

ENHANCING SHAREHOLDER VALUE

Dr. William E. Broxterman
Chairman and CEO

Daniel S. Murad
President

The ChemQuest Group, Inc.
Cincinnati, Ohio

FEICA 1999 CONFERENCE

September 23, 1999
Lucerne, Switzerland

Abstract

In this paper, we will consider the ways in which value can be created, extracted, or destroyed by a firm. We begin with an explanation of shareholder value along with misconceptions management often has on how to positively affect shareholder value through decision making, including mergers and acquisitions (M&A). We then look at the effect of M&A in the adhesive industry on shareholder value. Finally, we will take an additional look at the Value Web and the positive impact it can have on maximizing shareholder value.



Shareholder Value

Increase Shareholder Value! This must be the primary concern of every CEO. But what is the best measure for shareholder value? Even more importantly, what are the steps a company can take to increase shareholder value, as well as those that threaten to destroy it?

Historically, managers have sought to achieve continual growth of revenues and earnings with the belief that shareholder value would surely follow. As the analysis of a company's performance has become more sophisticated so have the metrics used to measure performance. Over the past several years, the metric that has been adopted by a growing number of companies and analysts is one that has been advanced by Stern Stewart & Company which involves the "Economic Value Added™" (EVA) concept. EVA simply attempts to charge corporate earnings with an expense for the cost of capital employed. This concept has been applied to an entire company or to a business unit.

$$\text{EVA} = (\text{Return on Capital Invested} - \text{Cost of Capital}) \times (\text{Capital Invested})$$

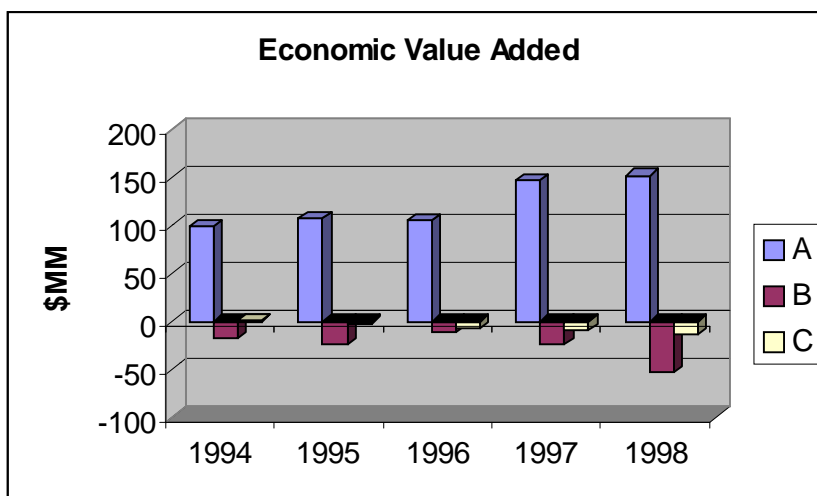
EVA has become popular as a determinant of shareholder value (or at least a metric to measure a trend of improving or declining shareholder value) since it is really a measurement of how much money is left in the shareholders pocket over the cost of capital. Therefore, we would not characterize EVA as a revolutionary concept, but it does help managers to focus on projects, businesses, product lines, and activities yielding more than a firm's weighted average cost of capital (WACC). The EVA value alone is not as important as the trend of EVA over time. This is value creation – or destruction. In a public corporation, it is felt the current value of a business is fairly expressed by the share price. Therefore, increasing EVA should move share prices upward, and decreasing EVA should impact share price negatively.

Examples of EVA trends for three different companies are presented in Figure 1. Company A, with its increasing positive EVA, shows that it has been able to consistently earn a return greater than its cost of capital over the last five years. However, company B has consistently failed to cover its cost of its capital over the same time period, while company C has also been struggling to cover its cost of capital well. Why?



Figure 1

**Examples Of EVA Trends For
Three Different Adhesive Formulators**



All three firms have been making strategic acquisitions over the period that resulted in substantial increases in their capital invested. But, while company A has been able to grow its operating profits substantially, company B continues to suffer from high overhead costs. This inefficiency along with its inability to shed overcapacity has led to a destruction of shareholder value. Company C has traditionally covered its cost of invested capital, but because of changes in its value chain it has begun to see its profitability squeezed over the last few years. As one might expect the share price for company A has moved up smartly, while companies B and C have seen their stock price stagnate over the last five years.

Because of the large capital investments employed among chemical producers, especially among raw material suppliers, many companies in the adhesive and sealant industry have become fervent supporters of EVA. Despite its many positive attributes, EVA is not a panacea since some of practitioners of EVA have encountered some pitfalls. These include, potential conflicts between the value of the company as measured by share price and EVA, misguided compensation systems based heavily on EVA, and the amount of manipulations that must be applied to the accounting data to use EVA.



Additionally, the implications of EVA on decision making can also be troublesome. For instance, if a company in total, or a division of a company, is not earning its WACC, then it is often recommended that it should be sold. This may or may not be a good recommendation, but EVA should not be the sole determinant. Another implication is that investments, expansions, or acquisitions, should be done only when a company can earn a return greater than its WACC, not just to maintain market share as many firms practice.

EVA needs to be implemented carefully, particularly when used to evaluate smaller businesses within larger a company such as individual businesses, product lines, or projects. Any strategic actions at these levels need to be weighted against the longer term impact on EVA for the entire company.



M&A in the Adhesives Industry

Mergers and Acquisitions have become numerous in the adhesives and sealants industries over the past ten years, and this activity is expected to continue into the future. A partial listing of acquisitions in 1998 is presented in Table 1. This is partly due to the fact that the adhesives industry is a highly fragmented industry, and, as such the industry is ripe for consolidation. Historically, those companies that have acquired a number of companies in a fragmented industry and then have successfully integrated them into a functioning unit with positive EVA have added significant value and have enhanced the shareholder value of the company.

Table 1

Partial List Of Adhesive Industry Acquisitions In 1998

DATE	TARGET NAME	NAT	TARGET ACTIVITIES	ACQUIRER NAME	NAT	VALUE (\$US m)
January	BTP PLC-Australian Industrial	AUSR	Manufacture industrial adhesives	National Starch and Chemical	AUSR	3.4
February	Industrial Adhesives Ltd	UK	Manufacture adhesives and sealants	HB Fuller Co	US	Undisclosed
March	Tra-Con Inc	US	Manufacture adhesives	National Starch and Chemical	AUSR	Undisclosed
March	Mydrin GmbH(Total SA)	GER	Manufacture adhesives, glue	National Starch and Chemical	AUSR	35.1
March	Thomas W Dunn Corp-Certain	US	Manufacture adhesives	CFS Group Inc	CAN	Undisclosed
March	Rubbermaid-Decorative Covering	US	Manufacture self-adhesive decorative coverings line and other shelf-liner products	Decora Industries Inc	US	62.6
May	Interquim SA(Enka de Colombia)	COL	Manufacture industrial resins and adhesives	Akzo Nobel NV	NET	Undisclosed
May	Data Klebstoffe GmbH	GER	Manufacture adhesives	HB Fuller Co	US	Undisclosed
May	Datac Adhesives Ltd	UK	Manufacture adhesives and sealants	HB Fuller Co	US	Undisclosed
June	Concreto		Manufacture tile cement/glue	Poliet SA	FRA	Undisclosed
June	Wuefrather Zement-Industrial	GER	Manufacture cement	Cie de Satint-Gobain SA	FRA	Undisclosed
July	Comercial de Exclusivas y	SP	Manufacture wholesale glue	Industrias Marca SA	SPA	Undisclosed
August	Tirreno Industra e Comercio	BRA	Manufacture adhesives and sealants	Henkel Surface Technologies	GER	Undisclosed
September	ACI Japan(ACI Asia)	JPN	Manufacture industrial adhesives	Toagosei Co Ltd	JAP	Undisclosed
September	CDI Seals	US	Manufacture sealing products using ploymer materials	Wellington Holdings PLC	UK	8.8
October	Wace Corporate Packaging PLC	UK	Manufacture wet glue, self adhesive labels and specialist printed folded cartons	Jarvis Porter Group PLC	UK	13.1
November	Scott Bader-Epoxy Curing Agent	UK	Manufacture epoxy curing agents	Air Products & Cemicsals Inc	US	Undisclosed
December	Gustav Espey GmbH & Co KG	GER	Manufacture sealants for the coal industry	Feodor Burgmann Dichtungswerke	GER	Undisclosed
December	Croda Int'l-Aus & NZ Adhesives	Multi-National	Manufacture adhesives	HB Fuller Co	US	Undisclosed
December	Croda Australia-Aust & NZ Bus	AUSR	Manufacture adhesives	HB Fuller Co	US	Undisclosed
December	Designstart Ltd(Energy Techn)	UK	Manufacture adhesives and foam rubber	Causescrypt Ltd	UK	2.9
December	Chemiseal Pte-Adhesives Div	SING	Manufacture adhesives	Adhesives Research Inc	US	Undisclosed



Companies often have different rules for acquisitions vs. traditional capital investments. In order for an acquisition to create shareholder value it must generate a positive NPV, exactly the same as if it were a capital investment. However, historically acquisitions have, on average, been value destroying for the acquiring company. This is often due to the fact that acquiring companies all too often bend the rules they set in order to make a “strategic acquisition”. As a result, the share price of the acquiring company often drops upon announcing an acquisition. What does this say? Clearly, the analysts following this publicly traded company often view the acquisition as a value destroying transaction since they perceive the price paid is greater than the value that can be captured. The larger the drop in price, the more value destroying the transaction. The ideal transaction is where the price of both firms, the seller and the buyer, increase upon the announcement of a deal, and the long-term value of the buyer increases.

A recent example of value creation through a strategic acquisition can be seen in Total’s bid for Elf Aquitaine. On July 2, the Friday before the proposed takeover was announced Total’s closing share price was 128.46 euros while Elf’s was 145.90 euros. On July 4, the day of the announcement, Total’s share price rose 4.7% to close at 134.50 euros, while Elf climbed 24% to finish at 180.90 euros. Both the initial bid by Total and the counterbid by Elf proclaim that the combined company will be able to generate between 1.2 and 2.5 billion euros worth of savings a year from synergies. Although the outcome of this proposed merger is still unknown at the time of this writing, it is considered that a deal will likely be completed because of the value it can produce and because it has the support of the French government.

However, it must be noted that empirical studies from McKinsey, KPMG, and various academic groups indicate that acquisitions, even successful ones, barely return more than the cost of capital. Why then does M&A activity in continue to grow? The driving force for acquisitions among companies that already have a significant position in the industry often results from a recognition that it cannot grow at the rate it wishes from internal growth alone. In many cases there is also a recognition that it would cost more, or take too long, to develop the needed technology or market position through internal means. Once again, each of these considerations should involve the possible impact on economic value, either today or in the future.

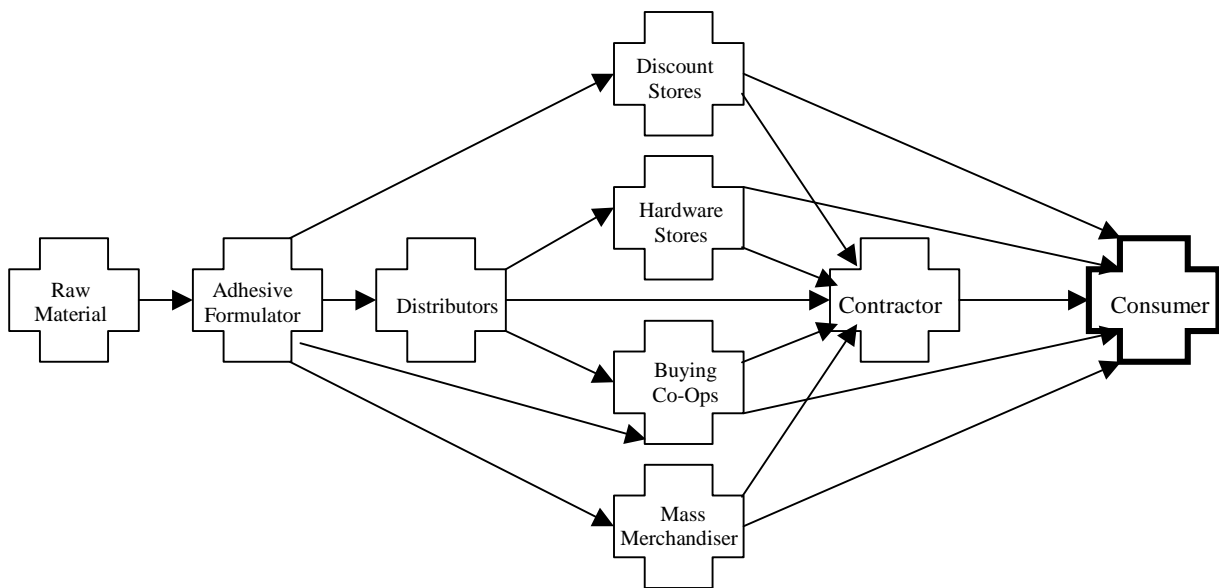


Creating Value Through Use Of Value Chains

An internal methodology that has proven useful in creating value for many companies originates with a Value Chain analysis. Simply stated, a Value Chain analysis identifies each discrete step, and the costs associated with each step, as a raw material proceeds through the various manufacturing steps and sales channels to the ultimate consumer. A Value Chain can be simple and linear, with the flow of value being a simple straight line diagram similar to an assembly line, or it can be more complex as the example shown in Figure 2 for a raw material that finds use in a construction adhesive.

Figure 2

Typical Value Change For Raw Materials Used In Construction Adhesives



Within the Value Chain depicted in Figure 2, a raw material is supplied to an adhesive manufacturer, who then formulates the material into an adhesive product which is then sold. This product will generally be sold directly to Mass Merchandisers, Home Centers, Buying Co-ops, and Discount Stores because of their size. However, smaller customers such as individual hardware stores, some smaller Buying Co-ops and the multitude of professional contractors it will sell through distributors.



Since the Mass Merchandisers, Home Centers and Discount Stores have such high purchasing leverage the contractors will often buy from them. This is putting great leverage on the individual hardware stores and distributors, many of which have gone out of business. Furthermore, the Do-It-Yourself market is so robust in the U.S. that the Consumer will often by-pass the professional contractor and use the adhesive directly.

However, the most important reason to analyze a Value Chain stems from the recognition that each step in the Value Chain has a cost associated with it, and that the various participants in the Value Chain make varying levels of profit. By understanding the costs, and where they can potentially be reduced, or understanding which of the participants are enjoying the highest profitability, it is often possible to develop a strategy that can capture additional profit, and increase shareholder value.

Value Chain analyses have often resulted in “vertical integration” strategies, where, for example, a raw material supplier may elect to become an adhesive formulator to extract more of the value in the chain. Conversely, adhesive suppliers may use similar data to decide to captively produce a key raw material itself. Either strategy results primarily in a shift of Value from one participant in the value chain to another. As such the value created by one company through a better understanding of the Value Chain is often at the expense of some other participant. Therefore, while understanding and using the Value Chain is generally used in an offensive manner to create value, it can also be used to develop a defensive strategy to prevent your own value from being “stolen”.



The Value Web

The Value Web concept is an extension of the value chain analysis in that it considers each of the other value chains that converge on the ultimate end user. For example, in addition to the Value Chain noted in Figure 2, there are many other Value Chains that converge on the same consumer and the same contractor. Examples of other Value Chains include the manufacturers of screws and nails, lumber, tools, electrical supplies and many other products. Through an analysis of each of these chains it is possible to understand where the value is centered in each chain and which company holds the power in each. Figure 3 makes an effort to depict these various chains that converge on the customer for construction adhesives.



Leveraging Power in the Value Web

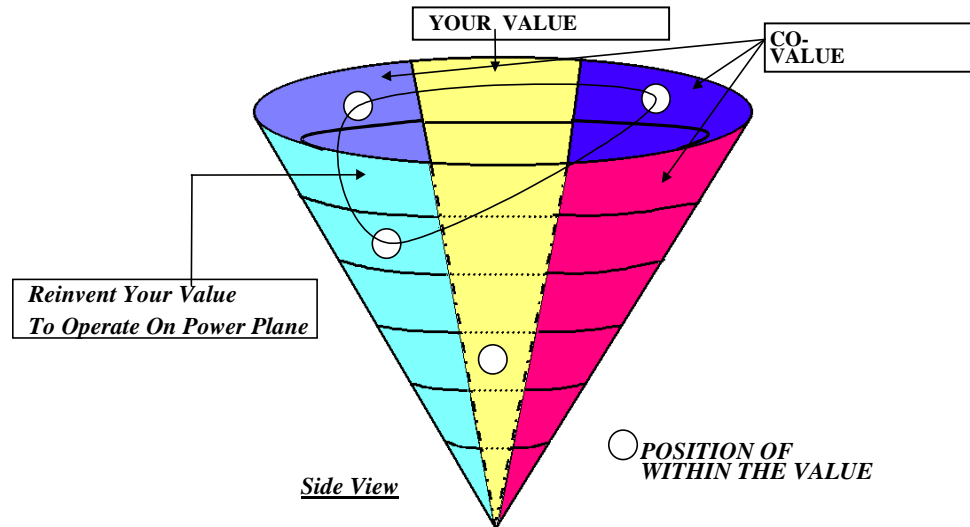
Power usually resides at the step in the value chain generating the most profit margin. The company in a given Value Chain enjoying the highest profit margins in that chain usually have the most leverage in that particular chain. The basis of the value web is a forced consideration of possible strategies that could involve a new paradigm to pursue identified opportunities through an association of two or more of the companies that possess the power from their respective value chains. Figure 3 depicts a Value Web formed from Multiple value chains.

An example of a Value Web was practiced by Loctite Corporation early in its corporate history when it developed its thread-locking adhesive. While highly useful, its customers purchased the product in small containers and used it “by the drop”, making it a highly expensive sales effort. However, Loctite came to recognize that participants of another Value Chain sold ball bearings to many of its customers. A relationship formed with these ball bearing suppliers helped Loctite “take off” and provided an additional source of income to the ball bearing suppliers.



Figure 3

Identification Of Multiple Value Chains And The Positions Of Power



There are however many additional relationships that could be formed. For example, it is conceivable that a raw material supplier with a revolutionary new material could form an alliance with an adhesive supplier and an equipment supplier in order to fully capture the maximum value from the invention. There are many other possible Value Webs.

The process for identifying value extraction opportunities via the Value Web methodology can be summarized as follows:

STEP 1

Develop the key Value Chains, first qualitatively, and then by attaching actual values to each step.

STEP 2

Identify the positions of Power within each Value Chain. Again, this is usually the participant making the highest profit margins.

STEP 3

Assemble the related Value Chains into a Value Web showing where the power positions reside in relationship to each other.



STEP 4

Develop new potential Value Chains where value can be shifted to more desirable positions for your business. This often produces multiple new Value Chains.

STEP 5

Select attractive new Value Chain scenarios and devise potential strategies and tactics to move the value delivery to these new more desirable paths.

Once potential value shifting strategies are identified, wise decisions must be made to maximize Value Creation and minimize or eliminate Risks.



Summary

Every business must continue to find ways to add more value to remain vital in the future. Sound methodologies have been developed which allow a business to identify opportunities for value creation via Value Chain and Value Web analyses. These tools further allow for the development of alternative strategies capable of moving this value to a more desirable location – your bottom line.



Questions or request for additional copies of this paper may be directed to the authors at:

The ChemQuest Group, Inc.
8150 Corporate Park Drive
Suite 250
Cincinnati, OH 45242

(513) 469-7555

(513) 469-7779 - FAX

www.chemquest.com

