

Signs of the times Valuation Methodology Survey

2009/2010
5th Edition



Table of contents

01	Introduction	1
02	Current valuation issues	5
03	Valuation approaches	19
04	Income approach	23
05	Market multiple approach	61
06	Discounts and premiums	65

Appendices

1	Overview of survey methodology	87
2	List of respondents	89
3	List of abbreviations	90
4	PricewaterhouseCoopers Transactions	92
5	Contacts	104



01

Introduction



PricewaterhouseCoopers Corporate Finance is pleased to present the fifth edition of its biennial Valuation Methodology Survey.

The survey continues to provide insights into the valuation methodologies, assumptions and parameters used in South Africa by financial analysts and corporate financiers. The 2009/10 edition reflects the views of battle-hardened practitioners who have survived the worst economic crisis since 1929. In the centre of the debate around the crisis was the concept of fair value. How it should be calculated or determined, accounted for in financial records and shared with investors were key questions discussed.

Warren Buffet commented that:

Price is what you pay, value is what you get.

The debate around fair value intertwined these concepts as markets started to question whether a price traded on an open market reflected value, whether markets and practitioners would be able to calculate an accurate value

at all and whether the theories and methodologies used were still appropriate in volatile markets.

In this edition of the survey we have included questions relating to those elements of the valuation process most frequently discussed during the crisis, including:

- Changes in the market risk premium;
- The impact of increased debt costs on cost of capital;
- The impact of lower equity values on gearing levels;
- Thoughts around the length of the downturn and the likely recovery; and
- The impact of a decline in equity values on valuation multiples and their future sustainability.

We trust that you will find these insights both informative and thought provoking.

In our experience, the turmoil, loss of value and uncertainty caused by the economic crisis have tended to drive investors back to the basics of the valuation process. As times have become more difficult, the application of solid

theory backed by proper analysis of the economy, the industry and subject companies has tended to become more important. For this reason, this survey not only reconfirms the valuation basics, but provides an update of the basic valuation inputs, assumptions and methodology issues surveyed in previous editions. Areas covered include:

- The most frequently used valuation methodologies;
- The calculation of cost of capital;
- Preferred market multiples;
- Discounts and premia; and
- Valuation issues around empowerment transactions, secondary tax on companies and the proposed dividend tax specific to the South African market place.

This survey represents the views of 27 financial analysts and corporate financiers. A full list of respondents is included in the appendices. I would like to thank all respondents for their valuable contributions and the time and effort they dedicated to participating in the survey.

In compiling the fifth edition of the survey, there was a noticeable increase in the number of comments and questions received from participants compared to previous years. We are confident that this is a sign that the survey is meeting its objective of stimulating debate among valuation practitioners in the South African market. We trust that this edition will continue to be of benefit to readers and contribute to the development of valuation practice in South Africa.

A handwritten signature in black ink, appearing to read 'Jan Groenewald', is written over a stylized, abstract graphic element consisting of several overlapping, angular shapes.

Jan Groenewald
Valuation & Strategy Leader
PricewaterhouseCoopers
Corporate Finance

17 March 2010



02

Current valuation issues

The economic crisis and the recession have posed unique challenges to practitioners. The concept of fair value was central to the debate around the crisis and its causes. Some of the questions valuers have to answer in performing valuations in a post-crisis environment include:

- What will the length of the recession be and the shape of any recovery to come?
- Has the crisis changed the way that we should look at the key components of our cost of equity calculation?
- How did the tightening of credit markets affect our view of the debt components of the weighted average cost of capital?
- Has the volatility in equity markets lowered the level of reliance we can place on the market multiple approach?
- What has been the impact on South Africa versus other countries in the developed and developing world?

In the first section of this report, we examine respondents' answers to these questions to provide some insight to the South African market's thinking around the crisis.

Market perception of the recession

The analysis of company budgets and forecasts is a key step in valuing a business. Valuation practitioners are therefore in a unique position to gauge market sentiment through their work. We therefore added a section in this year's survey to assess when South African companies are generally forecasting an end to the recession, or at least a return to "business as usual".

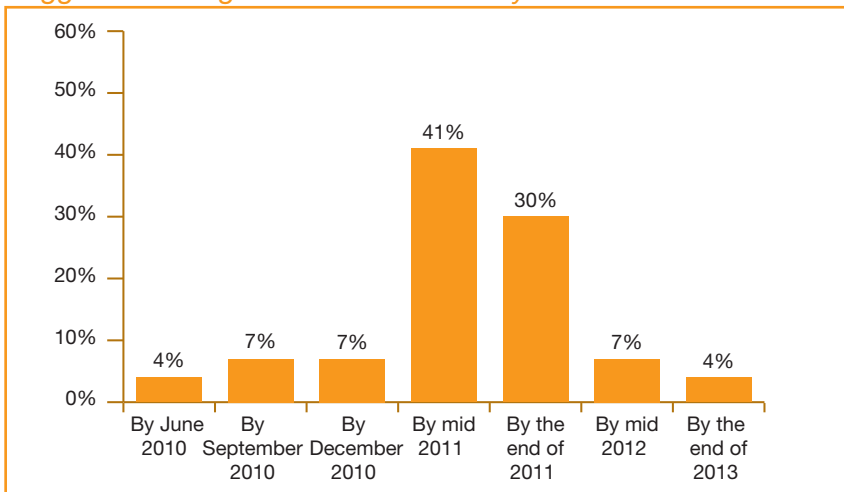
This area of the survey provides some interesting insights into the market's perceptions of the recession, adding a more qualitative perspective to the economic indicators and macroeconomic forecasts. Our first question asked practitioners to indicate when the companies they have been valuing are signalling an end to the recession and a return to "business as usual".

Question:

In the forecasts you are using to prepare income approach (discounted cash flow) analyses, when are market participants generally expecting a return to "business as usual"?

- By March 2010
- By June 2010
- By September 2010
- By December 2010
- By mid 2011
- By the end of 2011
- By mid 2012
- By the end of 2012
- By mid 2013
- By the end of 2013
- After 2013

Suggested timing of economic recovery



A majority of 71% of market participants expect an end to the recession only in 2011. Most of these respondents expect an end to the recession in the first half of 2011, but a sizeable minority expect difficult trading conditions to persist into the second half of 2011. Less than a fifth of respondents (18%) expect

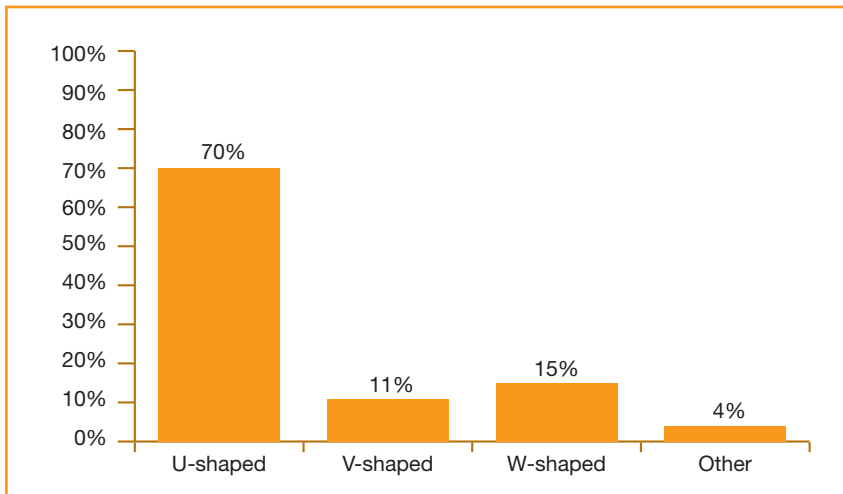
trading conditions to improve during the course of 2010. Certain companies and industries may exit the recession sooner or later than others, but the results shown on the previous page provide a high-level indication of when, on average, our respondents expect the recession to end.

Question:

What is your house view on the shape of the recession?

- V-shaped
- U-shaped
- W-shaped
- L-shaped
- Other

Shape of the recession



The shape of the recession has become a popular subject of debate amongst economists, the financial press and in the public at large. The view of 70% of our respondents is that we can expect a U-shaped recession,

or a protracted recession with no immediate upturn. This is consistent with the results of the previous question, which suggests respondents expect an end to the recession only in 2011.

The remainder of this section focuses on the valuation challenges created by market uncertainty for some of the essential parts of the valuation process.

Equity market risk premiums (EMRP)

The equity risk premium reflects fundamental judgements we make about how much risk we see in a market and what price we attach to that risk. The equity market risk premium affects all risky investments and therefore our allocation of investments in different asset classes.

Aswath Damodaran's article "Equity Risk Premiums (ERP): Determinants, Estimation and Implications – A post-crisis Update"¹, released in October 2009 lists the following determinants of equity risk premiums:

- **Economic determinants:** These include investor risk aversion, information uncertainty and perceptions of macroeconomic risk.
- **Risk aversion:** This relates to the collective risk aversion of investors. Variables that influence risk aversion include investor age and preference for current consumption.

- **Economic risk:** This relates to general concerns about the health and predictability of the overall economy.
- **Information:** There is no direct evidence to suggest correlation between the equity risk premium and quality of earnings. However, if the information is to become less precise and is not able to provide information on which we can base predictions of future earnings and cash flows, it is expected that equity investors will demand larger equity risk premiums to compensate for added uncertainty.
- **Liquidity:** The cost of illiquidity seems to increase when economies slow down and during periods of crisis.
- **Catastrophic risk:** This includes events that occur frequently but can cause dramatic drops in wealth.

Since the last edition of this survey, there has been a significant increase in risk aversion, a substantial rise in perceptions of macroeconomic risk, as well as concerns about the health and predictability of the world economy not seen since the Great Depression. We therefore asked respondents whether these events have affected their assessment of the market risk premium.

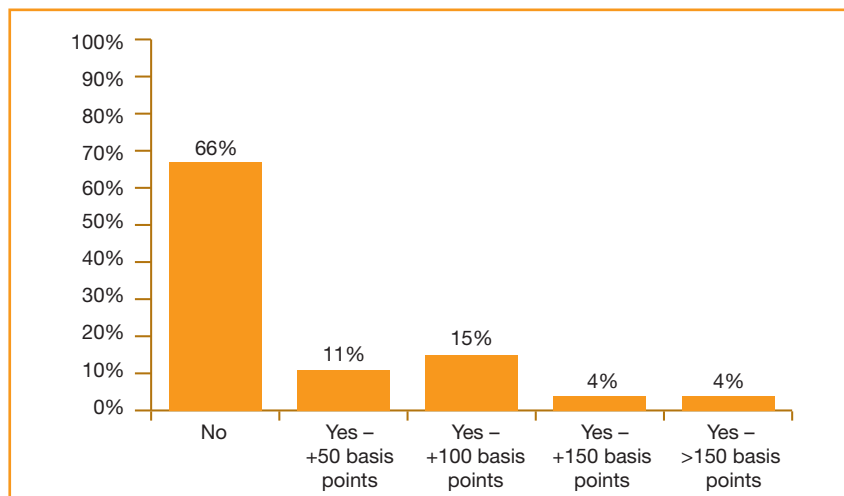
¹ (Source: Accessed at <http://pages.stern.nyu.edu/~adamodar/>)

Question

Have you changed your market risk premium assumption as a result of the current economic downturn?

- No – My estimate of the market risk premium remains unchanged.
- Yes – I have increased my market risk premium by 50 basis points.
- Yes – I have increased my market risk premium by 100 basis points.
- Yes – I have increased my market risk premium by 150 basis points.
- Yes – I have increased my market risk premium by more than 150 basis points.

Impact of the economic crisis on the market risk premium



No less than 66% of respondents have made no changes to the market risk premium, although a sizeable minority have increased their market risk premium.

Although most respondents have not changed their view of the equity market risk premium, we also wanted to assess whether

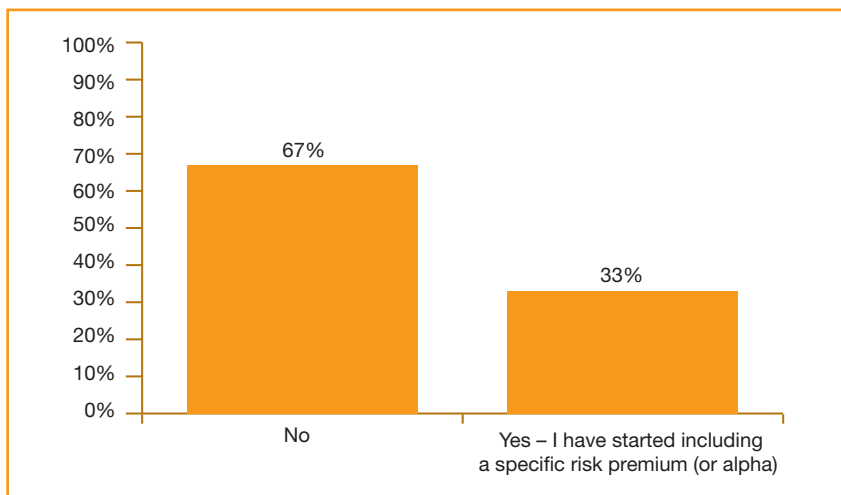
any other adjustments are being made to the cost of capital as a result of the global downturn. We therefore asked respondents to state whether they are applying any specific risk premiums in their cost of capital calculations to address the uncertainty created by the economic downturn.

Question:

Have you considered any other adjustments to the cost of equity as a result of the current economic downturn?

- No
- Yes – I have started including a specific risk premium (or alpha).
- Other

Suggested other adjustments to the cost of equity



One third of respondents are including specific risk premiums in the discount rate to reflect current economic uncertainty. However, the majority of market participants are not including adjustments to the weighted average cost of capital (WACC) to reflect economic uncertainty, which suggests that they are likely to have reflected current economic uncertainty in the cash flow forecasts.

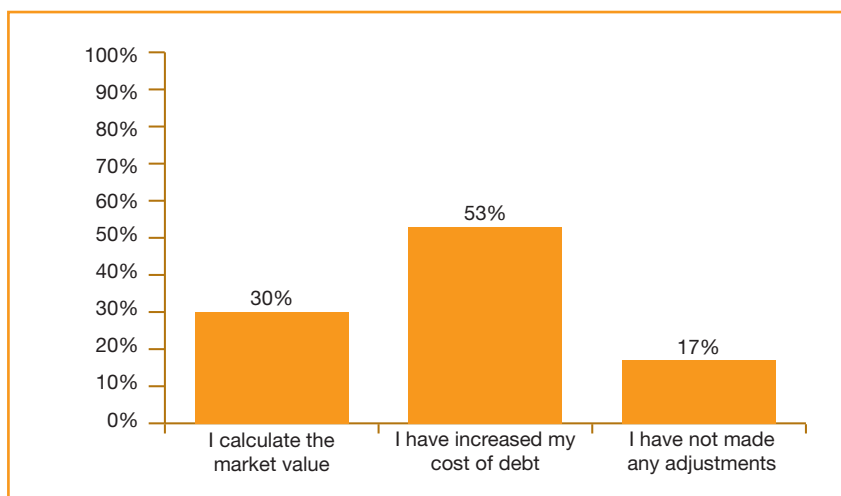
We also asked market practitioners to indicate how their approach to estimate the cost of debt has changed as a result of the economic downturn and the subsequent tightening of debt markets.

Question:

How are you addressing the widening of debt margins in your valuation analyses?

- I calculate the market value of existing debt based on current lending rates.
- I have increased my cost of debt assumption in light of current credit spreads.
- I have not made any adjustments to how I treat debt, or my cost of debt assumptions.

Impact of widening of debt margins



Although the options presented in this question are interrelated, the majority of respondents considered

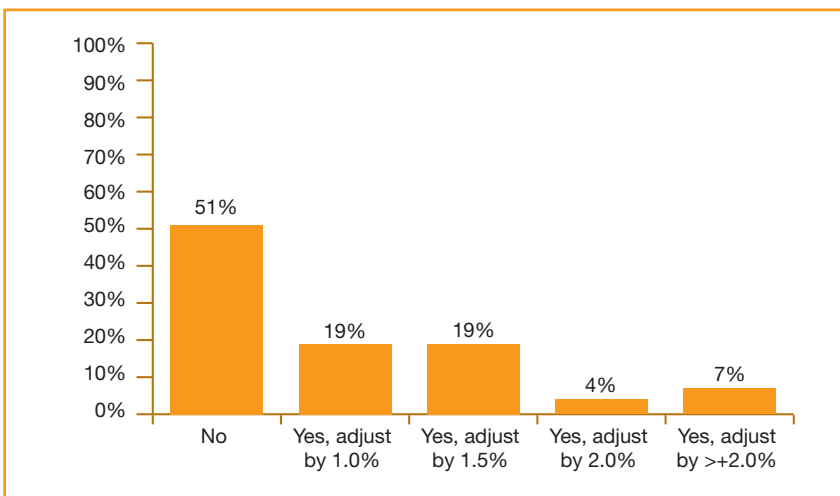
some form of adjustment to their cost of debt assumption.

Question:

Given a company listed on the JSE, which is not in financial distress, would you adjust your debt spread to account for the credit crunch?

- Yes – Adjusted by 0.5%
- Yes – Adjusted by 1.0%
- Yes – Adjusted by 1.5%
- Yes – Adjusted by 2.0%
- Yes – Adjusted by > 2.5%
- No

Adjustment to debt spread



There is little consensus amongst respondents about how widening debt margins should be addressed in valuations. Some respondents take a longer-term view and do not make adjustments, whilst others commented that the adjustment would be largely dependent on the nature of the company and its industry.

The economic recession has resulted in lower equity values,

which implies higher debt/equity ratios. Market debt/equity ratios impact business valuations in a variety of ways, including how betas are unlevered and relevered, and in some instances they may provide an indication of the subject company's target gearing levels.

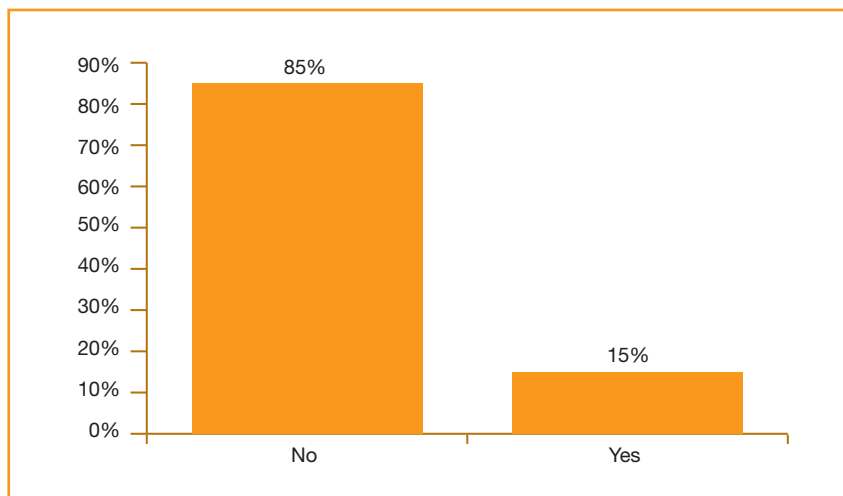
We therefore asked respondents to comment on whether this changed the way they calculate target gearing levels.

Question:

The economic recession has resulted in lower equity values, which implies higher debt/equity ratios. Has this changed how you calculate target gearing levels?

- Yes
- No

Impact of target debt/equity ratios



No less than 85% of respondents have not adjusted their target gearing levels, with some respondents indicating a preference to use a normalised or longer-term view. One respondent commented that most companies are currently in cash conservation mode, and focus predominantly on paying down current outstanding debt rather than taking on any new debt. With debt levels declining, the ratio should move back to normalised levels.

Those respondents who indicated that they have changed their methodology for calculating

target gearing levels also said they were moving towards longer-term estimates, rather than a calculation on a particular date. One respondent indicated that it was taking into consideration a possible improvement in the equity markets and therefore the possibility of lower target gearing levels, which also points towards a long-term, normalised estimate.

These findings suggest there is strong consensus in the market for the use of a long-term, normalised debt equity ratio for the purposes of evaluating target gearing levels.

Market approach

Current volatility is causing market practitioners to question what is driving equity values, with market volatility having had a significant impact on the market approach in particular. For example, when enterprise values drop, forward multiples will deflate if earnings forecasts are not regularly revised.

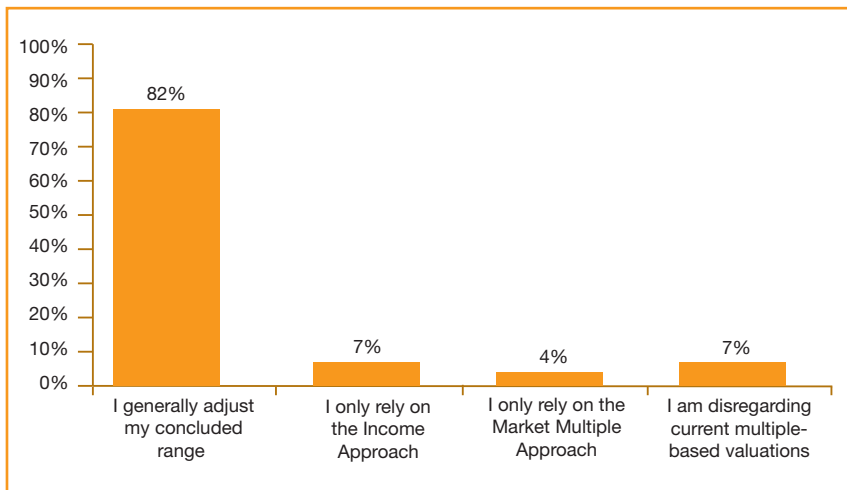
This results in the market approach producing a volatile result that is not always easy to interpret and reconcile with an income approach valuation. We therefore asked respondents to indicate whether this volatility has impacted their use of the market approach.

Question:

Market multiples have declined considerably in the past 12 months. Which statement most accurately summarises your approach to addressing the decline in multiples?

- The decline in multiples is a short-term phenomenon, and I am disregarding current multiple-based valuations in favour of longer-term income approach (discounted cash flow) valuations.
- I ensure that income approach valuations are supported by market multiple valuations. Where the income approach valuation is higher than the market approach valuation, I generally adjust my concluded range so that the market multiple analysis supports the income approach analysis.
- I only rely on the income approach.
- I only rely on the market multiple approach.

Impact on market approach



The majority of respondents indicated that they ensure that income approach valuations are supported by market multiple valuations and that they are considering the trading multiples of listed comparable companies in concluding on their valuation ranges.

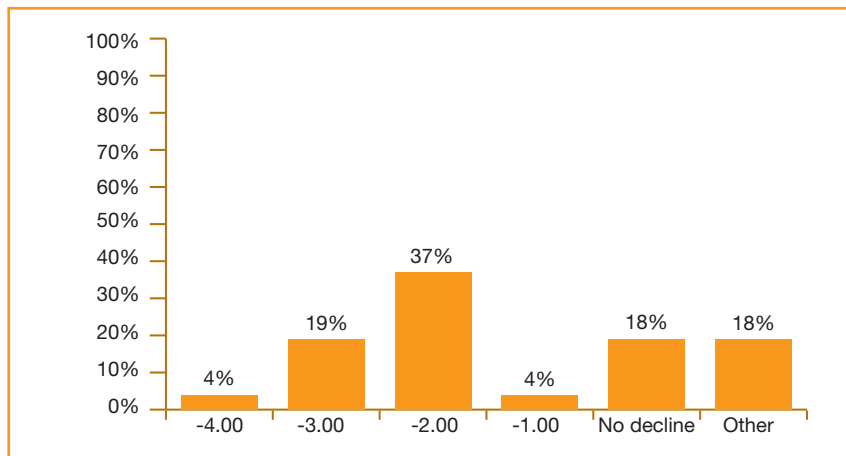
We also asked our respondents to indicate the extent to which their valuations have declined, on average, as a result of the downturn.

Question:

On average, by how much has the EBITDA multiple, at which a transaction is closed, declined?

- No decline
- -1
- -2
- -3
- -4
- -5
- Other

Average adjustment to EBITDA multiples



Most respondents indicated that multiples have declined between two and three points. However, the results are difficult to interpret given that transaction multiples are very dependent on sector and deal type (BEE, private equity or distressed sale).

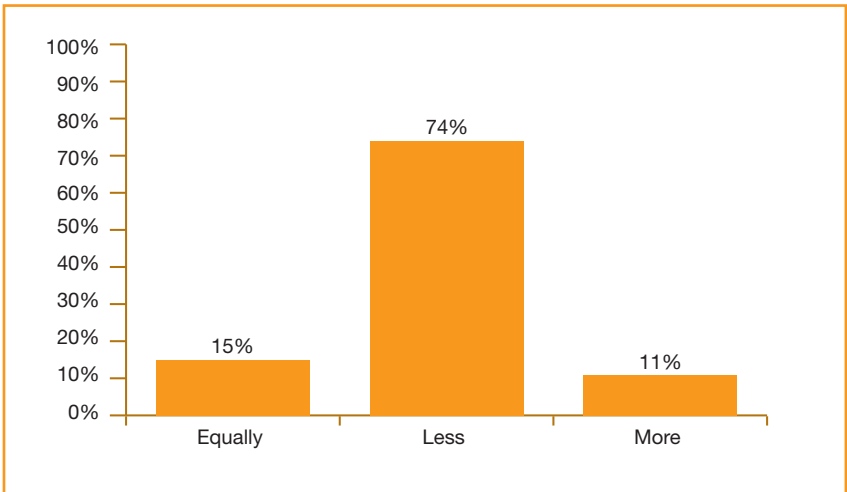
Lastly, we asked respondents to indicate how they feel South African valuations have been impacted by the recession compared to other markets.

Question:

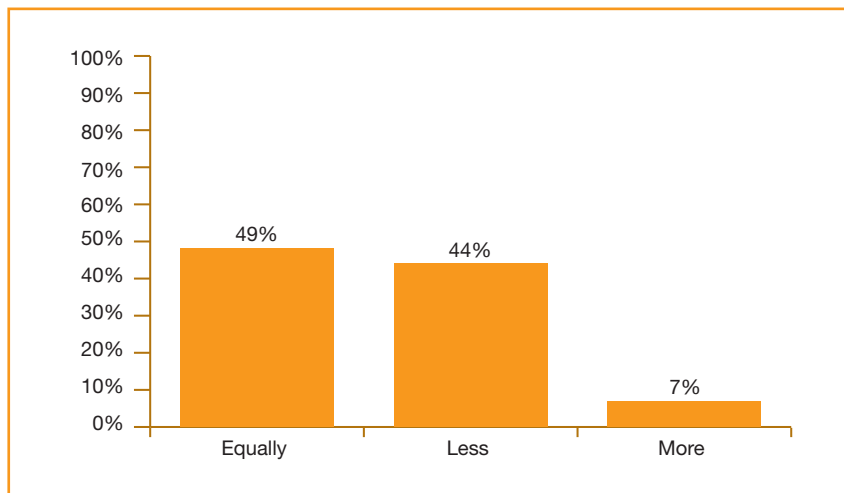
Do you believe that South African valuations have been more, less or equally affected by the slowdown compared to developed and developing markets?

- More
- Less
- Equally

Compared to developed markets



Compared to developing markets



As many as 74% of respondents indicated that company valuations in South Africa have been less affected by the global slowdown than in developed markets. A small majority of respondents (49%) indicated that they view South African valuations to have fared similarly to those in other developing markets, although a similar number (44%) believe South

African valuations have been less affected by the global downturn than those in other developing markets. This suggests that, on average, market practitioners consider the values of South African businesses to have been less affected by the downturn than developed markets, but have been similarly affected to businesses in other emerging markets.



03

Valuation approaches

There are various methodologies that can be utilised by financial analysts and corporate financiers when performing a business enterprise valuation. We have previously found that the approaches most commonly used in South Africa are the following:

- **The income approach**
This indicates the market value of the ordinary shares of a company based on the value of the cash flows that the company can be expected to generate in the future. This includes traditional discounted cash flow techniques and also real option valuations, which use option pricing models to measure the value of assets.
- **The market approach**
This indicates the market value of the ordinary shares of a company based on a comparison of the company to comparable publicly-traded companies and transactions in its industry, as well as prior transactions in the ordinary shares of the company.
- **The net assets approach**
This indicates the market value of the ordinary shares of a company by adjusting the asset and liability balances on the company's balance sheet to its market value equivalents. The approach is based on the summation of the individual piecemeal market values of the underlying assets less the market value of the liabilities.

Recent developments make the choice of approach particularly relevant. Current volatility is causing market practitioners to question what is driving equity values, with market volatility having had a significant impact on the market approach in particular. For example, when enterprise values drop, forward multiples will deflate if earnings forecasts are not regularly revised. This causes the market approach to produce a volatile result that is not always easy to interpret and reconcile with an income approach valuation.

We have observed two conflicting views in the market as to how to address this issue. The first is that the value of a business should reflect its “expected value”, with “value” referring to the present value of future cash flows, and “expected” referring to the range of uncertainty in future cash flows, probability weighted to reflect their likelihood of occurrence. According to this school of thought, we should resist short-term fluctuations in the market, as these give limited insight into expected value.

The opposite view is that methodologies using discounted cash flows should rarely be used in isolation of market-based measures, and then only with extreme caution. The International Private Equity and Venture Capital Valuation Guidelines Board subscribes to this view, stating that “in assessing whether a methodology is appropriate, the valuer should be biased towards those methodologies that draw heavily on market-based measures of risk and return. Fair Value estimates based entirely on observable market data should be of greater reliability than those based on assumptions.”*

The aim of this section is to determine the most popular valuation approaches being utilised in business enterprise valuations in South Africa. In particular, we were interested in determining whether any changes have taken place in the choice of approaches followed by market participants given current market volatility.

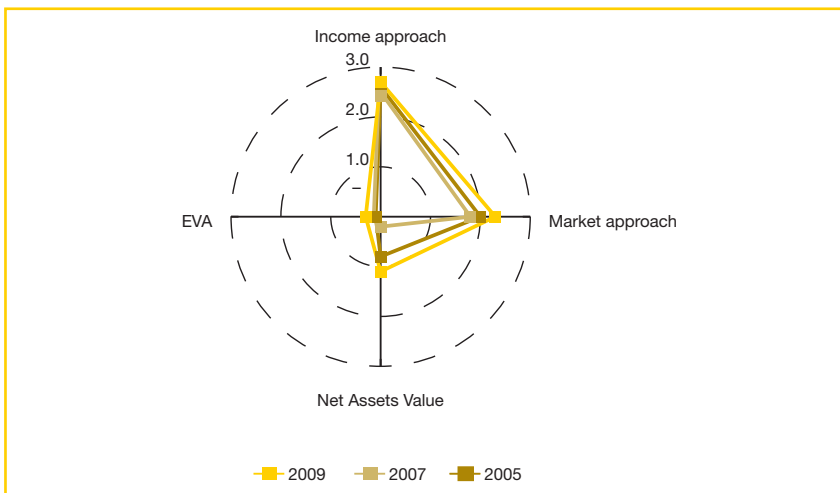
**source: International Private Equity and Venture Capital Valuation Guidelines, Exposure Draft of the 2009 Edition, 22 May 2009*

Question:

Which of the following valuation approaches are most often used to value a going concern?

- Income approach (discounted cash flow)
- Market approach (e.g. price/earnings ratio)
- Net assets approach
- Economic value added (EVA)

Valuation approaches



The primary valuation approaches remain the income approach (discounted cash flow) and market approach (based on market multiples). The general indication by respondents is that the income approach remains the primary valuation methodology in South Africa, although the use of the market approach and net assets approach increased slightly in both the 2007 and 2009 surveys.

In the South African market, where there are relatively few listed companies that can be used as a reliable source for market multiples, it is perhaps not surprising that the income approach remains the most favoured methodology. However, the growing use of alternative approaches may suggest that the view that discounted cash flows should rarely be used in isolation of market-based measures, is becoming increasingly prevalent.



04

Income approach

Cost of capital

From a company's perspective, the weighted average cost of capital (WACC) represents economic return (or yield) that an investor would have to give up by investing in the subject investment instead of all available alternative investments that are comparable in terms of risk and other investment characteristics².

The WACC is calculated by weighting the required returns on interest-bearing debt, preference share capital and ordinary equity capital in proportion to their estimated percentages in an industry's expected capital structure, target or other structure as appropriate.

WACC formula

This is the general formula assuming only debt and equity capital:

$$\text{WACC} = k_d \times (d\%) + k_e \times (e\%)$$

Where:

WACC = Weighted average rate of return on invested capital

k_d = After-tax rate of return on debt capital

$d\%$ = Debt capital as a percentage of the sum of the debt and ordinary equity capital (total invested capital)

k_e = Rate of return on ordinary equity capital

$e\%$ = Ordinary equity capital as a percentage of the total invested capital

² S Pratt, R Reilly, R Schweighs, *Valuing a Business* (McGraw-Hill, 2000)

There are three related steps involved in developing the WACC:

- Estimating the opportunity cost of equity financing;
- Estimating the opportunity cost of non-equity financing; and
- Developing market value weights for the capital structure.

The cost of equity is the most subjective and difficult measure to quantify in the WACC formula, which is why we have dedicated a substantial part of this survey to this issue.

There are two broad approaches to estimate the cost of equity:

- **Deductive models**

Deductive models, such as dividend growth models, rely on market data to determine an imputed cost of equity. The dividend growth model is one such approach, which requires market data that include the current share price, expected dividends and the long-term steady dividend growth rate.

- **Risk-return models**

The capital asset pricing model (CAPM) is probably the most widely used of the risk-return models. The CAPM measures risk in terms of the non-diversifiable variance (systematic risk) and relates expected returns to this risk measure. The CAPM derives the cost of equity by adding to the risk-free rate an additional premium for risk. This risk premium is a product of the investment's beta (a measure of relative systematic risk of the particular equity investment) and a market risk premium, being the reward required by investors for investing in an equity investment of average risk. The CAPM is therefore a linear combination of the risk-free rate, the equity risk premium and the company's beta. Its simplicity is attractive and largely explains the popularity of the CAPM.

CAPM

CAPM formula

$$E(R_e) = R_f + \beta \times E(R_p)$$

Where:

$E(R_e)$ = Expected rate of return on equity capital

R_f = Risk-free rate of return

β = Beta or systematic risk

$E(R_p)$ = Expected market risk premium: expected return for a broad portfolio of shares less the risk-free rate of return

The CAPM is popular, but is not perfect. A key criticism raised against the CAPM is its inability to account for anomalies observed in equity returns, such as the small firm effect (whereby smaller companies exhibit higher returns) and the value effect (whereby companies with low ratios of book to market value have higher expected returns). One response to this empirical questioning is to move away from the CAPM's linear, stationary, and single-factor features.

Examples of alternative models include arbitrage pricing theory (APT), which introduces a range of coefficients and terms which play a similar role in capturing risk that beta and the equity market risk premium (EMRP) play for the CAPM. The coefficients relate to economic variables that are considered to be measures of the sensitivity of a stock to market risk. Examples of risk factors include interest rates, GDP growth and the interest rate outlook.

Another example of an alternative multifactor model is the Fama-French Three-Factor Model, which is similar to the CAPM, but adds factors reflecting the effects on cost of equity of company size and the ratio of book value to market value.

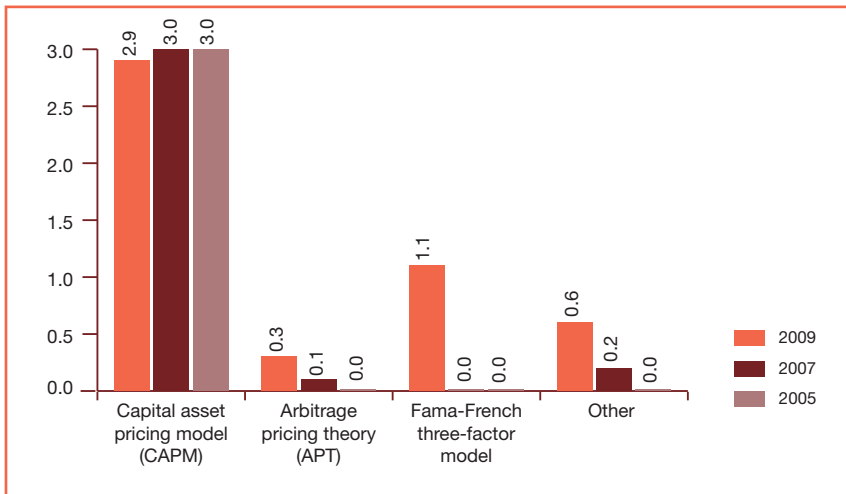
Given the competing views between deductive models and risk-return models outlined on the previous page, we included a question in our survey to determine what methodologies are being used by market practitioners. In other words, are alternative risk-return models being used, or has any movement taken place towards deductive models?

Question:

In calculating an appropriate rate of return to apply to future cash flows, which of the following methods are being used?

- CAPM
- APT
- Fama-French
- ICAPM
- Deductive models
- Other

Methods used to estimate cost of equity



Income approach

The 2009 survey again confirms the CAPM as the primary methodology used to estimate the cost of equity, with all respondents stating that they either always or frequently use it. The survey also confirms the preference for risk-return models over deductive approaches to estimating the cost of equity.

is the favoured approach, market practitioners are increasingly exploring alternative approaches.

Survey responses relating to the assumptions made in the application of the CAPM are included in the next section of the survey.

However, it appears from the responses that although the CAPM

Risk-free rate (Rf)

$$E(R_e) = R_f + \beta \times E(R_p)$$

The risk-free rate is the starting point to the calculation of the cost of equity.

If we consider a government security as an acceptable proxy for a risk-free rate, we also have to consider the maturity of the security and its possible influences on the market risk premium to be used later in the calculation.

However, the choice of maturity will always depend on the circumstances in question. Two common approaches are to:

- Match the maturity of the risk-free instrument to the profile of the cash flows; or
- Match the maturity to an assumed investor horizon of seven to ten years.

The table below provides a summary of the key statistics for the more liquid South African government bonds.

	Maturity	Time to maturity (Years as at 31.01.2010)	Coupon Rate %	Yield as at 31.01.2010 %	Median daily traded volume 2009	Highest daily volume traded	Lowest daily volume traded
R157	15 September 2015	5.62	13.50	8.38	11824	40059	1146
R203	15 September 2017	7.62	8.25	9.01	1784	10722	298
R207	15 January 2020	9.96	7.25	9.19	1982	16299	261
R186	21 December 2026	16.89	10.50	9.17	5787	80896	850
R208	31 March 2021	11.17	6.75	9.19	1605	9232	34
R209	31 March 2036	26.18	6.25	9.07	1652	15604	246

Source: Igraph

Market practitioners use a range of sources for the risk-free rate. Therefore, as a starting point to

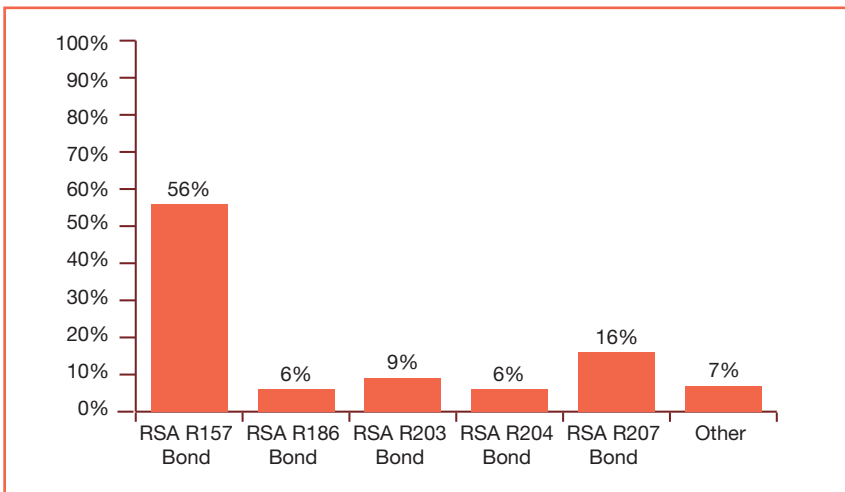
our discussion of the inputs to the CAPM, we determined market participants' preference for the selection of a risk-free rate.

Question:

Which of the following is used as a benchmark for the risk-free rate?

- R153 Bond
- R206 Bond
- R201 Bond
- R157 Bond
- R203 Bond
- R204 Bond
- R207 Bond
- R208 Bond
- R186 Bond
- Other

Proxies used for the risk-free rate



The R157 continues to be the most popular proxy for the risk-free rate. However, respondents indicated that they are looking to change

to other government bonds with longer maturity. The most popular choices in this regard are the R207 and the R203 bonds.

Beta (β)

$$E(R_e) = R_f + \beta \times E(R_p)$$

Beta typically measures the sensitivity of a share price to fluctuations in the market as a whole.

Holding a diversified portfolio of investments can eliminate unique or firm-specific risk that is associated with investing in a particular share. Market or systematic risk cannot be eliminated through diversification, and the principles of the CAPM advocate that an investor should be compensated for this risk.

Beta is calculated by regressing the individual share returns against the returns of the market index. The formula for beta is as follows:

$$\beta = \frac{\text{cov}(R_i, R_m)}{\sigma^2(R_m)} = \frac{\rho(R_i, R_m)\sigma(R_i)}{\sigma(R_m)}$$

Where:

$\text{cov}(R_i, R_m)$ = Covariance between security i and the market index

$\sigma^2(R_m)$ = Variance of the market index

$\rho(R_i, R_m)$ = Correlation coefficient between security i and the market index

$\sigma(R_i)$ = Standard deviation of returns of security i

$\sigma(R_m)$ = Standard deviation of market returns

Financial analysts and corporate financiers often do not use raw data (e.g. share prices and share returns) to estimate beta. Rather, they use professional information systems and databases as sources for betas. Service providers often make adjustments in calculating betas, for example:

- Bayesian adjustments: this technique is used to compensate for estimation error; and
- Illiquidity adjustments in respect of thinly traded shares.

In addition, the frequency of returns (daily, weekly, monthly or quarterly) is one of the major practical issues when estimating beta. The CAPM is based on maximising expected utility, therefore, the security returns have to be normally distributed and the distribution is fully described by standard deviation and the expected return. Different service providers often use different frequencies, which may or may not be in line with the specific best practice guidelines being followed by financial analysts and corporate financiers.

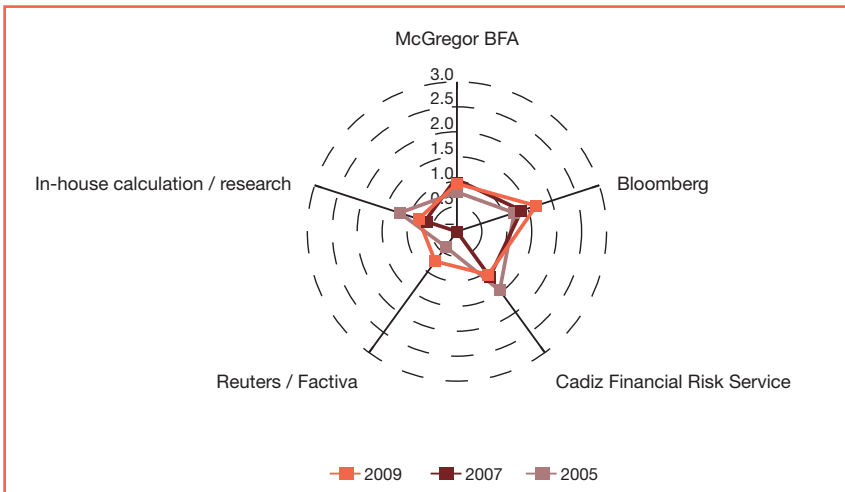
In the question that follows, we asked market practitioners to indicate what sources they are using in determining beta estimates.

Question:

Which of the following service providers are used as a source of information for the beta?

- McGregor BFA
- Bloomberg
- Cadiz Financial Risk Service
- Reuters/Factiva
- In-house calculation/research

Service providers used to source betas



The survey highlighted a wide variety of sources that are currently used for the determination of betas in the South African market. Bloomberg has continued to gain popularity and is now the most popular source for beta estimates, followed by Cadiz Financial Risk Service.

Another key issue relating to the beta calculation is the choice of market index. In practice, there is no index that accurately measures the total return of the market

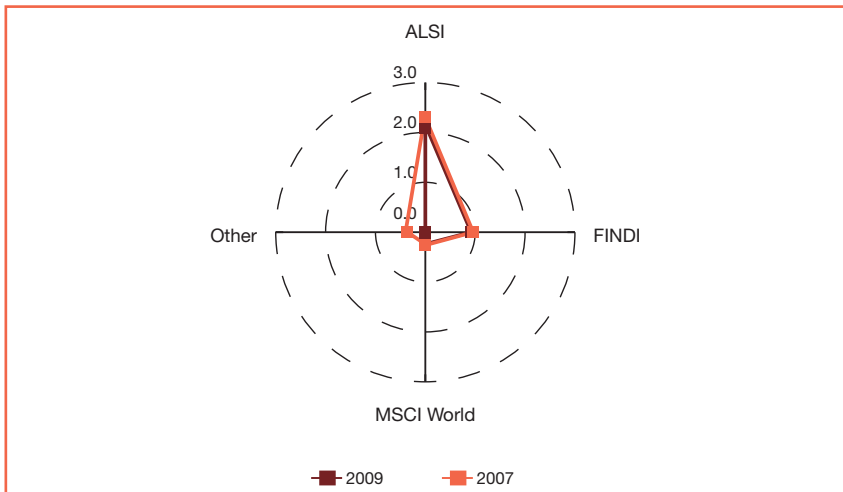
portfolio. Weekly or monthly return data not being available for all asset classes requires market practitioners to use equity indices as a proxy for the market. Complicating matters further is the fact that the various indices used by market practitioners may include bias towards certain companies or sectors. We therefore considered it important to gauge how market practitioners are responding to the various practical issues around the selection of a market proxy.

Question:

What would you consider to be an appropriate market index to use as a market proxy for a beta calculation in the South African market?

- ALSI
- FINDI
- MSCI World
- Other

Market proxy for a beta calculation



The most popular index remains the ALSI, with most respondents using the ALSI either frequently or always. However, the FINDI

has gained in popularity, with more than half of the respondents using the FINDI for some of their valuation projects.

Equity market risk premium [E(Rp)]

$$E(R_e) = R_f + \beta \times E(R_p)$$

The equity market risk premium (EMRP) is probably the most important assumption in a cost of capital analysis. It is also the single most debated input into the CAPM with various suggested approaches to calculating the premium.

The three broad approaches to estimating a market risk premium include; historic equity bond spreads, the survey approach and an implied forward approach.

Historical approach

The historical approach is the most widely used approach to estimating equity risk premiums. It is based on an assumption that in a well-functioning market, arbitrage will ensure that required and achieved returns should be equivalent. The actual returns earned on stocks over a long period are estimated and compared to the actual returns earned on a default-free asset (usually a government security). The difference between the two returns is computed on an annual basis and represents the historical risk premium.

There are several issues related to the use of this approach to estimating risk premiums. The suitability of the approach depends on whether investor expectations

are influenced by the historical performance of the market. It also depends on whether market conditions and expectations change over time. In some markets data availability might be limited or data may be unreliable. This is particularly an issue for emerging markets. The approach also allows for a large diversion in risk premiums with the use of the same data. There are three main reasons for information providers supplying different rates when using the historical approach:

- **Time period**
The time period on which the data is based will affect the result. Shorter and more recent periods are assumed to provide a more updated estimate. However, the cost associated with using shorter time periods is greater noise in the risk premium estimate.
- **Risk-free security and market index**
The choice of the risk-free security and the market index will influence the estimate. As discussed previously, the risk-free rate chosen in computing the premium has to be consistent with the risk-free rate used to compute expected returns. In theory, one would want to use the broadest index of stocks where the index is market-weighted and is free of survivorship bias.

- **Averaging approach**

Averages can be based on arithmetic or geometric averages. The arithmetic average return measures the simple mean of the series of annual returns, whereas the geometric average looks at the compounded return. If annual returns are uncorrelated over time, and the objective is to estimate the risk premium for the next year, the arithmetic average is the best and most unbiased estimate of the premium. However, as there are indications that returns on stocks are negatively correlated over time, the arithmetic average return is likely to overstate the premium. Also, as the time period increases, the argument for geometric returns increases.

Survey approach

The survey methodology is based on opinions of market participants. There are several issues with this approach. As with most forecasts, survey risk premiums are responsive to recent movements in stock prices. It is therefore possible that the survey premiums are a reflection of the recent past rather than a good forecast of the future. Survey results are also sensitive to how the question regarding the market risk premium is posed to respondents.

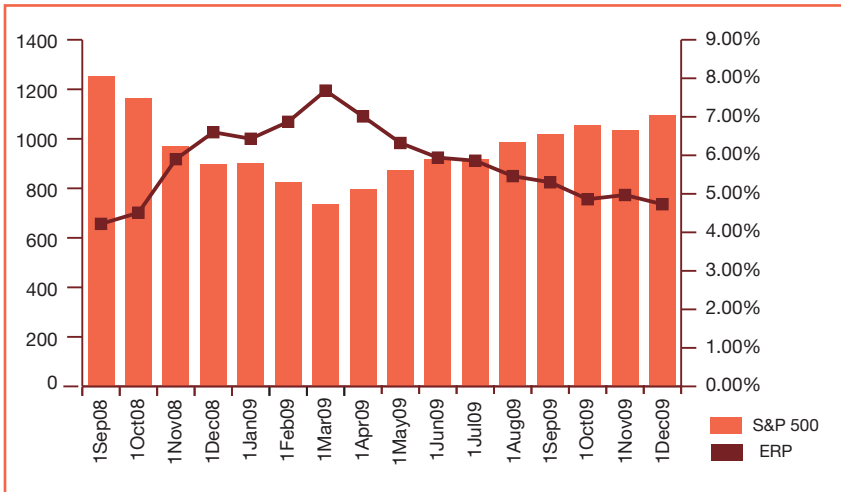
Forward-looking estimate

A forward-looking estimate of the premium is estimated using either current equity prices or risk premiums in non-equity markets. The discounted cash flow approach uses pricing of assets to infer required return or use actual or potential dividends on an index to calculate required return. This approach will not generate a correct estimate if companies do not pay out what they can afford to in dividends or if earnings are expected to grow at extraordinary rates for the short term.

Analysis of data from the recent past shows that the implied premium for the S&P 500 increased over the course of 2008, indicating that investors perceived more risk at the end of the year and were demanding a higher risk premium to compensate for the additional risk. The forward-looking estimate approach therefore does not suffer from the same shortcoming as the historical approach. The practice of backing out risk premiums from current prices and expected cash flows is a flexible one. It can be expanded into emerging markets to provide estimates of risk premiums that can replace the country risk premiums needed for the history-based equity risk premium.

Implied risk premiums for the S&P 500

The following graph illustrates implied risk premiums as calculated in a study by Aswath Damodaran.



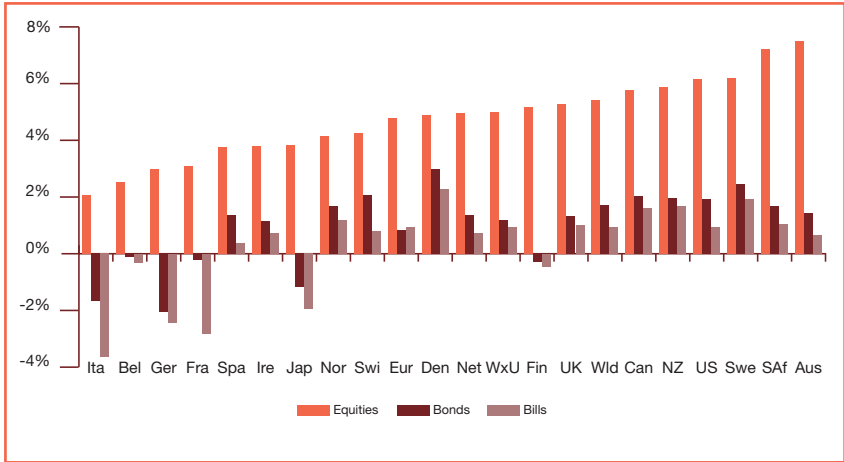
Source: Accessed at <http://pages.stern.nyu.edu/~adamodar/>

The calculations are based on a constant growth rate in earnings over the forecast period and the rate remains constant over the period

shown in the graph. The data clearly shows an increase in implied risk premium from September 2008 to March 2009.

The graph that follows illustrates observed real returns on equities

and bonds internationally over the period 1900-2009.



Source: Credit Suisse Global Investment Return Sourcebook 2010. Dimson, Maran and Staunton – authors of *Triumph of the Optimists*, Princeton University Press, 2002.

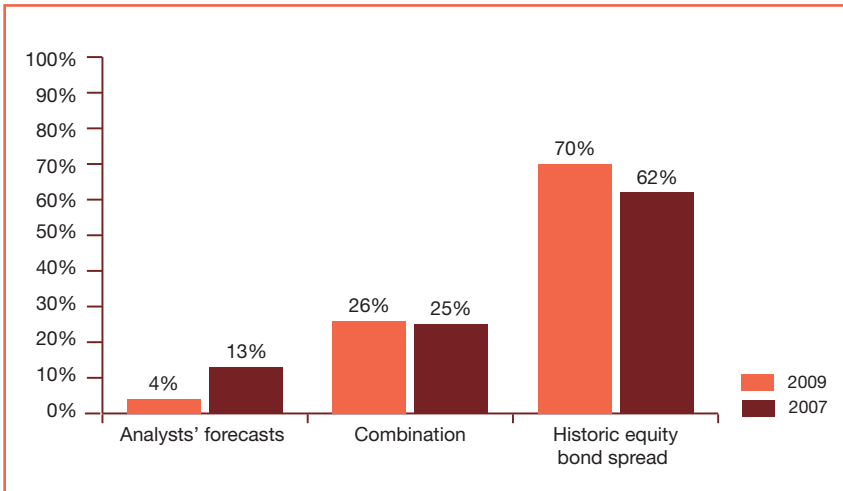
Income approach

Question:

Which of the following would you consider to be the rationale behind the estimation of the market risk premium?

- Historic equity bond spread
- Analysts' forecasts
- Combination
- Other

Approaches used to estimate market risk premium



Income approach

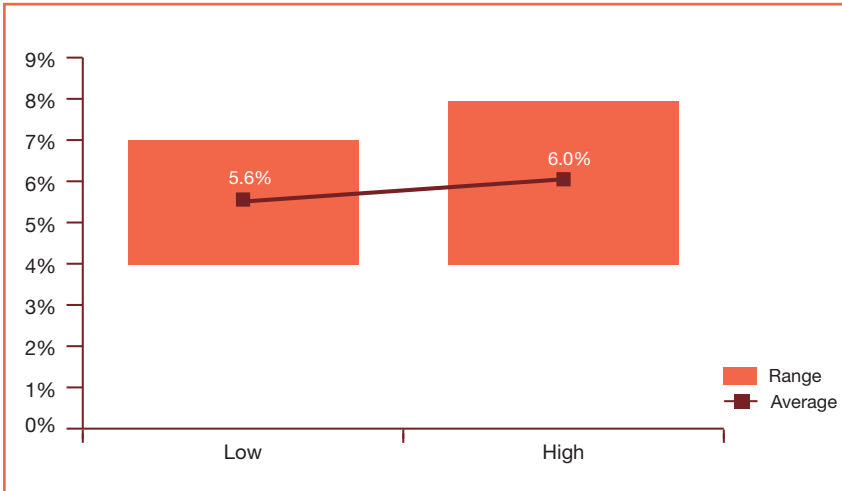
The survey results indicate that most respondents continue to consider historical equity bond spreads in determining equity risk premiums. The percentage that relies mainly on the historical equity

bond spread has remained fairly stable since the previous survey. Fewer respondents rely entirely on analysts' forecasts and are now relying on a combination of the two approaches.

Question:

What market risk premium do you use when making use of the capital asset pricing model (CAPM)?

Average market risk premium estimate



The market risk premium ranges from 4% to 8% with the average low range being 5.6% and the average high range being 6%.

Small stock premium (SSP)

In computing an equity risk premium to apply to all investments in the capital asset pricing model, we are assuming that betas carry the weight of measuring the risk in individual firms or assets, with riskier investments having higher betas than safer investments. A number of studies, such as the

Ibbotson SBBi Valuation Yearbook, have shown that investments in small companies have experienced higher returns than predicted by the standard CAPM approach.

In theory, the CAPM would suggest a higher required return for small companies through a higher beta for such companies. The higher betas for small companies can be the result of higher operational and financial leverage, limited access to funding and other factors that makes them more vulnerable to general market fluctuations.

However, the higher betas do not seem to fully explain the higher returns historically achieved by small companies. Some have interpreted this as an indication that there are other risks associated with small companies that the CAPM does not address and it is to adjust for this finding that many practitioners add an additional premium to the cost of equity of smaller market capitalisation companies.

Survivorship bias is one possible explanation for the observed high returns on small companies. The cash flows associated with small companies are often subject to relatively high degrees of risk (both systematic and diversifiable) and their size may make them more vulnerable to bankruptcy. In the event of an adverse performance, it is clear that there will be a large number of small companies that fail. Historical measurements of small company profitability will therefore be biased upwards as they will include only those companies that continue to operate. The observed higher returns simply demonstrate that such companies are subject to a great deal of diversifiable risk, which means that an analysis of

surviving companies will inevitably show that they make high returns (to offset the negative returns on those companies that fail). A series of studies have also argued that market capitalisation, by itself, is not the reason for excess returns, but that it is a proxy for other ignored risks such as illiquidity and poor information.

If the notion of the small-cap premium is accepted, there are two ways in which we can respond to the empirical evidence that small market capitalisation stocks seem to earn higher returns than predicted by the traditional capital asset pricing model. One is to view this as a market inefficiency that can be exploited for profit. The other is to take the excess returns as evidence that betas are inadequate measures of risk and view the additional returns as compensation for the missed risk.

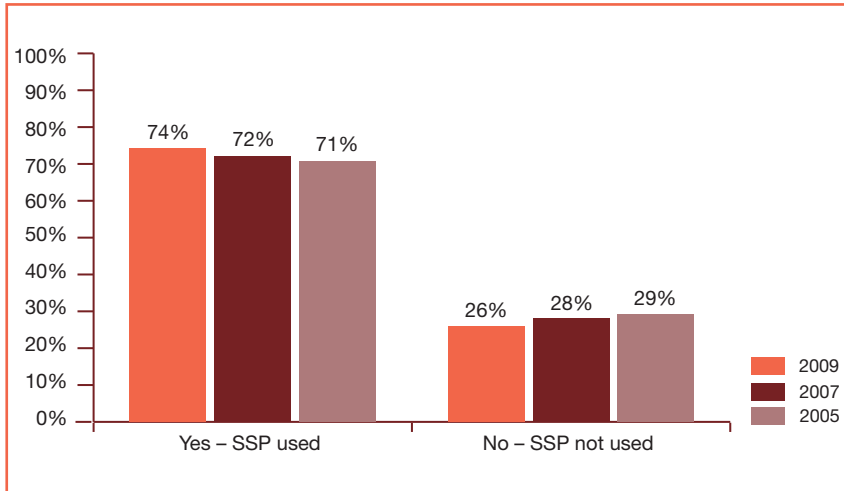
Given that there are two views on the appropriateness of the small stock premium, with various studies both supporting and refuting the notion of the small-capitalisation premium, we asked the respondents whether they apply small stock premiums in the course of their valuation analysis.

Question:

Do you adjust the CAPM rate of return by a premium that reflects the extra risk of an investment in a small company?

- Yes
- No

Use of a small stock premium



Income approach

The number of respondents considering a small stock premium has increased slightly. Those that do apply a small stock premium commented that care has to be taken in applying small stock premiums as the higher risk for smaller companies is often already

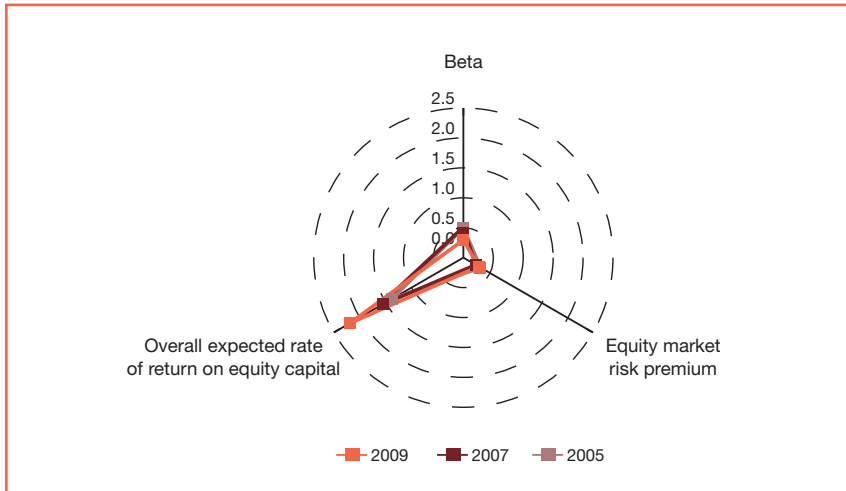
reflected in the beta if similar-sized companies are used. They also indicated that the nature of the business and specific facts and circumstances of the subject company must be considered when applying a small stock premium.

Question:

What factor is being adjusted for a small stock premium?

- Beta
- Equity market risk premium
- Overall expected rate of return on equity capital

Factor adjusted to reflect small stock premium



Most respondents indicated that they prefer to adjust the expected rate of return on equity capital to account for an additional risk in a small company. The results show an increasing preference for adjusting return on equity compared to incorporating the risk in the beta or the equity market risk premium.

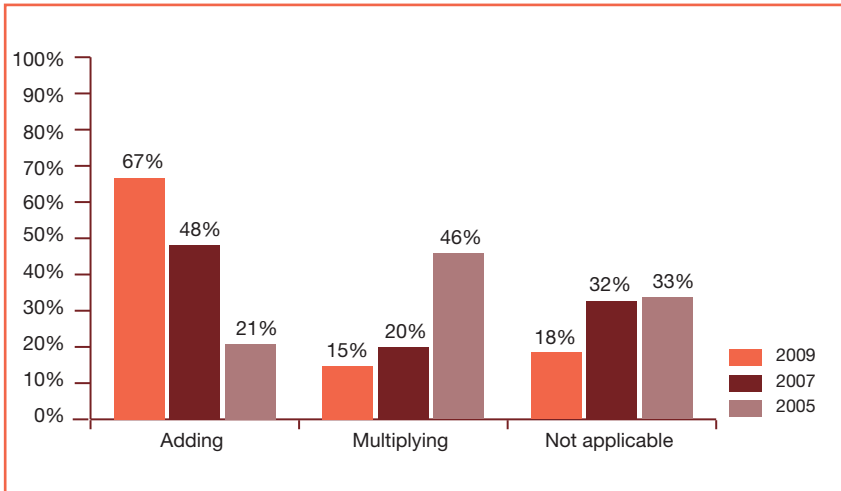
As the next step in the survey, we wanted to determine the methodology used to effect the adjustment for company size.

Question:

Do you adjust by multiplying a factor (i.e. CAPM x (1+SSP)) or adding a factor (i.e. CAPM + SSP)?

- Multiplying
- Adding
- Not applicable

Small stock premium inclusion method



Income approach

The survey results show that most respondents incorporate the small stock premium by adding a factor to the return on equity rather than multiplying. In 2005, the approach of multiplying a factor

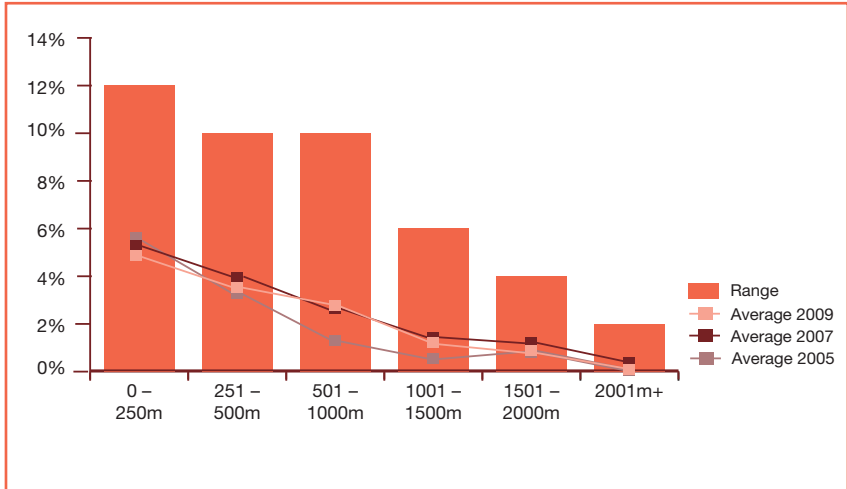
was preferred, but the graph shows a trend towards adding the small stock premium.

The quantum of discounts applied was then determined.

Question:

What is the benchmark small stock premium applied, given the expected size of the company or entity?

Small stock premium applied – adding

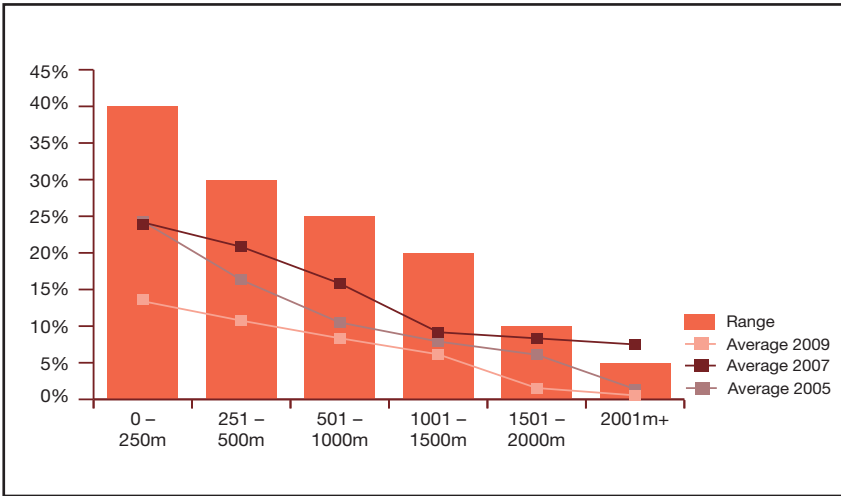


Income approach

Average small stock premium

	0-250m	251-500m	501-1000m	1001-1500m	1501-2000m	2001m+
2009	4.9%	3.7%	2.8%	1.3%	0.7%	0.1%
2007	5.2%	4.0%	2.7%	1.7%	1.3%	0.4%
2005	5.8%	3.4%	1.4%	0.7%	0.7%	0.0%

Small stock premium applied – multiplying



Average small stock premium

	R0-250m	R251-500m	R501-1000m	R1001-1500m	R1501-2000m	R2001m+
2009	13.4%	10.8%	8.4%	6.2%	1.6%	0.6%
2007	24.2%	20.8%	15.8%	9.2%	8.3%	7.5%
2005	24.3%	16.3%	10.5%	7.9%	6.1%	1.4%

Income approach

The ranges give some indication as to what small stock premiums are applied. However, as many of the respondents point out, facts and

circumstances of each individual company, the industry and the relative size of the company must be taken into consideration.

Specific risk premium (SRP)

A key attribute of the CAPM is that investors are rewarded only for systematic risk. Specific risks that are theoretically diversifiable are not included in the CAPM. Standard finance theory states that investors should be compensated only for non-diversifiable risks.

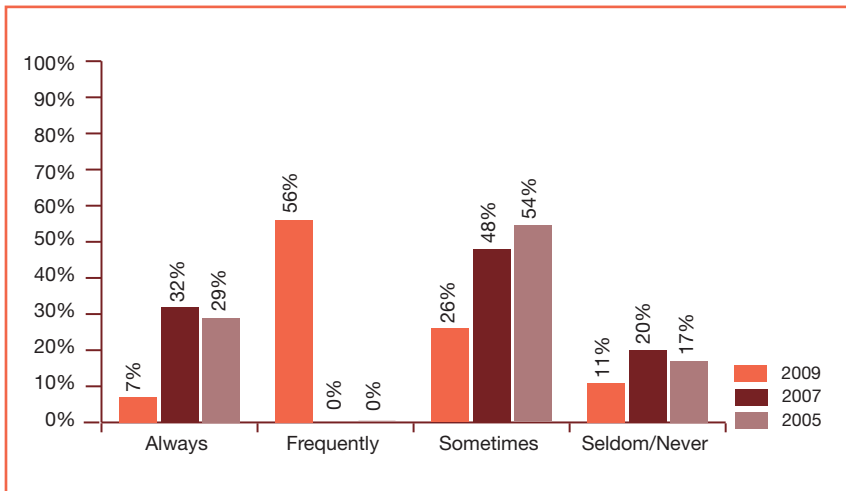
Therefore, if the CAPM is applied, this assumes that the WACC is the same for any investment, regardless of the firm that undertakes it. However, this

does not consider the fact that companies do not have unlimited resources to diversify risk. In project appraisal, hurdle rates are therefore frequently applied by managers to account for the specific risks of a project. These hurdle rates are generally higher than the company's WACC to reflect project-specific risks. In addition, investors appear to include risk premiums in their CAPM calculation for company-specific risk that cannot be adequately modelled.

Question:

Do you adjust the CAPM rate of return by a premium that reflects unique risks to the extent that such risks could not be modelled in the forecast cash flows?

Use of a specific risk premium



Given that the application of a specific risk premium is not consistent with the CAPM, we surveyed market practitioners about whether they apply specific risk premiums, and if so, in what instances. We also included an additional question in this year's survey around what premiums are

considered for projects at various stages of development.

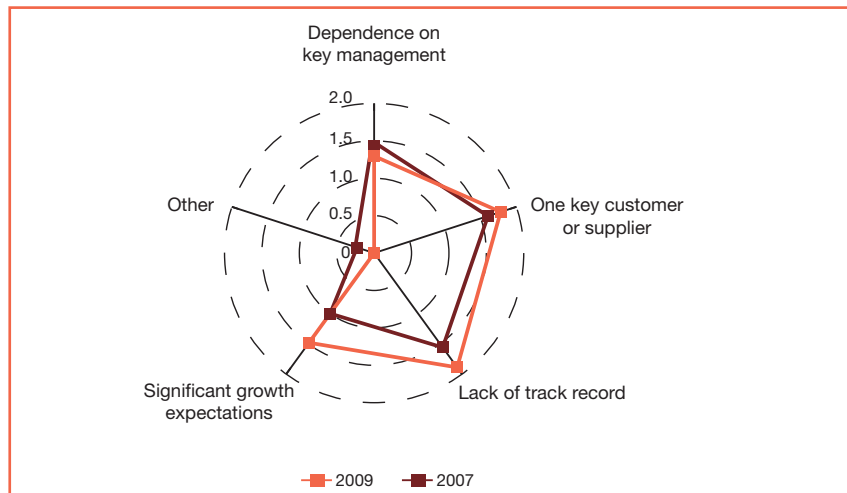
Only 7% of respondents always adjust the CAPM by applying a specific risk premium, while 82% of respondents regularly or occasionally consider an adjustment to the CAPM for specific risks.

Question:

Under which conditions would you consider applying a specific risk premium?

- Dependence on key management
- One key customer or supplier
- Lack of track record
- Significant growth expectations
- Other

Specific risk factors considered



Respondents indicated that most of the factors listed would at some time be considered as motivation

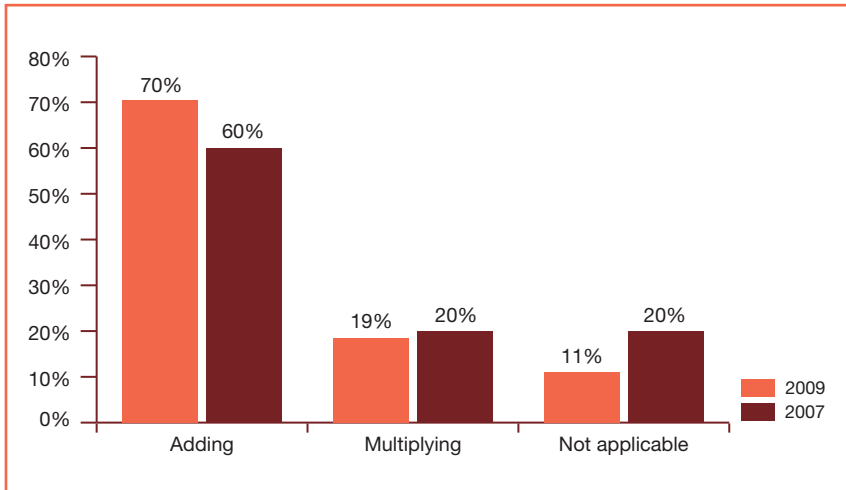
for the inclusion of a specific risk premium.

Question:

Do you adjust by multiplying a factor (i.e. CAPM x (1+SRP)) or adding a factor (i.e. CAPM + SRP)?

- Multiplying
- Adding
- Not applicable

Specific risk premium inclusion method



Income approach

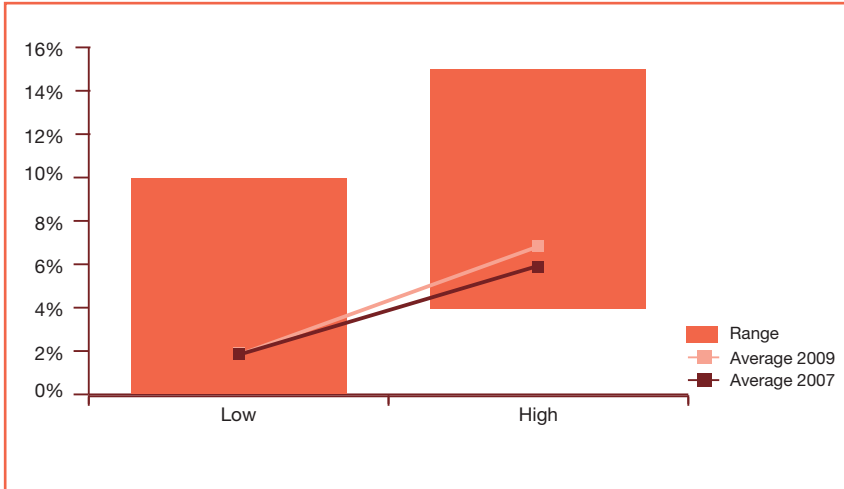
Most respondents adjust the overall expected return on equity capital by adding a premium.

This is consistent with the results of our 2007 survey.

Question:

What range of specific risk premiums would you typically apply?

Specific risk premium applied – adding

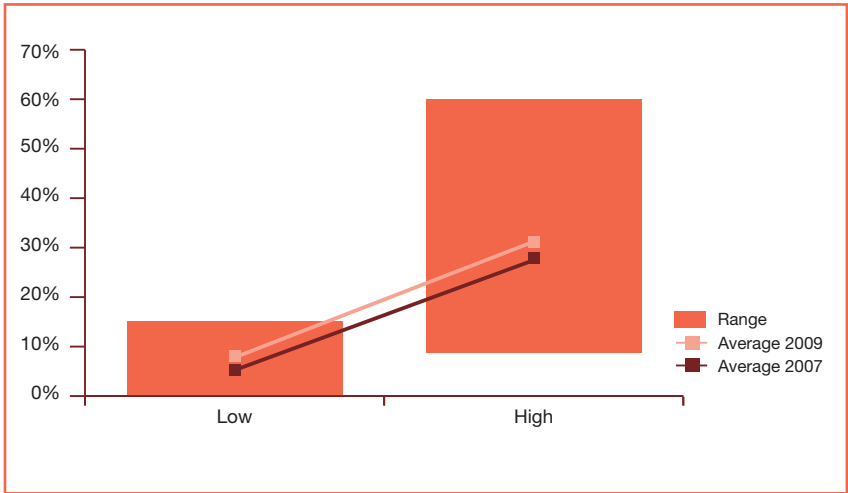


Income approach

Average specific risk premium

Adding	Low	High
Average 2009	2%	7%
Average 2007	2%	6%

Specific risk premium applied – multiplying



Average specific risk premium

	Low	High
Average 2009	8%	32%
Average 2007	6%	29%

As the accompanying graphs indicate, specific risk premiums are used for a wide variety of reasons, with the upper end of the range likely to be dominated by hurdle rates used to appraise very high-

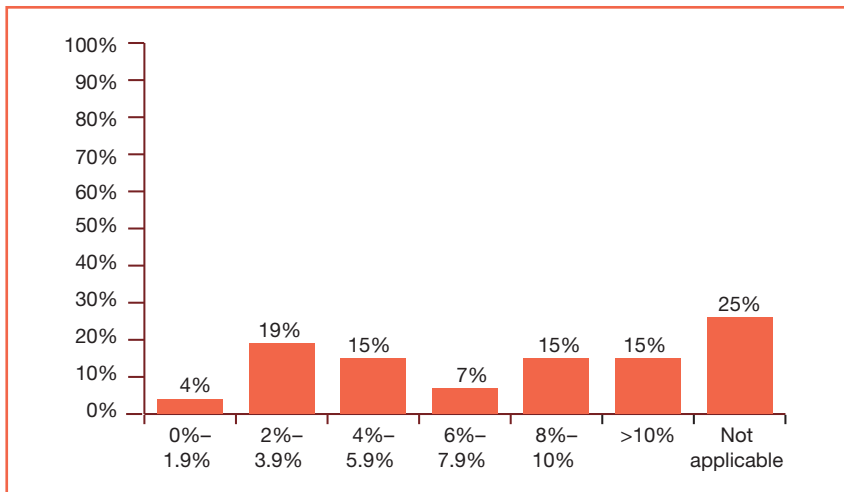
risk projects. The wide range of specific risk premiums added or multiplied to the CAPM is therefore likely to be a result of the variety of risks that specific risk premiums aim to address.

Question:

If you include a specific risk premium for start-up companies, what percentage would you normally add to the cost of capital?

- 0% – 1.9%
- 2% – 3.9%
- 4% – 5.9%
- 6% – 7.9%
- 8% – 10%
- More than 10%
- Not applicable

Specific risk premium for a start-up company



Income approach

The wide range of premiums suggests that specific risk premiums are highly asset specific.

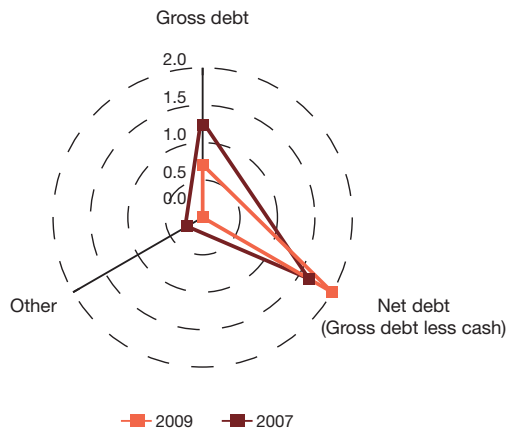
Gearing

Question:

Which of the following methods are used in calculating the debt/equity ratio in the cost of capital calculation?

- Gross debt
- Net debt (gross debt less cash)
- Other

Methods used to calculate debt/equity ratio



Income approach

While there is a wide range of methodologies applied by respondents, the majority use net debt to calculate the debt/

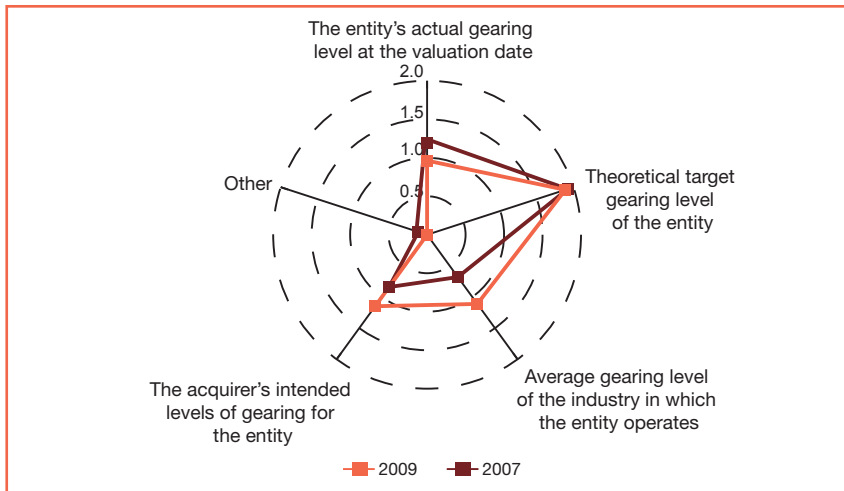
equity ratios used in cost of capital calculations. This is consistent with our findings in 2007.

Question:

Which of the following approaches are used in determining an appropriate level of debt and equity in the cost of capital calculation?

- The entity's actual gearing level at the valuation date.
- Theoretical target gearing level of the entity.
- Average gearing level of the industry in which the entity operates.
- The acquirer's intended levels of gearing for the entity.
- Other.

Approach for determining gearing levels



Income approach

As was the case in our 2007 findings, the theoretical target gearing of the entity being valued was the approach adopted most frequently.

Country risk premium (CRP)

South African companies are increasingly expanding their global profile, and, in particular, are investigating opportunities in the rest of Africa. In a cross-border mergers and acquisitions (M&A) process, it is critical that a prospective investor assesses and quantifies the risks inherent in investing in different sovereign territories.

An important question arising from international investments is whether we should add a country risk premium to the equity risk premium and thereby use a higher equity risk premium in some markets than in others. Although it appears intuitive to require a higher risk premium in emerging markets than in developed markets, there are some arguments that favour a global equity risk premium.

The equity risk premium concept is based on an assumption that investors are fully diversified. Some argue that country risk is diversifiable. However, for this argument to hold, it is required that investors be globally diversified and that there is low correlation across markets. As investors

become more globally diversified, global market integration will increase. Already, recent market developments and market crises have demonstrated that markets are not uncorrelated.

A second argument against a specific country risk premium is based on a global asset pricing view in which differences in risk are captured by differences in betas. Problems relate to the selection of comparable companies and the index against which the beta is measured. Measured against the local index, the average beta within each market is one, and the beta does not therefore capture country risk. Global equity indices are normally market weighted and if one measures betas against a global index, risky and smaller emerging market companies will report lower betas than mature large companies in developed markets.

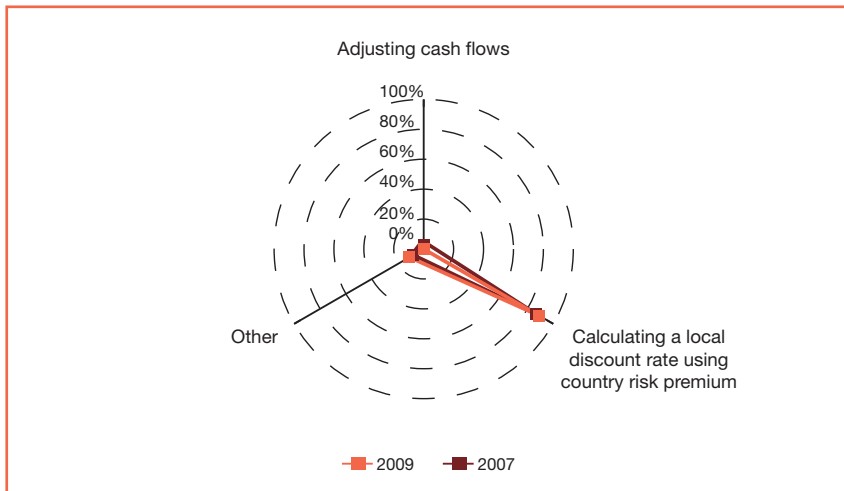
In addition to the question of applying different risk premiums in different countries, there is also the issue of what risk-free rate to apply. We therefore asked respondents what methodologies they are using to assess and quantify country risk.

Question:

How do you generally adjust for country risk when valuing an asset in a country where no reliable long-bond yield (i.e. risk-free rate) can be observed?

- Adjusting the cash flows
- Calculating a local discount rate using a US dollar or Euro based risk-free rate, and adding a premium for local country risk and inflation.
- Other

Country risk premium inclusion method



Income approach

The survey results indicate that country risk differentials are recognised mainly through adjusting local discount rates with a country risk premium. This is consistent with the results

in previous surveys. Other approaches include applying proxy bond yield rates and using similar countries with reliable long-bond yields.

Terminal value calculation

Another technical issue that frequently arises in the income approach is the question of terminal values. Terminal values often contribute in excess of 50% of the discounted cash flow value. As a result, the terminal

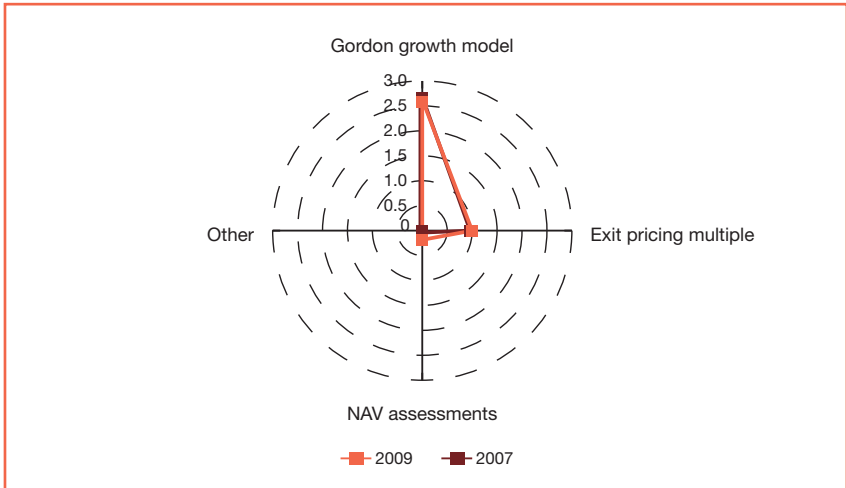
value calculation is an area that needs to be considered in detail. We therefore questioned market practitioners about how they approach terminal value calculations.

Question:

Which of the following approaches are used in valuing the terminal year in a business valuation?

- Gordon growth model/capitalised economic income model
- Exit pricing multiple of some economic income variable, such as EBIT or EBITDA
- NAV assessments

Terminal value calculation method



The Gordon growth model remains the most popular methodology used in calculating terminal values. All respondents use this approach either always or frequently. Exit multiples are used at least

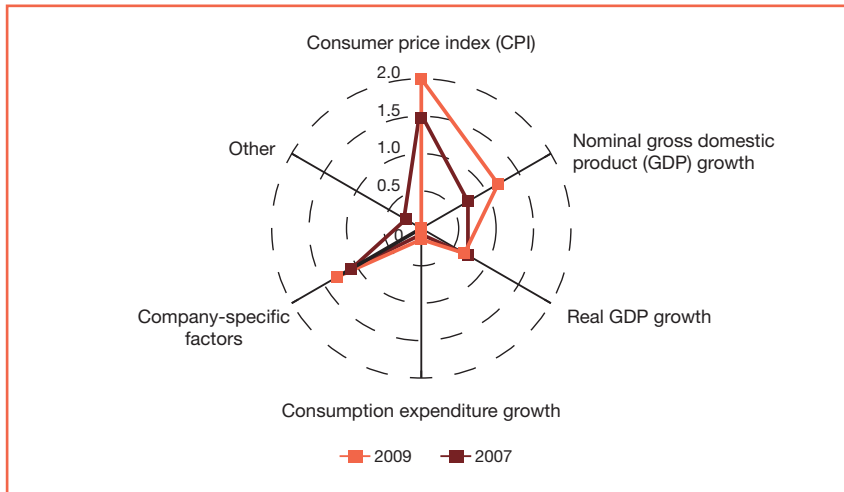
sometimes by the majority of respondents, including many of the respondents who indicated a strong preference for the Gordon growth model.

Question:

If you apply the Gordon growth model/capitalised economic income method, on what do you base your long-term growth assumptions?

- Consumer price index (CPI)
- Nominal gross domestic product (GDP) growth
- Real GDP growth
- Consumption expenditure growth
- Company-specific factors
- Other

Basis used for estimating long-term growth rate



The 2009 results indicate a strong preference for macroeconomic factors including CPI and GDP growth, but company-specific factors are also considered by the majority of market practitioners. The lack of consensus amongst survey respondents suggests that there is no single factor that can

be used to determine a company's long-term growth rate, and that a combination of company, industry and macroeconomic factors is generally considered.

Secondary tax on companies (STC)

In 2007, the Minister of Finance aimed to further improve the transparency and equity of the tax system and proposed that STC be phased out and replaced by a dividend tax at shareholder level.

The two phases of this reform consisted of:

- Reducing the rate of STC from 12.5 per cent to 10 per cent; and
- Redefining the base of taxation to apply to all dividends.

The reduced rate came into effect on 1 October 2007. Subsequently, the conversion to a dividend tax

collected at the shareholder level was aimed to be completed by the end of 2008, subject to the renegotiation of a number of international tax treaties.

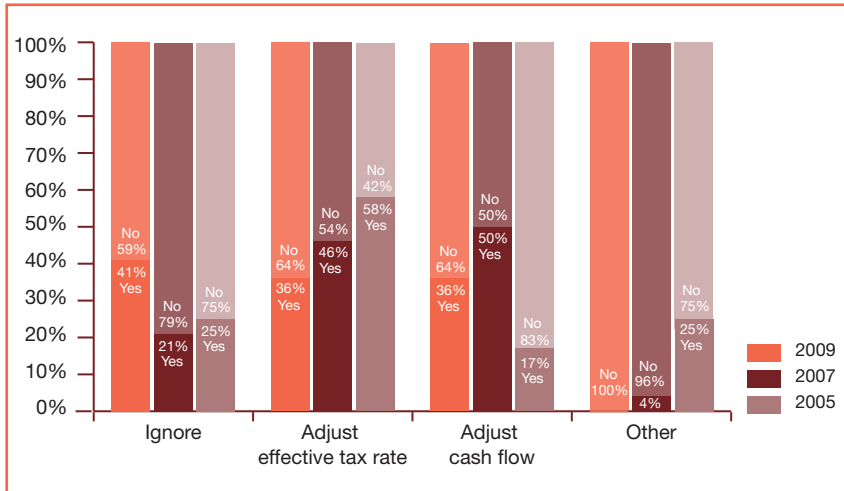
However, there have been significant delays in the process. The 2010/2011 National Budget indicates that a number of remaining issues will need to be resolved before the proposed withholding tax will be implemented. These issues relate to the required changes to the current and proposed dividend definition (such as adding a new definition for foreign dividends), transitional issues, practical problems relating to in specie dividends and further refinements to the proposed withholding tax system.

Question:

How do you currently treat STC in valuations?

- Ignore
- Adjust effective tax rate
- Adjust cash flow
- Other

Treatment of secondary tax on companies



Income approach

Respondents seem to expect that the withholding tax will be implemented shortly, which is reflected in the increased number of respondents who ignore STC.

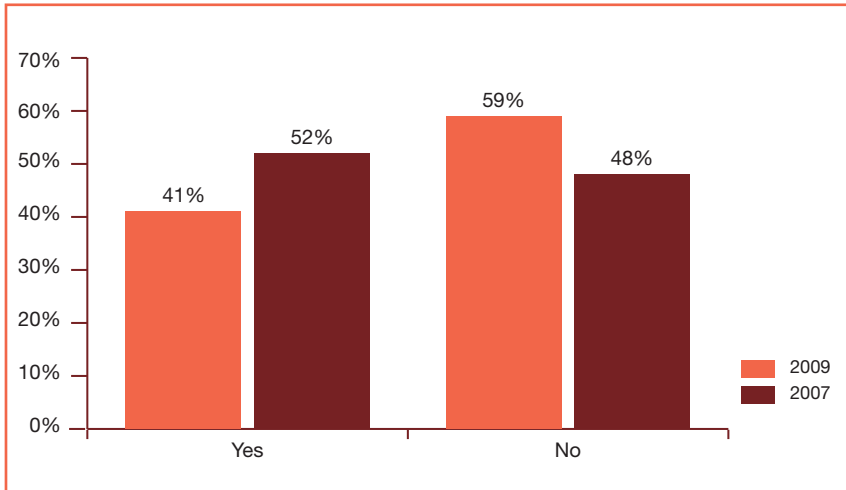
Those respondents that do not ignore STC either adjust the effective tax rate or adjust cash flows.

Question:

STC is currently being phased out and is to be replaced by a 10% withholding tax on dividends. Would you incorporate the proposed dividend tax in your business valuation?

- Yes
- No

Treatment of proposed dividend tax



Income approach

An increasing number of respondents indicated that they would not incorporate a withholding tax and that it would depend on the purpose of the valuation and the perspective from which the valuation was being performed. Some respondents argued that it is not

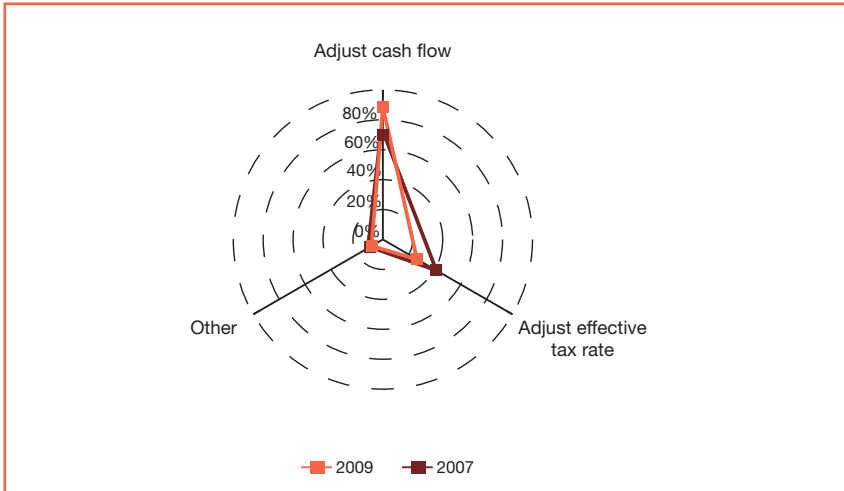
technically correct to incorporate a withholding tax as it is a shareholder tax and thus depends on the tax situation of the individual shareholder. However, the market does not seem to have priced in the reduction in company taxes and the issue is still being debated by valuation practitioners.

Question:

If you would consider the proposed dividend tax, how would you incorporate it?

- Adjust effective tax rate
- Adjust cash flow
- Other

Adjustment for dividend tax



The majority of respondents would incorporate the proposed withholding tax by adjusting cash flows.

Venture capital

One of the least researched aspects of valuation theory relates to the treatment of start-ups and venture capital investments. This topic is closely aligned to the determination of hurdle rates for new ventures where very limited, if any, data on market practice exists.

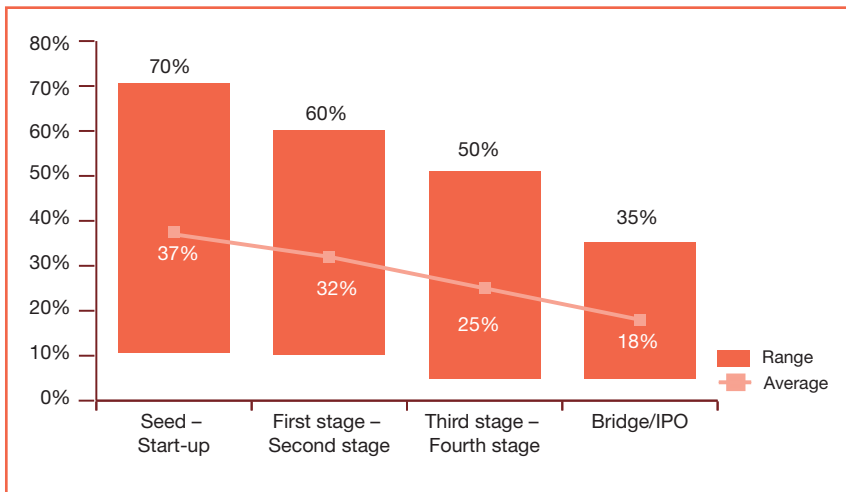
The expected rate of return for a start-up venture or hurdle rate for a new project often appears to be based on the individual policy of the private equity or venture capital house or corporate investor. In this year's survey, we included a question on start-up ventures to provide some insight into the treatment of these enterprises.

Question:

What discount rate do you apply to a start-up/venture capital in the following phases?

- Seed – Start-up
- First stage – Second stage
- Third stage – Fourth stage
- Bridge/IPO

Venture capital discount rate



05

Market multiple approach

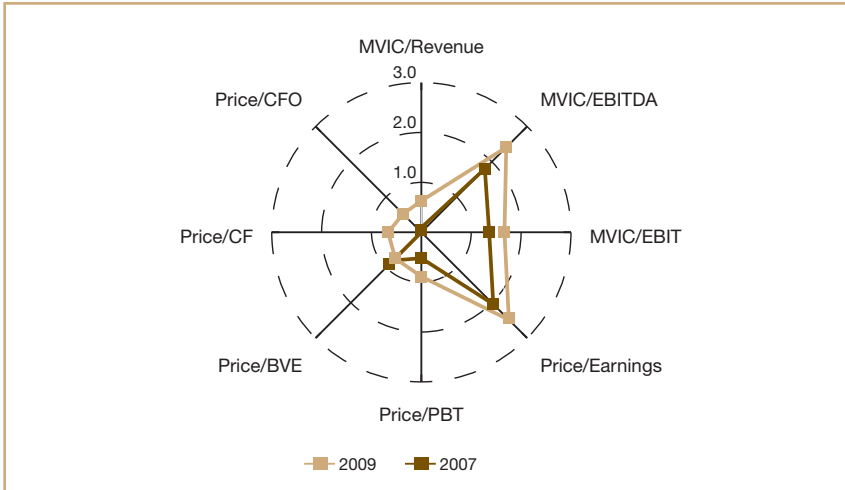
The focus on the market approach in the private equity environment has given this approach increased relevance in this year's survey. The exposure draft of the 2009 edition of the *International Private Equity and Venture Capital Valuation Guidelines* states that: "In assessing whether a methodology is appropriate, the Valuer should be biased towards those methodologies that draw heavily on market-based measures of risk and return."

A number of valuation multiples or valuation benchmarks can be used in the application of the market approach. The guidelines state that the valuer should "apply a multiple that is appropriate and reasonable (given the risk profile and earnings growth prospects of the underlying company) to the maintainable earnings of the company." This section of the survey tested the frequency of use of a range of common market multiples.

Question:

When using the market multiple approach, which of the following valuation multiples are used?

Valuation multiples used



The price/earnings multiple remained the most used valuation multiple in the application of the market approach. However, this was by a very small margin, with the MVIC/EBITDA multiple continuing to gain in popularity. The increased use of the MVIC/EBITDA multiple continues the trend towards cash flow and cash flow related multiples that were noted in our previous surveys.

The increased use of price/CFO and price/CF multiples in 2009 underscores this trend. The private equity valuation guidelines recommend that due to the key role of financial structuring, particularly in private equity, multiples should

be used to derive an enterprise value for the underlying business.

It is generally recognised that adjustments to multiples may be required. Due to the limited number of comparable companies in the South African market, less comparable foreign companies are likely to be used in a multiple approach. The private equity valuation guidelines recognise this and suggest that reasons why the comparator multiples may need to be adjusted include: size, diversity, growth rates, key employees, diversity of product ranges, quality of customer base, gearing level and differences in quality of earnings and marketability.

Question:

If applicable, which of the following adjustments to observed comparable company multiples would you consider in applying the market multiple approach?

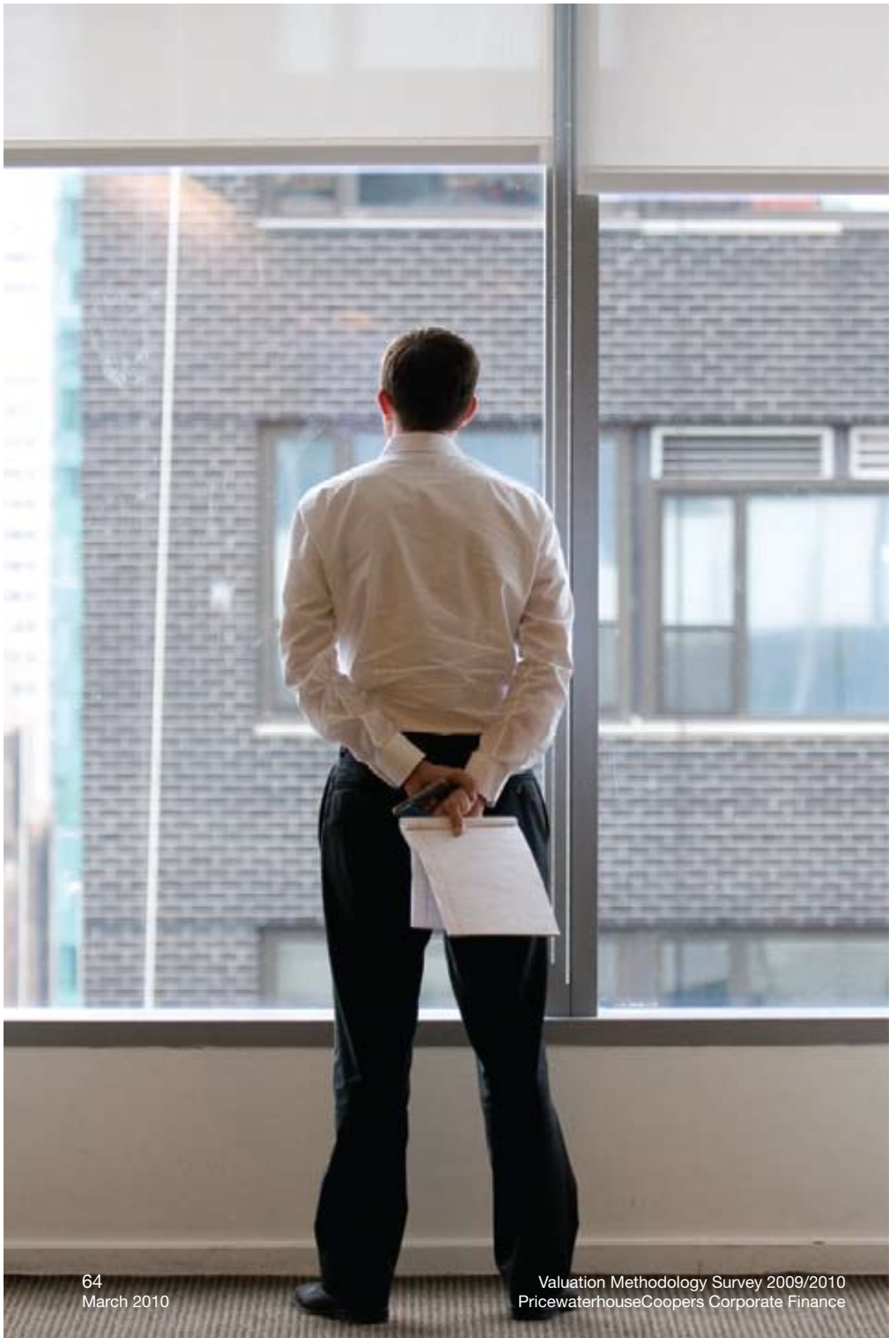
- Size
- Growth
- Diversification
- Country risk
- Other

Adjustments to valuation multiples



All respondents indicated that they consider making adjustments in determining appropriate multiples when applying the market approach. Adjustments for differences in size remained the most widely used adjustment, but adjustments for country risk,

growth and diversification are also frequently applied. Although adjustments are frequently or always considered, whether an adjustment will be applied does depend on the facts and circumstances of the specific valuation.



06

Discounts and premiums

Minority discount

The minority discount relates to the lack of control over the operation and corporate policy for a given investment by its minority shareholders. The minority shareholders can generally not direct the size or timing of dividends or control the selection of management. A minority shareholder can also not veto the acquisition, sale or liquidation of assets. Minority discounts are therefore usually applied when valuing a non-controlling stake to discount the value for lack of control.

Several factors can influence the level of input and control that a minority shareholder has in an investment. The following are characteristics of control that may be considered in assessing the influence a minority shareholder has in a business:

- The ability to revise the articles of incorporation and bylaws;
- Influence over the election of directors and management, and the ability to establish remuneration policies;
- Ability to influence the selection of suppliers and customers and enter into agreements with them;
- Level of control over dividend policy;
- Ability to set corporate strategies including the ability to acquire or liquidate assets, and control the sale of the company or public offerings; and
- Ability to liquidate, dissolve, or recapitalise the company.³

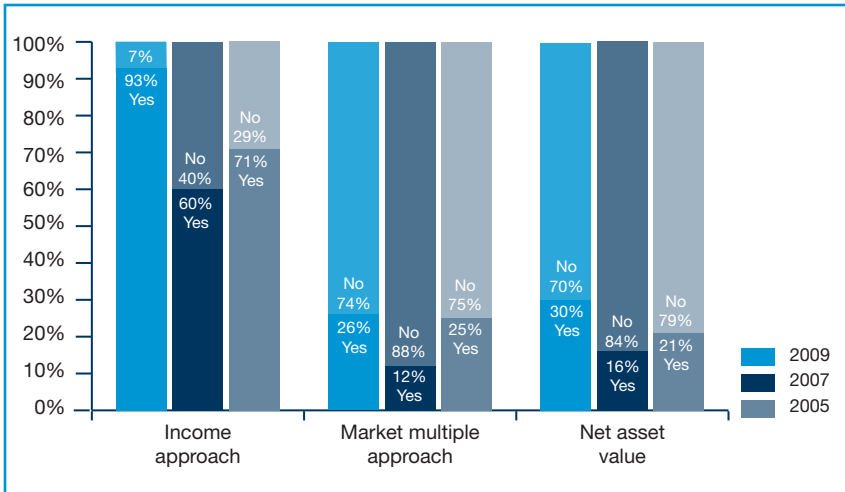
³ S Pratt, R Reilly, R Schweighs, *Valuing a Business* (McGraw-Hill, 2000)

Question:

When appropriate: do you generally apply a minority discount when using any of the following approaches?

- Income approach
- Market multiple approach
- Net asset value

Approaches in which minority discounts are applied



The majority of respondents will consider a minority discount in the income approach. A minority of

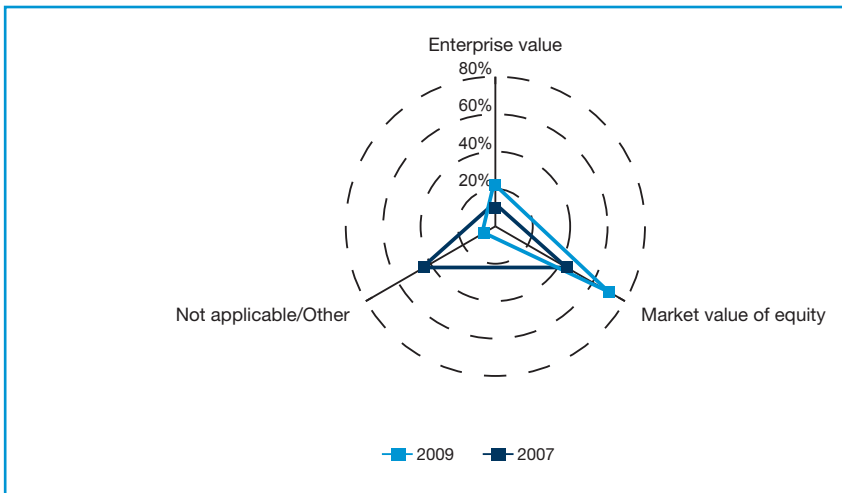
26% indicated that they consider a minority discount in the market multiple approach.

Question:

Where do you apply the minority discount?

- Discount rate
- Market value of equity
- Enterprise value
- Multiple
- Not applicable/Other

Application of minority discount



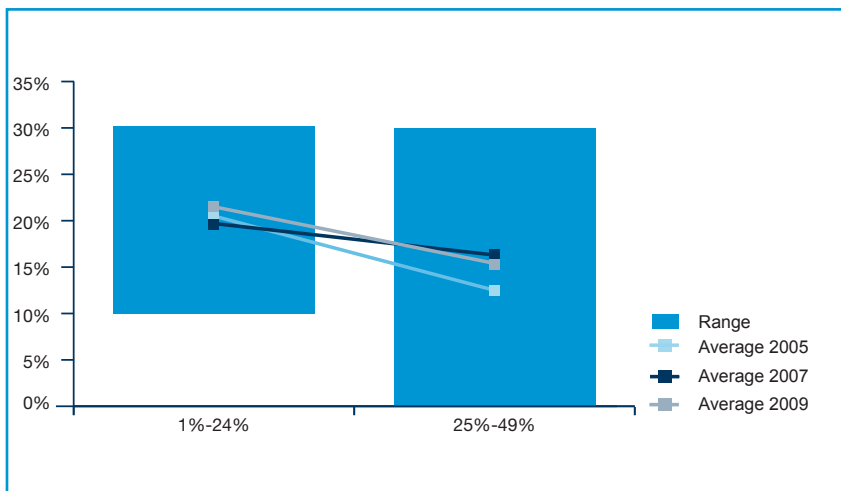
When asked where the minority discounts are applied, respondents replied that they prefer to apply the minority discount to the market value of equity.

Given that most respondents acknowledge the appropriateness of the minority discount, we asked our respondents for an indication of the range of minority discounts normally applied in their valuation analysis.

Question:

Please indicate the benchmark minority discount normally applied given the size of the interest being valued.

Average minority discount applied – market value of equity

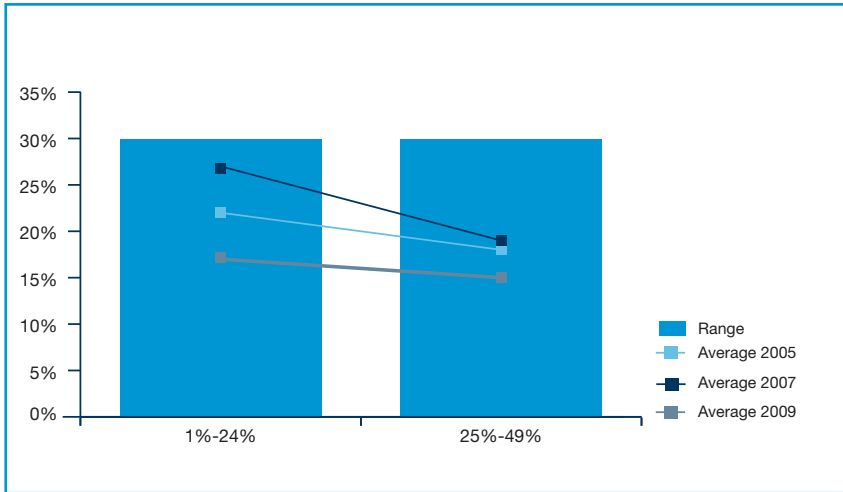


Size of interest	1%-24%	25%-49%
Average 2009	22%	15%
Average 2007	20%	16%
Average 2005	21%	13%

The average minority discount applied to the market value of equity for a stake in the range 1%-24% is 22% and 15% in

the range 25%-49%. The 2007 survey averages were 20% and 16% respectively for these two categories.

Average minority discount applied – enterprise value



Size of interest	1%-24%	25%-49%
Average 2009	17%	15%
Average 2007	27%	19%
Average 2005	22%	18%

The average minority discount applied to the enterprise value for a stake in the range 1%-24% is 17% and 15% in the range 25%-49%. The 2007 averages were 27% and 19% respectively. It is worth noting that the number of respondents applying the minority discount to the enterprise value is relatively small. The results are therefore very

sensitive to individual responses and may therefore exhibit greater fluctuations from year to year.

In applying minority discounts, respondents also commented that the valuer has to consider any minority protection clauses and the conditions relating to the remaining shareholding.

Control premium

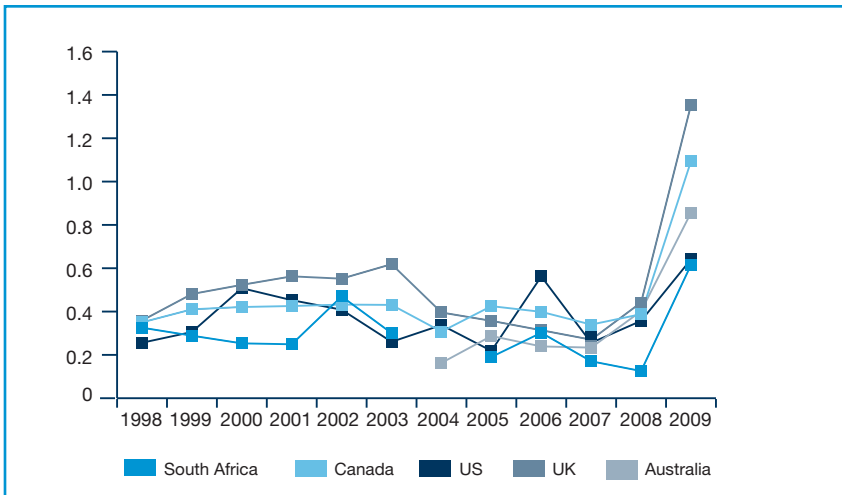
The control premium is the inverse of the minority discount and similar issues will have to be considered in calculating a control premium. To summarise, a control premium relates to the additional value associated with the ability to control the distribution of cash generated by the company, which includes the ability to influence the timing and size of the dividend distribution.

There is also a premium that relates to the ability to influence the direct

policy and hiring of management. A controlling interest can also direct the company in a direction that enhances the value derived by it, for example by choice of suppliers and markets it competes in relative to other ownership interests the controlling owners might have.

The observed control premiums in the market have increased significantly during the last year, but this may be a function of fewer transactions taking place during 2009. This is clearly reflected in the graph below.

Control premiums in various markets

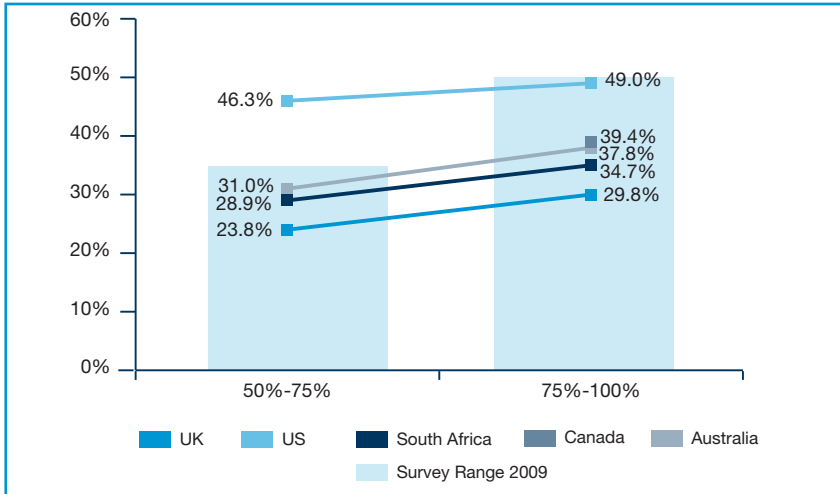


Source: FactSet Mergerstat Control Premium Study

An analysis of average control premiums per country analysed by size of the stake acquired is

summarised in the graph on the next page.

Average control premiums applied by various countries



Source: FactSet Mergerstat Control Premium Study

In this analysis, we excluded the 2009 results and in some cases other clear anomalies.

According to FactSet Mergerstat, the observed control premiums for South Africa are slightly higher than the survey averages shown later in this section. It is worth noting that the observed control premiums

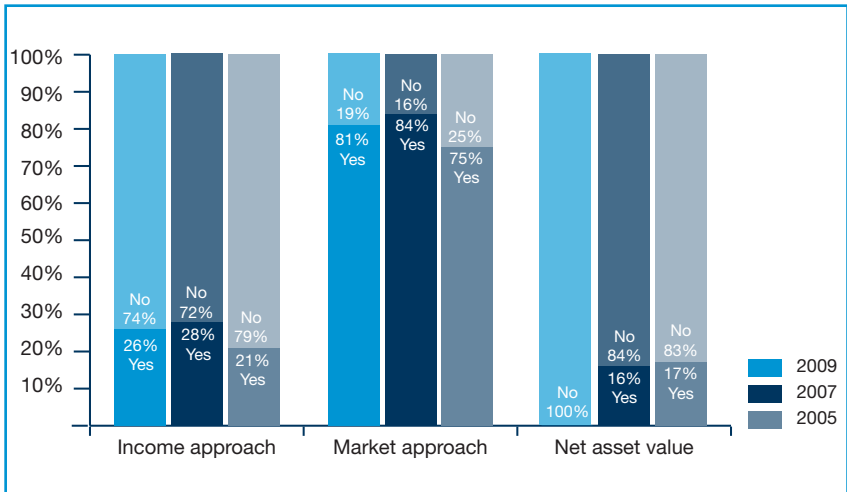
may include premiums paid for and other factors, including investor-specific considerations and synergies. The survey results are therefore considered largely in line with the observed premiums in the South African market. A summary of our detailed findings is contained in the remainder of this section.

Question:

When appropriate: do you generally apply a control premium when using any of the following approaches?

- Income approach
- Market multiple approach
- Net asset value

Approaches in which control premiums are applied



Most respondents consider the control premium to be implied in the income approach and will only apply the control premium in a market approach.

However, if the control premium relates to synergies not built into the cash flows, a control premium might in some cases be applied to the income approach.

In general, however, it is not common to apply a control premium to the discounted cash flow valuation. The majority of respondents will apply the control premium to the market value of equity, just as they will for the minority discount.

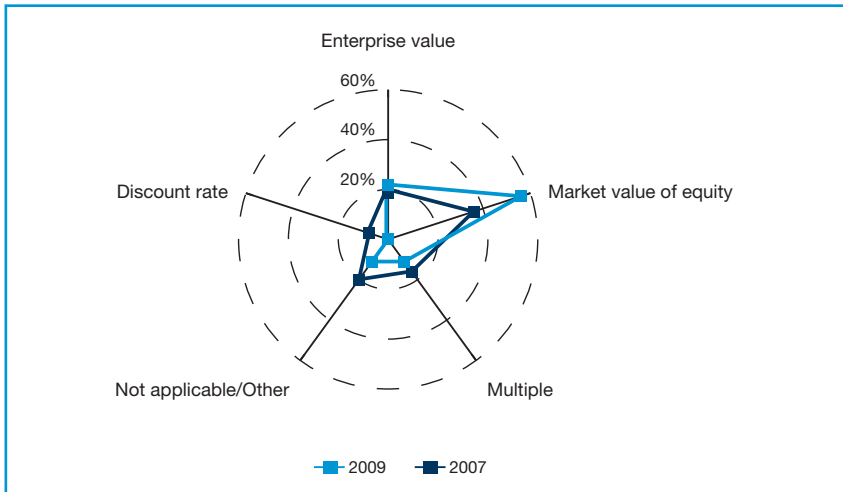
Given that most respondents acknowledge the appropriateness of the control premium, we asked them to indicate how they go about applying control premiums in their valuation analysis.

Question:

Where do you apply the control premium?

- Discount rate
- Market value of equity
- Enterprise value
- Multiple
- Not applicable/Other

Application of control premiums



The majority of respondents apply control premiums to the market value of equity. Some practitioners apply discounts to enterprise value. Differences are therefore expected to exist between the sizes of the

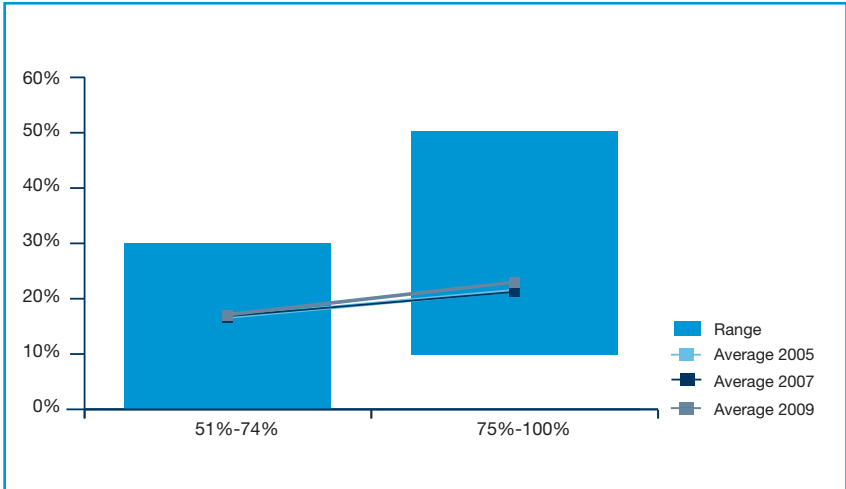
premiums applied by the two sets of practitioners.

We then attempted to quantify the benchmark control premiums that are typically applied.

Question:

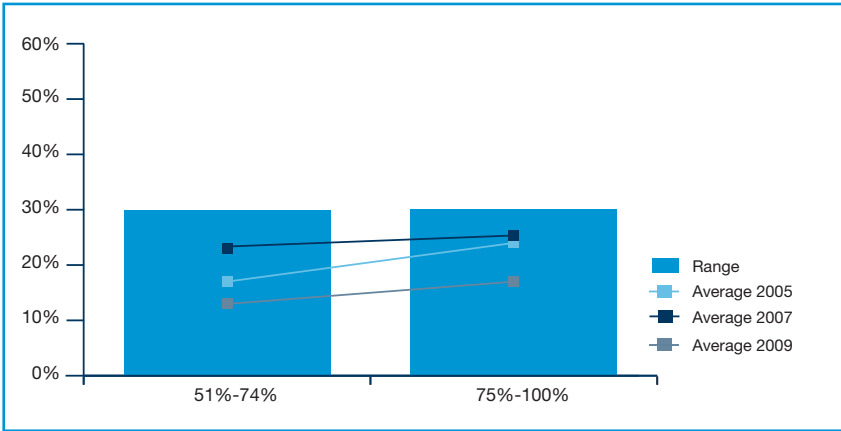
Please indicate the benchmark control premium normally applied given the size of the stake being valued.

Average control premium applied – market value of equity



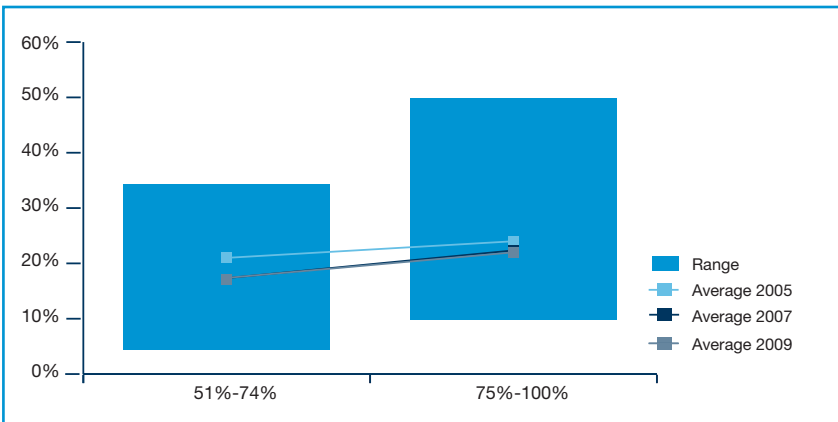
Size of interest	51-74%	75-100%
Average 2009	18%	23%
Average 2007	18%	22%
Average 2005	18%	22%

Average control premium applied – enterprise value



Size of interest	51-74%	75-100%
Average 2009	14%	17%
Average 2007	24%	26%
Average 2005	17%	24%

Average control premium applied – multiple



Size of interest	51-74%	75-100%
Average 2009	18%	22%
Average 2007	18%	23%
Average 2005	21%	24%

Marketability discount

Marketability can be defined as “the ability to convert the business ownership interest (at whatever ownership level) to cash quickly, with minimum transaction and administrative costs in so doing and with a high degree of certainty of realizing the expected amount of net proceeds”⁴.

It is important to distinguish the marketability discount from the minority discount. The lack of ownership control as captured by the minority discount addresses the limited ownership and lack of operational control, whereas marketability deals with how quickly and certainly the ownership share can be converted to cash.

There is, however, an expected relationship between the marketability and the ownership share. Even after we discount the minority interest for the lack of control, it is usually harder to sell a non-controlling stake than a controlling ownership interest. The marketability discount is therefore expected to decrease with the size of the ownership share.

There are two types of empirical studies aiming to quantify the valuation impact related to lack of marketability on non-controlling ownership interests:

- Discounts on the sale of restricted shares to publicly traded companies; and
- Discounts on the sale of closely held company shares – compared with prices of subsequent initial offerings of the same company’s shares.

Generally, there are some key factors which will influence the size of the marketability discount. The first to consider is whether the asset is privately held or publicly traded. Furthermore, a consideration of any restrictions on the sale of the investment is appropriate. Any shareholder agreements or company bylaws might put restrictions on timing of sale, the pricing of assets or the characteristics of the purchaser of the ownership stake.

One also has to consider whether there is a market for the sale of the asset and how active the market is. A satisfactory history of transactions in closely held shares will reduce the marketability discount and prospects for achieving an IPO and the lower the costs of listing, the lesser the need for a marketability discount.

⁴ S Pratt, R Reilly, R Schweighs, *Valuing a Business* (McGraw-Hill, 2000)

Even controlling ownership interests will be subject to some form of illiquidity discount. Factors that can affect the illiquidity discount include the cost to prepare for and execute the

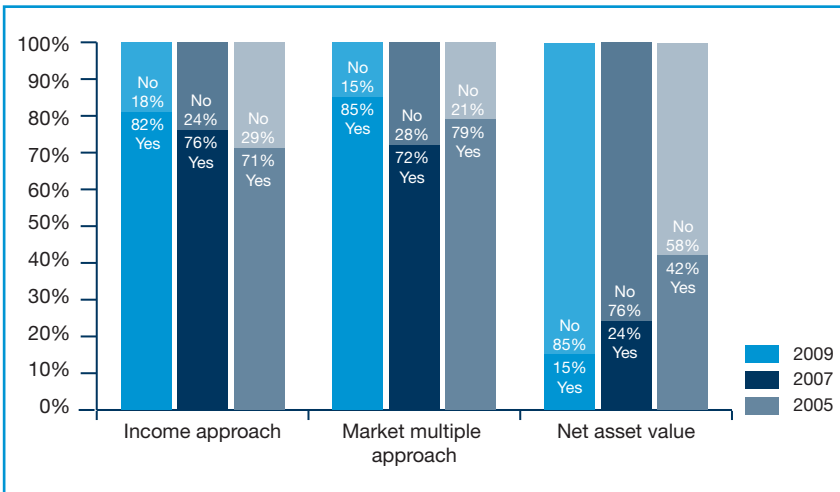
sale and the uncertainty around the time it will take to complete the transaction. There is also uncertainty related to the final sale price and the non-cash and deferred transaction proceeds.

Question:

When appropriate: if the entity is not listed, do you apply a marketability discount to any of the following approaches?

- Income approach
- Market multiple approach
- Net asset value

Approaches in which marketability discounts are applied



Respondents recognise the need to adjust for marketability in all valuation approaches. The remainder of this section therefore

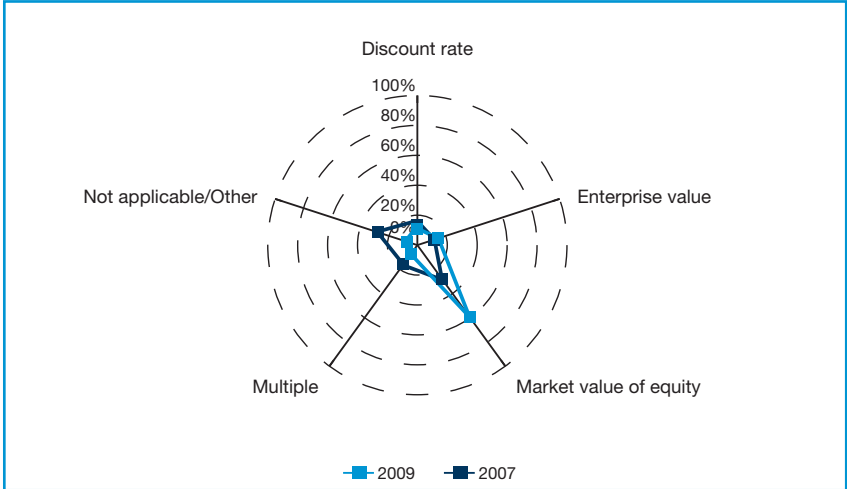
deals with how respondents apply marketability discounts in their valuation analysis.

Question:

Where do you apply the marketability discount?

- Discount rate
- Market value of equity
- Enterprise value
- Multiple
- Not applicable/Other

Application of marketability discounts



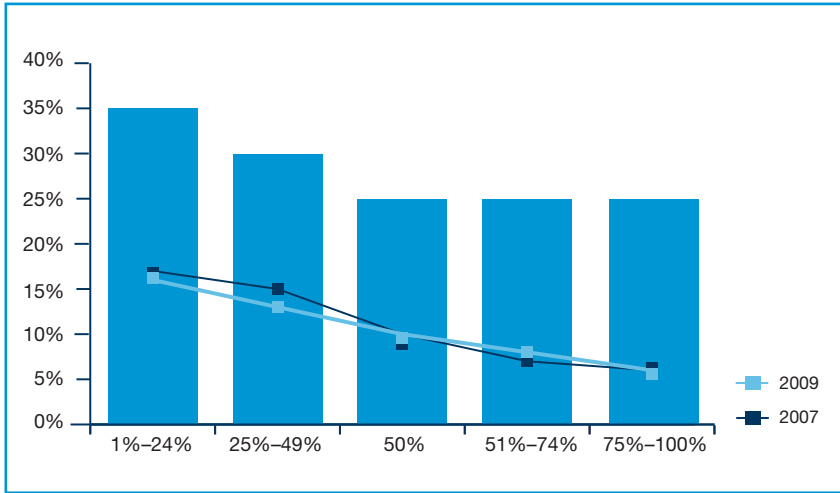
The majority of respondents apply marketability discounts to the market value of equity.

We subsequently asked them to quantify the benchmark control premiums that are typically applied.

Question:

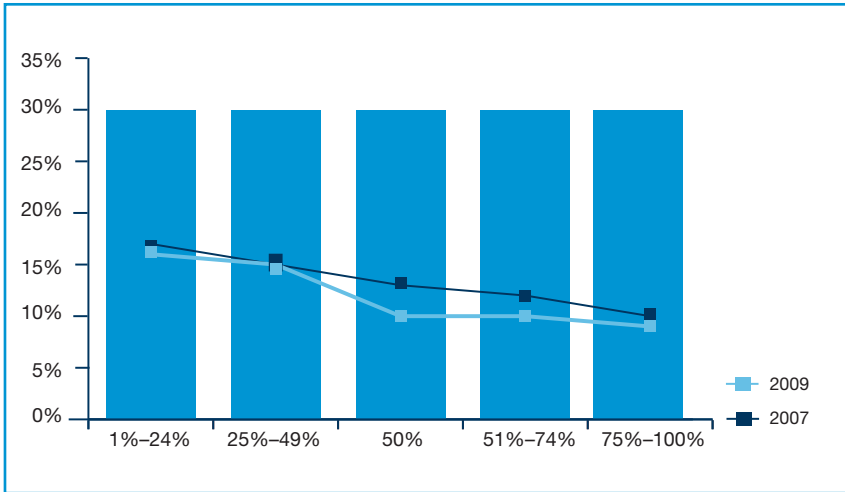
Please indicate the benchmark marketability discount normally applied given the size of the stake being valued.

Average marketability discount applied – market value of equity



Size of interest	1-24%	25-49%	50%	51-74%	75 -100%
Average 2009	16%	13%	10%	8%	6%
Average 2007	17%	15%	9%	7%	6%

Average marketability discount applied – enterprise value



Size of interest	1-24%	25-49%	50%	51-74%	75-100%
Average 2009	16%	15%	10%	10%	9%
Average 2007	17%	15%	13%	12%	10%

The ranges provide an indication of the size of the marketability discounts that are applied by our respondents. As some of the respondents have pointed out, it is also important to consider the

connection between minority and marketability discounts, and any specific facts and circumstances relating to the individual company or industry as described earlier in this section.

Black economic empowerment

Considerations for discounts and premiums

Black economic empowerment (BEE) remains an integral part of South Africa's transformation process and continues to have a profound effect on the South African economy.

BEE activity in the listed environment peaked at R514 billion in 2007, but subsided to R312 billion in 2008. Activity also declined from 125 deals in 2007 to 84 deals in 2008. This represents the lowest level of activity since 1997.⁵

Given the economic downturn, with the focus of management having been on steering their companies through challenging economic circumstances, coupled with difficulties in raising finance, this is not a surprising result. It is therefore possible that BEE deal activity will remain constrained until we see a significant improvement in economic conditions.

While deal activity in the listed company environment has declined, falling asset prices have placed some BEE structures in distress, which in some instances has necessitated the restructuring or refinancing of previous deals.

There may also be a movement by BEE companies to rationalise their investments, or to consolidate with other BEE entities.

With restructurings, consolidations and refinancing of BEE deals, the complexities surrounding the valuation of BEE transactions have become particularly relevant. A particularly contentious issue in valuing BEE investments is the issue of lock-in discounts, so our questions focused on obtaining the market's view on whether these discounts are appropriate and, if so, what the quantum is of these lock-in discounts that the market is applying.

The questions we asked and the responses we received around the valuation of BEE investments are highlighted in the remainder of this section.

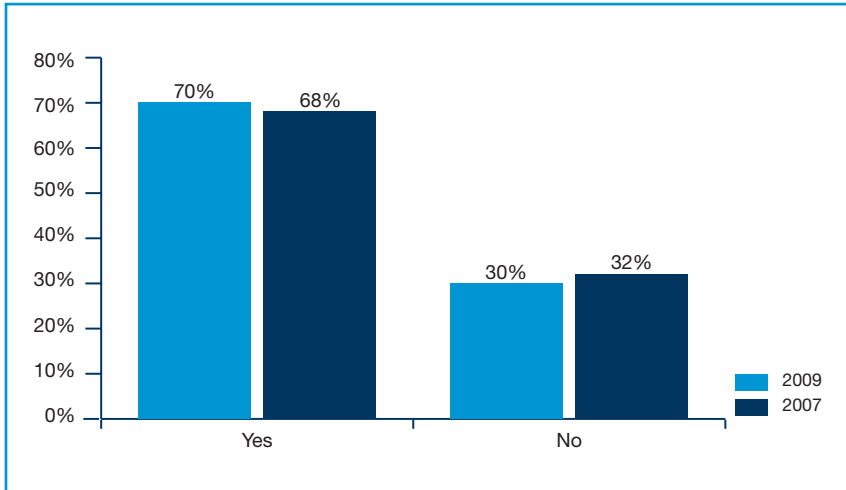
⁵ *Mergers and Acquisitions, A review of activity for the year 2008*, 18th Edition, Ernst & Young

Question:

For a BEE transaction involving a listed share, would you apply a discount to the observed share price for the purpose of pricing this BEE transaction?

- Yes
- No

Application of a BEE discount



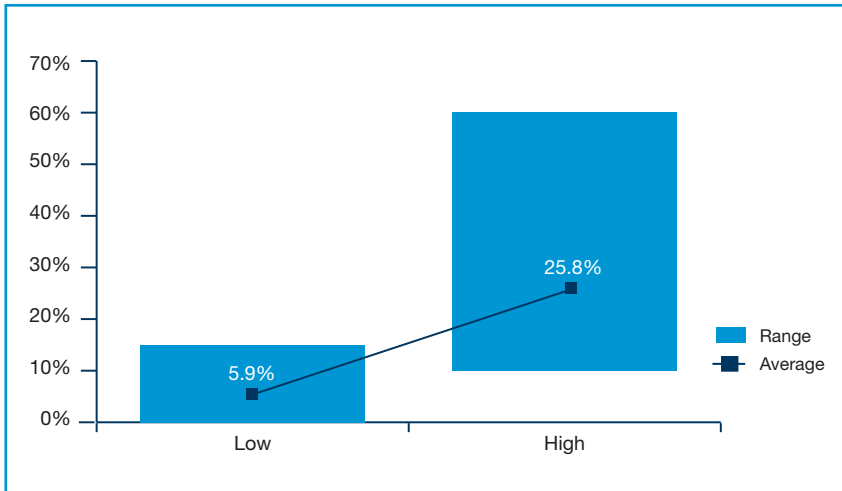
Most respondents indicated that they would consider a discount to the observed market price to

be necessary. These results are broadly consistent with the results of our 2007 survey.

Question:

What range of discounts would you consider applying?

Average BEE discount applied



The average discount applied by respondents in 2009 ranged between 5.9% and 25.8%. Such a wide range of discounts would be expected as the discounts will depend on a range of factors, including the lock-in period and the specific facts and circumstances of the BEE investment structure being assessed.

Typical BEE structures include lock-in periods in which BEE entities are required to remain invested in the structure for a number of years, or where other restrictions are placed on the transferability of the shares held by the BEE entity.

The wide range of discounts applied in the market is likely to correlate with the length of lock-in periods being considered by market practitioners.

Consequently, we attempted to gauge the impact of varying lock-in periods by asking respondents how they consider lock-ins of varying lengths from a valuation perspective.

The 2009 survey confirmed that the majority of market practitioners would apply a discount to reflect the lack of transferability inherent in BEE structures.

93% of respondents would include a discount to a BEE structure with a five-year and 10-year lock-in period.

No less than 85% of respondents indicated that they would apply a discount to a BEE structure with a three-year lock-in period, while

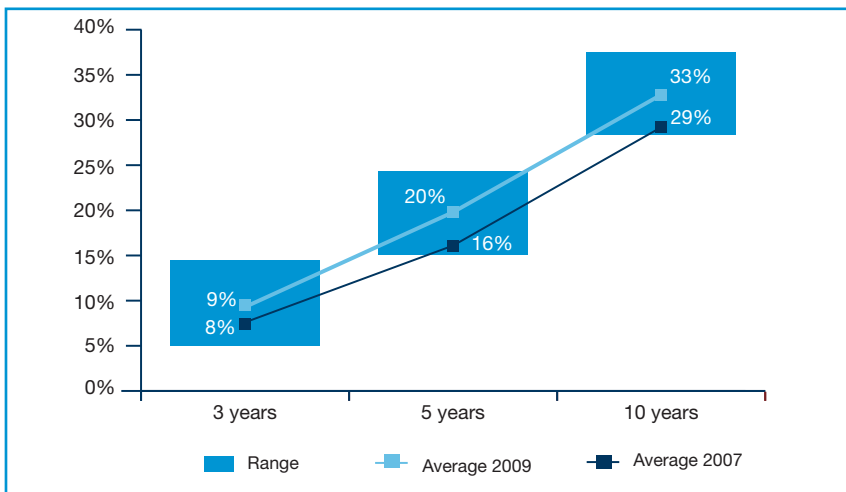
We then asked market practitioners to quantify what discounts they would apply for the various lock-in periods presented below.

Question:

What is the average discount you would apply for the respective lock-in periods (3 years, 5 years and 10 years)?

- 0% - 10%
- 11% - 20%
- 21% - 30%
- 31% - 40%
- 41% - 50%
- 51% - 60%
- 61% - 70%
- 71% - 80%
- 81% - 90%
- 91% - 100%

Average discount applied for lock-in period in BEE transactions



The discount level increased significantly as the lock-in period increased. The average discount relating to a 10-year lock-in was 33% in 2009. In comparison, discounts of 9% and 20% were applied for three and five year lock-ins, respectively.

Appendices

Appendix 1:

Overview of survey methodology

The survey was conducted via an electronic questionnaire. The responses from various financial analysts and corporate financiers were analysed for each question and the results of the analysis are presented in the sections of this report. The questionnaire contained the following basic types of questions:

- Frequency-type questions in which respondents were asked to indicate whether they always, frequently, sometimes or seldom used the particular methodology, variable or source;
- Alternative-type questions in which respondents were asked to indicate whether or not certain procedures are being followed; and
- Range-type questions in which respondents were asked to indicate the value or value range normally used for a particular variable.

Frequency-type questions

The objective of the frequency-type questions was to determine

the relative importance of each of the items tested. The frequency questions were analysed based on the following matrix:

Value	Description
3	Item tested is always used/considered by respondents
2	Item tested is frequently used/considered by respondents
1	Item tested is sometimes used/considered by respondents
0	Item tested is seldom or never used/considered by respondents

Alternative-type questions

Respondents were required to make a choice between two or more alternative responses. The results of alternative-type questions has been presented as a percentage of total respondents.

Range-type questions

Respondents were required to provide the value(s) for certain variables, for example, the market risk premium. Respondents had the option to include either a single value or a range of values.

In cases where a range was provided, the data was analysed utilising the midpoint of the range to calculate, for example, average/median values.

Appendix 2:

List of respondents

- Absa Capital
- BDO
- Bravura
- Bridge Capital
- Cadiz
- Consilium Securities
- Deloitte
- Deutsche Bank Group
- Ernst & Young Advisory Services
- Grindrod Bank Corporate Finance
- HSBC Bank
- iCapital advisers
- Investec Corporate Finance
- Java Capital
- JP Morgan
- KPMG
- Liberty Holdings
- McGregor BFA
- Nedbank Capital
- NM Rothschild & Sons
- PricewaterhouseCoopers Corporate Finance
- PSG Capital
- Remgro Limited
- Sasfin Corporate Finance
- Sasol
- Standard Bank
- Telkom SA

Appendix 3:

List of abbreviations

Abbreviation	Description
• Alsi	JSE All-share Index
• APT	Arbitrage pricing theory
• β	Beta
• BBBEE	Broad-based black economic empowerment
• BEE	Black economic empowerment
• BRS	PricewaterhouseCoopers Business Recovery Services
• CAPM	Capital asset pricing model
• CF	Cash flow
• CFO	Cash flow from operations
• CPI	Consumer price index
• CRP	Country risk premium
• DCF	Discounted cash flow
• E(Re)	Rate of return on equity capital
• E(Rp)	Market risk premium
• EBIT	Earnings before interest and tax
• EBITDA	Earnings before interest, tax, depreciation and amortisation

- EMPR Equity market risk premium
- EV Enterprise value
- EVA Economic value added
- Findi JSE Financial and Industrial Index
- IGU PricewaterhouseCoopers Infrastructure, Government & Utilities team
- JSE Johannesburg Stock Exchange
- ICAPM International capital asset pricing model
- IFRS International financial reporting standards
- MSCI World Index Index of 1500 world stocks
- MVE Market value of equity
- MVIC Market value of invested capital
- NAV Net assets value
- PBT Pre-tax earnings
- S&P 500 Standard & Poor's index of 50 leading US large cap equities
- SRP Specific risk premium
- PE Price/earnings ratio
- PPP Public-private partnership
- Rf Risk-free rate of return
- ROV Real option valuation
- SSP Small stock premium
- STC Secondary tax on companies
- WACC Weighted average cost of capital

Appendix 4:

PricewaterhouseCoopers Transactions

PricewaterhouseCoopers' (PwC) Transactions division provides comprehensive commercial, financial, economic and strategic advice to companies taking on significant business growth opportunities. We have developed a reputation for our excellent advice, strong relationships and high levels of independence. These attributes, coupled with a vast range of experience, have made PwC Transactions a key corporate adviser in the South African market and our position has been reinforced through the completion of a number of notable local and cross-border deals. Our range of specialist advisory services across critical areas of corporate finance and transactions includes:

- **Valuation and strategy advice**

We provide independent expert valuation advice to businesses and evaluate the financial implications of, amongst others, corporate debt, restructuring, investments, mergers and joint

ventures. We also advise on better managing assets and large capital investments amidst increased competition.

- **Mergers and acquisitions**

We focus on the deal process from strategy through to post-deal integration, accessing the capital markets and valuing, negotiating and structuring deals. Our specialists also help clients to complete and extract the maximum value from transactions.

- **Infrastructure, government and utilities**

We advise governments, state-owned enterprises and private sector investors on project financing, public-private partnerships and privatisations. We provide counsel on the deal process from strategy to financial closure, including the raising of debt.

- **Transaction services**

We assist companies involved in acquisitions, divestitures and strategic alliances to access local and global capital markets. Our services include financial and tax due diligence, sell-side due diligence, vendor assistance, no-access due diligence, bid support and post-deal services. We help our clients maximise the return on their deals and identify and manage associated transaction risks.

Valuation and strategy advice

For organisations that need an independent valuation of their business, PwC draws on vast international expertise and research to provide a comprehensive service. We also offer independent advice on a variety of value-related matters, such as advising on the cost of capital and evaluating the financial implications of restructurings, investments, mergers and joint ventures. PwC helps clients to evaluate their options by putting an exact price on shares, debt instruments, goodwill, brands and other intangible assets in their organisation.

Whether a client requires advice on cross-border deals, an

expert opinion for the Securities Regulation Panel or the JSE, advice or assistance in price negotiations, or in addressing IFRS valuation issues, we understand that complex valuations require specialist resources. PwC has a dedicated team specialising in performing large, complex and technically challenging valuations. The team is part of an international network of valuation experts, with access to global best practice and top-quality international research. They can assist in these areas:

- Valuation consulting
- Independent expert opinions
- Accounting valuations
- Tax valuations

Valuation consulting

Our valuation specialists assist businesses to achieve an in-depth understanding of the value of each business or asset in a transaction. Our technical knowledge combined with our in-depth industry knowledge allows us to understand the specific factors driving each deal. We can also assist to evaluate the impact on earnings the acquisition may have. We have extensive experience in valuing businesses for the purpose of BEE transactions and can draw on our vast knowledge to consider specific valuation issues related to BEE transactions.

Examples

- In the event of a merger, acquisition or alliance, it is vital to understand the value likely to be created through the transaction.
- Understanding the value of the business is the first step towards making a black economic empowerment (BEE) transaction, so a detailed valuation is often required from the outset.
- In the event of a dispute, an independent valuation is likely to help resolve issues swiftly.
- Multinational operations make an understanding of the issues driving valuations in different countries essential. Applying a common methodology across all countries generates a more reliable view of an international business' value.
- Achieving a reliable valuation of a business or asset is a critical driver of a successful transaction for buyers and sellers in acquiring or selling a business.

Independent expert opinions

There are a wide range of circumstances in which an independent opinion of value

is required and each scenario requires specialist knowledge and the application of specific skills.

Courts, regulators, tax authorities, shareholders and businesses may, at different times, all need an objective specialist to provide a valuation of an asset or business. In the instance of shareholder disputes, an opinion is often required by shareholders. The context and purpose of the valuation determines the approach that needs to be taken to provide an appropriate opinion.

In cases where boards of directors are required by the Securities Regulations Panel to obtain appropriate external advice on an offer, a fairness opinion is required. Related-party transactions may also give rise to the need for a fairness opinion in terms of the JSE Limited's listing requirements.

Increasingly, non-executive directors and audit committees bear a significant responsibility for corporate governance and this has numerous implications in the realm of independent valuations. PwC's valuations team has the required experience to provide a robust and credible independent expert valuation.

Accounting valuations

International Accounting Standards and International Financial Reporting Standards (IFRS) have introduced significant changes to the way in which accounts must be prepared and presented and require a wider range of assets to be valued on an annual basis.

IFRS changes the accounting treatment for acquisitions. A fair value exercise for assets and liabilities is now required, whereby all assets (tangible and intangible) from a merger or acquisition have to be included in the balance sheet of the acquirer at their current market value and are depreciated over the term of their useful economic life.

Goodwill is now tested for impairment annually, and is marked down for any impairments calculated during the annual review process.

These requirements call for specialist valuation services that both understand the specific accounting implications and the wider commercial context in which those accounting valuations will apply.

PwC's valuation services draw on considerable technical and financial specialisation provided by our valuation team in combination with the firm's accounting specialists to deliver integrated advice to our clients.

Tax valuations

Valuations often lie at the heart of disputes and negotiations with tax authorities. The specific demands of the tax authorities require specialist advice and detailed knowledge of their working methods and practices.

PwC's Valuation & Strategy team is able to assist with tax valuations, including valuations for capital gains tax, stamp duty, estate duty and exchange control purposes.

Mergers and acquisitions

As a leading corporate adviser in the African market, our dedicated and highly experienced Mergers and Acquisitions (M&A) team can identify opportunities, assist in deal structuring, lead negotiations for mergers and acquisitions, disposals, corporate listings, management buy-ins and management buyouts. Our position has been reinforced through the

completion of key local and cross-border deals and we are also highly experienced in advising companies and black investment groups on BEE transactions and finance raising.

We enjoy high levels of independence in relation to advisory and M&A mandates, since our advice is distinct and independent from financing.

For those pursuing growth opportunities or divestitures, our dedicated and exclusive merger and acquisitions research resources can identify opportunities locally and internationally through our global network, as well as providing input on global trends to assist clients with their transactions.

For every deal, we can leverage the strength of our International transactions network, and we are also able to draw on the full range of PwC services – including due diligence, tax and other specialised advisory services.

Mergers and acquisitions advisory

When organic growth does not satisfy the needs of stakeholders,

or when businesses decide to dispose of non-core assets, PwC's Corporate Finance team can assist.

The first challenge for any company seeking to expand is to identify the right business to acquire. At the same time, companies wishing to restructure by disposing of non-core assets at the highest possible prices require similar support. Our highly dedicated and exclusive mergers and acquisitions research resources are able to identify opportunities, locally and internationally, as well as provide input on trends and global transactions.

Our information systems and the direct line to both our African and worldwide network immediately extend clients' scope of opportunity. Specialist advice at each critical stage of the transaction – from target identification, investigation, structuring and financing, to facilitating and negotiating the purchase of target companies – ensures that clients gain maximum advantage.

Our integrated worldwide Corporate Finance network, structured in industry groups, facilitates the identification of potential deals in the international

arena. Supporting clients through every step of a transaction, we will review and value their business, identify prospective purchasers, and negotiate a transaction most suited to their requirements and one that will maximise the value to their business.

Black economic empowerment (BEE)

The planning and implementation of a black economic empowerment (BEE) transaction is a unique and complex process that requires a significant investment of time and resources from corporate entities, BEE partners, financiers and advisers. PwC is uniquely placed in having comprehensive experience in advising both entities seeking an appropriate empowerment partner and empowerment groups on strategic issues, and offering support in structuring negotiations with prospective targets or partners.

Our credentials speak for themselves and over the years we have advised numerous leading South African and multinational companies to successfully implement long-term, sustainable empowerment initiatives. In addition, as corporate adviser to some of the most respected

BEE individuals and consortiums in South Africa, we have built up a wide network of potential empowerment partners for corporate South Africa.

As an independent adviser we are able to take our clients through the process of deciding the most appropriate empowerment strategy, designing and structuring the partnership, identifying and negotiating with the best partners fitting the selected strategy, assisting in the design and implementation of a sustainable funding structure, and delivering an appropriate, value-enhancing empowered organisation. As we do not lend money into transactions, we offer independent advice as to the optimum finding as appropriate to the transaction.

Corporate lead advisory

PwC Corporate Finance proactively assists, advises and supports the development and implementation of corporate strategies. Many companies and individuals turn to us for help in shaping their business and reviewing strategic objectives. We assist with developing financial models, conducting industry research, and determining optimal financial structures.

Advice is geared to our clients' needs – whether to implement acquisition or rationalisation strategies, to operate effectively within regulatory regimes, or to sharpen defences against hostile bids.

In the current economic environment a number of enterprises are discovering that they require advice on restructuring, reorganisation, unbundling, and attracting strategic equity partners. We have an experienced team to advise on the strategic, commercial and legal aspects of these issues. Inward and outward investment opportunities are also advised on and we have significant capacity to apply the power of multidisciplinary international resources comprising industry and service line experts to contribute in this regard.

Business Recovery Services (BRS)

The survival of a business can be threatened by any sudden shift in environment, finances or competency. There are many factors (such as market changes, strategic errors, banking facility changes and technological disruptions) that can contribute to a financial crisis, which may be characterised by:

- Severe underperformance;
- Ineffective management;
- Declining earnings; and
- Cash flow blockages

BRS assists underperforming and distressed companies to stabilise, fund and fix their troubled operations through restructuring of their strategy, capital structure, organisation and operations.

PwC's specialist advisers can identify the problem areas affecting a business and resolve them quickly and efficiently. The solutions offered are sensitive to the business and its employees, and aim to gain the co-operation of everyone involved. Through an independent business review, we can provide stakeholders of troubled companies with independent and objective appraisals of:

- The company's business;
- Its prospective viability;
- Causes of difficulty/crisis;
- Issues facing the business; and
- The range of options available to various stakeholders.

The range of interventions we can offer extend from making firm recommendations to preparing business and turnaround plans, as well as assisting in monitoring turnaround plans and their implementation. In aiming to preserve, enhance and realise value in distressed businesses, we provide:

- Independent business reviews;
- Turnaround directors and chief restructuring advisers;
- Restructuring advice;
- Optimised exits;
- Working capital management;
- Crisis stakeholder management; and
- Business administrators

Infrastructure, Government and Utilities (IGU)

The IGU team provides leading-edge advice, from strategy through to transactions, in the areas of:

- Public-private partnerships;
- Project finance;
- Privatisations; and
- Smart procurement

We provide independent financial advice, ensuring a balance between conflicting objectives and the best structured and most competitive transactions for our clients.

We focus on providing advice to either government or private sector participants that achieves the objective of getting the transaction completed, while optimising the benefit to our clients.

Our local and international advisory experience covers numerous sectors, including:

- Hospitality;
- Health;
- Education;
- Power, mining, oil and gas;
- Information and communications technology, including telecommunications and convergence;
- Transport (road, rail, ports and public transport); and
- Water and waste

Public-private partnerships

Government is under significant pressure to improve public services and develop infrastructure. This

places an undue burden on government resources and public sector capital. Increasingly, the private sector is asked to provide capital and resources through public-private partnerships (PPPs), which take on many forms, including concessions and joint ventures.

PPPs allow the public sector to achieve value for money by accessing private sector capital, resources and skills, thereby obtaining the benefits of innovation, risk transfer and improved quality and service levels.

PPPs allow the government sector to develop in ways that are usually only associated with the private sector, while private businesses that enter into PPPs open themselves up to new growth opportunities and increase their capacity for development.

We help government undertake feasibility studies by scoping and developing projects and evaluating the appropriate procurement methodology. By managing the procurement process, including negotiations assistance, we ensure a timely financial close in accordance with legal and regulatory requirements. We also advise governments on the principles and implementation of PPPs.

We assist the private sector in PPPs by structuring deals, developing and modelling the commercial and financial structures for transactions, arranging finance and providing advisory assistance from bid submissions and clarification through to financial close. In addition, we provide specialist commercial advice to BEE investors participating in PPPs.

Privatisations

In order to successfully privatise an asset, governments often seek a reliable methodology. This may include:

- Recognising local, cultural and economic conditions;
- Learning from international experience and best practices;
- Developing an appropriate strategy and structure; and
- Ensuring the procurement process is competitive and fair.

PwC reconciles investors' profit motives with the government's requirements for political and financial transparency. For governments, PwC can assist in ensuring that these requirements are met and by offering support and advice on developing the

appropriate strategy and structure for the privatisation transaction.

Similarly, we advise private sector investors, management and employees on acquiring assets being privatised and assist in developing structures that access international and local funds, allowing for a competitive bid.

Smart procurement

We provide procurement transaction structuring and advice to the public sector for large and complex procurement transactions that are not being procured through PPPs, but which still require value-adding commercial structuring.

We provide advice and assistance during all aspects of the procurement process:

- Process development, including adopting the most appropriate procurement strategy for the relevant transaction. This also includes determining the commercial structure of the transaction and the risk allocation and mitigation strategies;

- Documentation development, including an expression of interest (EOI), request for qualification (RFQ) and request for proposal (RFP) as appropriate for the chosen procurement strategy;
- Development of the evaluation criteria and the contract term sheet;
- Process administration, including managing the bid process in such a manner that the outcomes of the process are able to withstand legal challenge;
- Bid evaluation by assisting with providing evaluation commentary and assessments; and
- Contract negotiations.

Project finance

Project finance relates to the limited recourse financing of public or private infrastructure projects. Increasingly, governments and companies want to shelter their balance sheets and prefer to finance major projects on a stand-alone basis. This is especially true for PPPs, but can be used for all types of infrastructure projects.

Funding for infrastructure projects is complex and presents specific challenges that require specialist knowledge and understanding to create appropriate finance structures to ensure that risks are dealt with effectively. The increasing need for public sector infrastructure means that funding from the private sector is in high demand. Investors are required to use sophisticated financial engineering to secure PPPs with the public sector, requiring increasing levels of innovation.

We provide independent advice and assistance in developing and modelling the commercial and financial structures for transactions, arranging the most appropriate and efficient mix of financing and closing each transaction by supporting the negotiations to financial close.

Transaction Services

PwC Transaction Services assists companies with acquisitions, divestitures, strategic alliances and access to local and global capital markets.

We see ourselves as deal process managers that help clients get deals done faster, with less disruption and at a more attractive price. Using cross-functional teams, we bring together all the relevant expertise from across the firm, including tapping into the firm's vast industry sector knowledge, both locally and globally.

We help our clients maximise the return on their deals and manage associated risks. Our services add value by:

- Assessing the target business, relative to the economic and operational objectives of the client, and the assumptions underpinning the deal;
- Assessing the basis of the transaction and providing clients with analyses that support their negotiations. We cover areas such as issues affecting pricing, sustainability and synergies; and
- Assessing risk factors and providing guidance on the way the deal should be structured.

We work with clients to leverage due diligence findings in deal negotiations and help them to maximise the benefits of their deals while managing risk effectively. We can assist with:

- Mergers and acquisitions;
- Divestitures/disposals;
- Carve-outs;
- Strategic alliances; and
- Providing access to local and global capital markets.

Appendix 5:

Contacts

Jan Groenewald

Director

Tel: +27 11 797 5380

Fax: +27 11 209 5380

E-mail: jan.groenewald@za.pwc.com

Tertius van Dijk

Director

Tel: +27 21 529 2563

Fax: +27 21 529 1760

E-mail: tertius.van.dijk@za.pwc.com

Matthew Human

Associate Director

Tel: +27 11 797 5279

Fax: +27 11 209 5279

Email: matthew.human@za.pwc.com

Adéle De Jongh

Associate Director

Tel: +27 21 529 2077

Fax: +27 21 529 1577

E-mail: adele.de.jongh@za.pwc.com

