	68.0290	85.2870	101.6560	117.9480	134.5940	151.8720

Note. Source: Computed data.

⁵Here, we assume a risk-free rate of 6% and risk-premium of 5% throughout the investment horizon.

Notes:

- a) Unlevered beta, also known as the asset beta, represents the risk scenario impacting a security without considering the influence of financial leverage. Here, we have presumed a stable unlevered beta of 1, which remains constant across the investment horizon. Keeping this value constant enables us to critically study the impact of variations of leverage on the overall equity risk of the firm.
- b) Levered beta is computed using the following mathematical notation.

$$\text{Levered beta } (\beta_l) = \beta_u \times \left[1 + (1 - t) \times \frac{D}{E} \right] \quad (\text{Hamada, 1972}) \quad (3)$$

where:

β_l = Levered beta,
 β_u = Unlevered beta,
 t = Tax rate,
 D/E = Leverage.

- c) The Equity value has been computed using the backward approach as described earlier.

Year 5 = 151.872 (terminal value),

$$\text{Year 4} = \left[\frac{151.872}{(1.1284)} \right] = 134.594,$$

$$\text{Year 3} = \left[\frac{151.872}{(1.1284)(1.1411)} \right] = 117.948,$$

$$\text{Year 2} = \left[\frac{151.872}{(1.1284)(1.1411)(1.1603)} \right] = 101.656,$$

$$\text{Year 1} = \left[\frac{151.872}{(1.1284)(1.1411)(1.1603)(1.1919)} \right] = 85.287,$$

$$\text{Year 0} = \left[\frac{151.872}{(1.1284)(1.1411)(1.1603)(1.1919)(1.2537)} \right] = 68.029.$$

With all the given values of K_e and $(1+K_e)$, it is possible for us to estimate the CAPM IRR, which is simply computed as the geometric mean of all the K_e values estimated across the investment horizon of the PE fund. That is:

$$\text{CAPM IRR} = \left[\left((1+K_{e_1}) \right) \left((1+K_{e_2}) \right) \left((1+K_{e_3}) \right) \left((1+K_{e_4}) \right) \left((1+K_{e_5}) \right) \right]^{\frac{1}{5}} - 1 \quad (\text{Baldwin, 2001}) \quad (4)$$

$$= 17.42\%$$

Interestingly, we can observe that with a CAPM IRR of 17.2%, the PE fund would be offering a price of 68.029 to the target firm commanding a book value of 10. While the offer might be very enticing to the shareholders of the target firm, management of the PE fund may deem it as exorbitant and unviable. Ultimately, the shareholders of the target firm would demand a significant premium over and above the book value to consent for stake sale. As we already noted, the PE fund need not really go by the extreme alternatives represented by the Implied IRR at 72.304% or the CAPM IRR at 17.42%. At a target IRR of 40%, the PE fund is in a comfortable position to offer premium to the target firm by offering a price of 28.238 (computed from Eq. 1).

The investment in the target firm would be deemed feasible as the PE fund is able to achieve a target IRR of 40%, which is greater than the CAPM IRR of 17.42%. Should the negotiation between the PE fund and target firm get into a deadlock over disagreement on the offer price, the PE fund would well serve to keep the CAPM IRR as the benchmark. That is, the PE fund must necessarily ensure that the target IRR is always at the least marginally greater than the CAPM IRR. If the PE fund were to accept the CAPM IRR, given the excessive premium offered, the risk arising out of erosion of value in the target firm in the light of an uncertain economic environment remains extremely high. PE fund would have to therefore calibrate a right strategy aimed at maximizing the value of investment on one hand and offering a price to the target on the other that is capable of ensuring a very fast transition of the PE led management into the target firm.

Challenges Surrounding the PE Valuation

It becomes clear from the above example that the valuation dynamics surrounding the PE industry is significantly different from the valuation applied in the context of securities as relevant to a typical fundamental analyst. One of the important challenges surrounding the PE firm pertain to the determination of the most desired rate of return as measured by IRR. Illustratively, while the task may look simpler, in reality, however, estimating the true rate of return becomes quite challenging. The usual IRR range applied to the PE industry, which varies from 20% to 40%, may not after all be fully representative of the unique complexities applicable for certain

kinds of industries. PE funds would naturally demand higher return for investments bearing higher risk. It is perhaps for this reason, at least in the Indian context, that we witness an overcrowding of interest in investments in businesses pertaining to IT and related industries.

The stability of the cash flows reflected in defensive industries like Health care and Education should also explain the sustained interest among PE funds to invest in these businesses. In recent times, with the explosion of e-commerce firms in India, PE funds of late have come under increasing pressure to devise strategies aimed at embracing a feasible exit route. Highly depressed bottom-lines coupled with complex regulatory and operational environment presents PE funds with enormous challenges to arrive a realistic valuation for E-Commerce firms.

Conclusions

This paper has sought to make a seminal contribution to the field of PE by dwelling upon the existing literature and identifying the gaps surrounding poor treatment of valuation models popularly adopted by PE firms. This has been overcome by laying out both conceptual and practical nuances surrounding two of the most popular models adopted by PE firms. As a result, it becomes much easier for discerning readers to appreciate the financial rationale surrounding some of these models. Apart from the treatment of valuation models, the paper also goes on to identify some of the most significant trends within the PE industry with specific reference to emerging market economies like India.

This paper has been primarily devoted towards expanding the underlying conceptual bases surrounding PE firms in general, which has been achieved by sound theoretical underpinnings. The ideas offered in the paper could be further expanded by possibly tracing the strategic imperatives on valuation governing the PE firms in general. This could be achieved by resorting to a qualitative study aimed at retrieving responses from key executives of a representative set of PE firms. Such a study would further enhance and enrich the scope of discussions surrounding the operation of PE firms both in academia and in the practitioners' community. As the present paper is restricted to offering an exhaustive theoretical background on PE firms, it is envisaged that the limitations surrounding analyses of practical considerations will be overcome in future studies.

Private Equity, notwithstanding the challenges, will continue to play a leading role in heralding the growth of the industries particularly representing the sunrise sector that offer enormous opportunities for scaling the business going forward. In emerging market economies like India and China, PE funds would continue to evince heightened interest in promising ventures (both young and middle-aged) representing diverse sectors so long as opportunities remain towards ensuring a profitable exit route. As

PE funds particularly evince interest in investing in private ventures, existence of a robust and an expanding capital market becomes a necessary condition.

References

- Baldwin, C. (2001). Technical Note on LBO Valuation (A). *Harvard Business School Concept Note*, 1-10. Baldwin, C. (2001). Technical Note on LBO Valuation (B). *Harvard Business School Conceptual Note*, 1-6. Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance*, 22, 613-673. Business Line. (2015). *RBI gives licence for 11 payment banks*. Mumbai, India: The Hindu. Grant Thornton. (2014). *Dealtracker*. New Delhi, India: GT India. Hamada, R. S. (1972). The Effect of the firm's Capital Structure on the Systematic Risk of Common Stock. *The Journal of Finance*, 27(2), 435-452. Kaplan, S. N., & Per, S. (2009). Leveraged Buyouts and Private Equity. *The Journal of Economic Perspectives*, 23(1), 121-146. Kaplan, S. N., & Schoar, A. (2005). Private Equity Performance: Returns, Persistence, and Capital Flows. *The Journal of Finance*, 60(4), 1791-1823. King, M., & Jill, A. (2002). The Returns to Entrepreneurial Investment: A Private Equity Premium Puzzle? *The American Economic Review*, 92(4), 745-778. Livemint. (2012). *Vasan Healthcare get \$100 mn PE infusion*. Bangalore, India: Hindustan Times. McKinsey & Company. (2012). *E-commerce in India: Early birds, expensive worms*. New York, NY: McKinsey & Company. Phalippou, L., & Gottschalg, O. (2008). The Performance of Private Equity Funds. *The Review of Financial Studies*, 22(4), 1747-1776. Sharpe, W. F. (1970). *Portfolio Theory and Capital Markets*. New York, NY: McGraw-Hill.

Authors Note

The authors would like to thank the special issue editor and the reviewers for helpful comments on the previous draft of this paper.

Correspondence concerning this article should be addressed to U. Rao, Department of Accountancy, Economics, and Finance, School of Social Sciences and Languages, Heriot-Watt University Dubai Campus, P.O. Box 294345, Dubai International Academic City, Dubai, United Arab Emirates. Email: u.rao@hw.ac.uk

Biographical Notes

N.R.Parasuraman is currently the Director of SDM Institute for Management Development, Mysore, India. Prior to becoming Director in 2011, he was a Senior Professor of Finance at the Institute. He is a Fellow member of the Institute of Company Secretaries of India and the Institute of Cost and Management Accountants, and a Commerce and Law graduate. His Ph.D. is on Capital Structure of Indian Companies. He has 30 years of experience in diverse areas of finance. He was the Company Secretary of Federal Bank for 5 years. He worked as a Finance Manager for the KEK Group of Companies, Trivandrum, and as a Securities Analyst for Joindre Capital Services, Mumbai. He has been in full-time academics for the last twenty years. His areas of teaching and research are Strategy, Financial Derivatives, and Multinational Finance. He is an Adjunct Faculty at the Indian Institute of Management, Kozhikode, and is now a visiting faculty at the Indian Institute of Management, Rohtak and at the Indian Institute of Management, Udaipur. He has published 30 research papers and conceptual articles in various journals. He has also authored a book titled 'Financial Management – a Step by Step Approach', which has been published by Cengage Learning. His earlier book 'Fundamentals of Financial Derivatives' published by Wiley India Limited has gone into a third edition. In 2016, he co-authored with Eugene Brigham and Scott Besley in bringing out the South-Asian version of the book 'CFIN (Corporate Finance)', published by Cengage.

Ullas Rao is an Assistant Professor of Finance at the School of Social Sciences, Heriot-Watt University, Dubai Campus, United Arab Emirates. He carries more than 10 years of teaching, research, training, and consultancy experience. He earned his doctorate in the field of Mergers and Acquisitions. He has published several research papers in referred international journals. He has trained and consulted with some of the biggest Indian Conglomerate Business Houses on topics of interest in Finance. He is also an Associate Member of CISI, UK.