Chapter 3

Research methodology

3.1 Identification of Research Problem

The whole research process adopted in the preference work is explained stepwise in this chapter. In fact, the present work was taken up by the researcher after determining the problem through the interactions with the PE investors (Particularly Business angels) and their portfolio companies in manufacturing and service sectors in NCR, review of literature, discussions with professionals, academicians and discussions with other researchers in the concerned areas. It was experienced by the researcher that private equity is a new type of investment in India comparing to venture capital funding. Private equity can play a significant role in the development of Indian economy. Particularly small and medium enterprises which are the backbone of our industrial growth needs both finance and management skill which can be catered by private equity providers. However, the rapid growth of the private equity industry in India, of late, has raised concerns relating to the regulation of the sector. The creative nature of private equity firm activity, limited research and dearth of regulatory control on the industry has raised several questions about the quality of the capital flowing in, the activities of private equity funds, impact on the firms’ fundamentals and possibility of systemic risks emerging from the operations of private equity funds. Although, there is a rich literature illuminating the impact of venture capital financing on the firm’s earnings, management, financial reporting practices, post IPO performance, etc. Due to institutional differences between venture capital firms and PE sponsors, the findings of such research cannot be completely extrapolated to assess the impact of private equity on the fundamentals of the firm. For example, while venture capital firms invest in early stage, low profitable firms and rarely use bank debt, PE sponsors generally, buy mature profitable businesses via leveraged/management buyout transactions finance the transactions with large portion of bank debt and assume control of board of directors but are less likely to assume operational control. Further, these studies look into firm specific effects. Hence, the questions pertaining to impact of private equity on the economic fundamentals of portfolio firms have remained more or less unanswered. The very motive of this study is to understand how the private equity finance had helped the economies to develop industrially and economically.
3.2 Objectives of the Study

Keeping this aspect into consideration and adjudging the points gleaned out of review of literature the following objectives were determined. In the process the study aims at understanding the:

To study the contribution of private equity in the development of innovative and advanced technology in manufacturing and service sector in India.

1. To study the different sources and trends of private equity in India’s manufacturing and service sector.

2. To find out the factors leading to confidence level of private equity placements makers.

3. To study the impact of private equity in proportion to total capital.

4. To study the factors allowing/forcing the firm private equity.

5. To recommend the improvement in the role of Pvt. Equity keeping in view the state of development of innovative and advance technology in manufacturing and service sector.

3.3 Area of the study

The present research work area had been restricted to the NCR for primary source of information. The research project is completed by taking the above said particular area of PE investors and their portfolio companies because it is a difficult phenomenon to cover a very wide area by a single researcher for this type of study due various limitations in terms of time, sources and traveling. That is why the present research is completed by taking the NCR for primary information from the private equity portfolio firms.

3.4 Sample design

The research “A Study of Role of Private Equity in Development of Innovative &Advance Technology in Manufacturing and Service Sector in India” took place between November 2012 and March 2014. As this study purely on primary data based, for getting primary information a well designed questionnaire was prepared by keeping the objectives of the study into consideration. The format and contents of the
questionnaire are given in Appendix-1. Total no of questions accommodated in the questionnaire were 25. Some of the questions were in the nature of response in yes or no, some were based on scale (in percentage or number) and some were in the form of contents. The questionnaire was generated to sixty PE portfolio companies of both the sectors and out of them only fifty firms have replied the questionnaire satisfactorily (27 belonging from manufacturing sector and 23 from service sector) in NCR. Along with using a well designed questionnaire for getting primary information a more in-depth verbal discussion was also held with the managerial positions of portfolio companies. At the time of the survey, almost all of the respondents were current investee companies, with only a very small number having seen their backers exit the business. Further, the survey sample of the this study was dominated by portfolio companies active in Eng. & Construction, Manufacturing, Telecom, Healthcare and IT/ITES. These companies attracted a different profile of private equity investor (Business Angels, HNI, PE Firms).

3.5 List of Sample Companies

List of 50 companies for primary and secondary information is given below:

1. A.V. Fastners Pvt. Ltd.
2. Aeroflex Industries Ltd.
3. Arun Excellence homes Pvt. Ltd.
4. Auro Mira Energy Ltd.
5. Australian Food India Pvt. Ltd.
7. Bala Tele Systems Pvt. Ltd.
8. Baring Pvt. Equity Partners India Ltd.
9. Bharat Box Factory Ltd.
10. BOXBEAT Technologies Pvt. Ltd.
12. Carnation Auto Industries Ltd.
13. CMR Recycling Pvt. Ltd.
15. Cyber Net Software System Pvt. Ltd.
16. Daman Hospitality Pvt. Ltd.
17. Deltronix India Ltd.
19. Electronica Machines Tools Ltd.
20. Fosters Bear India Ltd.
22. IMCL Ltd.
23. Infra soft Technologies Ltd.
24. JRG Securities Ltd.
25. Jyothi Laboratries Ltd.
26. Lokesh Machine Ltd.
27. MAPE Advisor Group Ltd.
28. MARACK Bioscience Ltd.
29. Matu Ram Art Centers Pvt. Ltd.
31. Network 18
32. Passive Infra Project Pvt. Ltd.
33. PL Shipping & Logistic Ltd.
34. Punch Ratna Steel Pvt. Ltd.
35. Push Up Threads Pvt. Ltd.
36. PVR Ltd.
37. Quikr.Com
38. Rivirea Jewels Pvt. Ltd.
39. S Kumar Leathrite India Pvt. Ltd.
40. Sasken Communication Tech. Ltd.
3.6 Statistical Methods used in the Study:

1. Mean = $\frac{\sum X}{N}$

2. Standard Deviation ($\sigma$) = $\sqrt{\frac{\sum dx^2}{N} - \left(\frac{\sum dx}{N}\right)^2}$

3. Standard Error = $\sqrt{p q \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}$

4. Computation of SE when Standard Deviation of Population is not known ($SE_x$) = $\frac{\sigma \text{ of Sample}}{\sqrt{n}}$

5. Proportion-test = $\frac{P_1 - P_2}{S.E.}$
   
   $P_1$ = Proportion of manufacturing sector units, $P_2$ = Proportion of service sector units

6. Chi-Square-test = $\sum \frac{(O-E)^2}{E}$

3.7 Chapter wise Scheme:

I) Introduction
II) Review of Literatures
III) Research Methodology
IV) Analysis and Interpretation
V) Summary and Discussion