

## INDIAN INSTITUTE OF MANAGEMENT CALCUTTA

## WORKING PAPER SERIES

WPS No. 717/ November 2012

Private Equity Trends and Exits in the Indian Market

by

Rama Seth Professor, IIM Calcutta, Diamond Harbour Road, Joka P.O., Kolkata 700 104 India

&

**Rohan Chinchwadkar** Doctoral Student IIM Calcutta, D. H. Road, Joka P.O., Kolkata 700 104 India

# **Private Equity Trends and Exits in the Indian Market**

by

Rama Seth<sup>1</sup> and Rohan Chinchwadkar<sup>2</sup>

## 1. Introduction

Private equity (PE) investors provide capital to private companies, usually for expansion, new product development, or restructuring of the company's operations, management, or

<sup>&</sup>lt;sup>1</sup> Professor, Indian Institute of Management Calcutta, Joka, Kolkata - 700104, West Bengal, India e-mail: <u>rama\_seth@iimcal.ac.in</u>

<sup>&</sup>lt;sup>2</sup> PhD (Finance) student, Indian Institute of Management Calcutta, Joka, Kolkata - 700104, West Bengal, India Phone: +91-9674265610, e-mail: <u>rohansc09@iimcal.ac.in</u>

ownership. As the firm grows, PE investors sell their stakes in the company either to return the capital to the limited partners or to find new investee companies. At the same time, owners of the company might either look for other sources of capital for new projects or look for ways in which they can sell off their stake and exit. There are four major exit outcomes for private equity investors: initial public offering (IPO), financial sale, strategic sale and buyback. The major difference between IPO and other mechanisms is that an IPO involves a large number of dispersed investors whereas the other three mechanisms involve a single or very few investors.

#### 1.1 IPO: the decision to go public

The theory of the decision to go public has been studied extensively in the literature. Ritter & Welch (2002) present an excellent review of literature related to initial public offerings (IPOs). They analyze three themes related to IPOs: why firms go public, why IPO underpricing exists and long run underperformance of IPOs. In this paper, we are interested in the first question i.e. what factors influence a firm's decision to go public. The broad answer to this question is: *to raise equity capital for the firm and to create a public market in which the founders and other shareholders can convert some of their wealth into cash at a future date*. There are broadly two approaches followed in literature to answer why firms choose to go public: life cycle theories (Zingales (1995); Black & Gilson (1998); T.J. Chemmanur & Fulghieri (1999); Maksimovic & Pichler (2001); Schultz & Zama (2001)) and market timing theories (Korajczyk, Lucas & McDonald (1992); Subrahmanyam & Titman (1999); Benninga, Helmantel & Sarig (2005)).

*Life cycle theories*: The first theory of the decision to go for an IPO was presented by Zingales (1995), who showed that it is easier for a potential acquirer to spot a takeover target when it is listed. Also, entrepreneurs realize that acquirers can better pressure targets on pricing concessions when they are private rather than when they are public. Thus, by going public, entrepreneurs can manage to get higher valuation for their firms than what they would get in a direct private sale. In contrast to the this exit-oriented view, Black & Gilson (1998) find that an IPO is the most common mechanism for entrepreneurs to gain control of the firm from exiting venture capitalists. T.J. Chemmanur & Fulghieri (1999) discuss the advantages and disadvantages of an IPO from the point of view that an IPO creates dispersed ownership. They study the fact that pre-IPO investors usually hold undiversified portfolios and, therefore, are not willing to pay as high as price as public market investors who hold

diversified portfolios. However, there are fixed costs of going public and information cannot be costlessly revealed to small, dispersed investors. Thus, early in the lifecycle of a firm, it will be privately held and when it becomes sufficiently large, it becomes optimal to go public in the late stages of its lifecycle. Maksimovic & Pichler (2001) analyze how a high public market price can attract product market competition. They show that firms in industries perceived to be viable, with low development costs and low probability of displacement, prefer to go public in the early stage of their life cycle. They also mention that being the first in an industry to go public can create competitive advantage.

*Market timing theories*: These set of theories are based on the assumption that firms try to "time" the market to maximize the valuation which they will receive in the public market. Korajczyk et al. (1992) develop a model of the effect of asymmetric information to show that firms postpone the timing of their IPOs if they are currently being undervalued and wait for bull markets to issue equity. Subrahmanyam & Titman (1999) suggest that the value of public firms increases with the size of public market and thus, when the stock market in a particular economy reaches a critical mass, it causes the IPO market to "snowball" i.e. new firms list on the stock market, making the market more liquid and efficient, which in turn induces more firms to go public. Benninga et al. (2005) endogenize the timing of the decision to go public and explain some observed phenomena like clustering of IPOs and buyouts and the industry concentration of IPO waves.

## 1.2 Choice between IPO and Acquisitions

The literature which focuses only on IPOs addresses only two outcomes: staying private or conducting an IPO. However, a firm often faces a different kind of choice: conducting an IPO or selling the firm to an acquirer. The motivation of the acquirer could be rooted in strategic or financial reasons. There have been very few studies which analyze the choice between IPO and acquisition as alternative exit options. There are only a couple of empirical studies such as those done by Brau, Francis, & Kohers (2003) and Poulsen & Stegemoller (2008) and only one theoretical paper by Bayar & Chemmanur (2011) that address this choice. Brau et al. (2003) was the first empirical study to address the choice of exit mechanism between IPO and acquisition. They define four categories of factors which influence a firm's choice between IPO and acquisition: industry-related factors, market-timing variables, deal-specific factors and demand for funds factors. Poulsen & Stegemoller (2008) study the effect of specific firm characteristics such as growth and capital constraints on the choice of exit mechanism. Thus, when we consider the decision to go for an IPO along

with an option to choose an acquisition, we realize that a wider set of parameters affect the exit decision.

#### 1.3 The IPO vs Acquisition decision in PE-backed firms

The literature which addresses the choice of exit between IPO and acquisition has dealt with generic firms. However, the decision of exit outcome becomes more complicated in the presence of PE investors. PE investors invest in small, privately held firms to help them grow and then realize returns through the "exit" transaction (see e.g. Cumming and MacIntosh (2003); McKaskill et. al. (2004); Farag et. al. (2004); Parhankangas et. al. (2005); Fleming (2004); Kutsuna et. al. (2000); Neus and Walz (2005)). Typically, PE investors invest two to seven years prior to exit events. It has been studied that returns vary substantially across different exit outcomes like IPO, financial sale, strategic sale and buyback (see e.g. Cochrane (2005); Nikoskelainen and Wright (2007)). Apart from financial returns, certain exit outcomes produce reputation benefits. Gompers (1999) finds that younger PE firms prefer to take their portfolio companies public through an IPO because the reputation benefits of the IPOs help them during the next round of fund raising. Thus, we see that the decision of the exit mode is an extremely important one for PE investors.

A number of factors affect the exit outcome of PE firms. Cumming and Johan (2006) study the theory and evidence relating information asymmetry and agency costs to exit outcomes in PE-backed firms. They mention that where the PE investors are better able to mitigate information asymmetry and agency costs faced by new owners, they are more likely to have successful exit outcomes. IPO is the most difficult exit outcome to achieve since information asymmetry is the highest, but also offers the highest returns. IPOs are sold to a large number of diverse shareholders who do not have the expertise or inclination to carry out due diligence. Relying on 'certification' is one way to overcome this lack of expertise and to achieve lesser information asymmetry.

Information asymmetry is lower for a financial sale than an IPO since the buyers are sophisticated financial investors who can conduct due diligence. It is even lower in the case of a strategic sale since the buyers in strategic sales are typically large players from the same industry who have a higher level of expertise and insight about the industry. Buybacks have no information asymmetry problem since the buyers are the promoters, but are also usually the least profitable since no new capital enters the firm.

This paper introduces a comprehensive dataset of all exited PE-backed firms in India over the period 2004 to 2010.

#### 2. Hypotheses development

A number of potential factors affect the exit outcome of a PE-backed firm. The outcome decision depends on the ability of the new owners to resolve information asymmetry problems and to get an accurate estimate of the value of the firm. As we have mentioned, there is a significant difference in returns across different exit outcomes which makes some outcomes better than others. In this paper, we do not wish to study the different factors which drive this difference in returns. Rather, we wish to study the basic question related to reasons which give rise to these different exit outcomes. This question is however partly related to returns since they partly affect the outcome. For example, Cochrane (2005) finds that average returns are 81% for IPOs and 50% for acquisitions based on a sample of exits in the USA. Nikoskelainen and Wrigth (2007) show that the average IRR of IPOs was 136%, of trade sale 23% and secondary sales 10%. Even though we see this difference in returns across exit outcomes, we note that exit outcomes do not determine returns. Instead, the underlying factors and conditions of the economic environment drive both exit outcomes and returns.

In examining the choice of exit between IPO and acquisition, Brau et. al. (2003) considered four categories of factors which affect the attractiveness of IPO versus trade sale: industry-related factors, market-timing variables, deal-specific factors and demand for funds factors. Cumming and Johan (2008) discuss the effect of VC characteristics, transactional characteristics and firm characteristics on various exit outcomes: IPO, financial sale, strategic sale and buyback. Each category of variables improves or worsens information asymmetry problems and agency costs.

In this section, we use the theoretical constructs of information asymmetry and agency costs to hypothesize the effect of different variables on the exit outcome.

#### 2.1 Private Equity Investor Characteristics

A private equity investor has two main roles:

 add value to the firm by providing expert inputs and by facilitating a networks of contacts with investment bankers, accounting firms, legal advisors and suppliers (see Sahlman (1990); Sapienza et. al. (1996); Sorenson and Stuart (2001); Lockett and Wright (2001); Megginson (2004); Cumming and Johan (2006); Cumming and Dai (2010)) and

 certify the quality of the firm (see Barry and Muscarella (1990); Lerner (1994); Megginson and Weiss (1991); Baker and Gompers (2003); Hsu (2004); Hochberg (2005); Hochberg et. al. (2007)) which will help the new owners to resolve information asymmetry problems with the firm.

The certification role of a private equity investor is more important in IPOs than in acquisitions since IPOs are sold to diverse and unsophisticated investors. It has been studied that certification lowers the indirect costs of an IPO through lower underpricing and higher profitability. This certification capability varies according to the characteristics of the private equity syndicate.

## 2.1.1 Number of PE investors

The presence of multiple private equity investors in the same firm is a common phenomenon. For example, three PE firms: Intel Capital, Norwest Venture Partners and Gabriel Partners had invested in Persistent Systems, a Pune-based IT firm and all of them part-exited during the IPO. More PE investors in the same firm usually signify that due diligence of the firm has been done multiple times and the firm has been found to be attractive. Also, more PE investors can mean that more value has been added to the firm due to higher involvement of investors. Thus, more PE investors in a firm may signal a better quality of a firm. Also, when it is time to exit, multiple investors present certain problems. Firstly, the liquidity requirements of all PE investors will be different from each other. Also, young PE firms might prefer IPO over trade sale due to the reputation benefits created by an IPO (Gompers 1996). Game theory research suggests that equilibrium in multi-party negotiation is much more complex and difficult to achieve than in a two-party negotiation. These considerations make it difficult for the firm to negotiate with the acquirers in the presence of multiple PE investors. Every PE investor may have a different view about synergy and the valuation needed for the firm. However, when it comes to IPO, the process is standard. The price band of the IPO is decided in collaboration with the investment bankers and then a feedback is received from the investors during book building. Also, after the launch of IPO, all PE investors possess shares of a liquid and listed entity.

Thus, we see that the presence of multiple PE investors better certifies the quality of the firm and helps in resolving information asymmetry. At the same time acquisitions become difficult due to divergence of opinions and negotiation problems. This leads us to the following hypothesis:

*H1: The probability of an IPO exit increases with the number of PE investors who are exiting from the firm.* 

#### 2.1.2 Presence of foreign PE investors

Many PE firms from developed markets have invested in India as a part of their emerging markets exposure. We can see multiple examples such as investments by Intel Capital in 123Greetings.com, JP Morgan in Binani Cement, Temasek in Infinite Computer Solutions and many more. Cumming and Johan (2008) mention that if the investee firm and PE investors are from the same country, it enhances the ability of the PE investor to conduct due diligence and reduces adverse selection problems. Thus, foreign PE investors are not able to resolve information asymmetry problems as effectively as domestic PE investors. Since IPOs need a higher capability of PE investors to resolve information asymmetry, it follows that going for an IPO might be more difficult for foreign PE firms than domestic ones. This leads us to the following hypothesis:

#### H2a: Foreign PE investors are less likely to prefer an IPO over an acquisition.

However, many a times, foreign and domestic PE firms form syndicates and investment together in certain targets. The investments by New Vernon Capital and Bessemer Venture Partners in Motilal Oswal, ChrysCapital and J P Morgan in Titagarh Wagons, ICICI Ventures and Intel Capital in Sequoia Capital India and Actis in Paras Pharmaceuticals are examples of such co-investments. If there is co-investment by foreign and domestic PE investors in the same firm, the ability of foreign PE investors to resolve information asymmetry problems, increases due to two reasons: presence of multiple investors in the syndicate and presence of domestic PE investors in the syndicate. Thus, information asymmetry problems in an IPO reduce due to a co-investment structure.

H2b: Firms in which there is co-investment by both foreign and domestic PE investors are more like to prefer an IPO over an acquisition.

Depending on the country of origin, we divide exits into three types: (i) Foreign (investment made by foreign PE firm), (ii) Domestic (investment made by domestic PE firm) and (iii) Co-investment (both foreign and domestic PE firms have invested in the firm). Using these classifications, we test the above hypotheses.

## 2.2 Industry characteristics

It is known that certain industries have more serious information asymmetry problem than others. Also, synergies are more important in some industries and not very significant in others. Thus, we discuss the effect of industry of the firm in the exit outcome in this section.

#### 2.2.1 High-tech industries

Industries like life-sciences and pharmaceuticals significantly depend on high-tech research and development. These industries are thus characterized by high information asymmetries. Also, technological and research synergies play a very important role in these industries. Thus, we hypothesize that, PE investors to prefer acquisitions in high-tech industries rather than IPOs.

## H3: High-tech firms are more likely to prefer acquisitions over IPOs

#### 2.2.2 Financial Services industry

The financial services industry is highly regulated and is characterized by high synergies. Also, since this is a relationship oriented service industry, there is an existence of soft assets. This creates a high level of information asymmetry. The presence of high synergies and high information asymmetry leads us to the conclusion that financial services firms are more likely to go for acquisitions than IPOs.

### H4: Financial services firms are more likely to prefer acquisitions over IPOs

## 2.3 Deal-specific characteristics

In this section, we focus on the effect of deal-specific characteristics on the exit outcome. We discuss the most important deal-specific variable i.e. size of the exit. It is known that IPOs

have higher fixed costs due to compliance, investment bankers and other process-specific reasons. It is easier for a larger firm to afford these fixed costs rather than a small firm. Also, being a very large firm narrows the set of potential acquirers. Thus, we would expect larger firms to go public rather than be acquired.

H5: Larger the size of exit, more would be the probability of an IPO exit as opposed to an acquisition

#### 2.4 Market-related factors

It is intuitive that the current market scenario will affect the exit outcomes in PE exits. IPO markets are subject to swings and clustering. Thus, we examine the effect of current and lagged month market return on the exit outcome. Since higher market returns signify a better market environment, we would expect higher market returns to be followed by more IPO exits than acquisitions. Similarly, we would expect a large number of acquisitions in the recession year (2009) as compared to IPOs.

The following section introduces the dataset which we will use to test the hypotheses.

## 3. Trends in Private Equity in India

In this section we describe the sample used in the empirical tests. We also perform difference tests between the IPO and M&A samples as an initial test of our hypotheses.

## Data

The major databases used for this study are Venture Intelligence and CMIE Prowess. We analyze a sample of 447 private equity exits in India from 2004 to 2010, out of which 97 are IPOs and 350 are trade sales. Out of these deals, the data for size of exit is available only for 336 deals. Figure 1 shows the ratio of PE exits through M&As to IPOs from 2004-2010. We see that this ratio shows a spike in 2009 when the IPO market volume was low. Thus, we see evidence of market timing in choice of exit mechanism by PE investors.

Figure 1: Ratio of PE exits through M&As to IPOs from 2004-2010



Figure 2 represents the type of exit according to different industries. We see that exits in different industries show different behavior when it comes to choice of exit. In our sample, the most IPO-friendly industry is FMCG whereas the most M&A-friendly industry is telecom.



Figure 2: Ratio of PE exits through M&As to IPOs in different industries

We will also analyze the quantum of deals through the years and across industries.

Table 1 below presents the size of the deals from 2004 to 2010 and analyzes how many of them were exits via IPOs and how many were acquisitions. Table 2 analyzes how the exits have been distributed across industries.

2004	1495.18	7	25
2005	4090.96	15	37
2006	2635.9	12	29
2007	3047.24	18	61
2008	4741.32	10	34
2009	2565.82	7	59
2010	7681.47	28	105

## Table 1: Industry distribution of deal size from 2004-2010

Industry	Deal Size (US\$ million)	Industry	Deal Size (US\$ million)	
Agri-business	85.7	Manufacturing	1389.36	
Banking and Financial Services	4391.5	Media and Entertainment	734.22	
Education	45.14	Mining and Minerals	27.3	
Energy	1816.1	Other Services	34	
Engineering and Construction	1551	Retail	205.2	
FMCG	102.8	Shipping and Logistics	551.45	
Food and Beverages	185	Telecom	3083.9	
Gems and Jewelry	83.5	Textiles and Garments	121.42	
Healthcare and Life Sciences	2675.9	Travel and Transport	603.7	
Hotels and Resorts	148.02	Real Estate	2743.2	
IT and ITES	5679.48			

Table 2: Distribution of deal size across industries

## Descriptive statistics and univariate tests

Table 3 presents the descriptive statistics of the independent variables.

Independent Variables	Ν	Mean	Std. Dev.
Number of PE investors	447	1.42953	0.887797
Foreign PE Dummy	447	0.496644	0.500549
Co-investment Dummy	447	0.120805	0.326266
Financial Services	447	0.082774	0.275849
High Tech	447	0.487696	0.500409
Industry Market-to Book	446	3.581749	2.002894
Industry Herfindahl Index	446	0.080221	0.077289
Size of exit (US\$ million)	336	78.14848	185.5878
Market Return (current month)	447	2.355454	6.917677
Market Return (previous month)	447	2.862287	7.204161

#### Table 3: Descriptive statistics

Table 4 represents the correlation matrix of the independent variables of our empirical model. We see that the correlation between 'number of PE investors' and 'coinvestment dummy' is very high. Thus, we will use separate empirical models to test our hypotheses about these variables to avoid the problem of multicollinearity.

	Number PE	Foreign	Coinvest	Fin Ser	High tech	Realestate	Log(size)	Buyout	Market(t)	Market(t-1)	T-Bill
Number PE	1										
Foreign Dummy	0.3301	1									
Coinvest Dummy	0.722	0.3708	1								
Fin Services	0.1213	0.1151	0.1223	1							
High-tech	0.05	0.0707	0.051	-0.298	1						
Real Estate	-0.0482	0.0215	-0.0103	-0.0774	-0.2185	1					
Size of deal	0.2922	0.2052	0.2114	0.1031	0.0909	0.0951	1				
Buyout Dummy	0.0744	-0.0456	0.1178	-0.0751	-0.0482	-0.0551	-0.0437	1			
Market(t)	-0.0644	-0.0349	-0.0709	-0.0373	0.0297	-0.0648	-0.0292	-0.0111	1		
Market(t-1)	-0.0765	-0.041	-0.1171	0.0023	0.0099	-0.0922	-0.1068	0.0237	0.0404	1	
3M T-Bill rate	0.0262	-0.105	0.0316	-0.1291	0.0468	-0.0377	0.0409	-0.0352	-0.2343	-0.1514	1

Table 4: Correlation matrix of independent variables

## 4. Case Study: Investment and Exit in VA Tech Wabag by ICICI Ventures, Passport Capital and GLG

After having analyzed the general trends of PE exits in the India market from 2004 to 2010, we will have a detailed look at the investments and exit in VA Tech Wabag by ICICI Ventures, Passport Capital and GLG.

## BRIEF INFORMATION OF THE CASE

This case deals with the analysis of the company- VA Tech Wabag, with special focus on how Private Equity has played a role in this company and how the investors have exited from the company.

Private Investors: ICICI Ventures, Passport Capital, GLG

Sources Used: <u>http://www.iciciventure.com</u>

ICICI Annual Report www.wabag.com

## ICICI VENTURE-AN INTRODUCTION:

The initial objective of setting up the Industrial Credit and Investment Corporation of India Limited (ICICI) was to create a development financial institution that could provide medium-term and long-term project financing to Indian businesses. It was a joint initiative of the World Bank, the Government of India and representatives of the Indian Industry and incorporated in 1955.

ICICI Ventures is a wholly owned subsidy of ICICI Bank and has funds under management of over US\$ 2 billion. ICICI Venture is a specialist alternative assets manager based in India credited with many "firsts" to it, in the Indian private equity industry. It was responsible for the first real estate investment (Cyber Gateway), the first leveraged buyout (Infomedia),the first mezzanine financing for an acquisition (Arch Pharmalabs) and the first 'royalty-based' structured deal in Pharma-Research & Development (Dr. Reddy's).

Directors	Auditors	Registered Office
Lalita D. Gupte, Chairperson	Deloitte Haskins & Sells	ICICI Venture House
H. N. Sinor	Chartered Accountants	Appasaheb Marathe Marg
K. N. Memani		Prabhadevi
S. Mukherji		Mumbai – 400 025
K. Ramkumar		
Vishakha Mulye, Managing Director & CEO		Regional Office
Prashant Purker, Executive Director		10th Floor, Prestige Obelisk
Mohit Batra, Executive Director	Anselm l'into	Kasturba Noad
Sumit Chandwani, Executive Director	Company Secretary	Bangalore - 560 001

Corporate structure of ICICI Venture<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> This section has benefitted from able assistance by Mohit Agarwal.

<sup>&</sup>lt;sup>4</sup> Source: Annual Report – Subsidiaries of ICICI Bank; FY2011

ICICI Ventures supports entrepreneurs and other upcoming as well as established businesses, fulfilling both roles- that of a capital provider and a business partner. It has provided growth capital funding across various sectors and has had experience over the entire spectrum of businesses. With a short stint in the Venture Capital Industry in the early 90s, the company shifted to alternative assets post the period.

As quoted by the company- "The firm is widely regarded as a prime mover in the Indian alternative assets industry, having established a successful track record of investing and nurturing companies across economic cycles and across various classes of alternative assets such as Private Equity, Real Estate and Mezzanine Finance, with Infrastructure & Special Situations being the latest additions to its spectrum of activities."<sup>5</sup>

Currently, ICICI Ventures is the largest alternative asset managers in India. It has under its management, funds in the excess of US\$ 2 billion

The Private Equity subdivision of ICICI Ventures manages three third-party Capital Funds - India Advantage Fund Series 1, 2 and 3(IAF Series).

The three funds have an aggregate original corpus of US\$ 1.45 billion and currently ICICI Ventures is active with the IAF Series 3 - focussing on buyouts and late-stage growth capital funds.

The company in study - Wabag - falls into the bracket of the India Advantage Fund Series 1.

		(₹ in million)
	Fiscal 2010	Fiscal 2011
Profit before taxation	744.1	937.5
Profit after taxation	514.9	739.1
Appropriations :		
General Reserve	51.5	74.0
Interim Dividend	260.0	450.0
Corporate tax on Dividend	44.2	74.7
Balance carried forward to next year	460.4	600.7

Financial Highlights of ICICI Ventures 2010-2011<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Source: <u>http://www.iciciventure.com/about\_corporate.php</u>

<sup>&</sup>lt;sup>6</sup> Source: Annual Report – Subsidiaries of ICICI Bank; FY2011

## VA TECH WABAG: A HISTORY

The formation of VA Tech Wabag came about as a result of multiple mergers and acquisition. Austrian Energy & Environment SGP/Waagner Biro GmbH was formed in 1989 after a series of mergers of smaller companies. These collective mergers made Austrian Energy and Environment the biggest energy firm in Austria in 1989. The company went on to buy a set of other companies and expanded its empire in the 1989-1999 period.

In 1990, another major company in Austria - Austrian Industry Holding AG was rechristened as Austrian Industries AG as it headed to privatization. 1993 saw three companies sprout out from Austrian Industries AG - one of which was Voest-Alpine Technologie(VA Technologie) AG - a company working on metallurgy, power generation, transmission and distribution, and infrastructure.

Wabag Wasserfilter-Bau was started in Breslau, Germany in 1924 by Max Reder.

In April 1999, VA Tech/Austrian Energy purchased the Wabag group from Deutsche Babcock. As the legal successor to the Austrian Energy and Environment, the new VA Tech Wabag GmbH was fully owned by VA Technologie AG-hence taking over the entire water business. With this purchase, Austrian Energy & Environment became VA Tech Wabag GmbH.

## VA TECH WABAG: TODAY

VA Tech Wabag is one of the big names in the water treatment sector-its focus lies in the planning, completion and operation of plants which treat drinking and waste water for all sectors- municipal and industrial.

While Wabag has offices all over the world, the majority of its workforce is concentrated in Vienna and Chennai. It has a workforce of 1500 employees and has set up offices in 19 countries

## WATER MARKETS



Water markets across the globe<sup>7</sup>

## WATER INDUSTRY IN INDIA



*Rapid increase in urbanization is going to increase demand for water supply and wastewater treatment services*<sup>8</sup>

With such increase in water requirement in urban sector – there was a constant need to increase investment in water sector.

<sup>&</sup>lt;sup>7</sup> Source: Wabag Investor Presentation August 2012

<sup>&</sup>lt;sup>8</sup> Source: JNNURM

# As of 2012, the water sector was underserved and there was a large demand gap to be tapped by companies

According to the Central Pollution Control Board of India 35,000 MLD (million litres per day) waste water is produced in domestic sector while only 25% of this water is treated. Industry produces 16000 MLD waste water and out of that only 60% is treated. With increase in govt. regulation and increase in industrial activities, this wastewater treatment requirement stands to grow at higher rates post 2012.

Domestic Sewage	Industrial Sewage
35,000 MLD	16,000 MLD
25 % Treated	60 % Treated
2.5 % Growth	8 % Growth
	* Source: CPCB, India

Sewage volumes in domestic and industrial sector

**Five Year Plans** 

JNNURM Investment

<b>6</b>	10th Five year Plan (2002-07)	11th Five year Plan (2007-12)	Parameters	Water Supply	Sewerage & Sanitation
Sector	(Rs. Billion)	(Rs. Billion)	Planned Investment		
Water Supply	282.4	536.6	(Rs. Billions)	400	333
water suppry	202.4	550.0			
Drainage	231.6	531.7	% of total Outlay	12%	10%
Sanitation		201.7		151 Projects, Rs. 195 billion	109 Projects, Rs. 133 billion
Total	514	1270	Current Situation	investment	Investment
* Source: Planning Commission, GOI				•	Source: JNNURM

Indian Government increased funding significantly for water supply and sanitation with the launch of JNNURM in 2005

Viewing the need to treat water more, the government raised its investment about twice from 10<sup>th</sup> to 11<sup>th</sup> five year plans. Around Rs.1270 billion was to be invested in water sector by the Government from year 2007 to 2012. JNNURM was to contribute a major chunk of this outlay.

## PRE INVESTMENT TIMELINE

## Milestones:

1924

Foundation of WABAG Wasserfilter-Bau in Breslau.

1973	DEUTSCHE BABCOCK becomes WABAG's majority shareholder.
1986/87	DEUTSCHE BABCOCK takes over WABAG in its entirety.
1989	The Energy and Environmental Technology Division of SGP AG merges with VA Finalindustrie to form SGP VA Energie- und Umwelttechnik.
1992	SGP VA Energie- und Umwelttechnik and the Environmental Technology Division of Waagner Biro AG merge to form Austria's largest energy and environmental technology company, Austrian Energy & Environment SGP/Waagner Biro GmbH.
1993	WABAG Salzburg branch founded.
1994	WABAG Brno founded.
1995	WABAG Kulmbach purchases the British company, WATER ENGINEERING LTD. and the Belgian company, STEP, with its branch in Tunisia, and also takes an interest in AEW ESMIL. A presence in India is created via BALCKEDÜRR AND WATER TECHNOLOGIES LTD.
1996	Austrian Energy takes over Tetra Industrietechnik and the environmental activities of Sulzer Chemtech AG.
1997	Austrian Energy takes over the reverse osmosis desalination segment of Elin Energieversorgung, as well as 70% of the PURAQUA shares of Energie Steiermark.
1999	VA TECH/Austrian Energy purchases the remaining 30% PURAQUA shares of Energie Steiermark, as well as the WABAG Group from DEUTSCHEN BABCOCK AG. As the legal successor to Austrian Energy & Environment, the new VA TECH WABAG GmbH is fully owned by VA TECHNOLOGIE AG.
2004/05	VA TECH ELIN EBG assumes the industrial management of VA TECH WABAG. In the course of a restructuring process, international branches and holdings not corresponding to the strategy of focusing on core competences and core market regions (above all business units in Germany and France) are sold off or shut down.
July 2005	Sale of VA TECH WABAG India Ltd. to ICICI Venture, a subsidiary of the ICICI bank, India's largest private banking institute.

As a result of the merger between VA TECHNOLOGIE AG and SIEMENS, VA TECH WABAG GmbH becomes part of the SIEMENS Group.

Nov. 2007 On November 6, Siemens transferred all its stock in VA TECH WABAG GmbH, Vienna to VA TECH WABAG India Ltd., which was based in Chennai. 2008 WABAG Water Services SRL was founded in Ploiesti, Romania and WABAG Water Services Limited was founded in Macao

## THE INVESTMENT



Source: Wabag Investor Presentation, August 2012

VA Tech India was a VA Tech Wabag GmbH subsidiary started in 1996. VA Tech India was initially a wholly-owned subsidiary of VA Tech WABAG GmbH, Austria.

The first investment to Wabag came from Siemens AG Osterreich – who offered about 1 billion euros for 97.15% of VA Technologie AG-this was approved by the EU Commission on July 14, 2005. With this investment, Siemens became the majority stake holder in the company.

In September 2005, a management buy-out of the company was carried out by Rajiv Mittal, Amit Sengupta, Shiv Narayan Saraf and S. Vardarajan-the managers of the company, from Siemens(which was the major stakeholder at that time) with the support of ICICI Ventures in a US\$ 22.87 million deal. The management team of VA Tech India had bought out the Indian company from its Austrian parent. ICICI Ventures became the majority owner of the VA Tech India and Rajiv Mittal was head of the management group holding the minority stake.

On August 25, 2006, Western India Trustee and Executor Company Limited acquired the majority shareholding of VA Tech India. The acquisition was represented by the investment manager ICICI Venture Funds Management Company Limited (promoters were Rajiv Mittal, Amit Sengupta, Shiv Narayan Saraf and S. Varadarajan).

On November 6, 2007, VA Tech India acquired the parent company in a reverse merger from Siemens for about \$100 million.

The WABAG Group was re-formed in November 2007 with the reunification of the VA TECH WABAG Ltd., Chennai and VA TECH WABAG, Vienna companies. The successful merger of these two enterprises restored WABAG to a leading position amongst the largest global players in the water technology sector.

ICICI Ventures says-"In 2005, IAF Series 1 acquired a controlling stake in VA Tech Wabag Limited (VA Tech), a former subsidiary of the global water engineering Wabag Group. VA Tech is India's No. 1 turnkey engineering services company for water and waste water treatment technologies. The deal was a buy-out along with the management team. In 2007, the company completed the acquisition of its former parent, WABAG Austria. The acquisition provided it with a footprint across North Africa, Middle East and Eastern Europe. IAF Series 1 has largely exited from this company."<sup>9</sup>

## OTHER FIRMS

VA Tech Wabag is also backed by investors such as GLG Emerging Markets Fund, Sattva India Opportunities Co and Passport India Investments. GLG had invested Rs 88 crore or about \$20 million in February 2007 which translates into 9.55% stake currently with average cost of acquisition pegged at around Rs 988 a piece.

<sup>&</sup>lt;sup>9</sup> ICICI Venture – Business Portfolio details

http://www.iciciventure.com/business\_portfolio\_details.php?id=27&KeepThis=true&TB\_iframe=true&width=5 00&height=268.25

## Access to markets all over the world

VA Tech Wabag acquired its previous parent VA Tech Wabag Gmbh, Austria in 2007 in \$100 million deal through its Singapore subsidiary which gave its access to developed European markets. According to Global Water Markets, water treatment revenue from the industrial sector is going to reach to around \$35 billion by 2016. Revenues from Asia Pacific region and Europe were going to increase consistently. VA Tech Wabag is well positioned to take advantage of this situation with its acquisition of major player in Europe. It also has presence in Middle East, North Africa, Central and Eastern Europe, China, and the South East Asia.



Use of outsourcing model to reduce investments and capital expenditure

VA Tech Wabag started outsourcing of civil works, constructions and erection works to third party contractors, which reduced its expenditure on fixed assets. In 2009, company's fixed assets were just 5% of its total assets. In frees lots of cash and allows higher scalability as the company can use its high margin engineering and design skills on large number of projects.

## Focus on R&D

With pressure from PE investors to add value to the investment and coming out with IPO, VA Tech Wabag spend significant amount on R&D to acquire and develop advanced water treatment techniques.

## **Improved Corporate Structure**

After the buyout, VA Tech Wabag went on acquisition spree and took control of many companies in other parts of the world. PE players with their previous experiences in mergers and acquisitions helped management to rationalize the structure the company.



Source: VA Tech Wabag DRHP Document

## 27% Revenue CAGR after the Buyout

With good governance practices, increase in R&D and access to worldwide markets, VA Tech Wabag's revenue increased at 27% annually compounded growth rate from Rs. 2798 million to Rs. 5737 million.



Source: Capitaline Database Revenue growth of VA Tech Wabag after buyout



## **RETURNS AND EXIT MECHANISM**

## THE IPO EXIT BY ICICI VENTURE FUNDS

The company offered a public issue in a valuation band of Rs 451.37 crore to Rs 472.59 crore. The price-band for the IPO was fixed at Rs 1230-1310 per share (face value of each share was Rs 5).

As of 2009, the shareholders of VA Tech Wabag consisted of Mittal's management team (38%) and ICICI (31%). ICICI fund was able to get around 353 crore from sale of its shares in the 2010 IPO.

ICICI Ventures encashed Rs 297 crore through the IPO and latest share sale with its remaining stake worth Rs 74 crore against a total investment of Rs 55 crore.

## **10% STAKE TO CAPITAL IN 2010**

In 2010, the venture capital firm sold 10 per cent stake for more than Rs 160 crore, making around a 7-8x multiple return on the deal. They sold a part of their stake to Capital International Emerging Markets Growth Fund and Capital International Emerging Markets Fund at Rs 1,550 a share, according to filings with stock exchanges in January 2011. The private equity fund sold 10% out of its remaining 14.6% (held through two funds) in the company earning Rs 162.6 crore with 7.5x gross returns. The total proceeds of the sale were 516 crore.

## **5% STAKE TO SUMITOMO**

Two funds which were being managed by ICICI Venture sold 4.65% stake on July 25,2011 on the National Stock Exchange for Rs 68.8 crore. Japan's Sumitomo Corporation, one of the largest worldwide trading companies, acquired the entire share according to NSE data.

ICICI Venture sold 4.91 lakh shares held by its two funds - IDBI Trusteeship Services of India Advantage Fund I (sold 232163 shares) and Dynamic India Fund I (sold 259095 shares) at Rs.1,400 per share, which is around 9.5% premium to VA Tech's closing price of Rs.1,279.

According to Bombay Stock Exchange (BSE) bulk data, Dynamic Fund I and India Advantage Fund I, have sold 259,095 and 232,163 shares respectively at the rate of Rs 1,400 per share. Interestingly, the shares were sold by ICICI Venture at Rs 1,400 per scrip, which meant over 8 per cent premium to VA Tech's closing price of Rs 1,290.35 per share. The shares were sold by ICICI Venture's Dynamic India Fund I and India Advantage Fund I. On the other side, Sumitomo Corporation has bought 491,384 shares at the rate of Rs 1,400 a share. The total amount involved works to around Rs 68.79 crore.

ICICI Venture, which had invested in one of the rare management buyouts of the firm from its Austrian parent, made around 6x-8x gross returns on its investment.

## RETURNS

While ICICI Ventures' Dynamic India Fund I generated 4x returns on its three-and-half-yearold investment, India Advantage Fund I generated returns of about 36x on its four-year- old investment, according to VCCircle estimates.

## **OVERALL ANALYSIS**

Its overall stake sales in the firm, including the IPO and open market exits, came to over Rs 400 crore. ICICI Venture had apparently invested a total of around Rs 50-Rs 60 crore for a 75% stake when it backed the buyout from the company's Austrian parent VA Tech WABAG GmbH in August, 2006(The management buyout). VA Tech Wabag, whose four promoters include British national Rajiv Mittal, Amit Sengupta, Shiv Narayan Saraf and S Varadarajan, raised around Rs 125 crore through fresh issue of shares late last year. Financial investors made Rs 353 crore, with ICICI Ventures itself getting Rs 134 crore through shares offered for sale.

#### SUMITOMO NOW

This is a significant development for the company which has an agreement with Sumitomo Corporation to jointly bid for large BOOT-based projects in water management, according to VA Tech Wabag officials. In an interesting arrangement, VA Tech Wabag had announced an agreement with Japan's Sumitomo Corporation to be partners in large water infrastructure projects. The arranged tie-up would be beneficial to Sumitomo in order to improve its global water infrastructure assets, increase operational capabilities and allow VA Tech Wabag to expand into more capital intensive concession-type business.

## References

- Baker, M., & Gompers, P. A. (2003). The determinants of Board structure at the Initial Public Offering. *Corporate Governance*, *XLVI*(October).
- Barry, C. (1990). The role of venture capital in the creation of public companies: Evidence from the going-public process. *Journal of Financial Economics*, 27(2), 447-471.
- Bascha, A., & Walz, U. (2001). Convertible securities and optimal exit decisions in venture capital finance. *Journal of Corporate Finance*, 285-306.
- Bayar, O., & Chemmanur, Thomas J. (2010). IPOs versus Acquisitions and the Valuation Premium Puzzle : A Theory of Exit Choice by Entrepreneurs and Venture Capitalists. *Journal of Financial and Quantitative Analysis*.
- Benninga, S., Helmantel, M., & Sarig, O. (2005). The timing of initial public offerings. *Journal of Financial Economics*, 75(1), 115-132.
- Black, B and Gilson, R. (1998). Venture capital and the structure of capital markets: banks versus stock markets. *Journal of Financial Economics*, 47, 243-277.
- Brau, J. C., Francis, B., & Kohers, N. (2003). The Choice of IPO versus Takeover : Empirical Evidence\*. *Journal of Business*, 76(4), 583-612.
- Chemmanur, T. J., Fulghieri, P. (1999). A theory of the going-public decision. *Review of Financial Studies*, *12*(2), 249-279.
- Chemmanur, T.J., & Fulghieri, P. (1999). A theory of the going-public decision. *Review of Financial Studies*, *12*(2), 249–279.
- Cochrane, J. (2005). The risk and return of venture capital. *Journal of Financial Economics*, 75, 3-52.
- Cumming, D, & Macintosh, J. (2003). A cross-country comparison of full and partial venture capital exits. *Journal of Banking & Finance*, 27(3), 511-548.
- Cumming, D. (2007). Contracts and Exits in Venture Capital Finance. *Review of Financial Studies*, 21(5).
- Cumming, D.J., and J. G. M. (2003). Venture capital exits in Canada and the United States. *University of Toronto Law Journal*, 53, 101-200.
- Cumming, D.J., and S. J. (2006). Provincial Preferences in Private Equity. *Financial Markets* and *Portfolio Management*, 369–98.
- Cumming, Douglas, & Dai, N. (2010). Local bias in venture capital investments. *Journal of Empirical Finance*, *17*(3), 362-380. Elsevier B.V.

- Farag, H., Hommel, U., Witt, P., & Wright, M. (2010). Contracting, monitoring, and exiting venture investments in transitioning economies : A comparative analysis of Eastern European and German markets. *Venture Capital*, (March 2012), 37-41.
- Fleming, G. (2007). Venture capital returns in Australia. *Venture Capital*, (March 2012), 37-41. doi:10.1080/1369106042000175573
- Giot, P., & Schwienbacher, a. (2007). IPOs, trade sales and liquidations: Modelling venture capital exits using survival analysis. *Journal of Banking & Finance*, *31*(3), 679-702.
- Hochberg, Y. V. (2011). Venture Capital and Corporate Governance in the Newly Public Firm.
- Hochberg, Y. V., Ljungqvist, A., & Lu, Y. (2012). Whom You Know Matters : Venture Capital Networks and Investment Performance. *Finance*, *62*(1), 251-301.
- Hsu, D. H. (2004). What Do Entrepreneurs Pay for Venture Capital Affiliation? *Journal of Finance*, *59*(4), 1805-1844.
- Korajczyk, R. A., Lucas, D. J., & McDonald, R. L. (1992). Equity issues with time-varying asymmetric information. *Journal of Financial and Quantitative Analysis*, 27(3), 397-417.
- Kutsuna, K., Cowling, M., & Westhead, P. (2010). The short-run performance of JASDAQ companies and venture capital involvement before and after flotation. *Venture Capital*, (March 2012).
- Lerner, J. (1994). Venture capitalists and the decision to go public. *Journal of Financial Economics*, 35(3), 293-316.
- Lockett, A., & Wright, M. (2001). The syndication of venture capital investments. *University Business*, 29, 375-390.
- Maksimovic, V., & Pichler, P. (2001). Technological innovation and initial public offerings. *Review of Financial Studies*, *14*(2), 459–494.
- Mckaskill, T., Weaver, K. M., & Dickson, P. (2007). Developing an exit readiness index : a research note. *Venture Capital*, (March 2012), 37-41.
- Megginson, W. L. (2004). Toward a global model of venture capital. *Journal of Applied Corporate Finance*, *16*(1), 89-107.
- Megginson, W. L., & Weiss, K. A. (1990). Venture Capitalist Certification in Initial Public Offerings. *Journal of Finance*, 46(3), 879-903.
- Neus, W., & Walz, U. (2005). Exit timing of venture capitalists in the course of an initial public offering. *Journal of Financial Intermediation*, *14*, 253-277.
- Nikoskelainen, E., & Wright, M. (2007). The impact of corporate governance mechanisms on value increase in leveraged buyouts. *Journal of Corporate Finance*, *13*, 511 537.

- Pagano, M., Panetta, F., & Zingales, L. (1998). Why do companies go public? An empirical analysis. *Journal of Finance, LIII*(1).
- Parhankangas, A., Landström, H., & Smith, D. G. (2005). Experience, contractual covenants and venture capitalists 'responses to unmet expectations. *October*, (March 2012), 37-41.
- Poulsen, A. B., & Stegemoller, M. (2008). Moving from Private to Public Ownership: Selling Out to Public Firms versus Initial Public Offerings. *Financial Management*, 37(1), 81-101.
- Ritter, J. R., & Welch, I. (2002). A review of IPO activity, pricing, and allocations. *The Journal of Finance*, 57(4), 1795–1828.
- Sahlman, A. (1990). The structure and governance of venture-capital organizations. *Journal* of Financial Economics, 27, 473-521.
- Sapienza, H., Manigart, S., & Vermeir, W. (1996). Venture Capitalist Governance and value added in four countries. *Journal of Business Venturing*, 439-469.
- Schultz, P., & Zaman, M. (2001). Do the individuals closest to internet firms believe they are overvalued. *Journal of Financial Economics*, 59(3), 347–381.
- Sorenson, O., Stuart, T. E., & Sorenson, O. (1999). Syndication networks and the spatial distribution of venture capital investments. *Leadership*.
- Subrahmanyam, A., & Titman, S. (1999). The Going-Public Decision and the Development of Financial Markets. *The Journal of Finance*, *54*(3), 1045–1082.
- Wright, M., & Lockett, A. (2003). The Structure and Management of Alliances : Syndication in the Venture Capital Industry. *Journal of Management Studies*, (December).
- Zingales, L. (1995). Insider Ownership and the Decision to Go Public. *The Review of Economic Studies*, 62(3), 425-448.