CHAPTER 7

RESEARCH DESIGN AND PLACEMENT OF COMPANIES ON A FINANCIAL STRATEGY MATRIX

7.1 INTRODUCTION

The preceding chapters have provided the theoretical foundation and background to which the empirical study can now be added. This chapter describes how the data for the empirical study were selected and how the most important variables were calculated and analysed.

Firstly, the data collection method indicating the initial pool of listed companies from which the final database was selected is discussed. Then the criteria used to determine which companies should be excluded from the database are specified. This is followed by a brief description of the most important variables and how they are determined.

Following on from the description of how the data was selected and processed, the actual ranking of companies and the placement of companies and sectors in the financial strategy matrix can be more clearly understood. The purpose of this ranking was to use rankings and placement in the matrix to identify companies and sectors that had performed very well, ones that had performed very badly and also ones that had improved or deteriorated dramatically during the period under review. Comparisons were done over time and between sectors in order to identify
trends or the companies and sectors that consistently out/underperform the others.

7.2 DATA COLLECTION METHOD

The source of the information used in the study was the McGregor’s BFA at the University of Pretoria. As a first step, a decision was made to use all the companies listed on the JSE in 2002, a total of 419.

Next, it was decided that for the purposes of this study, only industrial companies would provide the required information to determine the critical variables for the analysis. Therefore companies in the following sectors were eliminated: mining, financial and investments. After these companies had been taken out, 266 companies remained.

The next criterion was the availability of data. In order to have complete, calculated data for the ten-year period from 1993 to 2002, the raw data on each company had to be available for the full twelve-year period from 1991 to 2002 for each company. After the elimination of companies with incomplete data, 110 remained.

The final requirement for inclusion in the database was that the data had to be reliable. This aspect was pertinent to this study because the beta factor used in the determination of the cost of equity and the WACC cannot be determined reliably for companies with thinly traded shares. For this reason, all companies with thinly traded shares were eliminated from the database. Companies for which the ordinary share trading volume was below 500 000 shares per year for any of the twelve years from 1991 to 2002 were excluded. The minimum level was set at 500 000 shares traded per year because trading volumes below 500 000 are considered as thin trading.

The number of companies that remained in the final database was 89. A list with the names of these companies is included in Appendix A at the end of this thesis.
A list of the sub-sectors under which the companies in the final database are categorised is also provided Appendix B.

### 7.3 MOST IMPORTANT VARIABLES

The most important variables used for the statistical analysis were the following:

(a) ROIC;
(b) WACC;
(c) Spread (ROIC – WACC)
(d) EVA;
(e) MVA;
(f) Sales growth;
(g) SGR; and
(h) Sales growth minus the SGR

The ROIC was calculated by dividing the NOPAT by the IC at the beginning of the year and expressing it as a percentage. The WACC was determined by using appropriate weights for each component of long-term capital. A risk-free rate, the market premium and a beta-factor were used to calculate the cost of equity. For the other components of long-term capital, such as long-term loans, the appropriate after-tax cost was used.

The spread, also called the “return spread”, was determined by subtracting the WACC from the ROIC. The EVA was calculated by multiplying the spread with the IC. The EVA was determined for a given year and was expressed as an amount (in Rands). The MVA was calculated by first determining the market value of ordinary shares, preference shares, long-term loans and minority interest. Then the book value of all these items was subtracted from the market values to determine the MVA. The MVA was also expressed as an amount in Rands and it was a cumulative amount to date because it indicates all the value added (in terms of market value) by a company from when it started doing business to a given date.
The sales growth is the year-on-year increase/decrease in sales (expressed as a percentage), which can theoretically be determined by dividing the sales amount of the previous year into the amount of the current year and then subtracting one from the result. However, this formula is not always accurate because companies often restate the sales of the previous year. The companies provide a more reliable estimate of year-on-year sales growth and this percentage was used in the analysis.

The SGR for a given year (also expressed as a percentage) was determined by dividing the retained income from the previous year by the equity at the beginning of that (previous) year. The equity at the beginning of the previous year is also the equity at the end of two years before, and therefore the calculation of the SGR for a ten-year period required the data to be available for a twelve-year period. The sales growth minus SGR is the sales growth percentage minus the SGR percentage.

Each of the variables discussed in this chapter was used in the evaluation of listed companies and the statistical analysis described in Chapter 8.

7.4 RANKING OF COMPANIES

As a first step, a simple ranking was done in terms of spread alone. It was decided to leave out sales growth initially in order to focus on companies’ ability to earn returns above their cost of capital. The rankings were done for four periods, namely the year 2002 (this reflected the most recent results available), 1993 to 1997 (the median spread for the 5-year period was used for each company), 1998 to 2002 and the ten-year period from 1993 to 2002. The top ten companies and ten worst companies for each period are presented in Table 7.1a and Table 7.1b. The full lists with the rankings for each period are given as Appendix C for 2002, Appendix D for 1993 to 1997, Appendix E for 1998 to 2002 and Appendix F for 1993 to 2002.
Table 7.1a: Ranking of the top ten companies in terms of spreads for 2002

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPANY</th>
<th>SECTOR</th>
<th>SPREAD % (ROIC – WACC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WOOLTRU</td>
<td>12</td>
<td>206,9</td>
</tr>
<tr>
<td>2</td>
<td>JOHNCOM</td>
<td>15</td>
<td>160,5</td>
</tr>
<tr>
<td>3</td>
<td>SHOPRITE</td>
<td>21</td>
<td>38,7</td>
</tr>
<tr>
<td>4</td>
<td>PALS</td>
<td>10</td>
<td>37,7</td>
</tr>
<tr>
<td>5</td>
<td>MNET-SS</td>
<td>15</td>
<td>28,5</td>
</tr>
<tr>
<td>6</td>
<td>ALTECH</td>
<td>18</td>
<td>27,2</td>
</tr>
<tr>
<td>7</td>
<td>CASHBIL</td>
<td>5</td>
<td>25,2</td>
</tr>
<tr>
<td>8</td>
<td>PICKNPAY</td>
<td>21</td>
<td>24,8</td>
</tr>
<tr>
<td>9</td>
<td>ASPEN</td>
<td>9</td>
<td>23,2</td>
</tr>
<tr>
<td>10</td>
<td>BOWCALF</td>
<td>13</td>
<td>22,7</td>
</tr>
</tbody>
</table>

Table 7.1b: Ranking of the worst ten companies in terms of spreads for 2002

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPANY</th>
<th>SECTOR</th>
<th>SPREAD % (ROIC – WACC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>SISA</td>
<td>14</td>
<td>-5,9</td>
</tr>
<tr>
<td>81</td>
<td>ISCOR</td>
<td>4</td>
<td>-7,1</td>
</tr>
<tr>
<td>82</td>
<td>FORIM</td>
<td>8</td>
<td>-7,4</td>
</tr>
<tr>
<td>83</td>
<td>RICHEMONT</td>
<td>10</td>
<td>-8,1</td>
</tr>
<tr>
<td>84</td>
<td>DIDATA</td>
<td>20</td>
<td>-10,9</td>
</tr>
<tr>
<td>85</td>
<td>TRENCOR</td>
<td>16</td>
<td>-11,0</td>
</tr>
<tr>
<td>86</td>
<td>CONAFEX</td>
<td>7</td>
<td>-15,2</td>
</tr>
<tr>
<td>87</td>
<td>NAMSEA</td>
<td>7</td>
<td>-16,4</td>
</tr>
<tr>
<td>88</td>
<td>SPESCOM</td>
<td>20</td>
<td>-35,2</td>
</tr>
<tr>
<td>89</td>
<td>ANBEECO</td>
<td>13</td>
<td>-380,4</td>
</tr>
</tbody>
</table>
Looking at the top ten companies for 2002, it is clear that the first two, namely Wooltru and Johnnic Communications (Johncom), had extremely high spreads, which are completely out of line with their spreads for preceding years. In both cases, the high spreads were due to an abnormally high ROIC. If these two values are considered as outliers, Shoprite (with a more realistic spread of 38,7%) can be considered the best performer in terms of spreads for 2002. It is interesting to note that the only other company in the food and drug-retailing sector, Pick’nPay, also featured in the top ten.

As far as the worst ten companies are concerned, the very worst company, in 89th place, Anbeeco (with a spread of –380,4%) can be considered an outlier. If this outlier is ignored, it leaves Spescom (with a spread of –35,2%) as the worst performer for 2002. Another noteworthy fact is that the only sub-sector for which there was more than one company in the bottom ten was the food producers and processors sector (Conafex and Namibean Sea Products). The next ranking was done using the median spread for each company over the period from 1993 to 1997. The results are shown in Table 7.2a and Table 7.2b.

Table 7.2a: Ranking of top ten companies in terms of median return spreads for the period from 1993 to 1997

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPANY</th>
<th>SECTOR</th>
<th>SPREAD % (ROIC – WACC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OCEANA</td>
<td>7</td>
<td>21,6</td>
</tr>
<tr>
<td>2</td>
<td>SHOPRITE</td>
<td>21</td>
<td>19,3</td>
</tr>
<tr>
<td>3</td>
<td>WBHO</td>
<td>5</td>
<td>17,1</td>
</tr>
<tr>
<td>4</td>
<td>PICKNPAY</td>
<td>21</td>
<td>16,5</td>
</tr>
<tr>
<td>5</td>
<td>CONCOR</td>
<td>5</td>
<td>13,3</td>
</tr>
<tr>
<td>6</td>
<td>JASCO</td>
<td>18</td>
<td>13,1</td>
</tr>
<tr>
<td>7</td>
<td>CMH</td>
<td>11</td>
<td>11,4</td>
</tr>
<tr>
<td>8</td>
<td>BOWCALF</td>
<td>13</td>
<td>10,5</td>
</tr>
<tr>
<td>9</td>
<td>DELTA</td>
<td>18</td>
<td>9,9</td>
</tr>
<tr>
<td>10</td>
<td>BRANDCO</td>
<td>12</td>
<td>9,8</td>
</tr>
</tbody>
</table>
Table 7.2b: Ranking of the worst ten companies in terms of median return spreads for the period from 1993 to 1997

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPANY</th>
<th>SECTOR</th>
<th>SPREAD % (ROIC – WACC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>BASREAD</td>
<td>5</td>
<td>-6,5</td>
</tr>
<tr>
<td>81</td>
<td>ISCOR</td>
<td>4</td>
<td>-7,1</td>
</tr>
<tr>
<td>82</td>
<td>SAPPi</td>
<td>3</td>
<td>-9,2</td>
</tr>
<tr>
<td>83</td>
<td>SPESCOM</td>
<td>20</td>
<td>-9,5</td>
</tr>
<tr>
<td>84</td>
<td>CONAFEX</td>
<td>7</td>
<td>-10,4</td>
</tr>
<tr>
<td>85</td>
<td>HIVELD</td>
<td>4</td>
<td>-10,7</td>
</tr>
<tr>
<td>86</td>
<td>LABAT</td>
<td>24</td>
<td>-11,6</td>
</tr>
<tr>
<td>87</td>
<td>RAINBOW</td>
<td>7</td>
<td>-15,2</td>
</tr>
<tr>
<td>88</td>
<td>CULLINAN</td>
<td>14</td>
<td>-15,6</td>
</tr>
<tr>
<td>89</td>
<td>LA-GROUP</td>
<td>12</td>
<td>-19,9</td>
</tr>
</tbody>
</table>

When the median spreads are compared for the period from 1997 to 2002, Oceana emerges as the top company with a spread of 21,6%. Both Shoprite (2\textsuperscript{nd}) and Pick’nPay (4\textsuperscript{th}) also appear in the top ten for this period as well. Compared to 2002, the spreads of the top companies for the period 1993 to 1997 appear considerably lower.

LA-Group had the lowest median spread for the period from 1993 to 1997. Other companies amongst the worst ten that also appeared in the worst ten for 2002 are Iscor, Spescom, and Conafex. The only sub-sector for which there was more than one company in the bottom ten for this period was the food producers and processors sector (as for 2002).

The ten best and ten worst companies in terms of spread medians for the period from 1998 to 2002 are shown in Table 7.3a and Table 7.3b respectively.
Table 7.3a: Ranking of the top ten companies in terms of median return spreads for the period from 1998 to 2002

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPANY</th>
<th>SECTOR</th>
<th>SPREAD % (ROIC – WACC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MNET-SS</td>
<td>15</td>
<td>24,9</td>
</tr>
<tr>
<td>2</td>
<td>PICKNPAY</td>
<td>21</td>
<td>24,8</td>
</tr>
<tr>
<td>3</td>
<td>SHOPRITE</td>
<td>21</td>
<td>23,4</td>
</tr>
<tr>
<td>4</td>
<td>ASPEN</td>
<td>9</td>
<td>22,8</td>
</tr>
<tr>
<td>5</td>
<td>OCEANA</td>
<td>7</td>
<td>20,6</td>
</tr>
<tr>
<td>6</td>
<td>CERAMIC</td>
<td>5</td>
<td>20,5</td>
</tr>
<tr>
<td>7</td>
<td>BOWCALF</td>
<td>13</td>
<td>19,1</td>
</tr>
<tr>
<td>8</td>
<td>GRINTEK</td>
<td>18</td>
<td>16,8</td>
</tr>
<tr>
<td>9</td>
<td>CASHBIL</td>
<td>5</td>
<td>16,5</td>
</tr>
<tr>
<td>10</td>
<td>CMH</td>
<td>11</td>
<td>16,2</td>
</tr>
</tbody>
</table>

Table 7.3b: Ranking of the worst ten companies in terms of median return spreads for the period from 1998 to 2002

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPANY</th>
<th>SECTOR</th>
<th>SPREAD % (ROIC – WACC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>HIVELD</td>
<td>4</td>
<td>-5,8</td>
</tr>
<tr>
<td>81</td>
<td>ISCOR</td>
<td>4</td>
<td>-5,9</td>
</tr>
<tr>
<td>82</td>
<td>TRENCOR</td>
<td>16</td>
<td>-7,0</td>
</tr>
<tr>
<td>83</td>
<td>FORIM</td>
<td>8</td>
<td>-7,4</td>
</tr>
<tr>
<td>84</td>
<td>RAINBOW</td>
<td>7</td>
<td>-8,5</td>
</tr>
<tr>
<td>85</td>
<td>NAMSEA</td>
<td>7</td>
<td>-9,1</td>
</tr>
<tr>
<td>86</td>
<td>GLODINA</td>
<td>10</td>
<td>-10,1</td>
</tr>
<tr>
<td>87</td>
<td>DIDATA</td>
<td>20</td>
<td>-10,9</td>
</tr>
<tr>
<td>88</td>
<td>CONAFEX</td>
<td>7</td>
<td>-14,9</td>
</tr>
<tr>
<td>89</td>
<td>ANBEECO</td>
<td>10</td>
<td>-37,7</td>
</tr>
</tbody>
</table>
The company with the highest median spread for the period 1998 to 2002 was MNet-Supersport with 24,9%. Pick’nPay and Shoprite were second and third respectively, while Oceana (5th) and Bowler Metcalf (7th) remained in the top ten. Both the food and drug retailing sub-sector (Pick’nPay and Shoprite) and the construction and building materials sub-sector (Ceramic and Cashbuild) were represented by two companies each in the top ten. The median spreads of the top ten companies for this period (1998 to 2002) seem to be considerably higher than those for the period from 1993 to 1997.

At the bottom end, the company that performed worst in the period from 1998 to 2002 was Anbeeco (as in 2002) with a spread of –37,7%. Three companies (Rainbow Chickens, Namibean Sea Products and Conafex) from the food producers and processors sub-sector were in the “worst ten” group. Companies that featured in the “worst ten” group for both periods (1993 to 1997 and 1998 to 2002) are Iscor, Rainbow Chickens and Conafex. Lastly, a ranking was done of median spreads per company for the ten-year period, from 1993 to 2002. The results are shown in Table 7.4a and Table 7.4b.

Table 7.4a: Ranking of the top ten companies in terms of median return spreads for the period from 1993 to 2002

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPANY</th>
<th>SECTOR</th>
<th>SPREAD % (ROIC – WACC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MNET-SS</td>
<td>15</td>
<td>24,6</td>
</tr>
<tr>
<td>2</td>
<td>PICKNPAY</td>
<td>21</td>
<td>21,9</td>
</tr>
<tr>
<td>3</td>
<td>OCEANA</td>
<td>7</td>
<td>21,1</td>
</tr>
<tr>
<td>4</td>
<td>SHOPRITE</td>
<td>21</td>
<td>19,7</td>
</tr>
<tr>
<td>5</td>
<td>CMH</td>
<td>11</td>
<td>15,8</td>
</tr>
<tr>
<td>6</td>
<td>WBHO</td>
<td>5</td>
<td>15,7</td>
</tr>
<tr>
<td>7</td>
<td>BOWCALF</td>
<td>13</td>
<td>12,8</td>
</tr>
<tr>
<td>8</td>
<td>CERAMIC</td>
<td>5</td>
<td>12,8</td>
</tr>
<tr>
<td>9</td>
<td>GRINTEK</td>
<td>18</td>
<td>12,3</td>
</tr>
<tr>
<td>10</td>
<td>CONCOR</td>
<td>5</td>
<td>11,6</td>
</tr>
</tbody>
</table>
Table 7.4b: Ranking of the worst ten companies in terms of median return spreads for the period from 1993 to 2002

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPANY</th>
<th>SECTOR</th>
<th>SPREAD % (ROIC – WACC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>WBHOLD</td>
<td>7</td>
<td>-5,3</td>
</tr>
<tr>
<td>81</td>
<td>NAMSEA</td>
<td>7</td>
<td>-5,4</td>
</tr>
<tr>
<td>82</td>
<td>SAPPI</td>
<td>3</td>
<td>-5,5</td>
</tr>
<tr>
<td>83</td>
<td>GLODINA</td>
<td>10</td>
<td>-5,7</td>
</tr>
<tr>
<td>84</td>
<td>ISCOR</td>
<td>4</td>
<td>-6,6</td>
</tr>
<tr>
<td>85</td>
<td>LABAT</td>
<td>24</td>
<td>-8,3</td>
</tr>
<tr>
<td>86</td>
<td>SPESCOM</td>
<td>20</td>
<td>-8,4</td>
</tr>
<tr>
<td>87</td>
<td>RAINBOW</td>
<td>7</td>
<td>-9,9</td>
</tr>
<tr>
<td>88</td>
<td>HIVELD</td>
<td>4</td>
<td>-10,1</td>
</tr>
<tr>
<td>89</td>
<td>CONAFEX</td>
<td>7</td>
<td>-13,8</td>
</tr>
</tbody>
</table>

Perusal of the results for the ten-year period from 1993 to 2002 shows that MNet-Supersport was the best company, with a median spread of 24,6%. Pick’nPay (2nd), Oceana (3rd) and Shoprite (4th) showed their consistency by consistently appearing in the top five. Bowler Metcalf (7th) also remained in the top ten for all four periods.

At the bottom end, Conafex had the worst median spread of –13,8% over the period from 1993 to 2002. Three companies from the food producers and processing sub-sector (Namibia Sea Products, Rainbow Chickens and Conafex) formed part of the “worst ten” category.

When the median is taken of the spreads for 2002 and the median spreads for the other periods, the results are as follows: for the period from 1993 to 1998, the median spread was 1,8%; for the period from 1993 to 2002, the median spread was 1,9%; for the period from 1998 to 2002, the median spread was 4,6% and the median for 2002 was 6,5%. This indicates a clearly increasing trend in terms of spreads over time from 1993 to 2002 for the companies selected.
Particular companies that showed big improvements between the two five-year periods were MNet-Supersport (moving from 24th to 1st place), Aspen (from 49th to 4th), Cashbuild (from 30th to 9th). Companies that deteriorated dramatically were, among others, Brandcorp (dropping from 10th to 35th), Edcon (from 11th to 53rd) and Wooltru (from 18th to 74th).

7.5 PLACEMENT OF COMPANIES AND SECTORS IN THE FINANCIAL STRATEGY MATRIX

In this section of the study, companies and sectors were placed in the financial strategy matrix. A graph was used with the growth in sales minus the SGR on the x-axis and the spread (ROIC – WACC) on the y-axis. Three individual companies, one very good performer in terms of spreads (Pick’nPay), one very poor performer (Conafex) and one average performer (Ellerine) were selected and placed on the financial strategy matrix for each year from 1993 to 2002. The graphs are presented in Figure 7.1, Figure 7.2 and Figure 7.3.

The quadrants of the financial strategy matrix are indicated on each graph. “A” indicates a positive spread and negative sales growth minus the SGR percentage. “B” shows a positive spread and a positive sales growth minus the SGR percentage. “C” is used for a negative spread and a negative sales growth minus the SGR percentage. “D” is used for a negative spread and a positive sales growth minus the SGR percentage. In some cases where there were only positive returns over the full period involved, only the “A” and “B” quadrants are shown. Similarly, if there were only negative spreads, only the “C” and “D” quadrants are shown in the graph. In those cases where there were outliers that would distort the graph, the scales of the graphs were set to eliminate these outliers.
7.5.1 Summary of the results for three individual companies

Figure 7.1 shows that Pick’nPay consistently had positive spreads for the whole period under review, from 1993 to 2002. Its excellent performance is emphasised by the fact that its spread was more than 20% each year for the last seven years from 1996 to 2002. As far as its sales growth is concerned, the graph shows that the sales growth minus the SGR was negative for four years and positive for six years. It is also not possible to find a trend that indicates that the growth in sales is managed in such a way that it remains below the SGR percentage.

It has been pointed out in Section 6.4 of Chapter 6 that a positive sales growth minus the SGR percentage may lead to cash deficits. Different factors that influence and distort sales growth and the SGR may cause the sales growth minus the SGR percentage to be unreliable as a measure of cash management.

The SGR, which is based on the retained income of a given year, would remain the same if there is an increase in assets financed by new issues of shares or loans leading to an increase in sales. In such a situation, the sales growth minus the SGR could be very high (positive) and yet it may be wrong to infer from this that the company is growing too fast (and has run up cash shortages). Consequently, further investigation would be required to determine the impact of sales growth on shareholder value.

Looking at the results of Conafex, it is clear that there were negative spreads for each of the ten years from 1993 to 2002. It seems as if the trend in terms of spreads got worse over time. Not surprisingly, the results for five years fell in the “D” quadrant, where the only options left to the company are to restructure radically or to close down.

The results of the company Ellerine indicate low to average spreads, but the spread was negative for only one year (1999). The differential between sales growth and the SGR remained negative for the whole ten-year period. Consequently, the results fall in the “A” quadrant for nine out of the ten years.
It would be interesting to see how much weight the market gives to a company’s ability to limit its sales growth to a percentage below its SGR. The data of the companies included in the database seems to indicate that there is no pattern as far as sales growth relative to the SGR percentage is concerned.
Figure 7.1: Pick’nPay – each year from 1993 to 2002

PICKNPAY '93 - '02

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.2: Conafex – each year from 1993 to 2002

CONAFEX '93 - '02

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.3: Ellerine – each year from 1993 to 2002

ELLERINE '93 - '02

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
In order to facilitate a comparison between the results of the three companies (Pick’nPay, Conafex and Ellerine) with that of the sub-sectors in which they operate, the results of the particular sub-sectors are also placed on the matrix. Figure 7.4 contains the median results for Sub-sector 21 (food and drug retailing). Figure 7.5 shows the results of Sub-sector 7 (food producers and processors). Figure 7.6 shows the results for Sub-sector 12 (general retailers).

### 7.5.2 Summary of results for the sub-sectors

It is clear from Figure 7.4 that Sub-sector 21 (consisting only of Shoprite and Pick’nPay) had excellent results in terms of spreads throughout the ten-year period. Figure 7.5 shows that Sub-sector 7, which includes ten companies, had nine median spreads that were negative and only one that was positive. The results for Sub-sector 12, which has 14 companies, appear average, with nine out of ten positive spreads over the ten-year period.

As a next step, the medians per sector were determined for the four periods decided on at the beginning, namely 2002, 1993 to 1997, 1998 to 2002 and 1993 to 2002. The results for these periods are set out in Figure 7.7 (2002), Figure 7.8 (1993 to 1997), Figure 7.9 (1998 to 2002) and Figure 7.10 (1993 to 2002).

Figure 7.7 shows that, for 2002, the median spread (31.8%) for the food and drug retailing Sub-sector (sector 21) was significantly higher than that for all the other sectors (next best was about 10%). The majority of sectors (17 out of 21) had positive median spreads. The results of two sectors were ignored as outliers. Of the 21 sectors, 13 were categorized in Quadrant B and only four in Quadrant A.

The sub-sector medians for the five-year period from 1993 to 1997 are shown in Figure 7.8. Sector 21 stands out as the best performer for this period, with a median spread of 18.7% (the next best 9.1%). Of the 23 sectors, 14 (61%) had positive median spreads. Eleven sectors were placed in the B quadrant and only three sectors were included in the A quadrant.
Figure 7.9 shows the sub-sector medians for the period from 1998 to 2002. In this period, two sectors, namely Sectors 21 and 9 (pharmaceuticals and biotechnology, with only one company, Aspen) stood out with spreads significantly higher than the other sub-sectors. Of the sub-sectors, 16 had positive median spreads, while 11 were categorized in the B quadrant. Five sub-sectors were placed in the A quadrant, as well as five in the D quadrant. Compared to the preceding five-year period, it seems as if there was a slight improvement in the results.

The medians for the ten-year period from 1993 to 2002 are set out in Figure 7.10. Sector 21 with a median spread of 21.2% (next best 8.3%) again stands out as the best performing sector by far. Of the 23 sub-sectors, 14 had positive spreads, while 10 sub-sectors were classified in the B quadrant. Four sub-sectors were placed in the A quadrant and eight in the D quadrant.
Figure 7.4: Sector 21 medians per year 1993 to 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.5: Sector 7 medians per year from 1993 to 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.6: Sector 12 medians per year from 1993 to 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.7: Medians per sub-sector 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.8: Medians per sub-sector 1993 to 1997

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.9: Medians per sub-sector 1998 to 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.10: Medians per sub-sector 1993 to 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
The next step in the evaluation of the performance of companies was to place all the companies in the financial matrix for each year, from 1993 to 2002. The results are shown in a series of graphs included in Figure 7.11 (for 1993), Figure 7.12 (for 1994), Figure 7.13 (for 1995), Figure 7.14 (for 1996), Figure 7.15 (for 1997), Figure 7.16 (for 1998), Figure 7.17 (for 1999), Figure 7.18 (for 2000), Figure 7.19 (for 2001) and Figure 7.20 (for 2002).

7.5.3 Summary of results for all companies

The results for 1993 in Figure 7.11 show that slightly more companies had positive spreads, compared to those with negative spreads. Wilson Bayly Holmes-Ovcon Limited (WBHO) had the highest spread (29.7%), with Shoprite second best at 18.1%. The company with the lowest spread was the LA-Group (-19.9%). In terms of the sales growth minus the SGR percentage, it seems as if the number of companies with positive percentages versus those with negative percentages was split more or less evenly.

The results for 1994 in Figure 7.12 show that the majority of companies had positive spreads, with MNet-Supersport being the best performer with a spread of 47%. The LA-group (-25.1%) was again the worst performer. As far as the sales growth minus the SGR percentage is concerned, it looks as though there were more companies with a positive percentage than there were companies with a negative percentage.

Figure 7.13 indicates that Combined Motor Holdings (CMH) had the best performance in 1995 with a spread of 32.1%. For the third year in a row, the LA-Group had the worst spread (-35.3%). It seems as if there were more companies with positive spreads, compared to those with negative spreads. There were significantly more companies with positive sales growth minus the SGR percentages than there were ones with negative percentages.

The 1996 results in Figure 7.14 reveal that in general there seem to have been no dramatic changes from 1995. The majority of companies had positive spreads,
and CMH was again the highest, with 25,6%. This time Rainbow Chickens, with a spread of −20,4%, was the worst performer. As far as the sales growth minus the SGR percentage is concerned, it appears as if more companies had positive percentages than negative percentages.

The results for 1997 in Figure 7.15 show that there were an equal number of companies with positive and negative spreads. The company with the highest spread for 1997 was Basil Read, with 38,9%. Cullinan Holdings was the worst performer this time, with a spread of −32,1%. The number of companies with a positive sales growth minus the SGR percentage seemed to be equal to the number of those with a negative percentage.

The results for 1998 in Figure 7.16 show that the majority of companies (more than in 1997) had positive spreads. There is a bigger dispersion of positive spreads than a dispersion of negative spreads. Basil Read was, as in 1997, the best performer in terms of spreads (44,9%). Rainbow Chickens (−22,8%) had the worst spread in 1998. There seem to have been slightly more companies with positive sales growth minus the SGR percentages than ones with negative percentages.

Figure 7.17 shows that the number of companies that had a positive spread in 1999 was a little higher than those with a negative spread. It also seems as if the dispersion of the values with positive spreads is bigger than for the values with negative spreads. MNet-Supersport (24,9%) performed best in terms of spreads in 1999. The company with the worst results was Anbeeco, with a spread of −37,7%. It appears as if there were about as many companies with a positive sales growth minus the SGR percentage as there were companies with a negative percentage.

The results for 2000 as presented in Figure 7.18 show that slightly more companies had positive spreads compared to those with negative spreads. Pick’nPay had the best spread (26,8%), and MNet had the second best (24,2%). Conafex had the worst spread (−20,0%). The number of companies with a positive sales growth minus the SGR percentage seems to have been higher than of those with a negative percentage.
Figure 7.19 shows quite clearly that there were many more companies with positive spreads compared to those with negative spreads in 2001. Shoprite had the highest spread of 34,7% and Aspen was second best, with 27,2%. The company with the worst spread was Anbeeco with −88,4%. When the sales growth minus the SGR percentage is considered, it seems as if more companies had positive percentages than negative percentages. This means that there were more companies creating value than companies destroying value in terms of spreads (and EVA). It also seems as if these percentages were more widely dispersed than in preceding years.

The results for 2002 in Figure 7.20 show distinctly that there were far more companies with positive spreads (creating value) than ones with negative spreads (destroying value). As in 2002, Shoprite was the best performer in terms of spreads, with 38,7%. PALS Holdings was second best with 37,7%. The worst performer in 2002 was Namibian Sea Products with a spread of −16,4%. It is also clear that a larger number of companies had positive sales growth minus the SGR percentages compared to the number of ones with negative percentages.

As another way to compare the results from year to year, the median results of all companies for each year from 1993 to 2002 are shown in Figure 7.21. It shows that the median spread for all companies was positive each year from 1993 to 2002 (with a lowest spread of 0,4% in 1996 and a highest spread of 6,5% in 2002). In terms of spreads, there was a clear upward trend from 1999 (1,4%) to 2002 (6,5%). The median sales growth minus the SGR percentage was negative for only three years (1993, 1997 and 1999). For the other years, the median sales growth minus the SGR percentage was positive, indicating a possible build-up of cash shortages.
Figure 7.11: Results all companies 1993

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
Figure 7.12: Results all companies 1994

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.14: Results all companies 1996

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.15: Results all companies 1997

All companies 1997

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.16: Results all companies 1998

All companies 1998

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.17: Results all companies 1999

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.18: Results all companies 2000

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.19: Results all companies 2001

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.20: Results all companies 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.21: Medians all companies each year from 1993 to 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
In order to allow comparison between individual companies, sectors and all companies, the median results for all companies are presented for the periods 1993 to 1997 (in Figure 7.22), 1998 to 2002 (in Figure 7.23) and 1993 to 2002 (in Figure 7.24).

7.5.4 Summary of results of sub-sectors for three periods

Figure 7.22 shows that the median spreads for all companies for the five-year period from 1993 to 1998 were more or less evenly distributed around zero, with perhaps a few more positive spreads than negative ones. The majority of companies had median sales growth minus SGR percentages that are positive. In comparison, the results for the five-year period from 1998 to 2002 show that a clear majority of companies had positive median spreads. For this period also, there were more companies with a positive sales growth minus SGR percentage than ones with a negative percentage. Figure 7.24 shows the results for the full ten-year period from 1993 to 2002 and therefore reflects a situation that “averages” the results of Figure 7.22 and Figure 7.23.

The next three graphs (contained in Figure 7.25, Figure 7.26 and Figure 7.27) show a comparison of the three individual companies selected relative to the sub-sector and all companies.

7.5.5 Summary of results comparing company to sector to all companies

In Figure 7.25 the results of Pick’nPay (a “good performer”) are compared to the results of Sub-sector 21 and the median for all companies for the periods 2002; 1993 to 1997; 1998 to 2002 and 1993 to 2002. It shows that Pick’nPay outperforms all other companies by far and that its performance is very similar to that of its sub-sector.

In Figure 7.26 the same comparison is done for the company Conafex (a “bad performer”). It indicates that the individual performance of Conafex was
significantly worse than that of the sub-sector and the performance of all companies for all four periods.

Figure 7.27 shows the results of an “average performer”, Ellerine, compared to the sub-sector and all companies. It is clear that Ellerine had lower spreads than both the sub-sector and all companies. It is interesting to note that the results of Ellerine are categorized in the A quadrant for all four periods. This again highlights the need to investigate further the question about how much value the market attaches to sales growth relative to the SGR.

The last three graphs, Figure 7.28, Figure 7.29 and Figure 7.30, show a comparison of the results of the three companies selected relative to the sub-sectors in which they operate, for each year from 1993 to 2002. Figure 7.28 shows that Pick’nPay performed more or less in line with the sector medians over the ten-year period from 1993 to 2002. It must be borne in mind that there was only one other company in the sub-sector, namely Shoprite, and that the performance of these two companies were both outstanding over the period under review.

Figure 7.29 shows that the performance of Conafex was consistently worse (in terms of spread) than the median for its sub-sector for each year from 1993 to 2002. The sales growth minus SGR percentage of Conafex was also more widely dispersed than that of the sub-sector for the ten years to 2002. In Figure 7.30 the results of the “average performing” company, Ellerine, compared to its sub-sector show that the company underperformed the sub-sector in general, even though Ellerine had higher spreads than the sub-sector in 1994 and 1997.
FIGURE 7.22: Medians all companies each year from 1993 to 1997

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.23: Medians all companies each year from 1998 to 2002

Medians all companies '98 - '02

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.24: Medians all companies each year from 1993 to 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.25:  Pick’nPay vs. Sector 21 and all companies

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR

Pick’nPay
Sector median
All co's median
A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.27: Ellerine vs. Sector 12 and all companies

ELLERINE, SECTOR, ALL CO'S

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR

Ellerine
Sector median
All co's median
A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.29: Conafex vs. Sector 7 each year from 1993 to 2002

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR
FIGURE 7.30: Ellerine vs. Sector 12 each year from 1993 to 2002

ELLERINE vs SECTOR '93 - '02

A = Spread > 0 and Sales growth < SGR
B = Spread > 0 and Sales growth > SGR
C = Spread < 0 and Sales growth < SGR
D = Spread < 0 and Sales growth > SGR

Gsales - SGR (%)
7.6 CONCLUSION

The ranking of companies was done in terms of spreads for four periods, namely the year 2002, the five years from 1993 to 1997, the five years from 1998 to 2002 and the ten years from 1993 to 2002. It is notable that some companies like Pick’nPay and Shoprite remained in the top ten rankings for all four periods and some like Conafex and Rainbow Chickens stayed in the “worst ten” category. This indicates that some companies that deliver outstanding performance do so consistently and that some that perform poorly also do so consistently.

The rankings also highlighted the big movers like MNet Supersport and Aspen (both up) and Brandcorp and Edcon (both down). It also indicated an upward-sloping trend in terms of spreads over time from 1993 to 2002.

The placement of companies, sub-sectors and all company medians on the financial strategy matrix revealed that a company could very seldom be categorized in only one quadrant for each of the ten years from 1993 to 2002. The reason for this is mostly because of the varying nature of the sales growth minus the SGR percentage, which could be positive in one year and negative in the next.

The placement of the individual companies on the matrix revealed the consistent good performance of Pick’nPay in terms of spread. It also indicated that the company moved between the A quadrant and the B quadrant on account of a positive or negative sales growth minus the SGR percentage. Conafex, the “bad performance” company, had low spreads and low sales growth and consequently was categorized in the C quadrant for most of the ten years from 1993 to 2002. Ellerine, the “average” company had relatively low to average spreads, but was still placed in the A quadrant for eight out of the ten years.

The placement of the results per sector and the comparison between sectors show that the food and drug-retailing sector (Sector 21) had median spreads dramatically higher than the other sectors for the whole period from 1993 to 2002. The median spread of Sector 21 was above 20% for 1993 to 2002, while the second best sectors had a median spread of below 10%. For the period from 1993
to 2002, the majority of sectors had positive median sales growth minus SGR percentages (18 out of 23 sectors).

The placement of all companies in the matrix highlighted some notable issues. The first is that the majority of companies had positive, rather than negative spreads each year from 1993 to 2002. There is an increasing trend over time in terms of spreads. The median sales growth minus the SGR percentage for all companies was positive for seven years and negative for three years. This indicates that cumulative cash shortages may be a problem. However, this percentage may be an unreliable measure of cash generation/shortfalls because the SGR does not take into account sales growth because of new investment in assets financed with new issues of debt or equity.

The comparison of individual company results with that of the sector and all companies immediately reveals the performance of any given company compared to the benchmarks set by the sector in which it operates and the median of all companies. From the analysis of the results placed in the financial strategy matrix, it looks as if the most successful companies are those with the highest spreads. Due to the varying nature of the sales growth minus the SGR percentage, it is not clear how much this measure contributes to the value of the company and this aspect needs to be investigated further.

The next chapter discusses the statistical tests performed to test the strength of the financial strategy matrix model and the relationship between MVA and the main drivers of EVA.