The Art of Valuing SMEs in South Africa

Louise van Scheers[1], Thea Visse[2]

Abstract: Aim. There is no formal structured market where the most correct values of SMEs could be determined therefore valuing SME type businesses is more of an art than a science. The aim of this research was to obtain a better understanding and knowledge of the appropriate valuation methods and value factors contributing to the most correct market value of SME type businesses. **Problem investigated.** The problem emanates from the fact that SMEs cannot properly be appraised, and a value be attached to it is the effect of a slow transfer of skills and a slow growing SME sector in the South Africa economy. **Methodology.** Quantitative paradigm was deemed appropriate for the primary research. The goal was to interview 10 different SME business brokers, 30 SME buyers and 30 SME sellers in order to conduct a creditable investigation and recommendation. **Research Findings & Conclusion.** The conducted research confirmed that strategic value contributing factors for selling an SME are recognised by the general market. Generic valuation method for five types of SMEs, namely: Supermarket, restaurant, liquor store, coffee shop and hardware shop were created. **Significance of the research for South African SMEs.** SMEs play a vital role in the economy of South Africa, and therefore, their sustainability is crucial. This study will indicate to SME owners how to value their SME

Keywords: SMEs; valuation factors; valuation methods; valuation types

JEL Classification: M39

1. Introduction

The South African accounting system requires yearly valuations of all assets owned by entities (business and personal) where the financial reporting statements are used by a third party, such as the South African Revenue Services (SARS), shareholders, financial institutions and/or investors. This also includes the valuation of businesses and equipment in the SME market place. There is no formal structured market where the most correct values of SMEs could be determined, like the Johannesburg Stock Exchange (JSE) as a structured governing body for listed companies. Valuing these SME type businesses is therefore more of an art than a science. Financiers such as banks have the problem that they cannot securitise non-bankable assets like goodwill and expertise. This problem is enhanced by the fact that most SMEs work at a loss

[1] Prof DMRM, School of Business Management, CEMS, University of South Africa, South Africa, Address: Po Box 329, Unisa 0003, Corresponding author: vscheml@unisa.ac.za.
[2] Dr Department of Business Management, School of Business Management, CEMS, University of South Africa, South Africa, Address: Po Box 329, Unisa 0003, E-mail vissed@unisa.ac.za.

on their financial reports, but most of the owners stay in big houses or drive expensive cars, while indicating that they do not make any profit. When it comes to selling these businesses, the seller always wants the maximum possible price, but for a SME that does not show a "book profit". The question arises: How does one place a value on such a "profitable bankrupt" SME to sell it, and to enhance the chances of success to obtain finance for such a business? The valuation of a business works on imperfect information. It is not like selling a house in a street of similar houses in which case one knows what the one down the road sold for a couple of months ago. There is also no other business 100% the same as the subject one, in the same location and of similar size. Even if there were, how would you determine its value?

According to Allen (2012), calculating the value of a business is a challenge because value is a subjective term with many meanings. The author opines that a key component of any financial strategy is determining the value of the business, as a realistic value figure is needed no matter which avenue is taken to raise growth capital. However, valuation of, specifically, early-stage private businesses is a subjective process fraught with the challenge of predicting future earnings in a highly uncertain environment, and with no track record on which to base these projections. Moreover, the already difficult task of valuation is exacerbated by the fact that most valuable assets that businesses hold, are intangible. That is, they consist of patents, knowledge and people instead of plant and equipment (Allen, 2012). Andriessen (2005) notes that research seeking to compare, and contrast, the potential for the practical application of valuation methods is scarce, even though the need to establish their validity and applicability is clear. Furthermore, determining what a business is worth is a complex task (Baron, 2014; Vallejo-Alonso, Arregui-Ayastuy, Rodriguez-Castellanos & García-Merino, 2013) and is a concern to entrepreneurs (Hisrich, Peters & Shepherd, 2013). Most attempts at implementing valuation models have involved large businesses, while very little research has focused on valuation methods applicable to SMEs (Vallejo-Alonso, García-Merino & Arregui-Ayastuy, 2015). SMEs also have fewer resources to identify and manage intangibles, while they usually have less developed information databases (Vallejo-Alonso, Garcia-Merino & Arregui-Ayastuy, 2015). Brunninge, Nordqvist and Wiklund (2007) argue that larger top management teams are likely to have more sources, skills and increased cognitive diversity to result in better decision-making. Furthermore, a difficulty for venture capitalists lies in a complicated valuation process in an entity where the price is not defined by a market, but through financial considerations that play a small part alongside other considerations, such as industry characteristics (structure, trends and markets) and the business's characteristics (development stage, competitiveness) (Dimov & Shepherd, 2005). Furthermore, Deaconu and Nistor (2009) argue that the legitimacy concerning the valuation methodology elaboration for financial reporting, which falls back on accounting or valuation bodies, is not clearly established.

Limited research was conducted in South Africa on valuing SMEs; hence, this paper attempts to fill this important gap. This investigation approaches the situation with the view that because SMEs cannot properly be appraised, and a value be attached to it is the effect of a slow transfer of skills and a slow growing SME sector in the South Africa economy. This study will therefore explore the possibility of establishing standard, practical valuation methods (benchmarks) for top selling SMEs, in the quest to assist key players with unlocking some potential that is tied up in this sector by trading more with SMEs. The main aim of this research is then to obtain a better understanding and knowledge of the appropriate valuation methods and value factors contributing to the most correct market value of SME type businesses. The paper is structured as follows: First, we provide the problem statement and research methodology. This is followed by a review of the literature. Lastly, we report on the results and findings, and conclusion.

2. Problem Statement

The average number of active businesses in South Africa is between 450 000 and 1 million, of which about 30% fall into the SME size categories (http://www.statssa.gov.za/publications/ P0276/P02762013.pdf). This means that between 135 000 and 300 000 SMEs in South Africa change ownership or are bought/sold in South Africa on an annual basis, and in an unstructured market place (http://www.statssa.gov.za/publications/P0276/P02762013.pdf). Most of the time this change of ownership is associated with a pre-determined price for the business which has various financial implications, like the capital gains tax payable on the sale, business finance requirements and the structuring of the transaction from a legal and risk point of view. The two main parties involved in a transaction of this nature are typically the buyer and the seller and the question frequently asked by them is: *"Did I pay too much for the business?",* or *"Did I sell the business for too little?"* Often a business broker gets involved in these transactions in an advisory capacity or from a marketing point of view. Most advice required from this person is usually about the value of the business.

There are various basic theoretical valuation methods, but these can seldom be used when valuing SMEs, specifically because of a lack of information and misrepresentation of the true financial state of the business. The question therefore arises: Is there a "rule of thumb" or benchmark valuation technique(s) that can be applied in principle to estimate the current market value of some of the most commonly traded SMEs in the Gauteng region of South Africa?

3. Research Methodology

Primary and secondary sources were used to gather information about the current market value of some of the most commonly traded South African SMEs. The main secondary sources were articles and books. Since the aim of this research was to answer a research question by understanding the valuing of SMEs, a quantitative paradigm was deemed appropriate for the primary research. The goal was to interview 10 different SME business brokers, 30 SME buyers and 30 SME sellers in order to conduct a creditable investigation and recommendation.

4. Literature Review

4.1. The Concept of Valuation

Valuation is an incremental process of bringing together "key pieces of information" that gives some insight into the health and future of the business (Allen, 2012). Value is also defined as the present value of estimated future cash flows expected to merge from the continuing use of an asset and from its disposal at the end of its useful life, or a reasonable estimate thereof (International Accounting Standards Board [IASB], 2009). Valuation standards have an advantage over accounting standards as valuation applications, with a higher technical character, are developed along with the former. Kuratko (2017) claims that the value of a business drives what price investors will pay for the business. Information used to determine valuation comes out of the due diligence process and has to do with the strength of the management team, market potential, the sustainable advantage of the product/service and potential financial returns. Another way to look at valuation is how much money it will take to make the business a success. In the end, the value of a business is the price at which a willing buyer and seller can complete a transaction.

According to Allen (2012), the following definitions of value are in common use:

• Fair market value: The price at which a willing seller would sell, and a willing buyer would buy in the transaction. By this definition, every sale would ultimately constitute a fair market value sale;

• Intrinsic value: The perceived value arrived at by interpreting balance sheet andincome statements through ratios, discounting cash-flow projections and calculating liquidated asset value;

• Investment value: The worth of the business to an investor, based on his/her individual requirements in terms of risk, return and tax benefits;

• Going-concern value: The current financial status of the business as measured by financial statements, debt load and economic environmental factors (i.e. government regulation) that may affect its long-term continuation;

• Liquidation value: The amount that could be recovered by selling off all business assets;

• Book value: An accounting measure of value that reflects the difference between total assets and total liability. It is essentially equivalent to shareholders' or owners' equity.

Those who finance ventures also use some non-financial yardsticks to measure value. These include: firstly, the experience level of the management team; secondly, the innovative level of the firm's distribution channels; thirdly, the nature of the business's relationships in the industry and with customers; fourthly, the business's ability to be fast and flexible; and finally, the business's amount and kind of intellectual property (Allen, 2012). Lipmann (2001) argues that risk determines the value of the business. If the business takes more risks, the higher the rate of return that is required, otherwise no one would take on the additional risk. The corollary is that the higher the rate of return required, the lower the price will be. It is therefore the assessment of the risk which will place a value on the business. Allen (2012) states that value is not cost or price. A bargain is where the value is less than the cost, whereas paying dearly or excessively is where the cost is more than the value. The author defines value as "the representation of all future risks and benefits of ownership compressed into a single payment".

4.2. How do you Value South African SMEs?

Between 135 000 and 300 000 SMEs change ownership or are bought/sold in South Africa on an annual basis (http://www.statssa.gov.za/publications/P0276/P02762013.pdf). SMEs are typically businesses with a market value of less than R2, 5 million. However, may vary in size, as the classification is more about the number of employees and annual turnover, than market value or sales price of the business.

The valuation of a business works on imperfect information. There is no other business the same as yours in the same location and of similar size. Even if there were, how would you know its value?" (Allen, 2012). There are no rules to tell one what the business is worth and there is no such thing as a correct price. These and various other value contributing factors are faced by most sellers, buyers, business brokers, financiers and other key players in the SME industry today. As a result, it causes a lack of participation, stimulation and growth in most SMEs, which create a situation where the economy could suffer as a result.

This investigation approaches this situation with the view that because SMEs cannot properly be appraised, and a value be attached to it, is a major cause rather than the effect for a slow transfer of skills and a slow growing SME sector in the South Africa economy. This study explores the possibility of establishing a standard, practical valuation model or benchmark for the top selling SMEs in the quest to assist key

players with unlocking some potential tied up in this sector by trading more with SMEs. Businesses are typically valued on the amount of money they earn, combined with the desirability of the industry and the risk factor. Higher prices will be paid for businesses in more desirable industries that are operating in a market perceived as low risk. These types of businesses are in stronger demand and therefore the value of these businesses will be greater than for those in a less sought-after industry. They are also perceived to have a higher risk factor attached to it, despite that both businesses may make the same amount of money (Allen, 2012).

4.3. Valuation Factors

Valuation is at the core of determining how much ownership an investor is entitled to for a certain amount of funding for a business and this is determined by considering certain factors in valuation. According to Hisrich, *et al*. (2013), the first factor is the nature and history of the business. The characteristics of the business and the industry in which it operates are fundamental aspects in the evaluation process. The second factor involves an examination of the financial data of the business compared with those of other businesses in the same industry. The third factor is the book (net) value of the stock of the business and the overall financial condition of the business. The fourth factor, the future earning capacity of the business, is the most important factor in valuation. The firth valuation factor is the dividend-paying capacity of the venture. Since the entrepreneur in specifically, a new venture, typically pays little (if any) in dividends, it is the future capacity to pay dividends rather than actual dividend payments made, that is important. An assessment of goodwill and other intangibles of the business is the sixth valuation factor. These intangible assets usually cannot be valued without reference to the tangible assets of the business. The seventh factor in valuation involves assessing any previous sale of equity. Previous equity transactions and their valuations represent the future sales. The final valuation factor is the market price of equity of the business engaged in the same or similar lines of the business. A critical issue is the degree of similarity between the publicly traded business and the business being valued.

Hendrikse and Hendrikse (2003) and Baron (2014) claim that the following principal factors influence value:

• The *cost* factor, which represents the intrinsic cost and reproduction or replacement cost;

• The *market* factor, which is about the saleability and transferability of the asset. This includes the condition of the asset, its age, economic lifespan, depreciation, market conditions, micro and macro-economic conditions, ownership entity and control of ownership;

• The *earnings* factor, which the revenue earning capacity of the business determines. The earnings factor of the asset includes the productivity attributes, utility attributes, goodwill, brands, future benefits, risk factor, maintainable earnings and the required rate of return; and

• The *legal* factor, which is about the usage rights of ownership in the asset, possible restrictions of use, and the scope of ownership.

According to Puttick and Van Wyk (2000), the value of an enterprise is a function of two inter-related factors, namely (a) the value of the underlying assets (tangible, intangible and monetary assets); and (b) the ability of the assets to generate a return that will add value to the investment in the business by its owners. The authors also define the value of a going concern as: "The value of an enterprise which has tangible assets, resulting from factors such as having a trained work force, operational plant, equipment, facilities and resources and the necessary licenses, systems and procedures in place, and where the business is in operation".

Factors which also intervene in the valuation process and which influence the final valuation of the business include:

Firstly, start-up costs (some buyers are willing to pay more for a business than what the valuation methods illustrate its worth to be). Secondly, accuracy of projections (sales and earnings of a business should always be projected on the basis of historical financial and economic data); and lastly, the control factor (degree of control an owner legally has over the firm and which can affect its valuation) (Kuratko, 2014; Kuratko, 2017). A study conducted by Vallejo-Alonso, *et al*. (2015) showed that SMEs that consider the financial valuation of their intangibles to be important experienced improved business performance and a significant growth in profits. On the other hand, SMEs that believe the financial valuation of their intangibles is important in order to facilitate information for external stakeholders and which are pressured to do so, have higher levels of leverage. In addition, the load of intangible resources in relation to total resources with the weight of intangible resources became statistically significant. Grandis and Palazzi (2015) highlight reasons for valuation. Which include firstly, the contribution of a business or a business unit/area as a going concern in a new business. Secondly, the recess of a partner from an enterprise. Thirdly, transfer of a business/business unit or shareholdings; fourthly, mergers and acquisitions; and the expert's report for civil suit. Finally, the definition of new arrangements because of the entrepreneurial succession process and monetary re-valuation of minority shareholdings (unlisted in the stock exchange market) to benefit the fiscal advantages *ex lege*, informational/strategic purpose. Influences that create value in the business are divided into the following five categories (Stokes & Wilson, 2017):

• Customer base and market position. (a) Quantity of customers: A weakness of many businesses are their over-reliance on a small number of customers. (b) Quality

of customers: The quality of the customer base is determined by the loyalty of customers and the strength of their own businesses;

• Embedded knowledge and intellectual property. A key asset of any business is the knowledge of the owner (entrepreneur) running it;

• The entrepreneurial team. If the value of a business is not to be over-dependent on the expertise and knowledge of the owner, a management team capable of running the business on a day-to-day basis needs to be in place;

• Process and facilities – the business model. Businesses create value by bringing together resources and processes in a way that constitutes a viable "business model". A business model is the system that transforms an intangible business idea into products/services that have value in the market place; (Hedman & Kalling, 2003; Osterwalder & Pigneur, 2010).

• Cash flow and profits growth. The ability of the business to generate cash through profitable trading is a crucial part of its value, and the relationship between cash generation and profits will also affect the value of the business.

4.4. Types of Valuation Methods

According to Hatten (2016), there are three principal types of valuation approaches, namely the market approach, the income approach and the cost approach. A forth approach is the "rule of thumb" approach which is usually linked with the income approach. The cost, income and market approaches are the tools of valuation. Any type of asset can be valued by using one of these principle types of valuation methods or a combination thereof. The "rules of thumb" approach should only be used to test valuation calculations reached by other methods.

The Market Approach to Value: Allen (2012) define the market approach value method as follows: "This approach is based in the principle of comparability and substitution. The assumption is that if similar assets in a similar market place have been sold at a particular value, then the comparable asset will also sell at a similar price. Key elements to consider during this approach are: (a) How active is the market; (b) How public is the market, and (c) Whether there is an exchange of comparable assets (properties, businesses or shares). What makes this approach difficult is when the asset has unique features and benefits that make comparison virtually impossible. This approach is mostly effective for valuing estates, general use machinery, motor vehicles, liquor licenses and franchise type operations.

To utilise the market approach in the valuation of a business, the valuer would investigate and analyse the reported sales, including other business enterprises. If the valuer is fortunate, some might be found and be similar enough to the business to be used as a comparison. In other words, to be useful in the valuation process, there should be a high degree of comparability in the sales data, otherwise the adjustment

process becomes so extreme that it renders the exercise worthless. Sometimes the "rule of thumb" method can be used when there is an especially active market for a specific type of business and there is enough similarity in the tangible assets, the revenue streams and operating expenses. This approach is less effective for special purpose machinery and equipment, most tangible assets and intellectual property, and non-listed business enterprises.

The Income Approach to Value: Allen (2012) define the income approach as "an approach which is based on a measurement of the present worth of the economic benefits of ownership". In the case of an enterprise, the benefits of ownership are in the form of future profits. The present worth of those future profits is the value of the enterprise. Where the market approach focuses on recent past transactions, the income approach focuses on the future performance of the assets or the business, and specifically, the income-producing capability of the asset. The value of the asset or business can be measured by the present worth of the economic benefit to be received over the life of the asset. Key elements to address include:

• The economic life of the business;

• Choice of period over which the income is expected to be generated;

• Earnings attributable to tangible and intangible assets;

• Choice of appropriate capitalisation rate;

• Choice of period over which income is expected to be generated; and

• The risk associated with realising the earnings' expectations.

The cost approach to value: This approach seeks to measure the future benefits of ownership in the asset or business by quantifying the amount of money that would be required to replace the future service or earnings' capability thereof. This approach examines the current cost of replacement and adjusts this cost by the depreciation and obsolescence factors. The following key elements should be considered:

• The original cost of the asset;

• The current cost of replacing the asset;

• The insured value of the asset;

• Depreciation and obsolescence; and

• The economic life of the asset.

The underlying assumption of the cost approach is that the price of a new asset is commensurate with the economic value of the service that the asset can provide during its life. The market place is therefore the best testing place for this equation.

For example, if the price of a specific new machine was set at a level far above the value of the future economic benefits of owning the machine, then none would be sold. If the opposite was true, then demand would outstrip supply and presumably the price would rise. The price of this new machine, absent from some market aberration, is then equal to its fair market value. This approach therefore focuses more on the current capital costs of replacing the asset of a business.

Hatten (2016) states that approaches to valuing a business and which focus on the value of the business's assets, are referred to as "balance-sheet methods of valuation". They are appropriate for businesses that generate earnings primarily from their assets, rather than from the contributions of their employees. Approaches that focus more on the profits or cash flow that a business generates are referred to as "income-statement methods of valuation". This method is often considered the preferred tool with which to value a business. What sets this approach apart from other approaches is that it is based on future operating results rather than on historical operating results. As a result, businesses can be valued based on their future cash flows, which may be somewhat different than the historical results, especially if the buyer expects to operate some aspects of the business differently.

Valuation can also be classified into three typologies, depending on the degree of formalisation, namely informal, formal or official. Informal valuation is voluntary and not binding, whereas the formal valuation is equally voluntary but binding among counterparts. A legal authority according to the laws of a civil code imposes official valuation. Ultimately, it is important to specify the selected valuation method adopted by a professional. The corporate value of the business should be defined through capitalisation of future earnings; however, the practice application of this income statement-based method is not always possible, especially in SMEs in which planning, and budgeting systems are absent. In addition, the method selection, specifically, depends on the purpose of the valuation of the business (Grandis & Palazzi, 2015). Gilligan and Wright (2014) highlight the following two ways of valuing a business and which follow the nature of the assets to be valued, namely:

• Market or other valuation of the assets to be acquired. Tangible assets tend to be valued this way. Property, fixtures and fittings, equipment, stocks and debtors can all be physically, and separately, identified and valued;

• Multiple of annual profits. Rather than evaluating individual assets, a buyer can consider the earning power of the business now and in the future. This is the usual way of assessing the value of intangible assets. If intangibles cannot be physically measured or counted, their effectiveness in the marketplace can be evaluated; the usual yardstick for this is profit;

5. Results and Findings

5.1. Experience of Business Broker, Number of SMEs Sold and Top Selling SMEs

The first question of the questionnaire seeks to establish the level of experience of the business broker which will give an opinion about which type of SMEs is most commonly sold. The frequency distribution in Table 1 shows the level of experience from these respondents.

Table 1. Years of experience of business broker

Experience	Number of business brokers	Percentage
Less than 2 years	3	16.7%
2-4 years	9	50.0%
5 years>	6	33.3%

More than 80% of the respondents had experience of more than two years.

The purpose of the second question was to determine the average number of SMEs sold by the business broker on an annual basis. The frequency distribution is shown in Table 2.

Table 2. Average number of SMEs sold per annum

SMEs sold per annum	Number	Percentage
1-5	4	26.7%
6-10	8	53.3%
11-20	3	20.0%
21-30	0	0.0%
31>	0	0.0%

A total of 53% of the respondents sell between 6 and 10 SMEs per annum. None of the respondents sells more than 20 SMEs. The following question was also posed to respondents: "Which are the top selling SMEs in the Gauteng area as per your experience?" The responses are presented in Table 3.

Table 3. Top selling SMEs in the Gauteng area

Top selling SMEs	Type
Top selling	Supermarket
2nd best selling	Restaurant
3rd best selling	Liquor store
4th best selling	Coffee shop
5th best selling	Hardware shop

5.2. Empirical Research: Results and Discussions

Different theoretical valuation methods have been applied to estimate a market value for a business. The most strategic value factors as recognised by the general market aim to establish a generic or "rule of thumb" valuation method for these businesses, were determined. Respondents were also required to list the five most strategic value contributing factors from most important to less important, and as shown in Table 4.

Table 4. Most strategic value contributing factors

Strategic value contributing factors	Supermarket	Restaurant	Liquor store	Coffee shop	Hardware shop
Most important value factor	Location is easy accessible	Quality and value for money menu	Location is easy accessible	Location and convenience	Quality and value for money menu
2nd most important value factor	"Friendly" rental agreement	"Friendly" rental agreement	"Friendly" rental agreement	Quality and value for money menu	"Friendly" rental agreement
3rd most important value factor	Computerised management systems	Well equipped and great atmosphere	Computerised management systems	"Friendly" rental agreement	Sufficient stock on site
4th most important value factor	Sufficient space, stock and equipment	Computerised management systems	Sufficient space, stock and equipment	Well equipped and great atmosphere	Computerised management systems
5th most important value factor	Security and parking	Location and secure parking	Security and parking	Computerised management systems	Well trained and experienced staff

Respondents were requested to estimate a current market value for each of these businesses. No guidelines were provided, and respondents had to indicate the estimated value that he/she had calculated for the business. These estimated values were then added together per group (buyer, seller, broker) and divided by the number of surveys conducted per group. The average calculated values are presented in Table 5.

Table 5. Value expectations

Estimated value for:	SME buyers R	% of average	SME sellers R	% of average	SME business brokers R	% of average	Average R
Supermarket	2 753 000	83%	3 832 000	115%	3 420 000	103%	3 335 000
Restaurant	1 890 000	86%	2 440 000	111%	2 270 000	103%	2 200 000
Liquor store	1 310 000	73%	2 230 000	125%	1 815 000	102%	1 785 000
Coffee shop	1 420 000	80%	2 115 000	119%	1 790 000	101%	1 775 000
Hardware shop	2 327 000	89%	2 950 000	113%	2 538 000	97%	2 605 000
Average		82.2%		116.6%		101.1%	

Based on the information in Table 5, the estimated values of the different types of SMEs and according to the buyers, were on average 82%, or 18% lower than the estimated average market values of these SMEs. Expectations of the sellers were on average 16.6% higher than the calculated averages, while the professional business brokers were only 1% on their value expectations. Various valuation methods were applied to the simulated information, and the outcome per valuation method is presented in Table 6.

Table 6. Outcme per valuation method

A) Earnings capitalization valuation method	Supermarket	Restaurant	Liquor store	Coffee shop	Hardware shop
$CE = E^1/r$					
CE (capitalised earnings value)	R1 800 000	R1 805 000	R1 190 000	R1 480 150	R1 625 000
E^1 (most recent earning per annum)	R720 000	R722 000	R476 000	R592 060	R650 000
r (capitalisation rate)	40%	40%	40%	40%	40%

Notes on the application of this valuation method:

• Most recent earnings represent net profit before interest and tax and less depreciation, for the latest available financial period;

• The same capitalisation rate of 40% was applied throughout. This capitalisation rate was before owner's drawings and interest and tax, which could reduce this percentage even further; and

• All necessary financial information was available to apply this valuation method.

Next the price earnings ratio (PE) valuation method will be indicated in table 7

Table 7. Price earnings ratio (PE) valuation method

B) Price earning ratio (PE) valuation method	Supermarket	Restaurant	Liquor store	Coffee shop	Hardware shop
E^1 X Fair P/E ratio	R2 160 000	R2 166 000	R1 428 000	R1 776 180	R1 950 000
E^1 (most recent earning per annum)	R720 000	R722 000	R476 000	R592 060	R650 000
Fair price earnings	3	3	3	3	3

Notes on the application of this valuation method:

• Most recent earnings represent the net profit before interest and tax and less depreciation, for the latest available financial period;

• The same price earnings ratio of 3 was applied throughout; and

• Most of the required financial information was available to apply this valuation method, although the price earnings ratio could vary from time to time and from buyer to buyer because of various micro- and macroeconomic-related factors.

The present value of future earning $\mathbf{PVE = \sum E^1 / (1 + r)^1 + E^2 / (1 + r)^2 + E^3 / (1 + r)^3}$ was not applied because no information regarding future earnings was available.

Notes on the application of this valuation method:

• This valuation method provides a good estimate of the business value; however, no information regarding any future earnings were provided. As a result, this valuation method was not applied.

Next in table 8, the payback period method is applied.

Table 8. The payback period method

D) The payback period method	Supermarket	Restaurant	Liquor store	Coffee shop	Hardware shop
Payback period = Market value / After tax profits					
Payback period in years	4	4	4	4	4
Market value	R2 544 000	R2 266 400	R1 613 600	R1 898 536	R2 288 000
After tax profits	R636 000	R566 600	R403 400	R474 634	R572 000

Notes on the application of this valuation method:

• After tax profits represent the net profit before interest and tax, less depreciation, less interest and less tax payable for the latest financial period;

• In the above stated calculations this formula was applied in reverse, and the same payback period of 4 years was applied in all (five) cases in order to generate an estimated market value for each of the SMEs; and

• Most of the required financial information was available in order to apply this valuation method, although the payback period could vary from time to time and from buyer to buyer because of various micro- and macroeconomic-related factors.

In table 9 the net asset valuation method is applied.

Table 9. Net asset valuation method

E) Net asset valuation method	Supermarket R	Restaurant R	Liquor store R	Coffee shop R	Hardware shop R
Value = Total assets - Total liabilities					
Total assets:					
Assets: Equipment	1 000 000	500 000	500 000	750 000	800 000
Current assets	845 067	230 600	708 000	128 594	990 000
Less liabilities:					
Current liabilities	1 061 067	1 061 067	888 600	354 600	1 208 000
Long term liabilities	700 000	70 000	150 000	250 000	400 000
Total net asset value	84 000	-400 467	169 400	273 994	182 000

Notes on the application of this valuation method:

• This valuation method is not based on the profitability of the business, but rather on the current "breakdown value" of the business;

• As a result, this is not an accurate valuation method to determine the most correct market value of the business, but rather a valuation method to estimate a minimum value for a going concern business;

• The "total assets" represent all the assets of the business. It includes cash, money in the bank, stock, collectable debtors and all equipment at market value;

• The "total liabilities" include all loans, creditors, bank overdrafts and outstanding taxes;

• This valuation method is largely influenced by the balance sheet of the business rather than the income statement items; and as a result, is not accurate regarding the true market value of the business; and

• Most of the required financial information was available in order to apply this valuation method.

In table 10 the price multiplier valuation method is applied.

Table 10. The price multiplier valuation method

F) Price multiplier valuation method	Supermarket	Restaurant	Liquor store	Coffee shop	Hardware shop
Price = benchmark base X multiplier					
Benchmark = annual gross sales/fees; or annual gross profit					
Annual gross sales	R8 000 000	R2 400 000	R3 600 000	R2 200 000	R6 000 000
Annual gross profit	R2 560 000	R1 680 000	R1 440 000	R1 760 000	R3 000 000
Annual net profit	R720 000	R722 000	R476 000	R592 060	R650 000
Stock value	R666 667	R120 000	R500 000	R55 000	R750 000
Multiplier = number of time X benchmark base; or					
percentage X benchmark base	11%	35%	27%	42.5%	34%
Benchmark base = sales, fees, gross profits and net profits	Annual TO + stock	2-3 times Gross profit	Annual TO + stock	Annual TO + stock	Annual TO + stock
Calculated value 1	R6 545 455	R2 062 857	R1 762 963	R1 393 082	R1 911 765
Calculated value 2	R8 666 667	R4 200 000	R4 100 000	R2 255 000	R6 750 000

Note that TO = turnover

Notes on the application of this valuation method:

• The annual gross profit is the difference between sales and cost of sales, for the latest financial period. It should be kept in mind that wages and electricity could also be seen as cost of sales in some cases, and the applicant should ensure that he/she compares "apples with apples" when this calculation is applied;

• Annual net profit represents the net profit before interest and tax and less depreciation, for the latest available financial period;

• Stock value represents the stock value for the latest financial period;

• The "benchmark" percentages and ratios used in these calculations are based on the table used byHendrikse and Hendrikse (2003). It should also be kept in mind that this table is based on market averages and not specifically privately-held SMEs. By applying these benchmark percentages and averages to the subject data and SMEs, a better estimate or average could be obtained to arrive at an estimated "fair average market price" per SME;

• Different stock levels and the construction of cost of sales figures could have a direct impact on the calculation of market value by using this valuation method; and

• Most of the required financial information was available to apply these valuation methods.

In summary and based on all of the above listed valuation methods, the estimated and calculated average market values for each of the SMEs are listed in table 11.

Table 11. Calculated average market values for each of the SMEs

	Supermarket R	Restaurant R	Liquor store R	Coffee shop R	Hardware shop R
Average calculated market values of SMEs	3 633 354	2 016 632	1 710 660	1 512 824	2 451 127

Respondents were also required to list what they perceive as strategic value-adding factors for each of the five different SME type of businesses. Based on these data, the following statements can be made:

• Value adding factors were not seen as, for example, "a high return on investment" or a low "price earnings ratio", but as underlying factors that unlock value in each of the SMEs;

• The strategic value-adding factors were very similar for the various SMEs with "location", "value for money" and "a friendly rental agreement" almost always amongst the two most important value-adding factors;

• Computerised management and control systems were also prominent items; and

• It should be kept in mind that results are based on SME type businesses, and not large corporations/companies.

Based on this information, it can be confirmed that the following valuation methods generated the most accurate market value estimates for each SME:

Type of SME	**Valuation method**
Supermarket	Payback period valuation method
Restaurant	Price earning ratio valuation method
Liquor store	Price multiplier valuation method
Coffee shop	Price earning ratio valuation method
Hardware shop	Payback period valuation method

In conclusion, these valuation methods are influenced by micro- and macro-economic factors such as interest rates, taxes, and currency fluctuations and legislation, and may change from time to time.

6. Conclusion

This study focused on establishing which theoretical valuation methods can be used when determining a market value for privately held SMEs in South Africa. The conducted research confirmed that strategic value contributing factors for selling an SME are recognised by the general market and it aims to establish a generic valuation method for these five types of SMEs. For a supermarket, the most strategic value contributing factor for selling was "location is easy accessible", for a restaurant it was "quality and value for money menu", for a liquor store it was "location is easy accessible", for a coffee shop it was "location and convenience", and for a hardware shop it was quality and value for money menu".

7. References

Acknowledged Pieter du Plessis, MBA student.

Allen, K.R. (2012). *New venture creation.* 6th international ed. Canada: South-Western, Cengage Learning.

Andriessen, D. (2005). Implementing the KPMG Value Explore. Critical success factors for applying IC measurement tools. *Journal of Intellectual Capital*, 6(4), pp. 474-488.

Baron, R.A. (2014). *Essentials of entrepreneurship: Evidence and practice.* Cheltenham, UK: Edward Elgar Publishing Limited.

Brunninge, O.; Nordqvist, M. & Wiklund, J. (2007). Corporate governance and strategic change in SMEs: The effects of ownership, board composition and top management teams. *Small Business Economics*, 29, pp. 295-308.

Deaconu, A. & Nistor, C.S. (2009). Controversies over fair value accounting: The case of SMEs'. *Journal of Modern Accounting and Auditing*, 5(11), pp. 38-46.

Dimov, D. & Shepherd, D. (2005). Human capital theory and venture capital firms: Exploring "home runs" and "strike outs". *Journal of Business Venturing*, 20, pp. 1-21.

Gilligan, J. & Wright, M. (2014). *Private equity demystified: An explanatory guide*. 4th Ed. London: ICAEW Corporate Finance Faculty, Imperial College Business School.

Grandis, D.F.G. & Palazzi, F. (2015). The valuation methods for small and medium-sized enterprises. *Rivista Piccola Impresa/Small Business*, 2, pp. 33-52.

Hatten, T.S. (2016). *Small business management: Entrepreneurship and beyond*. 6th Ed. Canada: Cengage Learning.

Hedman, J. & Kalling, T. (2003). The business model concept: Theoretical underpinnings and empirical illustrations. *European Journal of Information Systems*, 12, pp. 42-59.

Hisrich, R.D.; Peters, M.P. & Shepherd, D.A. (2013). *Entrepreneurship*. 9th international ed. New York, USA: McGraw-Hill.

International Accounting Standards Board (IASB). (2009). International Financial Reporting Standards (IFRS) (Online). Available from: http://eifrs.iasb.org/eifrs/ bnstandards/en/ias36.pdf. Accessed: 13 September 2010.

Kuratko, D.F. (2014). *Introduction to entrepreneurship*. 9th international ed. Canada: South-Western, Cengage Learning.

Kuratko, D.F. (2017). *Entrepreneurship: Theory, process, practice*. 10th Ed. USA: Cengage Learning.

Osterwalder, A. & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers and challengers*. USA: John Wiley & Sons.

Stokes, D. & Wilson, N. (2016). *Small business management and entrepreneurship*. 7 ed. Hampshire, UK: Cengage Learning.

Vallejo-Alonso, B.; Arregui-Ayastuy, G.; Rodriguez-Castellanos, A. & García-Merino, D. (2013). "Real options in the valuation of intangibles: Managers' perception". *The Electronic Journal of Knowledge Management*, 11(2), pp. 168-182.

Vallejo-Alonso, B.; García-Merino, J.D. & Arregui-Ayastuy, G. (2015). Motives for financial valuation of intangibles and business performance in SMEs. *Innovar*, 25(56), pp. 113-128.

http://www.statssa.gov.za/publications/P0276/P02762013.pdf.