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Over-Valuation and Leverage: A Toxic Combination

Those familiar with Warren Buffett's paper "The Superinvestors of Graham-and-Doddsville" may recognise the name Walter Schloss. Walter, one of the aforementioned "superinvestors", employed a relatively straightforward approach to investing. He bought stocks at low prices, preferably with reference to book value, and had a particular aversion to debt. Walter, now retired, saw that debt was an easy way for otherwise decent businesses to become distressed. When the activities of a business with a large debt load deteriorate, often unexpectedly, there is less cash flow available to make the required interest and principal payments. After making these payments, even less is left over for the shareholders; this is because of the "fixed" nature of interest and principal which unfortunately do not decline in line with deteriorating operating activities. In a particularly distressed situation, where the cash flows are insufficient to meet the obligations, the creditors can effectively repossess the assets of the business, to retrieve as much of their entitlement as possible. In such an instance, shareholders are often left with nothing. Walter fundamentally understood the importance of not paying over-the-odds for a stock, but also of avoiding excessive debt levels in the businesses he invested in. These two elements are crucial components of the "margin of safety". Investors who ignore these components can pay a heavy price. As can corporations. There are few examples in the corporate world that illustrate the dangers of over-valuation and financial leverage better than **Boston Scientific**.

Boston Scientific is one of the leading manufacturers of medical devices in the world with a reputation for producing cutting-edge medical products. In the year 2000 the stock finished at about $6.50 per share and peaked at around $45 per share in 2004. A key reason for this meteoric rise was the remarkable success of the company's new drug-eluting stent. A stent is a small mesh tube used to support a vessel after heart surgery. The "drug-eluting" stent includes a drug-coating which is designed to improve the patient's prognosis, and sells at a significant premium to the older generation "bare-metal" stent. Boston was one of the pioneers in this area and its success helped Boston to increase its revenues from $638 million in 2000 to over $2 billion in 2005.

Buoyed by recent successes and keen to ensure continued growth, Boston Scientific acquired **Guidant** in 2006. Guidant was then one of the world's leading producers of CRM ("Cardiac Rhythm Management") devices. These are pacemakers and implantable defibrillators used to regulate the heart's rhythm. In 2006, Guidant was viewed as a high-growth, high return business that warranted a very high price. Guidant had already agreed to be acquired by **Johnson & Johnson** and so Boston Scientific paid Johnson & Johnson a break-up fee of $700m on top of the $27 billion it had offered to buy Guidant. $27bn represented a staggering 7.5 times trailing sales, 64 times trailing earnings and 5.5 times book value – a high price indeed. **Abbot Labs** had agreed to acquire part of the Guidant

business to help fund the deal. The balance was to be financed by a mixture of debt and newly issued Boston Scientific shares.

Despite the initial and fairly widespread enthusiasm for this deal, Boston's balance sheet and financial profile changed significantly for the worse as a result of the transaction. Net debt rose from about $1.2 billion as of December 2005, to $7.7 billion as of June 2006, after the deal was consummated. Interest expense rose from $90 million in 2005 to $435 million in 2006 and $570 million in 2007. The interest coverage ratio (operating income divided by interest expense) declined from a very comfortable 23 times in 2005 to a worrying 2.1 times in 2007. The ratio of net debt to EBITDA (earnings before interest, tax, depreciation and amortisation of intangibles) increased from 0.5 to 3.1 from end 2005 to end 2007. As its obligations to creditors had expanded so much, Boston now had considerably less room to invest and shield itself from unanticipated hits to its business. Bottom line: the financial strength of Boston Scientific had been greatly diminished as a result of this deal.

Boston's management anticipated that Guidant would produce rapidly growing profits that would justify the high price paid, and replenish the balance sheet which had been so stretched in order to assimilate Guidant. These expectations proved hopelessly misplaced.

From end 2006, the first year Guidant was consolidated, to end 2009, Boston Scientific's revenues increased by a paltry 5% in total. Operating income actually contracted by more than 20% over the same period. Having generated cash flows from operating activities of $1.8 billion in 2006, Boston generated only $835 million of such cash flow in 2009. Boston's equity capital declined from $15.3 billion in 2006 to $10.8 billion as of March 2010. Boston's shares outstanding have increased by 80% from 2005, primarily as a result of the Guidant purchase, making the financial performance even worse on a "per-share" basis.

What happened? Growth in the global CRM market slowed, just as Boston's core stent business slowed too. Yet Boston was left to fund a large interest expense and significant debt obligations with profits that were way below its forecasts. On top of this, Guidant has been subject to various regulatory investigations and manufacturing quality concerns which remain to this day. In March 2009, Boston announced it was indefinitely suspending all US sales from its implantable defibrillator unit because it had failed to update the regulator on manufacturing process changes. Although this issue has since been resolved, Guidant's credibility in the marketplace has been seriously damaged. And Boston has yet to make significant progress in paying down its debt load. As of March 2010, net debt stood at $5.3 billion, as compared to $7.7 billion in June 2006. Operating income covered interest expense 3 times in 2009, not a substantial improvement from 2007.

As of June 2010 Boston's stock price is about $6, down from a 2004 peak of about $45 and about $23 at the time of the acquisition of Guidant. Boston may or may not be an attractive investment at this price. However what is clear is that the deal to acquire Guidant destroyed billions of shareholders' capital and placed the company in a significantly weakened financial position. The enormous decline in the share price must be at least partially the result of the significant overpayment for Guidant and the use of debt to finance the deal.

The horror story that is the Boston Scientific acquisition of Guidant highlights two key lessons. Firstly, management should avoid taking on a debt pile that would compromise its ability to comfortably finance the business if trading activity deteriorates. Secondly, the price paid for an acquisition or investment should not be based on the assumption that super-high growth rates will be maintained. Conservative assumptions must be incorporated into the analysis. To ensure a "margin of safety", investors should make these principles part of the foundation of their investment strategy.

Value Investment Institute, March 2010

Figure 1

Boston Scientific: Deteriorating Financial Metrics				
Metric	***Pre-Guidant***	***Post-Guidant***	***Post-Guidant***	***Post-Guidant***
	Dec-05	**Dec-06**	**Dec-09**	**Mar-10**
Sales	$6.3bn	$7.8bn	$8.2bn	
Equity Capital	$4.3bn	$15.3bn	$12.3bn	$10.8
Net Debt	$1.2bn	$7.2bn	$5.1bn	$5.3bn
Net Debt/Ebitda	0.5	3.1	2.5	
Operating Income	$2.1bn	$1.6bn	$1.2bn	
Interest Expense	$90m	$435m	$407m	
Interest Cover	23	3.6	3	
Cashflow from Operations	$903m	$1845m	$835m	
Number of shares outstanding	838m	1274m	1508m	1515m
Share Price	$24	$17	$9	$6

Source: Financial Statements, Bloomberg.

All Metrics are last twelve months except Net Debt, Equity capital and Share Price which are as at period end

Figure 2: Boston Scientific's "Rise and Fall": Share price 2000-2010