RECONSIDERING THE MEASURES OF SHAREHOLDERS VALUE: A CONCEPTUAL OVERVIEW

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Abstract

Economic and finance theory dictates that the major purpose of a firm is to create value. Value can be considered from different points of view. Advances in two distinctly different functional areas of business, namely marketing and financial management, initiated a reconsideration of our understanding of what constitutes a firm’s value. On the one hand marketing was called upon to become more financially accountable and at the same time intangible assets on balance sheets require that the asset or group of assets should be separately identifiable, protected, transferable and enduring. Brands represent a significant fraction of the intangible, and hence, total value of many firms. This situation made various researchers call for the integration of the disciplines of marketing and finance. The blend of empirical customer research and financial measures to produce measures such as, for instance, CLV holds a great deal of promise to support our understanding of value creation in firms and how that translates into shareholder value.

Keywords: shareholders value, finance theory, firm’s value

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Introduction

According to economic and finance theory the major purpose of a firm is to create value. Value, however, can be considered from different points of view. Value is based on growth expectations as opposed to a mere continuation of past performance (Srivastava, Shervani and Fahey, 1999). A firm has different stakeholders and it needs to consider the effect of its actions on their value. In most cases firms follow an approach of shareholder value maximisation.

Financial control systems represent a formal structure through which individuals in a firm may be influenced to act in the interests of that firm. They coordinate the decisions taken in different parts of the firm, providing a way to assess how these decisions have been converted into results (Scarlett, 2007: 41).

The demands from managers for performance management systems that can assist in assessing the effectiveness and efficiency of management decisions have resulted in endeavours to develop performance measures of greater relevance (Chenhall and Langfield-Smith, 2007: 266).

Recent events and demands from various stakeholder groups have led firms to re-evaluate as to what constitutes firm value. For instance, predicaments associated with traditional financial measures are that they are not cash flow values, they do not incorporate the risk of a firm’s activities, they do not focus on the time value of money, and that the value of a measure may differ from firm to firm due to different accounting practices (Martin and Petty, 2000).

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Structure of the Article

The rest of the article consists of four major sections. In the first section a background to the emergence of a reassessment of the components of firm value is provided. This is followed by a discussion of the purpose of the article. Thereafter the traditional measures of firm performance and a criticism thereof are attended to in more detail. The next section deals with a major challenge marketing management experiences in respect of quantifying the financial impact of marketing activities and the response of marketing management to address this challenge. The latter section is followed by a discussion of the measures that could bridge the divide between marketing and financial management to refer to firm value in a uniform manner. The article concludes with some of the major implications of an alternative approach to place a value on a firm.

Background

Developments in two distinctly different functional areas of business, namely marketing and financial management, initiated a reconsideration of our understanding of what constitutes a firm’s value. On the one hand marketing was called upon to become more financially accountable (Rao and Bharadwaj, 2008; Lehmann, 2004; Rust, Zahorik and Keiningham, 1995; Srivastava, Shervani and Fahey, 1997). On the other hand intangible assets on balance sheets generally require that the asset or group of assets should be separately identifiable, protected, transferable and enduring (Trevillion and Perrier, 1999; IAS, 2006). Brands represent a significant fraction of the intangible, and hence, total value of many firms (Lehmann and Reinsten, 2006). This situation has led to various researchers calling for the integration of the disciplines of marketing and finance (Day and Fahey, 1988). Srivastava, Shervani and Fahey (1998) emphasize that “theories of marketing must be extended and broadened to include developments in finance, as indeed theories of finance must be extended and broadened to include recent developments in marketing.”

Purpose of the Article

Accounting measures on its own are unable to explain the value of a firm. Firms often possess intangible assets or embark on strategies whose benefits are not accurately portrayed in the accounting valuation of a firm’s assets or in contemporary accounting measures of financial performance (Srivasta, Shervani and Fahey, 1998). The primary purpose of this article is to provide a brief overview of the debate in academic circles that have taken place over the past decade and a half in respect of what should be part of firm value and how firm value should be determined. Secondary purposes of the article is to highlight the roles of marketing and financial management in assessing the value of a firm and to draw attention to measures such as brand and customer equity that will most likely fulfill a major role in the resultant measures to assess the value of a firm.

Traditional Measures of Firm Performance and a Criticism Thereof

Generally speaking, shareholder value is regarded as the leading business principle in measuring the financial performance, as well as the success of firms (Madden, Fehle and Fournier and 2006). This can be ascribed to the perception that the main objective of any firm is to maximize shareholders’ return on their equity (Ambler, 2003), in other words, a firm only adds value for its shareholders when equity returns exceed equity cost (Black and Wright, 2001:9).

Most metrics that measure shareholder value directly have relied on accounting-based measures (Anderson, Fornell and Mazvancheryl, 2004) and include measures such as cash flow return on investment (CFROI), return on investment (ROI), return on assets (ROA) and share price (Lukas, Whitwell and Doyle, 2005; Anderson, Fornell and Mazvancheryl, 2004). Market-valuation methods include approaches such as price/earnings multiples, market-to-book value ratio, economic value added (EVA) and market value added (MVA) (Srivastava, Shervani and Fahey, 1999: 173).

Mixed results are obtained when evaluating the ability of these traditional performance measures to quantify financial performance. In some cases little or no relationship between traditional accounting measures and future share performance is established (Black, Wright and Davies, 2001: 51; Obrycki and Resendes, 2000: 158; Copeland, Koller and Murrin, 2000). Developing performance measures that can be applied to evaluate financial performance and value creation is of great importance. Traditional measures of performance appear to focus exclusively on the use of historical accounting information in an attempt to quantify financial performance. The need for performance measures that also consider the value creating potential of a firm led to the development of value based performance measures. These measures attempt to link the financial performance of a firm with the value it created.

Additional problems associated with the traditional measures identified by Martin and Petty (2000: 36) include that they are not cash flow values, they do not incorporate the risk of a firm’s activities, they do not focus on the time value of money, and that the value of a measure may differ from firm to firm due to different accounting practices. Furthermore, it is also possible to manipulate accounting figures in such a way that they do not provide a true indication of a firm’s actual financial position (Young and O’Byrne, 2001; Obrycki and Resendes, 2000; Stern, Stewart and Chew, 1995). The valuation and inclusion of intangible assets (including items like goodwill, patent rights and licenses) in financial statements also
presents a problem when evaluating a firm. When calculating and interpreting financial performance measures it is therefore of great importance that the possible influence of different accounting methods should be considered. While profit-based measures continued to be prescribed and used for evaluating managerial performance, it has been argued that the dysfunctional impact of these measures on decision making could be reduced by combining profit-based measures with non-financial measures (Chenhall and Langfield-Smith, 2007: 267). The research investigating the links between customer-focused strategies and performance measures is very limited (Hyvönen, 2007: 345).

According to Obrycki and Resendes (2000: 158) an ideal performance measure should not only focus on the financial performance of a firm but should also provide an indication of what it is worth. The correlation between such a measure and the firm’s market value should therefore be high. A considerable number of measures have been developed to value corporate performance. While most of the traditional measures attempt to evaluate the financial performance of a firm they fail to consider value creation. Value based performance measures focus both on financial performance as well as the value created by a firm. The traditional measures of performance are not suitable to be utilised as measures of value creation in general. In most cases they are single-period measures. Furthermore they are based on accounting figures, exposing them to the distorting effects of Generally Accepted Accounting Principles (GAAP). Numerous criticisms against the use of the traditional financial performance measures have been reported. One of the major criticisms levied against the use of these measures is that they are based on accounting data (Ehrbar, 1998; Peterson and Peterson, 1996). These accounting figures may not be an accurate indication of the actual financial situation of a firm. For instance, the accounting values of property, plant and equipment may be distorted as a result of inflation and may not represent their current replacement value. The demands from managers for performance management systems that can assist in assessing the effectiveness and efficiency of management decisions have resulted in endeavours to develop performance measures of greater relevance (Chenhall and Langfield-Smith, 2007: 266).

The Challenge to Marketing Management to Justify the Financial Implications of Its Actions

In the past two decades, marketing as a traditional functional area of business came under pressure to demonstrate the link between marketing expenses and its contribution to shareholder value. This particular demand and the lessons to be learned from the dot.com crash emphasised a reconsideration of the link between shareholder value and its antecedents. During the nineties it became apparent that, despite the opportunities and value that marketing brought to the table, marketing executives were unable to quantify marketing’s contribution to the welfare of the firm. The growing importance of this trend was later confirmed by the Marketing Science Institute’s (MSI) call for marketing metrics to be developed for a wide range of marketing activities. The development of such metrics was one of their top tier research priorities for the 2001-2004 and 2004-2006 periods (Marketing Science Institute, 2000; 2004).

Day, as far back as 1992, argued that marketing is losing its standing when it comes to the strategy debate. Webster, Malter and Ganesan (2003) state that “marketing’s inability to document the value of its strategic contribution has been a major reason for its fall from grace at the corporate level”. Lehmann (1997) contend that “marketing loses control … and becomes solely an implementer of the 4Ps … essentially the department of cents-off coupons and blue-light specials”. Moorman and Rust (1999: 195), in contrast to Day and Lehmann (1992; 1997), found that marketing augments value to the firm when it succeeds to link customers to products, service delivery and financial results. Customers as assets became prominent during the crash of the dot.com marketplace. The funding of the majority of the dot.com start-ups were based on customer-centric measures such as eyeballs, number of customers, and click-through’s, all of which have an indirect and often doubtful association to shareholder value (Hogan, Lehmann, Merino, Srivastava, Thomas and Verhoef, 2002:). Hogan, et al (2002: 27) commented that the important lesson to be learned from the dot.com crash, is a clear understanding of the relationship between customers as assets and shareholder value. One of the major bones of contention in respect of marketing’s contribution to the value of a firm is found in the viewpoint of firms that treat marketing expenditures as expenses and not as investments. This difference in viewpoints lends itself to extensive debates. Even though it has been suggested that researchers should direct their focus further than profits and investigate linkages between marketing actions and their impact on firm value (Anderson 1982; Day and Fahey 1988; Srivastava, Shervani and Fahey 1997), the missing link appears to be a means by which the effects of a marketing action to firm value (stock price) can be formally traced (Rao and Bharadwaj, 2008).

The literature of the past two decades has witnessed an escalating dialogue with regard to the links between marketing actions and cash flows because the cash flows that are shared by and divided amongst investors in the end determine firm value (stock price) and the wealth created for shareholders (Rappaport 1986). More recently Ambler and Roberts even went as far to state that “at the end of the day, marketing is the creation of cash flows” (2006). Ambler and Roberts (2006) are very positive about the use and role of cash flows in determining firm and argue that “alternative scenarios and plans can be
compared … using future cash flows,” and also suggest that if marketers do not have the means to take care of the uncertainties that accompany future outcomes, they falter in the application of discounted cash flow methods. Marketing and firm value can only be linked if marketers appreciate fully how their actions affect anticipated cash flows. This demands a “modeling of the nature of the uncertainty facing the firm” by modeling mathematical expectations of the probable distribution of future cash flows (Ambler and Roberts, 2006). Rao and Bharadwaj (2008) remark that “If the marketing activity requires an investment today, the key to justifying this investment is to articulate how it affects the investors’ cash flows and the shareholders’ wealth”. Essentially, the value of a firm is the discounted value of the cash flows shared by the firm’s share holders. Various authors have suggested that marketing activities must be related to the cash flows they generate (Anderson 1982; Day and Fahey 1988; Doyle 2000; Rust, Ambler, Carpenter, Kumar and Srivastava, 2004).

Marketing Management’s Response to Linking the Investment in Marketing Activities to Shareholder Value

The large and increasing portion of shareholder value that is seen as attributable to intangible assets such as brands has strengthened the need to link marketing expenditures to financial outcomes (Lehmann and Reibstein, 2006). For a long time marketers were unsure or lacked the means by which to systematically link the cash flows emanating from their actions and activities to firm value. This “missing link” prompted researchers to call for the integration of the disciplines of marketing and finance (Day and Fahey, 1988). In 1998 Srivastava, Shervani and Fahey asserted that “theories of marketing must be extended and broadened to include developments in finance, as indeed theories of finance must be extended and broadened to include recent developments in marketing.”

Today’s marketing activities focus on the enhancement and building of long-term relationships with customers. The investments made in marketing activities thus aim to generate a positive income stream for the firm over as long as possible a term. The discounted net worth of such an income stream, after provision for costs such as direct costs to produce a product or service and the cost to retain or acquire a customer in the future, can be expressed as the lifetime value of a customer (CLV). The CLV of a customer can be defined as the present value of all the future profits obtained from a customer over the duration of the time that the customer has a relationship with a firm (Gupta et al., 2006). Although CLV has much in common with the discounted cash flow approach that are utilised extensively in finance and valuation, it also differs in two aspects from the discounted cash flow approach. The first difference is that CLV is defined and calculated at individual customer or segment level. This difference enables one to distinguish between levels of profitability in stead of averages. The second difference, which is very different from that followed in finance, is that customer’s departure, for whatever reason, can be incorporated in CLV. Customers are the primary source of all future cash flows and measures such as customer satisfaction, customer loyalty and customer commitment are significant indicators of the strength of a company’s customer relationship; the timing, level and stability of cash flows thus depend on the strength of such measures (Anderson, Fornell and Mazvancheryl, 2004: 172). The CLV of an individual customer is expressed as follows (Gupta et al., 2004; Reinartz and Kumar, 2003):

\[
CLV = \sum_{i=1}^{n} \frac{(p_i - c_i) r_i}{(1+i)^t} - AC
\]

where:
- \( p_i \) = price paid by a consumer at time \( t \)
- \( c_i \) = direct cost of servicing the customer at time \( t \)
- \( i \) = discount rate or cost of capital for the firm
- \( r_i \) = probability of customer repeat buying or being “alive” at time \( t \)
- \( AC \) = acquisition cost, and
- \( T \) = time horizon for estimating CLV

Over time researchers developed two concepts, based on CLV, and that enable marketing management to justify investments and link these investments to positive cash flows over time. These concepts are brand equity and customer equity. Recent marketing related literature extensively address issues on how marketing creates intermediate assets such as customer equity and brand equity and how these assets result in sales over time, though not necessarily immediately (Rust et al., 2004). Initially much of the focus was on brand equity whilst customer equity seems to have seized the limelight more recently. In needs to be pointed out at this stage that no consensus has been reached about acceptable definitions of brand equity and customer equity. Ambler (2003), highlights the confusion that exists in the use of the terms brand equity and customer equity. For the purpose of this article we define brand equity as the sum of the customer equities in respect of the products carrying a particular brand name. Figure 1 illustrates the relationship between brand equity and customer equity.

Gupta, Lehmann and Stuart (2004) regard customer equity as “a useful proxy” for the market value of a firm. Rust, Lemon and Zeithaml (2004) are of the opinion that firms can gauge how marketing expenditures influence customer equity. They describe customer equity as the sum of all the discounted lifetime values of cash flows from all the firm’s existing and potential customers. If a firm has two products under one brand name, customer equity for product one can be expressed as follows:

\[
CE1 = \sum_{i=1}^{n} CLV_i
\]

In a similar vein, the customer equity for product two can be expressed as follows:
The aforementioned equation of CE is similar to the customer equity measures that are found widely in the marketing literature (Berger and Nasr, 1998; Berger, Bolton, Bowman, Briggs, Kumar, Parasuraman and Terry, 2002; Blattberg, Getz and Thomas, 2001; Mulhern, 1999; Reinartz and Kumar, 2000; Rust, Zeithaml and Lemon, 2000).

The sum of brand equity is therefore the sum of the customer equities of products one and two and can be expressed as follows:

\[ BE = \sum CE_1 + \sum CE_2 \]

In terms of the discussion in the preceding sections about brand equity and firm value, the value of the firm is thus equal to the sum of brand equity.

![Figure 1. The relationship between brand equity and customer equity](image)

*Source: An adaptation of Ambler, 2003, p.49.*

**Conclusion**

The article attends to the debate about alternative measures to represent the value of a firm. The approach to start with the consumer as point of departure in this valuation process is forward looking, compared to traditional measures of firm values that rely on a great extent on historical accounting figures. At the same time the measures of brand equity and customer equity also defines and guide the involvement of marketing management in the firm. The combination of empirical customer research, to assess attitudes, with financial measures to produce measures such as, for instance, CLV holds a great deal of promise to support our understanding of value creation in firms and how that translates into shareholder value.

**References**