VALUE INVESTMENT INSTITUTE

Pfeiffer Acquisition Puts Future in a Vacuum

For many years I had thought my cousin, who at the time was working in Germany, was the person to talk to if my vacuum cleaner broke down because my aunt told me that he specialised in vacuum equipment. It was years later that my cousin opened my eyes to the fact that the vacuum equipment industry is not about cleaning carpets! In a long conversation, he explained all about vacuum pumps, vacuum chambers, leak detectors and the other equipment that comprises the overall vacuum equipment industry. He also explained that vacuum equipment was used in many industries from, food, for vacuum packing, to glass, for putting on different coatings, and semiconductors, for depositing various chemical layers. During this conversation I immediately knew that I had stumbled across what Phil Fisher described as a “scuttlebutt”. In other words, I knew I had available to me an expert in the industry and importantly he was prepared to share his knowledge with me.

Naturally enough it is one thing to have an industry expert available but it is another thing to be able to use that knowledge to make a good investment. I therefore had to start the process of analysing the industry. Who were the major players? Were they quoted? Did they have anything unique that allowed them to create a moat?

To cut a long story short, my cousin said that the best company in the industry in his opinion was a company called **VAT Valves**. I was really disappointed to discover that it is a private family-owned Swiss company that is unlikely to ever be available as a potential investment. He said that the next best company was **Pfeiffer Vacuum**, the market leader in Turbomolecular (turbo) pumps. I was delighted to see that Pfeiffer was quoted on the German Market and therefore might be a potential investment opportunity.

I therefore asked my cousin to tell me as much as he could about Pfeiffer. He started by explaining how turbo pumps are used to achieve what is known as Ultra High Vacuum (UHV), which is the level of vacuum required to do leading-edge research. He also made clear that achieving UHV required significant amounts of technical knowledge, in addition to using the best equipment. He noted that Pfeiffer had the best pumps, partly because of their use of a single magnetic bearing, so making them easier to service. Pfeiffer also had a reputation for having the highest quality products. In other words, he was suggesting that there were some barriers to entry that had so far meant that Pfeiffer had retained its leadership position in the industry.

This was all music to my ears because, as with any German industrial company based in high-cost Europe, I have to be aware of the competitive threats from Asian or American companies.

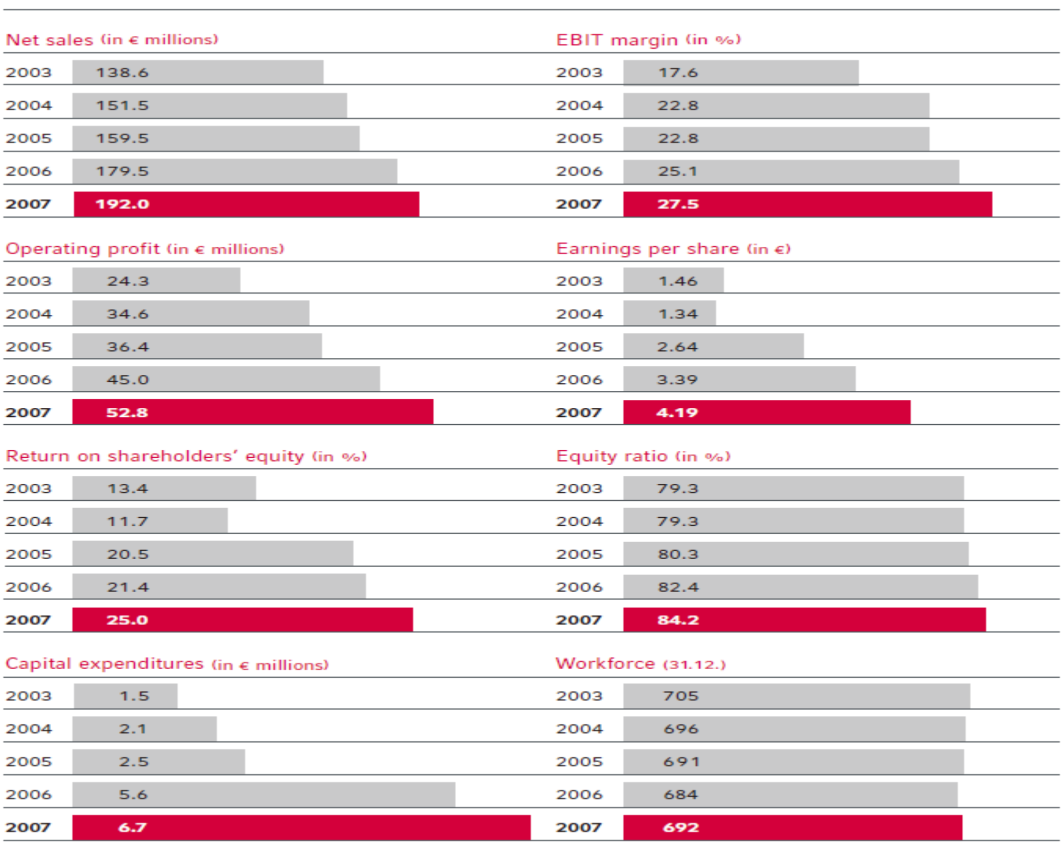
In my mind the critical question was to find out if the barriers to entry were sustainable. My cousin told me that in theory there was little to prevent other players like **Edwards** or **Leybold** from catching up, but in his opinion there would be a long period of inertia before users would be convinced of the merits of switching away from Pfeiffer. The cost of getting it wrong was so high that users of vacuum equipment are reluctant to try anything different.

It therefore appeared to me that Pfeiffer had a moat that they had managed to defend for many years but it was difficult to know if that moat was durable.

My cousin may have had a deep knowledge of the vacuum industry but he had never looked at any Pfeiffer annual reports nor analysed its accounts. In other words, I had to do the financial and valuation work myself.

I had a look at the 2007 Annual Report to see if the numbers backed up the idea that this was a company with an established moat. I didn't have too far to go to find the key performance indicators. This is what I found:

KEY PERFORMANCE INDICATORS



The numbers for fiscal years 2005 to 2007 were determined on the basis of IFRS, those for fiscal years 2003 and 2004 on the basis of U.S. GAAP.

Going through older annual reports, I was able to see that these good performance indicators were not just a recent phenomenon. This had been a profitable, good return on capital company from the time it was listed in 1996.

Turning to the Balance Sheet, I found it in a fortress-like situation with no debt and cash of over €80m (see Appendix 1). The Income and Cash Flow statements did not throw up anything of serious concern. I also discovered that they had a history of paying dividends.

At this stage I had come to the conclusion that Pfeiffer was a good company with a fortress balance sheet but I did not know if I could buy it with a margin of safety. I had to estimate intrinsic value.

In order to get an approximate estimate of intrinsic value I am a believer in keeping things as simple as possible. If at all reasonable, I like to use a simple Dividend Discount Model (Gordon Growth Model). From where I looked in 2008, Pfeiffer had paid a 2007 dividend of €3.15, to which I applied a discount rate of 8% and a dividend growth rate of 4%. This gave me an approximate intrinsic value of €79. At the time the share price was trading around €55, so I thought I had a reasonable margin of safety for what I thought was a good company.

I then jumped on a plane and was given a guided tour of the factory by a senior member of the sales team as well as the head of Investor Relations.

I bought some shares believing that any fall in the share price could be used as an opportunity to buy more. I was looking forward to holding the shares for the long-term, knowing that my cousin would keep me up to date with quality scuttlebutt.

When the Lehman crash occurred a few months later, there was bad news about in nearly every position I owned. There was nothing worse going on in Pfeiffer relative to any other industrial company. With its fortress balance sheet, I felt I could sit on it and wait for the recovery (I did not buy more because there were other bargains that the crash threw up). As the market recovered through 2009 and 2010, so did the Pfeiffer share price (see Appendix 2 for a share price chart).

Acquisition Time

On Nov 3rd 2010 Pfeiffer made the following announcement:

*Pfeiffer Vacuum Technology AG, Asslar, intends to acquire Alcatel-Lucent's Vacuum Technology Unit ("**Adixen**") which is headquartered in Annecy, France. Negotiations on the purchase of the companies, patents and licenses belonging to this unit have been largely finalized.*

Manfred Bender, Chief Executive Officer of Pfeiffer Vacuum Technology AG, comments on the envisaged acquisition: "With this move, Pfeiffer Vacuum is now entering a new dimension of business. We will not only double our sales revenues, but also significantly increase our market presence. We have always said we want to enhance our position in backing pumps, and we believe that the Adixen product portfolio is the perfect fit for us. In addition, we will expand our international sales and service network and, in particular, gain better overall access to the high-

growth Asian markets." *Bender adds: "We at Pfeiffer Vacuum are dedicated to creating and enhancing value for our shareholders. Based on the current strong business performance we expect to generate sales revenues of more than € 500 million in the fiscal year 2011.The financial results we announced this morning demonstrate that we were able to return our EBIT margin to normal, even during the first year of the Trinos integration. And we are going to show the same strict discipline in connection with the Adixen integration."*

This was serious stuff. The business model was changing dramatically. The products were changing, the customers were changing and the balance sheet was changing. A niche company with a good moat was buying a division of an unwieldy conglomerate. This was the makings of a real conundrum.

I rang my cousin and he was able to tell me that he could see the logic of what they were trying to do because Adixen had a good backing pump and a good leak detector that would complement the Pfeiffer turbo. What he could not tell me was the proportion of Adixen sales that came from their good products and what proportion came from all their other products. He was also less familiar with the Asian markets where Adixen made a substantial proportion of their sales. In other words, the quality of my scuttlebutt had also changed.

The extent of the change can be seen from the following table, taken from the Pfeiffer 2011 Annual Report, which shows the dramatic shift in the proportion of Pfeiffer's sales generated in Asia:

Sales by region

	2011	2010	Change	
	in € millions	in € millions	in € millions	in %
Europe	229.9	127.7	102.2	80.1
Asia	189.8	37.3	152.5	408.5
The Americas	98.7	54.8	43.9	80.4
Rest of World	1.1	0.7	0.4	44.8
Total	**519.5**	220.5	299.0	135.6

I honestly did not know what to do because I felt my intrinsic value and margin of safety had become far more difficult to calculate. Large acquisitions are notorious for going wrong. Should I sell the shares and wait untill a clearer picture emerged? Should I reduce my holding, or should I do nothing and place my faith in the management? This is where cognative psychologist Daniel Kahneman would have enjoyed using me as a guinea pig for one of his experiments as the emotions ran riot. I certainly was not feeling overconfident and loss aversion was foremost in my mind.

In order to avoid making a knee-jerk reaction, I asked myself if Warren Buffett had ever been in a similar situation. I knew that his Israeli tool company **Iscar** had bought a Japanese company **Toshiba Tungaloy**, originally part of the Toshiba conglomerate, but I did not know whether Warren had been involved in the decision. A quick Google search threw up the following interview with the Iscar Chairman by an Israeli business news service, *Globes Online*:

Wertheimer said, "*We closed the deal in record time. Iscar president Jacob Harpaz and legal counsel Dan Goldman handled the deal perfectly. Three days ago, I told Warren Buffett that we were about* *to make the deal that we'd dreamed of, and which seemed imminent for the first time, but it was still a bird in the tree. Yesterday, it was already possible to cheer. He was very pleased. He trusts us and likes everything we do."*

Warren put his trust in the Iscar management so I thought about doing the same with Pfeiffer. The track record of Pfeiffer management was good and the team had been relatively stable. My cousin, in all his years working in Germany, had grown to admire and respect the quality of management in the German engineering sector and had an admiration for what Pfeiffer had achieved, although he did not personally know the senior management team.

At the time I originally bought the shares, I did not think about the fact that the Pfeiffer management team owned so few shares in the company, but it begged the question why they had so little "skin in the game". According to the 2008 Annual Report:

"On December 31, 2007, members of the Management and Supervisory Boards held an aggregate total of 1,577 shares in the Company."

Maybe I was naive but their track record up to that point made me hope that they believed they were maintaining a long-standing culture of pride in a leading global company and did not need to own a large part of the company. I therefore put my faith in Manfred Bender and did not sell my shares, but I was still worried.

Present Day

I was right to be worried because the last three years have not been easy.

The table below was taken from the 2012 Annual Report and it highlights how the Adixen acquisition has significantly boosted sales but, so far, has had a much smaller impact on profits. The higher SG&A and R&D expenses and lack of additional profit has so far reminded me that growth only creates value if it earns returns above the cost of capital, which most often occurs when growth is "within a franchise". It's debatable whether the Adixen acquisition could be described as such.

Consolidated Statements of Income (6-Year-Overview)

	2012	2011	2010	2009	2008	2007
	in K€	in K€	in K€	in K€	in K€	in K€
Net sales	461,327	519,509	220,475	182,001	198,060	192,042
Cost of sales	–294,552	–352,129	–117,553	–103,694	–106,346	–97,860
Gross profit	**166,775**	167,380	102,922	78,307	91,714	94,182
Selling and marketing expenses	–50,674	–54,521	–26,211	–22,961	–21,884	–21,487
General and administrative expenses	–30,173	–35,009	–16,518	–10,634	–11,562	–12,661
Research and development expenses	–22,441	–22,713	–6,993	–7,171	–6,799	–7,187
Other operating income	10,515	14,648	1,424	1,170	2,463	1,632
Other operating expenses	–6,317	–8,008	–1,714	–937	–1,037	–1,047
Operating profit	**67,685**	61,777	52,910	37,774	52,895	53,432
Financial expenses	–2,245	–2,923	–1,798	–239	–1,490	–21
Financial income	822	645	3,416	893	2,738	6,001
Earnings before taxes	**66,262**	59,499	54,528	38,428	54,143	59,412
Income taxes	–21,010	–17,931	–16,199	–10,735	–16,095	–22,127
Net income	**45,252**	41,568	38,329	27,693	38,048	37,285
Thereof attributable to:						
Pfeiffer Vacuum Technology AG shareholders	**45,252**	41,382	38,144	27,596	37,967	37,025
Non-controlling interests	—	186	185	97	81	260
Earnings per share (in €):						
Basic	4.59	4.19	4.40	3.24	4.36	4.19
Diluted	4.59	4.19	4.40	3.24	4.36	4.19
Number of shares (weighted average)	9,867,659	9,867,659	8,667,075	8,514,248	8,702,529	8,843,524

My cousin is still keeping me up to date with what he sees going on in the industry but, as I mentioned before, he does not have particularly good knowledge of Asia and in particular he knows very little about Korean semiconductor manufacturers, which are now a particularly important source of business for Pfeiffer.

He still believes, however, that the original acquisition logic makes sense. Pfeiffer now has one of the best backing pumps to go with their best-in-class turbo pump.

I am also still hanging on to Manfred Bender's every word. Here is a section from the 2012 Annual Report, where the executive team discusses the benefits of the Adixen acquisition:

What do you mean by combined expertise?

Bender: We are the inventors of the turbopump and have engineering experience since 1890. As a result, we have a great wealth of knowledge, on which we rely daily, in the generation, measurement and control of high vacuum and ultra-high vacuum. For decades, our colleagues from adixen have set standards in the market with their backing pumps. Just the linking of this know-how is in itself a combining of expertise.

Dr. Wiemer: Our goal, however, goes far beyond the addition of past achievements. In the past year we spent a lot of time exchanging our skills and our technologies. We have initiated many projects in which different products are interlinked. This creates something completely new. It is an exciting process. That is precisely how we originally envisioned the convergence of complementary enterprises.

Bender: In our case, one and one equals more than two. We have said this from the outset.

Benedikt: On the other hand, we have also combined the expertise in the various locations worldwide. In each country we have been consolidating and administratively unifying the different companies which were competitors prior to the acquisition. That laid the foundations to act as a cohesive unit. From a practical standpoint, the robust IT infrastructure also forms the basis for a cooperative collaboration across national boundaries.

I want to highlight the fact that he claims **"one and one equals more than two".** The numbers so far do not support this, but how long should I give him to prove it?

I also want to point out that the management team still hasn't become major shareholders, still hasn't got much skin in the game. From the 2012 Annual Report:

"Without any change by comparison with the year before, members of the Management and Supervisory Boards held an aggregate total of 3,577 shares of the Company as at December 31, 2012."

CONCLUSION

I wrote this article to first of all highlight how I struggled to know what to do when one of my holdings made a major acquisition and secondly to show how, three years after the acquisition, I am still struggling to act like a long-term owner with my patience being tested to the full. In short, I'm left feeling in a vacuum!

I did not write it to suggest that I have reached any earth-shattering conclusions. I just want to share my experience because I presume some readers have also found themselves in similar situations.

The Value Investment Institute, November 2013

Appendix 1: 2007 Pfeiffer Vacuum Balance Sheet

(in K €)	Note	2007	2006
Assets			
Intangible assets	7	221	319
Property, plant and equipment	8	26,251	22,901
Investment properties	9	1,767	1,838
Investment securities	10, 29	11,060	17,535
Prepaid pension cost	24	142	145
Deferred tax assets	22	4,185	5,585
Other non-current assets	11	1,901	1,822
Total non-current assets		**45,527**	50,145
Inventories	12	16,857	15,520
Trade accounts receivable	13	26,255	23,934
Receivables from construction contracts	14	2,631	–
Other accounts receivable	15	1,979	1,801
Prepaid expenses		608	449
Investment securities	10, 29	–	1,000
Other current assets	15	190	467
Cash and cash equivalents	16	83,383	75,354
Total current assets		**131,903**	118,525
Total assets	28	**177,430**	168,670
Shareholders' equity and liabilities			
Equity			
Share capital	17	22,965	22,965
Additional paid-in capital	17	13,305	13,305
Retained earnings	18	119,185	104,269
Other equity components	19	–3,113	1,520
Treasury shares	20	–3,722	–3,722
Equity of PFEIFFER VACUUM TECHNOLOGY AG shareholders		**148,620**	138,337
Minority interests		747	635
Total equity		**149,367**	138,972
Deferred tax liabilities	22	275	308
Provisions for pensions	24	1,599	3,859
Total non-current liabilities		**1,874**	4,167
Trade accounts payable	25, 29	4,803	4,428
Other payables	25	1,539	2,571
Provisions	26	12,455	13,564
Income tax liabilities	22	5,810	3,420
Customer deposits		1,582	1,548
Total current liabilities		**26,189**	25,531
Total shareholders' equity and liabilities		**177,430**	168,670

Dec. 31

Appendix 2: Pfeiffer Share Price